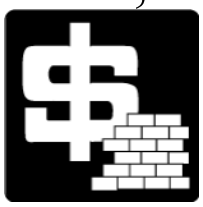
Goals, Objectives & Policies



Capital Improvements Element

GOAL 1

TO PROVIDE AND MAINTAIN, IN A TIMELY FASHION, ADEQUATE, EFFICIENT, RELIABLE, EQUITABLE AND ENVIRONMENTALLY SOUND PUBLIC FACILITIES THAT ARE FINANCIALLY FEASIBLE.

Objective 1.1 **The City shall use, in its biennial budget process, the 5-Year Schedule of Capital Improvements to set funding levels for the provision, renewal or replacement of public facilities necessary to meet and maintain the adopted Level of Service (LOS) standards for existing and future populations.**

Policy 1.1.1 The Capital Improvements Element shall only include facility expenditure information for the facility types with adopted LOS standards (Transportation, Potable Water, Water Supply, Wastewater, Recreation, Public Schools Facilities and Stormwater Management). Existing and projected facility needs identified in those elements are included in this Element. Other capital expenditures are listed in the biennial budget and the City's 5-Year Capital Improvement Plan or Gainesville Regional Utilities' (GRU) 6-Year Capital Improvement Plan.

Policy 1.1.2 The Capital Improvements Element shall define a capital improvement as land, non-structural improvements to land and structures (including the costs for design, permitting, construction, furnishings and equipment) with a unit cost of $25,000 or more. The improvement shall have an expected life of at least 2 years.

Policy 1.1.3 The City shall schedule and fund City capital projects shown in the 5-Year Schedule of Capital Improvements included in this Element.

Revised 11/14/05, Ord. 031253
Revised 11/20/08, Ord. 080546
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Revised 07/17/14, Ord. 130103
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Revised 08/18/16, Ord 150942
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Policy 1.1.4 The City shall annually review and update the Capital Improvements Element and 5-Year Schedule of Capital Improvements during the regular budget planning and adoption process.

Policy 1.1.5 The City and GRU shall continue their policies of annually including capital projects and capital equipment as part of their adopted budgets.

Policy 1.1.6 The City's Capital Improvements Element shall be considered a component of the City's overall Capital Improvements Program (CIP) in the annual budget appropriations and the 5-Year Capital Improvement Plan (5-YR CIP) and items listed in the CIP and 5-YR CIP shall reflect the priorities and needs set in the Capital Improvements Element.

Policy 1.1.7 The Potable Water and Wastewater sections of the City's Capital Improvements Element shall be considered a subset of GRU's capital budget and 6-Year Capital Improvements Plan (6-YR CIP), and the capital budget and 6-YR CIP shall reflect the priorities and needs set in the Capital Improvements Element.

Policy 1.1.8 The Capital Improvements Element and 5-Year Schedule of Improvements shall reflect the policies and needs set in other elements of the Comprehensive Plan.

Policy 1.1.9 The City shall replace or renew capital facilities required to maintain adopted LOS standards when deemed necessary by prudent engineering and utility practices. These improvements shall be included in the 5-Year Schedule of Capital Improvements.

Policy 1.1.10 The City shall evaluate all annexation proposals to determine its ability to provide facilities at adopted LOS standards for the residents in the area(s) to be annexed.

Policy 1.1.11 The 5-Year Schedule of Capital Improvements shall identify projects necessary to ensure that any adopted LOS standards are achieved and maintained for the 5-year period. The projects shall be identified as either funded or unfunded and given a level of priority for funding.

Policy 1.1.12 The City incorporates by reference the Alachua County School District's "5-Year District Facilities Work Program" as updated annually by October 1 of each year per the requirements of Florida Statutes. The Alachua County School District's "5-Year District Facilities Work Program" is posted and annually updated on the websites of the Florida Department of Education, Office of Educational Facilities and the School Board of Alachua County, Department of Facilities, Maintenance, Planning and Construction.

Revised 11/14/05, Ord. 031253
Revised 11/20/08, Ord. 080546
Revised 10/15/12, Ord. 110925
Revised 08/15/13, Ord. 120370
Revised 07/17/14, Ord. 130103
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Revised 04/16/15, Ord. 140694
Revised 08/18/16, Ord. 150942
Revised 07/20/17, Ord. 160967

Objective 1.2 **The City shall continue to ensure the provision of services and facilities needed to meet and maintain the LOS standards adopted in this Plan.**

Policy 1.2.1 The City shall adopt the following LOS standards for public facilities within its jurisdiction as indicated in the below listed elements of its Comprehensive Plan:

Transportation Mobility: Objective 1.1 and associated policies
Stormwater: Policy 1.1.1
Potable Water & Water Supply: Policy 1.1.1 and Policy 1.1.3
Wastewater: Policy 1.1.2
Recreation: Policy 1.1.1
Solid Waste: Policy 1.4.1
Public School Facilities: Policy 2.3.1

Policy 1.2.2 The LOS adopted for Transportation Mobility is solely for planning purposes and not for the purpose of applying transportation concurrency. Transportation Mobility LOS is excluded from the Concurrency Management System, and final development orders are not conditioned on transportation concurrency. The foregoing provisions shall apply to all references to Transportation Mobility LOS in the Comprehensive Plan.

Policy 1.2.3 The City shall continue to use the Concurrency Management System to issue final development orders conditioned on the following:

a. The availability of existing public facilities associated with the adopted LOS standards; and

b. The funding, based on existing or projected funding sources, of public facilities listed in the City's 5-Year Schedule of Capital Improvements or the Alachua County School District's "5-Year District Facilities Work Program" that are needed to maintain adopted LOS standards.

Policy 1.2.4 If the projected revenues to support capital improvements become unavailable, the City shall amend the relevant LOS standards in the Comprehensive Plan or prohibit any development that would lower the adopted LOS standards that are included in the Concurrency Management System.

Policy 1.2.5 The City shall continue operation of its Concurrency Management System. The Concurrency Management System is used to determine whether adequate facilities exist, when the impacts of development are expected to occur, to maintain adopted LOS standards set in the Comprehensive Plan. The latest point in the application process for the determination of concurrency is prior to the approval of an application for a development order or permit which

Revised 11/14/05, Ord. 031253
Revised 11/20/08, Ord. 080546
Revised 10/15/12, Ord. 110925
Revised 08/15/13, Ord. 120370
Revised 07/17/14, Ord. 130103
Revised 11/20/14, Ord. 140322
Revised 04/16/15, Ord. 140694
Revised 08/18/16, Ord. 150942
Revised 07/20/17, Ord. 160967

contains a specific plan for development, including the densities and intensities of development.

Policy 1.2.6 The concurrency requirements for potable water, solid waste, stormwater management, water supply, recreation, and wastewater shall be met by any one of the following standards:

a. The necessary facilities and services are in place at the time a final development order is issued;

b. A final development order is issued subject to the condition that the necessary facilities and services will be in place and available to serve the development no later than the issuance of a certificate of occupancy or its functional equivalent;

c. The necessary facilities are under construction and bonded for completion at the time a final development order is issued; or

d. The necessary facilities and services are guaranteed in an enforceable development agreement that is secured by a completion bond, letter of credit, or other acceptable form of security, subject to review and approval as to form and legality by the City Attorney. The agreement must guarantee that the necessary facilities and services will be in place and available to serve the development no later than the issuance of a certificate of occupancy or its functional equivalent.

e. Prior to approval of a building permit or its functional equivalent, the City shall consult with Gainesville Regional Utilities to determine whether adequate water supplies to serve the new development will be available no later than the anticipated date of issuance by the City of a certificate of occupancy or its functional equivalent.

Policy 1.2.7 The concurrency requirements for public school facilities shall be met if:

a. Adequate school facilities (elementary, middle, and high school) are in place or will be under actual construction within 3 years after the issuance of a final development order or its functional equivalent;

b. Adequate school facilities are available in an adjacent School Concurrency Service Area (SCSA) or will be in place or under actual construction in an adjacent SCSA within 3 years after the issuance of a final development order or its functional equivalent; or

c. The developer executes a legally binding commitment to provide mitigation proportionate to the demand for public school facilities to

Revised 11/14/05, Ord. 031253
Revised 11/20/08, Ord. 080546
Revised 10/15/12, Ord. 110925
Revised 08/15/13, Ord. 120370
Revised 07/17/14, Ord. 130103
Revised 11/20/14, Ord. 140322
Revised 04/16/15, Ord. 140694
Revised 08/18/16, Ord. 150942
Revised 07/20/17, Ord. 160967

be created by actual development of the property, including, but not limited to, the options described in Subsection 163.3180(6)(h)2.a., F.S.

Policy 1.2.8 Notwithstanding a failure to satisfy school concurrency, a development may proceed if all the following factors are shown to exist:

a. The proposed development is consistent with the future land use designation for the specific property;

b. The proposed development includes a plan that demonstrates that the capital facilities needed as a result of the proposed development can be reasonably provided; and

c. The landowner contributes a proportionate share of the cost of providing the school facilities necessary to serve the proposed development.

Objective 1.3 The City shall continue to require future development to pay for its capital improvements that are required to maintain adopted LOS standards.

Policy 1.3.1 Development shall pay the full cost of stormwater management facilities required by it to maintain the stormwater LOS standards set in the Comprehensive Plan.

Policy 1.3.2 The City shall continue the adopted Land Development Regulations that establish stormwater quantity and quality standards for the development of existing sites with substandard on-site stormwater facilities. Such development shall pay the proportional cost of meeting those standards that it requires.

Policy 1.3.3 The City shall continue its policy of having all new water and wastewater service connections pay the fully allocated cost of the treatment facilities required to serve them in the form of plant connection fees, and the cost of distribution or collection facilities unless the service is on a developer installed system.

Policy 1.3.4 The City shall continue its policy of having development contribute the water and wastewater distribution and collection system internal to a development. Contributions in aid of construction must be paid if the City does not project an adequate return on investment for water distribution or wastewater collection system extensions.

Policy 1.3.5 The City shall continue its policy of having development provide all road improvements within subdivisions as per the City's subdivision regulations.

Revised 11/14/05, Ord. 031253
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Revised 10/15/12, Ord. 110925
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Revised 04/16/15, Ord. 140694
Revised 08/18/16, Ord. 150942
Revised 07/20/17, Ord. 160967

Objective 1.4 **The facilities necessary to maintain the adopted LOS standards required to serve vested developments shall be available when the impacts of development occur, consistent with Objective 1.2 and its policies.**

Policy 1.4.1 Vested developments shall be defined as developments that have been issued final development orders that have not expired under the regulations of the City's Code of Ordinances, were issued prior to adoption of the City of Gainesville 1991-2001 Comprehensive Plan, and such developments have commenced and are continuing in good faith.

Policy 1.4.2 The City shall continue its tracking of the number of developments with vested development rights that must be served by public facilities at adopted LOS standards through the Concurrency Management System.

Policy 1.4.3 Vested developments must provide or pay for the capital improvements that they were required to provide under the development regulations that existed when they were permitted.

Objective 1.5 **The City shall continue to schedule General Government Capital Improvements necessary to meet and maintain the LOS standards adopted in this Plan. The schedule shall give priority to correcting existing deficiencies and replacement of worn-out or obsolete facilities prior to the extension of new facilities.**

Policy 1.5.1 The capital improvement must be within the financial capability of the City (either through debt capacity or ability to fund the improvement outright). The operating costs associated with it shall be identified and shall not exceed the City's ability to annually fund those costs.

Policy 1.5.2 The City shall consider the plans of state agencies and water management districts in evaluating capital improvements projects.

Policy 1.5.3 First priority shall be given to correcting existing facility deficiencies in adopted LOS standards, elimination of public hazards and meeting regulatory requirements or Federal and/or State mandates. First priority shall also be given to capital improvements that are fully funded by development and that will not cause operating cost deficits for the City.

Policy 1.5.4 Second priority shall be given to replacement of obsolete or worn-out facilities that are projected to cause facility deficiencies in LOS prior to expanding other facilities.

Policy 1.5.5 Third priority shall be given to adding or expanding facilities to serve vested developments.

Revised 11/14/05, Ord. 031253
Revised 11/20/08, Ord. 080546
Revised 10/15/12, Ord. 110925
Revised 08/15/13, Ord. 120370
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Revised 11/20/14, Ord. 140322
Revised 04/16/15, Ord. 140694
Revised 08/18/16, Ord. 150942
Revised 07/20/17, Ord. 160967

Policy 1.5.6 Fourth priority shall be given to adding or expanding facilities to serve development needs in designated redevelopment areas that increase the use of existing facilities and promote infill development.

Policy 1.5.7 Fifth priority shall be given to adding or expanding facilities for new development in currently unserved areas. Expansions of facilities to unserved areas shall be based on projected growth patterns found in the Future Land Use Element.

Objective 1.6 The City, through GRU, shall continue to schedule and fund water/wastewater capital improvements necessary to meet the standards adopted in this Plan. The schedule shall give priority to correcting existing deficiencies and replacing worn out or obsolete facilities prior to the extension of new facilities.

Policy 1.6.1 The capital improvement must be within the financial capability of GRU (either through debt capacity or ability to fund the improvement outright) and the operating costs associated with it shall be identified and shall not exceed GRU's ability to annually fund those costs.

Policy 1.6.2 GRU shall consider the plans of state agencies and water management districts in evaluating capital improvements projects.

Policy 1.6.3 First priority shall be given to projects that correct existing facility deficiencies in adopted LOS standards, eliminate or mitigate public hazards, meet regulatory requirements or Federal and/or State mandates, or promote the reuse and conservation of resources.

Policy 1.6.4 Second priority shall be given to projects to correct projected deficiencies in adopted LOS standards or projects to accommodate new development and redevelopment needs.

Objective 1.7 The City General Government shall use the following policies to manage debt in such a way that General Government revenues available to fund on-going operating expenditures are maximized.

Policy 1.7.1 Debt pledged as a general obligation of the City shall not exceed 3% of the non-exempt property valuation within the corporate boundaries.

Policy 1.7.2 Revenue bond debt can be as high as 100% of total debt.

Policy 1.7.3 The maximum ratio of total debt service to total revenue shall not exceed 10%.

Objective 1.8 GRU shall continue to use the following policy to manage debt.

Policy 1.8.1 In order to issue additional bonds, GRU shall establish and collect rates, fees and other charges for the use or the sale of the output, capacity or services of the Water/Wastewater Systems sufficient so that the revenues of the Systems are expected to yield net revenues that shall be at least equal to 1.4 times the annual debt service on outstanding revenue bonds for each 12-month period within any prospective 60-month period.

Objective 1.9 The City shall continue to use the Stormwater Management Utility funds allocated for capital improvements to pay for the Stormwater Projects needed to maintain LOS standards. These projects shall be shown in the 5-Year Schedule of Capital Improvements.

Policy 1.9.1 The City shall provide at least $200,000 annually for Stormwater Projects.

Revised 11/14/05, Ord. 031253
Revised 11/20/08, Ord. 080546
Revised 10/15/12, Ord. 110925
Revised 08/15/13, Ord. 120370
Revised 07/17/14, Ord. 130103
Revised 11/20/14, Ord. 140322
Revised 04/16/15, Ord. 140694
Revised 08/18/16, Ord. 150942
Revised 07/20/17, Ord. 160967

TABLE 14: 5-Year Schedule of Capital Improvements (FY 16/17 - 20/21) (in $1,000s)

No.	Project Description	Projected Total Cost	Cost to the City	FY[1,2] Schedule	General Location	Revenue Sources	Consistency with Other Elements
	Transit[3]						
1.	Existing vehicle replacement	2,756 3,274 1,905 8,241	2,347 2,787 1,622 7,017	2016/2017 2017/2018 2018/2019 2019/2020	Gaines-ville urban area	Florida Department of Transportation (FDOT), Federal Transit Administration (FTA), City of Gainesville Transportation Mobility Program (TMP), Alachua County, UF, Santa Fe College	Yes
2.	Buses for service expansion (Routes 6 and, 15). Add approx. one bus per year.	1,000	1,000	2018/2019	Citywide	FDOT, (FTA), TMP & other loca funds, UF, Santa Fe College	Yes
3.	Transit Route 35	440 440 440 440 440	440 440 440 440 440	2016-2017 2017/2018 2018/2019 2019/2020 2020/2021	See Map 6	Local Option Fuel Tax (5 cents)	Yes
4.	Support Vehicles	0 0 45 45 114	0 0 39 38 97	2016/2017 2017/2018 2018/2019 2019/2020 2020/2021	Gaines-ville urban area	FDOT, FTA, City of Gainesville, Alachua County	Yes
5.	Paratransit vans	683 139 0 144 817	582 118 0 123 696	2016/2017 2017/2018 2018/2019 2019/2020 2020/2021	Gaines-ville urban area	FDOT, FTA, and local funds	Yes
6.	Bus stop amenity improvements (e.g., bicycle racks, benches, landing pads, and shelters)	834 853 868 884 903	610 622 633 645 658	2016/2017 2017/2018 2018/2019 2019/2020 2020/2021	Citywide for TMP funds; Gaines-ville urban area	FDOT, FTA, TMP & other local funds (City of Gainesville, Alachua County)	Yes

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Revised 11/20/08, Ord. 080546
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Revised 07/20/17, Ord. 160967

No.	Project Description	Projected Total Cost	Cost to the City	FY[1,2] Schedule	General Location	Revenue Sources	Consistency with Other Elements
7.	Technology Improvements	456 465 474 484 494	457 465 474 484 494	2016/2017 2017/2018 2018/2019 2019/2020 2020/2021	Gaines-ville urban area	FTA, FDOT, City of Gainesville, Alachua County	Yes
	Potable Water						
8.	Water main Phase IV-B, V-A (from NW 43rd ST to Magnolia Place, along NW 51st ST to NW 33rd AVE) , & V-B (from NW 43rd ST to NW 23rd Ave and NW 63rd St) Pressure Improvement	100 100 1,500	100 100 1,500	2016/2017 2019/2020 2020/2021	See Map 6	Utility bond proceeds	Yes
9.	New Electrical Building and Plant Engine Generator at Murphree Water Treatment Plant	4,500 3,000	4,500 3,000	2016/2017 2017/2018	See Map 6	Utility bond proceeds	Yes
10.	Depot Avenue Water Line Reconstruction – Segment 4	300	300	2016/2017	See Map 6	Utility bond proceeds and HUD grant	Yes
	Water Supply						
11.	Well #11 R&R	150 950 100	150 950 100	2018/2019 2019/2020 2020/2021	See Map 6	Utility bond proceeds	Yes
	Recreation						
12.	Park Land Acquisition	1,463	1,463	2017/2018	Location to be determined	Wild Spaces/Public Places; Greenspace Acquisition Fund	Yes
13.	Hogtown Creek Headwaters Park	200	200	2017/2018	See Map 6	2015 CIRB Bond	Yes
14.	Bivens Arm Marsh Restoration	250	250	2018/2019	See Map 6	Capital Improvements Revenue Bond (CIRB) 2015 Bond	Yes

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Revised 11/20/08, Ord. 080546
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Revised 07/20/17, Ord. 160967

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15.	Fred Cone Park Splashpad	105	105	2017/2018		Capital Improvements Revenue Bond (CIRB) 2015 Bond	Yes
	Stormwater						
16.	Little Hatchet & Lake Forest Creek Watershed Management Plan	300	300	2016/2017	See Map 6	Stormwater Utility	Yes
17.	Pipe Replacement (SW 2 Ave/SW 10 St/SW 5 Ave)	568	568	2016/2017	See Map 6	SMU (Stormwater Utility)	Yes
18.	Tumblin Creek Regional Wetland and Trash Trap	2,189	1,605	2016/2017	See Map 6	SMU, FDOT,FDEP	Yes
19.	Pipe Replacement (SW 6th St – West University Ave. to SW 2nd Ave.)	350	350	2016/2017	See Map 6	SMU	Yes
20.	LIDAR Project	115	50	2017/2018	Citywide	SMU	Yes
	Transportation Mobility						
21.	Traffic Management System	1,091	0	2016/2017	Citywide	2005 CIRB; TRIP; Alachua County; UF; TMP	Yes
22.	Depot Avenue Reconstruction with sidewalks & bike lanes (from SW 13th St. to Williston Rd.)	1,470 1,470	1,470 1,470	2016/2017 2017/2018	See Map 6	Local Option Fuel Tax (5 cents); 2007 City bond; & LAP; County Incentive Grant Program (CIGP); 2015 City bond	Yes

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Revised 11/20/08, Ord. 080546
Revised 10/15/12, Ord. 110925
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Revised 08/18/16, Ord. 150942
Revised 07/20/17, Ord. 160967

No.	Project Description	Projected Total Cost	Cost to the City	FY[1,2] Schedule	General Location	Revenue Sources	Consistency with Other Elements
23.	SE 4th Street Reconstruction with sidewalks & bike lanes (from Depot Ave. to Williston Rd.)	850 4,800	850 4,800	2016/2017 2017/2018	See Map 6	Local Option Fuel Tax (5 cents)	Yes
24.	Hull Road Extension; partially constructed by Canopy and Grove developments	4,800	4,800	2019/2020	TMPA Zone M	TMPA or developer contributions	Yes
25.	SW 62nd Blvd. Extension (from Newberry Rd. to Archer Rd.)	72.1	72.1	2020/2021	TMPA Zones B&M	TMPA; federal funds;FDOT	Yes
26.	SW 40th Blvd. Extension Construction (from Archer Rd. to SW 34th St.)	500 2,180	500 500	2016/2017 2017/2018	See Map 6	TMPA; Local Option Fuel Tax (5 cents); CIGP grant allocation by FDOT (FDOT tentative work program FY15-FY19)	Yes
27.	SW 6th St. Reconstruction with sidewalks & bike lanes (from Univ. Ave. to SW 4th Ave.)	100 1,600	100 1,400	2016/2017 2017/2018	See Map 6	Local Option Fuel Tax (5 cents), Stormwater Management Utility, Campus Development Agreement	Yes
28.	NW 16th Street (new street) from US 441 to NW 65th Place	2,900	2,900	2020/2021	See Map 6	TMP and other local funds	Yes
29.	Archer Rd./SW 16th Ave. from US 441 to junction at Archer Rd. (capacity enhancement of SW 16th Ave.)	4,200	0	2017/2018	See Map 6	Campus Development Agreement funds	Yes
30.	Sidewalk construction	100 100 100	100 100 100	2016/2017 2017/2018 2018/2019	Citywide	City General Fund; TMP	Yes
31.	SR226/SE 16th Avenue intersection modifications at S Main Street and at Williston Road	448.8 51.3	0 0	2016/2017 2017/2018	See Map 6	FDOT [2]	Yes

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Revised 10/15/12, Ord. 110925
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Revised 08/18/16, Ord. 150942
Revised 07/20/17, Ord. 160967

No.	Project Description	Projected Total Cost	Cost to the City	FY[1,2] Schedule	General Location	Revenue Sources	Consistency with Other Elements
32.	Norton Trail extension (NW 45th Avenue to NW 39th Avenue)	1.5 377.3	0 0	2016/2017 2017/2018	See Map 6	TMP; FDOT (included in FDOT tentative work program FY 2015 – FY 2019)	Yes
33.	Bike Share Stations	28 28	28 28	2016/2017 2017/2018	Gainesville urban area	TMP & other local funds	Yes
34.	SW 27th ST/SW 40th Place/SW 25th Terrace multiuse trail (Williston Road to SW 35th Place)	105 412	0 0	2016/2017 2018/2019		FDOT	
35.	NW 19TH Lane multiuse trail (NW 16th Terrace to NW 13th Street)	86 417	0	2016/2017 2019/2020		FDOT	
36.	Two-lane roadway parallel to Archer Road and west of I-75, consistent with the Alachua County Comprehensive Plan	2,500	0	2020-2021	See Map 6	Developer	Yes
	Wastewater						
37.	Paynes Prairie Sheetflow Restoration (GRU portion)	125 80 80 80 40	125 80 80 80 40	2016/2017 2017/2018 2018/2019 2019/2020 2020/2021	See Map 6	Utility Bond Proceeds and grant funding	Yes
38.	Main Street Water Reclamation Facility (MSWRF) East Treatment Train Rehabilitation	1,075 3,900 3,150 1,600 1,000	1,075 3,900 3,150 1,600 1,000	2016/2017 2017/2018 2018/2019 2019/2020 2020/2021	See Map 6	Utility Bond Proceeds	Yes
39.	Depot Avenue Wastewater Collection Reconstruction – Segment 4	400	400	2016/2017 2	See Map 6	Utility Bond Proceeds	Yes
	TOTAL	$94,971	$80,660				

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[1]Fiscal year for the City of Gainesville is October 1 through September 30 of the following year.

[2]Fiscal year for FDOT is July 1 through June 30 of the following year.

[3]Unless otherwise specified, local match for FDOT and FTA funds ranges from 20 - 50 percent. Cost to the City is estimated at 50 percent of Projected Total Cost and is a conservative estimate because it does not account for County or developer contributions.

Sources: GRU, 2017; Parks, Recreation and Cultural Affairs Department, 2017; Public Works Department, 2017; Regional Transit System (RTS), 2017.

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Revised 11/20/08, Ord. 080546
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Revised 07/20/17, Ord. 160967

Capital Improvements Data and Analysis Report

Introduction

The Capital Improvements Data and Analysis Report summarizes the existing and projected needs for City-provided capital facilities identified in the data and analysis reports of the other Comprehensive Plan Elements. These needs are then linked to the City's costs associated with the improvements and the revenues available to support the improvements. This linkage indicates the financial feasibility of the Comprehensive Plan.

For the purposes of the Capital Improvement Element (CIE), a capital improvement is defined as land, non-structural improvements to land, structures (including the costs for design, permitting, construction, furnishings and equipment) with a unit cost of $25,000 or more. The improvement should have an expected life of at least 2 years. Payments for the capital improvement may require multi-year financing. Capital improvements in this element will cover the 5-year period beginning in fiscal year 00/01 (October 1, 2000) through FY 04/05 (ending September 30, 2005).

The CIE does not include all capital outlays which the City of Gainesville or Gainesville Regional Utilities (GRU may budget and expend. First, as indicated above, the element does not include capital items costing less than $25,000. Second, it does not include capital costs, which are not identified and associated with the Comprehensive Plan.

The Element also does not include capital improvements or expenditures, which are the sole responsibility of another governmental unit. For example, capital improvements associated with solid waste facilities are excluded because Alachua County is obligated to provide those improvements. Similarly, road facilities which are under Florida Department of Transportation's (FDOT's) or Alachua County's maintenance responsibility and are funded by the State of Florida or County are excluded from consideration.

Level 1 capital improvements are improvements to correct deficiencies or maintain level of service (LOS) standards associated with comprehensive plan elements which require that LOS standards be set. These elements are Potable Water and Wastewater, Recreation, Stormwater Management, and Transportation Mobility. The improvements related to LOS standards in these elements must be shown in a 5-year schedule listing the yearly expenditures for each improvement.

The City of Gainesville (General Government) and GRU maintain separate budgets and budgetary procedures. Therefore, explanations of procedures associated with General Government and GRU are dealt with separately in this report.

Capital Improvements Data

Identifying Existing and Projected Capital Improvement Needs

Table 1 contains a listing of the capital facilities needed to correct deficiencies or maintain LOS standards adopted in the City's Plan. These capital improvements were identified in the relevant data and analysis reports of the Plan.

Table 1 indicates whether the required capital improvement is needed to correct an existing deficiency or to prevent a projected problem. An "X" is placed in the existing need column if an existing deficiency was identified. An "X" is placed in the projected need column if the improvement is necessary to maintain an existing LOS standard or prevent a deficiency. The fiscal year(s) in which the capital expenditure will be made are also provided in the table.

Table 1 lists needed capital improvements for the Potable Water and Wastewater and- Stormwater Management Elements. While the Transportation Mobility Data and Analysis Report indicated LOS deficiencies on several roadways (see Figure 24 in that report), the City has opted to use its adopted Transportation Concurrency Exception Area (TCEA) as the means of dealing with deficient LOS roads in the city. Implicit in this is the City's acceptance of certain levels of congestion to promote redevelopment and infill within city limits. The TCEA sets alternative standards that developments must meet to promote transportation choice and multi-modal opportunities.

TABLE 1: Existing and Projected Deficiencies which Require Capital Improvements (Level 1 Capital Improvement Needs)

Item	Element	Existing Need	Projected Need	Fiscal Year(s)
	Potable Water			
1.	Murphree Water Plant Filter System Upgrade (expands max day capacity to 51 mgd)		X	00/01
2.	Murphree wellfield expansion (expands the number of wells by 2)		X	00/01
3.	Archer Road water main (between I-75 and Tower Rd.)		X	00/01
	Recreation No capital improvements associated with LOS standards have been identified as necessary.			

Table 1 continued

	Stormwater Management		
4.	Northeast Boulevard/Duck Pond Improvements	X	00/01 – 01/02
5.	Brownfield Project	X	01/02 – 02/03
6.	Sweetwater Branch-Paynes Prairie Outfall Facilities	X	00/01
7.	Hogtown Creek Sedimentation Project	X	00/01
	No City capital improvements associated with LOS standards have been identified as necessary.		
	Wastewater		
8.	2.5 mgd expansion of Kanapaha Wastewater Plant	X	00/01 – 02/03

Sources: Potable Water and Wastewater; Recreation; Stormwater Management; and Data and Analysis Reports of the Comprehensive Plan.

Public Education and Health Facilities and their Impact

Maps 1, 2 and 3 illustrate the locations and service areas for the public schools (elementary, middle, and high, respectively) in the urban area. Since adoption of the 1991 Comprehensive Plan, Norton Elementary School has been constructed in the City's northwest quadrant.

Map 4 shows the locations of public health and higher education facilities. The University of Florida (UF) and Santa Fe Community College serve an area well beyond city limits since students at these facilities often come from across the state and nation. Shands Teaching Hospital (private, non-profit hospital) is located on the UF campus.

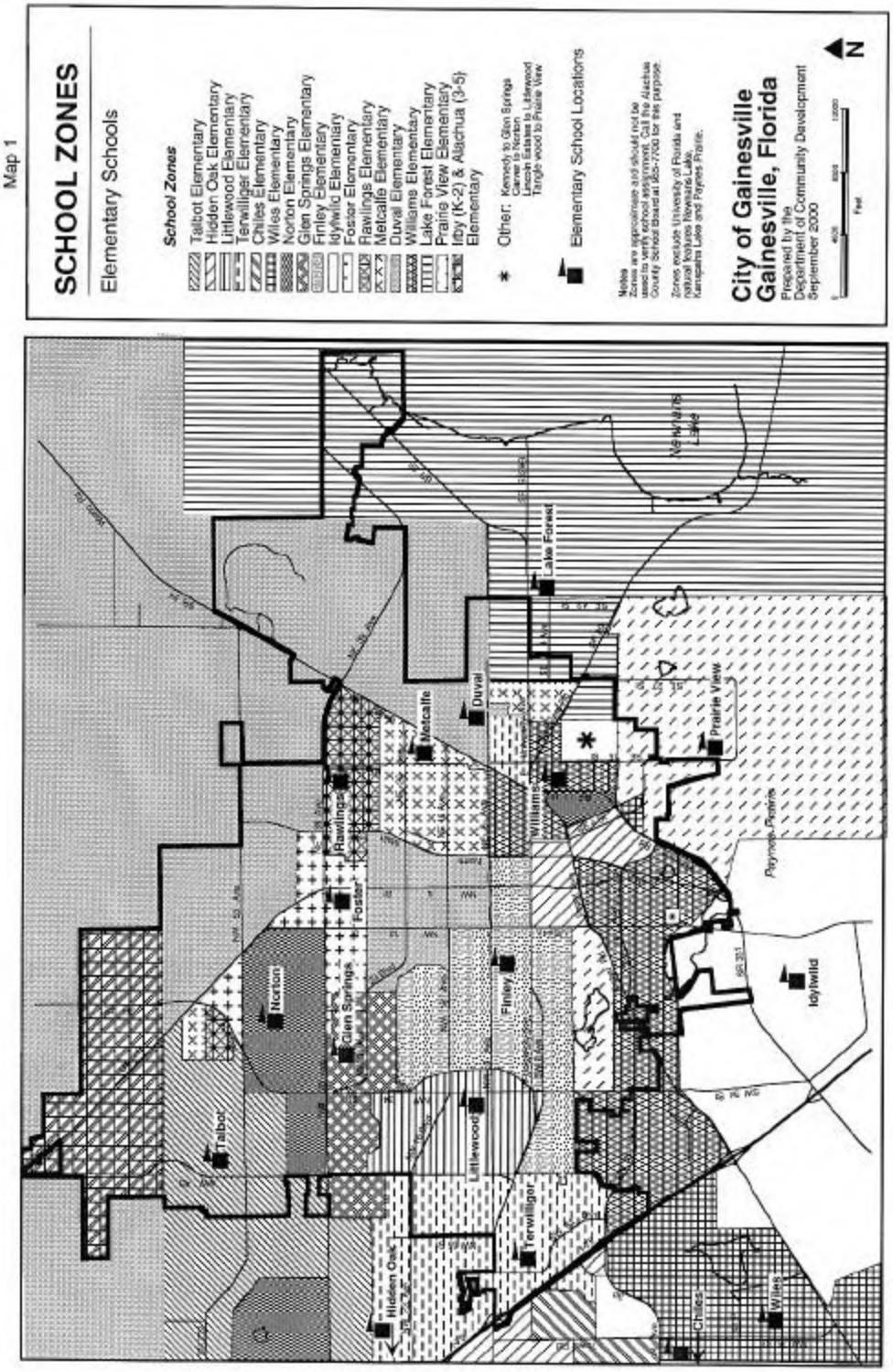
The public health facilities shown on Map 4 serve both local and much broader regional areas. The Alachua County Public Health Unit (will be re-located in the Alachua County Community Services building by the time of this element's adoption) serves all Alachua County residents. Tacachale (formerly Sunland) serves a statewide housing need for the developmentally disabled. The Family Services Center is affiliated with the Alachua County public schools and serves the counseling needs (mental health and social) of students referred by the school system. The Veteran's Administration

(VA) Hospital and VA Nursing Home provide care for patients from across the North Central Florida region.

Most of the capital improvements (water, wastewater, roads, mass transit service, stormwater management, solid waste collection) required by educational and public health facilities already exist within city limits. The existence of these improvements provides an economic incentive for locating or expanding these facilities within city limits and supports the policies of compact

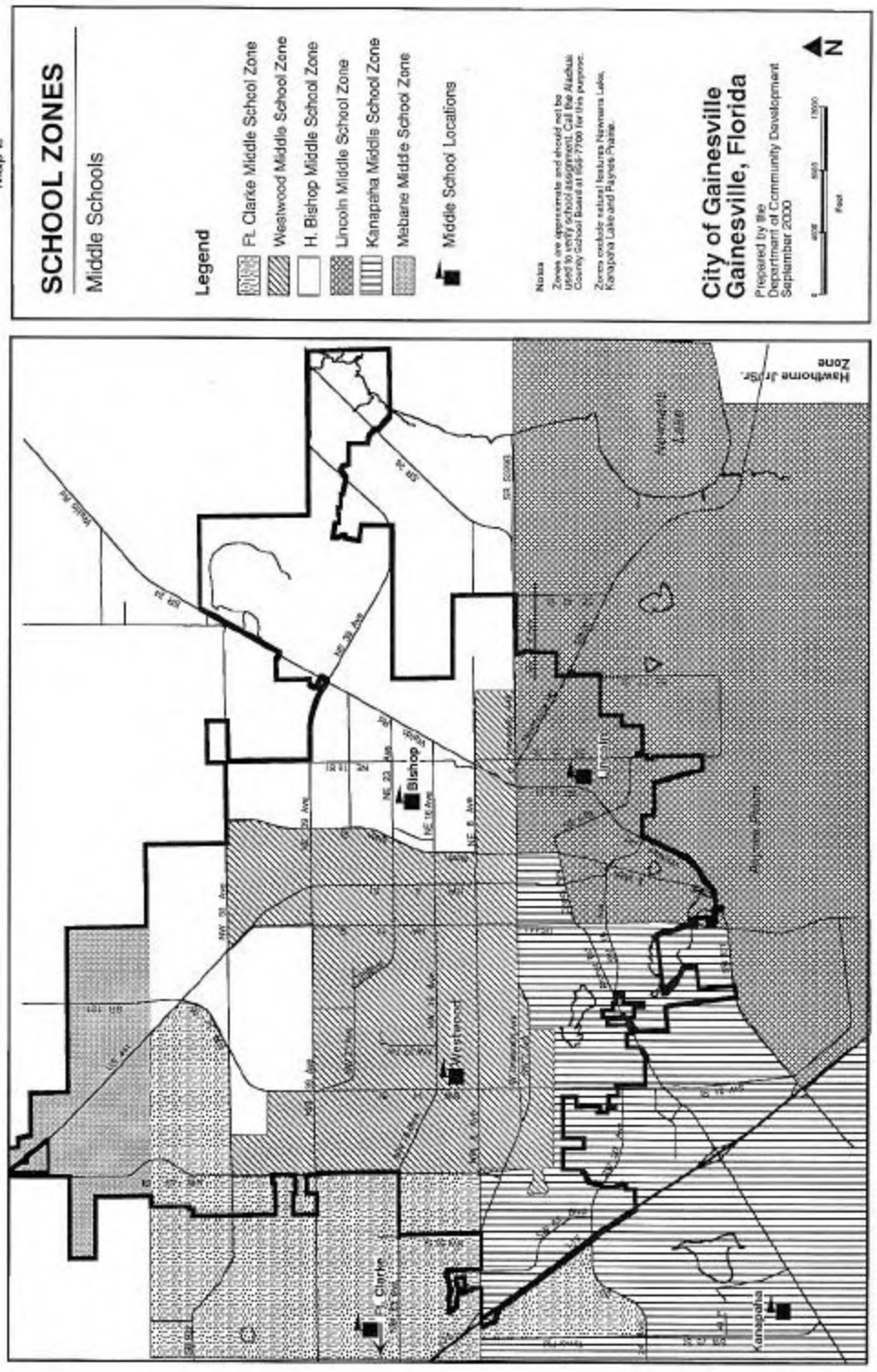
City of Gainesville
Petition 171CPA-00 PB

Map 1



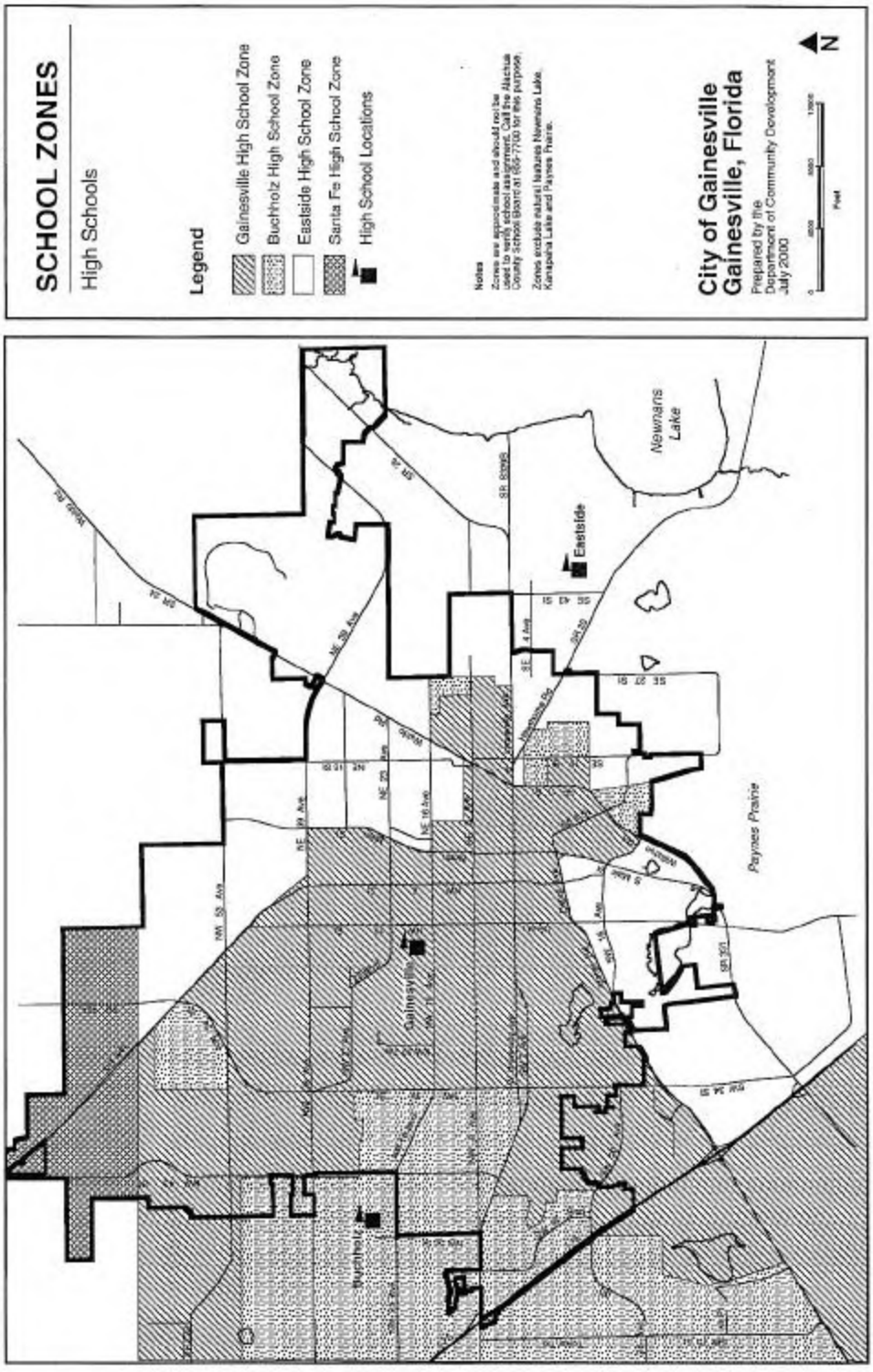
City of Gainesville
Petition 171CPA-00 PB

Map 2



City of Gainesville
Petition 171CPA-00 PB

Map 3



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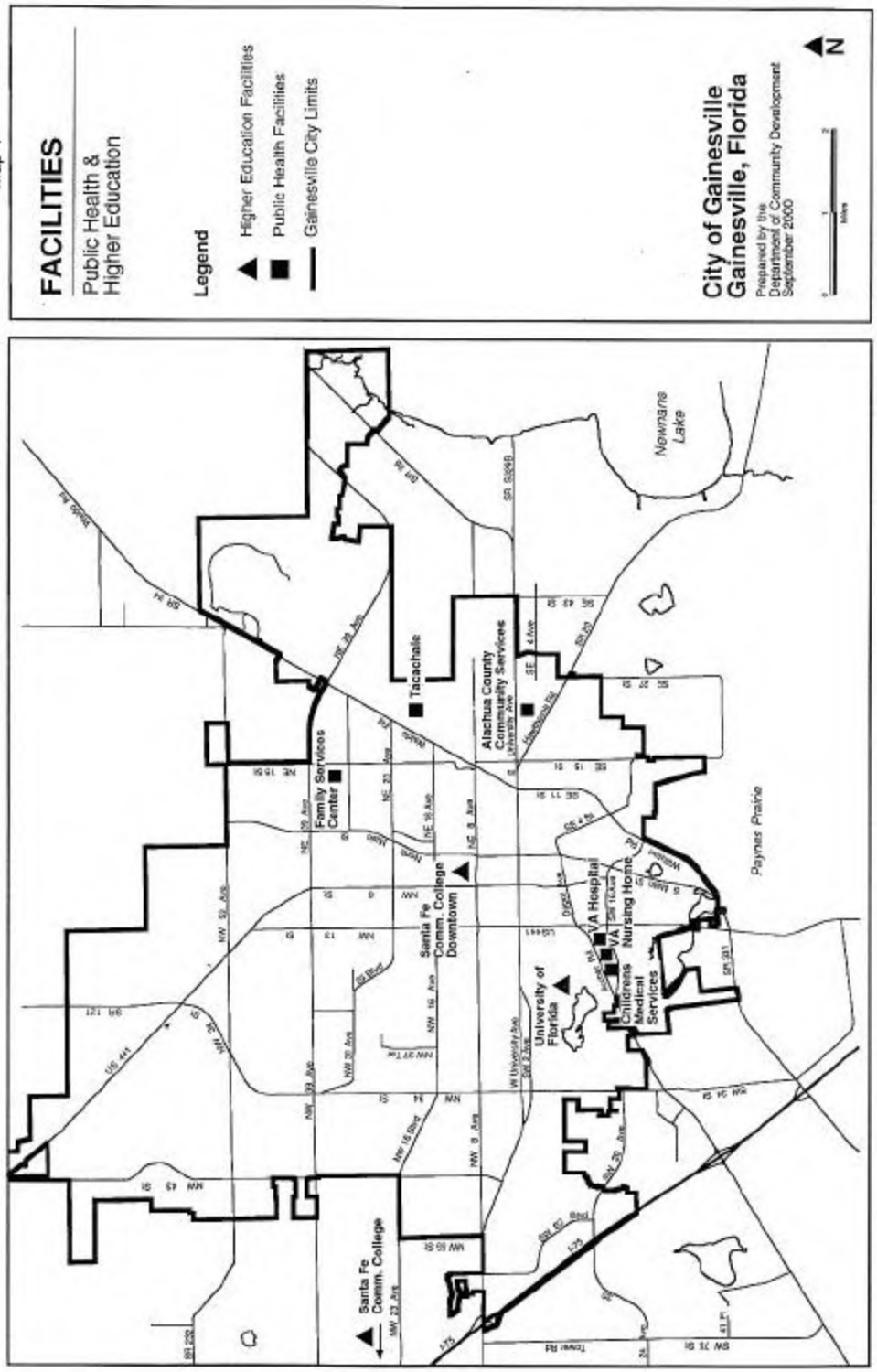
Petition 171CPA-00 PB

Map 4



development and redevelopment found in the Future Land Use Element. Improvements to existing infrastructure for public facilities already in place (e.g., the University of Florida, VA Hospital facilities and Tacachale) are encouraged so that these facilities will not have to relocate or expand to areas outside of city limits.

Almost all areas within city limits fall within the potable water and wastewater service areas. Capacity is available to service education and public health uses. Stormwater management facilities must be provided by new development or by expansions of existing development. Within city limits, mass transit serves all public health and education facilities at the LOS standards set in the Transportation Mobility Element.

The University of Florida is the only known state agency that has plans to add additional buildings within the city limits. Expansions occur at the University of Florida and Santa Fe Community College on a regular basis as state funding becomes available. Expansions at these facilities can impact water, wastewater and transportation services. The University provides its own wastewater and stormwater management facilities and owns the potable water pipes running through the campus. The University also maintains its own roads. The University contracts with the City for mass transit services and for potable water.

No new public health facilities or expansions of existing facilities are known to be planned. In fact, according to officials at Tacachale, the resident population at the facility is expected to shrink over the next ten years as more individuals are de-institutionalized. The North Central Florida Regional Health Planning Council has indicated no need for new hospital or nursing home beds in the community. Communication with the VA Hospital has indicated that have no expansion plans for either the hospital or nursing home.

With the exception of deficient LOS roadways near the University of Florida and VA Hospital complex, there are no existing deficiencies or anticipated deficiencies connected with public health and higher education facilities. The VA and the University of Florida campus have been placed within the City's TCEA. The University of Florida must meet the requirements of 240.155 F.S. and the levels of service established for streets within the UF transportation impact area.

Existing Revenue Sources for Capital Improvements

Many of the City's revenue sources are used to defray the operating and administrative costs of programs and do not produce sufficient funds for capital projects. The primary sources of revenue available to fund capital improvements are listed below with a brief explanation of each source. Because GRU and the City of Gainesville maintain separate budgets and accounting systems, the revenue sources for each organization are listed separately. The following inventory is not exhaustive of all revenues for GRU and the City; however, it represents the major funding sources available for capital improvements.

Several funding sources are tied to the purchase of specific items. For example, Federal Transit Administration (FTA) funds can only be used for transit-related expenditures. Thus, the list of revenue sources available to fund capital improvements should not be considered a list of potential revenues which can be used across all types of capital improvement expenditures.

GRU Revenue Sources Available for Water/Wastewater Capital Improvements

Revenue Bonds

Revenue bond proceeds are the primary means used by GRU to finance capital improvements. The bonds are secured by revenues and collections from system users. Currently, GRU's long-term credit (bond) rating is AA.

Rates and Collections

GRU collects fees for water and wastewater service from customers. Rates are established in the City's Code of Ordinances. This revenue source also includes developers' cash contributions for capital improvements in the form of connection fees and forcemain fees. It also includes additional contributions in aid of construction if GRU does not project an adequate return on investment from an extension.

Grants

The City has received federal grants from the U.S. Environmental Protection Agency (EPA) to finance wastewater plant expansions and upgrades.

Developer Contributions

Developers contribute water and wastewater distribution and collection systems internal to developments. These capital improvements are fully funded by development.

Special Assessments

GRU can levy an assessment against property owners in a designated area to fund capital improvements deemed necessary for, or beneficial to, those property owners.

City Revenue Sources Available to Fund Capital Improvements

Property Taxes

All real and personal property within the City, not expressly exempted from taxation, is subject to ad valorem taxes based on a millage rate adopted annually by the City Commission. The current millage rate is 4.9416. There are no special restrictions on the use of these funds.

Franchise Taxes--Telephone

BellSouth Telephone Company pays a tax on gross receipts for telephone exchange services. The fee schedule is 1% of gross receipts. This tax will expire when the new telecommunications Services Tax comes into effect. There are no special restrictions on the use of these funds.

Franchise Taxes--Cable TV

The cable television provider pays a tax on charges levied on customers. The tax is 5% of gross revenues. There are no special restrictions on the use of these funds. This tax will expire when the new Telecommunications Services Tax comes into effect.

Utility Taxes

A 10% tax is levied on city residents for water, gas and electric services. There are no special restrictions on the use of these funds.

Telecommunications Services Tax

A new tax on cable TV, telephones (both regular and cellular), and pagers/beepers will come into effect 10/1/01. The Florida Department of Revenue will establish the rates for this tax prior to 10/1/01.

Intergovernmental Revenue

This revenue includes the following items:

a. State Revenue Sharing - Motor Fuel Tax. The City receives one cent of the tax on motor fuels from the State Revenue Sharing Trust Fund. Funds are received from the State monthly. This revenue is earmarked for transportation-related expenses.

b. Local Government Half-Cent Sales Tax. One-half of the "Fifth Cent" portion of the state's sales tax is distributed to City and County governments. The City's portion is in relation to the City/County population, and depends on sales taxes collected within the County. These funds are received monthly and can be used for any city program. The one-half cent tax on telecommunications will phase out on 10/1/01 with the implementation of the Telecommunications Services Tax.

c. State Revenue Sharing - Cigarette Taxes. Eleven cents of the 21-cents/pack tax on cigarettes is received from the State Revenue Sharing Trust Fund. The City also receives an additional 2 cents of the 21-cents/pack tax which is part of an excise tax on retail sales of cigarettes sold

within the County. Portions of these funds are used for debt service on revenue bonds. The remainder can be used for any municipal program.

d. Federal Funds and Grants. The City receives federal monies in the form of Community Development Block Grant funds to assist low- and moderate-income areas, FTA capital grants earmarked for transit, and other miscellaneous grants.

e. State Grants. The City regularly receives state grants for transit capital improvements. Other state grants occasionally become available for specific improvement projects.

Utility Transfers

Based on a formula, GRU transfers a portion of the profits generated from the operation of the electric, natural gas, water and wastewater utilities to the General Fund. Beginning in fiscal year 2000/2001, the formula for the electric utility transfer was changed. The formula is now based on delivered units of power, rather than gross revenues. This formula change was as a result of electric utility deregulation and its impacts on GRU's competitiveness in the market place. In addition to a specific percentage of revenue being transferred, the transfer also includes the direct transfer of revenue realized from the levy of a surcharge on electric, water and wastewater services provided to residents in the unincorporated area. The transfer may be made only to the extent such funds are not needed to pay GRU's debt service.

Local Option Gas Tax Fund

By inter-local agreement the City of Gainesville receives 38.635% of the 6 cents Local Option Gas Tax funds collected. These funds must be used for transportation-related expenditures. A portion of these funds goes to the Regional Transit System to fund mass transit.

Bonds

The City can issue either general obligation or revenue bonds to fund capital improvement projects. General obligation bonds require voter approval and are backed by the full faith and credit of the local jurisdiction. The City can issue revenue bonds to pay for capital facilities associated with revenue-producing enterprises such as the Stormwater Utility.

The City's current bond rating for non-ad valorem revenue pledge is A2.

Special Assessments

The City can levy a special assessment to pay for necessary capital improvements in an area. Funds collected must be used for the specified purpose of the assessment and expended only within the special assessment area.

Regional Transit System (RTS)

RTS collects fares and has several contracts for service which generate funds. Currently, these revenues are insufficient to fund all capital improvements. In addition, RTS received funding from the University of Florida (UF) Campus Master Plan Agreement. RTS also receives monies for transit service as a result of the student activity fee (based on a per-credit-hour fee) at UF, which provides unlimited access to the transit system. A new fee will be implemented for the 2001-2002 school year and will replace the current Activity and Service fee charge to UF students.

Stormwater Management Utility - Monthly Stormwater Fees

The City instituted a stormwater utility fee in 1988. The revenues generated from this source can be used to issue revenue bonds or to fund pay-as-you-go stormwater capital projects.

Community Redevelopment Area Tax Increment Funds

There are 3 tax increment districts producing. One district is the downtown area, established in 1980. The second area is the Fifth Avenue district, established in 1979. The third district is College Park/University Heights, established in 1994. A fourth redevelopment district on the east side of Gainesville is pending the completion of the redevelopment plan for the area. The CRA receives the ad valorem tax funds over and above the tax levels as of the establishment dates in these districts to finance redevelopment projects in those areas. These funds can be used for infrastructure needs. However, the revenues from the 3 districts cannot be co-mingled and must be expended in the respective districts.

Analysis of Capital Improvements Data

Current Local Practices Guiding Capital Improvements

A variety of local policies and practices guide the timing and location of public facility construction and expansion. State and federal requirements also play a major role in infrastructure placement and planning. The current practices for each type of capital improvement are listed below. Policies and programs being established in the City's Comprehensive Plan (especially the Concurrency Management System) and the resulting Land Development Regulations will alter or modify some of the current practices.

Water/Wastewater

Gainesville Regional Utilities maintains annual customer and sales forecasts for the water and wastewater plants. These forecasts are used to project when plant capacity increases will be needed. Increases in capacity are then scheduled in the 6-year GRU Capital Improvements Program (CIP). Repairs and replacements to system components are done on a regular maintenance schedule. Additionally, pursuant to the utilities bond resolution, repairs and replacements may be required if prescribed during the conduct of a 5-year review by an independent consultant. Any such repairs and replacements found necessary are scheduled in GRU's CIP.

Extensions to potable water and wastewater lines are occasionally made by GRU to provide loops, which offer redundancy in the potable water distribution systems and wastewater collection systems. This is consistent with prudent utility practice and provides a safety mechanism for customers in the event of line maintenance and/or failures. These extensions are made to better support the existing customer base. In emergency circumstances, when health and safety are endangered, extensions may be made to protect citizens and provide service.

Extensions within existing city limits are considered infill because most of the city falls within GRU's existing service area (see Maps 1 and 6 in the Potable Water and Wastewater Data and Analysis Report). The only exceptions are that a small area of undeveloped land at the eastern edge of the airport is not currently served with potable water and the Deerhaven Power Generation Plant is not served with centralized wastewater facilities.

The timing and locations of extensions outside of city limits are controlled by Alachua County. The policies concerning these extensions are provided in the Alachua County Comprehensive Plan. In addition, an Urban Service Area boundary (now known as the Urban Cluster) has been set by the County in their Comprehensive Plan. Extensions beyond the urban services boundary are subject to approval by the Alachua County Board of County Commissioners. Policies for approval of extensions beyond the Urban Service Area boundary are set in the County's Comprehensive Plan.

Extensions to new developments inside or outside of city limits are permitted only when potable water and wastewater plant capacity are available or can be made available through developer contributions.

This policy has been established in the City's Concurrency Management System. Extensions require developer contributions to finance the improvements. Section 27-124 of the City's Code of Ordinances (see Appendix A of this report) discusses developer contributions for the potable water system. Sections 27-174, -175 and –176 (see Appendix A of this report) discuss developer contributions for the wastewater system.

Policies concerning connection charges, fire support and line construction for water and wastewater are found in the City's Code of Ordinances (Water: see Sections 27-129, -130, -131, -134; Wastewater: see Sections 27-171, -172, -176, -173, -179, 180, 180.1, 180.2, 180.3; and Appendix A for fees. A copy of these items can be found in Appendix A of this report.). Federal and/or state mandates may necessitate facility improvements (e.g., as EPA standards change, new construction or upgrades may be necessary for the wastewater plants to meet federal regulations).

Conservation, Open Space and Groundwater Recharge

Alachua County voters recently approved the Alachua County Forever Bonds. This is a new land conservation program to finance the purchase of environmentally significant lands to protect water resources, wildlife habitats and natural areas suitable for resource-based recreation. A nine-member board will be appointed by the County Commission to select properties for purchase. Lands within city limits would qualify for purchase. The City can participate in this program through the nomination of worthy lands for conservation purposes. The property tax rate of .25 mills over the next 20 years will be used to repay bond funds borrowed from financial markets.

Transportation Mobility

Mass transit capital improvements are heavily dependent on the availability of federal and state funding. Capital improvements for transportation are scheduled and approved through the federally required Metropolitan Transportation Planning Organization (MTPO). The MTPO includes transit and roadway facilities in its 5-year Transportation Improvement Program (TIP). The TIP implements projects consistent with the Gainesville Urbanized Area Transportation Study (GUATS) Plan (the 2020 Plan is currently being developed) and addresses all functionally classified roadways in the Gainesville Urban Area.

During the City's subdivision and site plan review process new facility needs are frequently identified. Road facilities necessary for safety and/or improved traffic flow in connection with new development are usually developer-contributed. The City's recently adopted TCEA also provides a mechanism for developer contributions to improve the various transportation modes.

Recreation

Responsibility for planning recreation facilities and improvements lies with the City's Recreation and Parks Department, Cultural Affairs Department and the City Commission. Advisory support is provided by the Public Recreation Board and the Nature Centers Commission. Recommendations for recreation capital improvements are programmed in the City's Capital Improvement Program. Park

land acquisition follows the same procedures listed in the Conservation section above. As noted earlier in the Conservation section, the Alachua County Forever Program may provide a funding source for resource-based recreation facilities.

Stormwater

Currently, new development must construct the stormwater management facilities required to meet the water quality standards of the appropriate water management district and abate increased stormwater run-off due to the development. Redevelopment of existing property also requires developer-installed stormwater facilities. Developments must submit dimensioned drainage plans, including calculations, for review and approval by the Public Works Department in accordance with plan review procedures established in City ordinances. The Public Works Department has established the standards for stormwater retention and detention and these have become LOS standards in the Stormwater Management Element.

Other stormwater management facilities are constructed or increased in capacity based on need priorities established by the Stormwater Management Utility. Facility construction or expansion must receive City Commission approval and be included in the capital improvements plan. A Stormwater Management Utility fee was implemented in 1988 to provide a dedicated funding source to meet existing needs and provide for regular maintenance of facilities.

Fiscal Implications of Existing Deficiencies and Future Needs

Table 1 in this report listed the Level 1 capital improvements projects which were identified in the various data and analysis reports of the Comprehensive Plan. Level 1 improvements are considered high priority items because the facilities are necessary to either meet or maintain adopted LOS standards or to correct existing deficiencies. The Potable Water and Wastewater, Stormwater Management and Transportation Mobility Data and Analysis Reports identified Level 1 improvement needs.

Potable Water

In order to meet projected future peak water demands, capacity upgrades are being implemented at the wellfield, at the Murphree Water Treatment Plant and in the water distribution system. The plant maximum day treatment capacity will be increased from 40 mgd to 51 mgd through a filtration system upgrade. The wellfield capacity is being increased by installing two additional wells, which are expected to increase the wellfield capacity to approximately 45 mgd. Distribution system upgrades are being performed in order to maintain LOS standards for pressure with future demand increases. Low pressure problems occurred periodically in the southwest area as a result of high demands during the spring of 2000. In order to alleviate these problems and continue to maintain LOS, a water main upgrade along Archer Road between Tower Road and I-75 at a cost of $665,000 is planned.

A schedule of projected rate increases to secure the bonding has been established and is shown in the Potable Water and Wastewater Data and Analysis Report. These improvements are also shown in the 5-Year Schedule of Capital Improvements. Thus, there are no negative fiscal implications from the three Potable Water capital improvements projects listed in the 5-Year Schedule of Capital Improvements.

Wastewater

In order to maintain LOS standards with projected increases in flow, Kanapaha Water Reclamation Facility will be expanded from 10 mgd to 12.5 mgd, with completion of the capital improvement in FY 2002/2003. This project is being financed with utility revenue bonds. A schedule of projected rate increases to secure the bonding has been established and is shown in the Potable Water and Wastewater Data and Analysis Report. This will result in sufficient utility revenues for the revenue bonding. Thus, there are no negative fiscal implications from this projected need.

Stormwater Management

The capital needs identified in this data and analysis report were related to projected water quality and quantity treatment needs. The Northeast Boulevard/Duck Pond improvements are being funded by a combination of EPA grant funds and City SMU funds. The Brownfield Project funds have come from the State Revolving Fund (one million dollars). Repayment will be made over time using SMU funds. The Sweetwater Branch-Paynes Prairie Outfall Facilities funding has come from an EPA grant. An application to the State Revolving Fund has been made for further funding. The Hogtown Creek Sediment Project has been funded, to date, by the Florida Department of Transportation. The City has applied for an additional $32,500 in grant funds from the St. Johns Water Management District. In addition, the City has designated $45,000 of SMU funds for the design element of this project.

SMU fees can be used as a revenue source to support the issuance of a revenue bond to finance projects at some point in the future. Thus, there are no negative fiscal implications from the Stormwater Projects. However, full funding of all these projects has not been established. Because the SMU funds can only be used to finance stormwater management improvements and operations, the needs associated with this Element do not impact the priority of funding for other projects.

Transportation Mobility

The capital improvements associated with transit, which were noted in this data and analysis report are not associated with the adopted LOS standards. There are no City capital improvements associated with roadway LOS standards due to the adoption of the TCEA.

Conservation, Open Space and Groundwater Recharge

See the discussion of the Alachua County Forever Bond Program in the earlier section on Conservation.

Capital Improvements Costs

The total costs associated with each needed capital improvement are shown in Tables 3 (Level 1). The tables also indicate the amount of the total cost, which is the City's share, in cases where federal, and state matching funds are used. It should be noted that if federal and state funding matches are decreased or eliminated, many of the capital projects listed may not be financially feasible for the City.

The bases for the Level 1 costs estimates are historical cost figures and engineering cost estimates based on project studies. These estimates were obtained from the relevant city departments.

TABLE 3: Capital Improvements Costs by Revenue Source
Level 1 Capital Improvement Needs (in $1,000's)

Item	Element	City Funds	State Funds	Federal Funds	Total Cost
	Potable Water				
1.	Murphree Water Plant Filter System Upgrade (expands max day capacity to 51 mgd)	250			250
2.	Murphree wellfield expansion (expands the number of wells by 2)	1,530			1,530
3.	Archer Road water main	665			665
	Recreation No capital improvements associated with LOS standards have been identified as necessary.				
	Stormwater Management				
4.	Northeast Boulevard/Duck Pond Improvements	500		300	800
5.	Brownfield Project	1,000		1,300	2,300

Table 3 continued

6.	Sweetwater Branch-Paynes Prairie Outfall Facilities	500			2,000
7.	Hogtown Creek Sediment Project	45	1,525		2,000
	Transportation Mobility				
	No City capital improvements associated with LOS standards have been identified as necessary.				
	Wastewater				
8.	2.5 mgd expansion of Kanapaha Wastewater Plant	10,600			10,600
TOTAL:		**$15,090**	**$1,525**	**$1,600**	**$20,145**

Sources: Potable Water and Wastewater and Stormwater Management Data and Analysis Reports and cost estimates from City Departments, 2000.

Use of Timing and Location of Capital Improvements to Public Facilities to Support Efficient Land Development

As an urbanized city (approximately 90% built-out), Gainesville already has most of the capital facilities (water and wastewater facilities, roads, mass transit service, solid waste collection and stormwater management) in place to meet the existing needs of its population. The existence of these improvements provides an economic incentive for locating within city limits and supports the policies of compact development and redevelopment found in the Future Land Use Element.

Population growth is projected to be limited over the planning period. Thus, the primary need for new capital improvements will be for infill development or redevelopment. Regulations already in existence require development to pay for, or provide, water, wastewater and stormwater management facilities. Transit services the redevelopment areas shown in the Future Land Use Data and Analysis Report. Solid waste collection is available citywide. Some of the roads in the area designated for redevelopment (see the Designated Urban Redevelopment Area in the Future Land Use Element map series) are operating at a deficient LOS. The Designated Urban Redevelopment Area has also been designated as a Transportation Concurrency Exception Area to deal with the issue of deficient roadway

LOS. Allowing redevelopment and infill within this area promotes compact development where urban services are currently available and reduces the incentives for urban sprawl. Standards set within the TCEA by policies established in the Concurrency Management Element require alternative strategies to roadway widening for resolving traffic congestion problems.

Extensions of potable water or wastewater lines to serve developments within city limits which were not on centralized systems have been made by special assessments as requested by neighborhoods. For example, the Wimberly Estates neighborhood, which had its own water system, has been added to the centralized potable water system through special assessment payments. The city will make every effort to provide service to neighborhoods wanting to retrofit to centralized systems, especially in emergency situations where health and safety are at risk. Since the adoption of the 1991 Plan, Tacachale has been hooked to the centralized potable water system due to contamination being found in their water supply wells.

Policies in the Future Land Use, Capital Improvements, and Concurrency Management Elements specify that adequate public facilities must be available concurrent with the impacts of development. The City's Concurrency Management System has operated since 1992 to insure that LOS standards are met by new development and redevelopment. Thus, facilities will be timed to be available to service the future city population.

The principal state agencies which provide public facilities within the City of Gainesville include the Board of Regents (University of Florida and Santa Fe Community College Downtown Campus), Health and Rehabilitative Services (Tacachale), and FDOT (roads). The plans of the University of Florida, Santa Fe Community College and Tacachale and their impacts have already been discussed above in the "Public Education and Health Facilities and their Impact" section.

The City, Alachua County and FDOT jointly plan, through the Metropolitan Transportation Planning Organization (MTPO), roadway facilities for the Gainesville Urban Area. As discussed earlier in this report, the City's TCEA is the strategy chosen to deal with deficient roadway LOS because FDOT does not have sufficient transportation funds or right-of-way to alleviate traffic congestion with road widenings or new construction. Without the TCEA, infill and redevelopment within major portions of the city would be impossible using strict roadway LOS standards.

A conservation easement was purchased for a 7,100-acre tract adjoining the existing wellfield with joint funding from GRU, St. Johns River Water Management District, Suwannee River Water Management District and the USDA. The purchase also includes four additional well sites, and the provision for purchase of additional well sites in the future. This purchase will provide additional protection to the existing wellfield against potential contamination resulting from development activities, and will allow the City to expand its wellfield to meet its needs well beyond the 2010 planning horizon.

The City is currently working with the St. Johns River Water Management District in renewing its consumptive use permit. It is anticipated that the new permit will be issued by September 2001.

<u>Extension of Water and Wastewater Facilities outside of City Limits</u>

Extensions of GRU's water and wastewater facilities outside of city limits occur only when: development is approved pursuant to Alachua County's Comprehensive Plan, adequate capacity is available, and GRU's cost recovery policies are met. Alachua County's Comprehensive Plan has designated an Urban Cluster area (formerly referred to as the Urban Services Area) around the City of Gainesville (see Map 5). The County's Urban Cluster area, among other things, establishes a boundary for the extension of water and wastewater facilities in accordance with the County's land use plan.

Extensions of potable water and sanitary sewer lines beyond the County's Urban Cluster area are subject to approval by the Alachua County Board of County Commissioners. To be approved, any such extension must be accompanied with the scheduling and funding of other appropriate urban services required to support the development and the amendment of the Land Use Plan and maps. The County's Comprehensive Plan provides the extenuating circumstances under which such extensions would be approved. Circumstances under which the County Commission could grant approval include:

a. The absence of such facilities would result in a threat to the public health or safety; or

b. The extension of such facilities is necessary to enhance the safe, effective, and efficient delivery of central potable water or sanitary sewer service within the existing urban service area; or

c. To serve a purpose consistent with Alachua County's Comprehensive Plan, such as the retention and expansion of existing business and industry or the attraction of new business and industry in accordance with the Economic Element of the Alachua County Plan, or to serve institutional, tourist, or entertainment uses consistent with the Future Land Use Element; or

d. Extensions are needed as part of a comprehensive expansion of public services to encourage urban development in a new area as part of a comprehensive plan amendment. In this case, a finding must be made by the Alachua County Commission that the extension to new areas is based on the following factors (from the Alachua County Potable Water/Sanitary Sewer Element, Policy 8.3):

    a. population growth rate;

    b. maintenance of level of service standards for the potable water or sanitary sewer system;

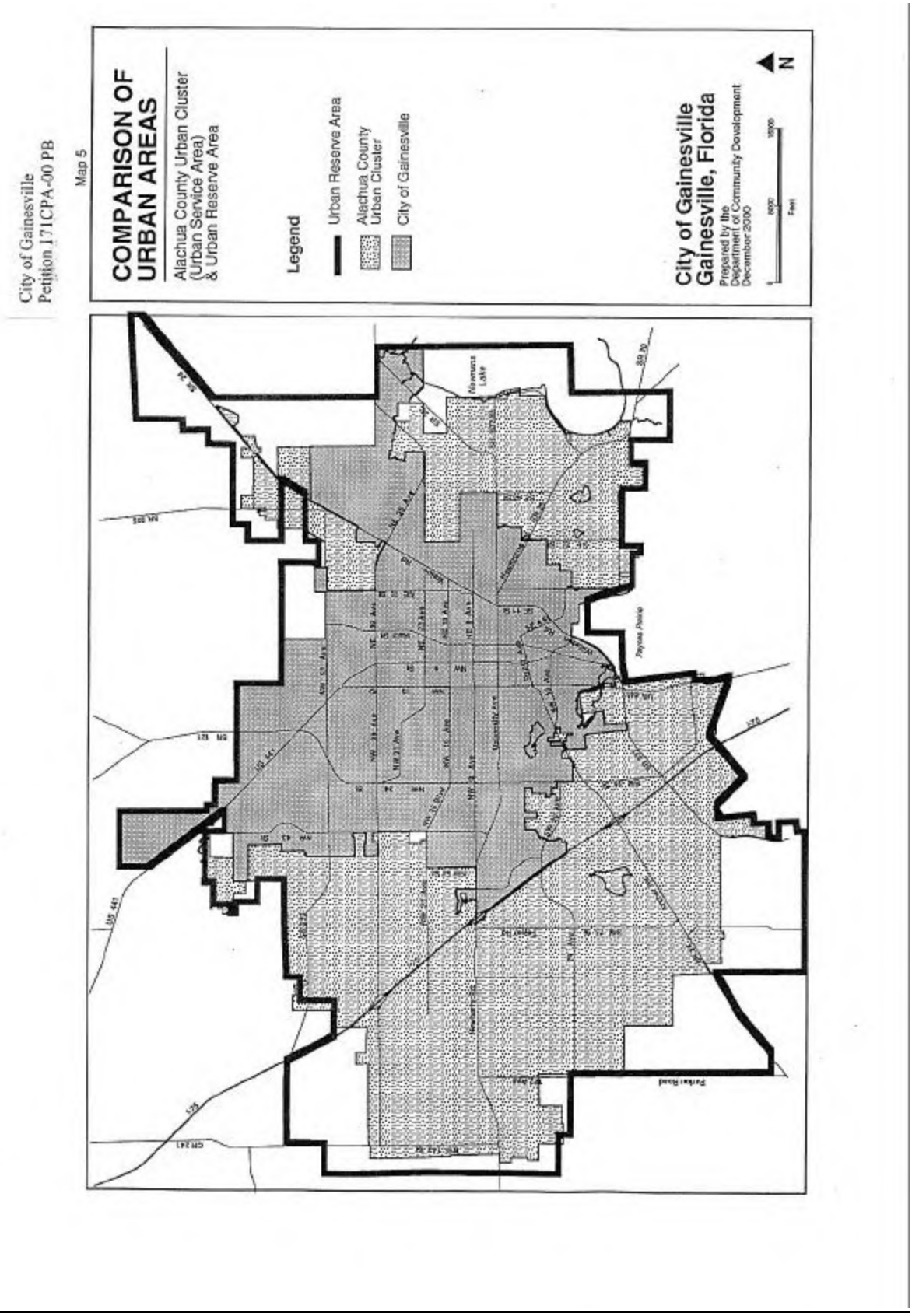
    c. adequacy of existing and planned supporting infrastructure.

    Approval of such extensions would require the following:

    1. Identification, scheduling, and designated funding for capital improvements to other public facilities need to extend urban services. Such projects shall be incorporated in the Five-Year Capital Improvement Program of the Alachua County Capital Improvement Element.

2. Adoption of necessary amendments to the Future Land Use Map extending the urban service area boundary.

Pursuant to the Boundary Adjustment Act of 1990, the Alachua County Commission has adopted an Urban Reserve Area (see Map 5) to promote efficient planning and delivery of urban services. The Urban Reserve Area is the area which is expected to become urban in character in the next ten years and generally represents the area within which it is reasonably prudent to extend water and wastewater facilities. The boundary of the Urban Reserve Area is subject to review and revision every five years. The Urban Reserve Area is generally either coincident with or extends somewhat further from city limits than the County's Urban Cluster (previously referred to as the Urban Services Area). Any extensions beyond the Urban Reserve Area Boundary approved by the County Commission under the terms described above will also be subject to City Commission approval. The City does not intend to allow extensions beyond the Urban Reserve Area except as required by law or existing contractual obligations as outlined below.


City of Gainesville
Petition 171CPA-00 PB
Map 5
COMPARISON OF URBAN AREAS
Alachua County Urban Cluster (Urban Service Area) & Urban Reserve Area
Legend
Urban Reserve Area
Alachua County Urban Cluster
City of Gainesville
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
December 2000
N
Feet

As a general principle of law, a public utility is under a legal obligation to render adequate and reasonably efficient service impartially to all members of the public in areas outside the City's corporate limits in which it has generally operated as a public utility. These circumstances prevail in the case of Gainesville Regional Utilities, which has recognized and operated in a service territory including unincorporated Alachua County for many years. This recognition of service territory arises from a number of circumstances including, but not limited to, the 1979 Regional Utilities Board Agreement with Alachua County, the City's 201 Facilities Plan, the 1983 Utilities System Revenue Bond Resolution, and the February, 1990 contract with Alachua County relating to the provision of fire hydrant and street light service. Additionally, as a general rule, public utilities serving an area may not refuse to render further service in that area because of collateral matters not related to that service.

Ability to Finance Capital Improvements

Both GRU and the City of Gainesville provide capital improvements. The analysis assessing the ability to finance these improvements is separated for these two entities.

GRU

Because potable water and wastewater are considered enterprise operations, GRU is capable of financing all of the necessary capital improvements shown in the 5-Year Schedule of Capital Improvements. GRU finances most improvements using revenue bonds. Revenue bonds are the only type of long-term debt which GRU issues. EPA grants have been obtained in the past to fund wastewater facility improvements.

Tables 5 and 6 show projected revenues and expenditures for the Potable Water and Wastewater Systems. The tables list projected operating costs and debt service for currently outstanding bond issues for the Potable Water and Wastewater Funds. (Table 13, later in this document, shows the debt service obligations for GRU's whole utility system through the year 2017). The analysis, which follows the tables, discusses GRU's projected debt capacity for the Water and Wastewater Systems.

TABLE 5: 5-Year Projections of Revenues and Expenditures for the Potable Water Fund (in $1,000s)

POTABLE WATER FUND REVENUES	**00/01**	**01/02**	**02/03**	**03/04**	**04/05**
Base rate revenue--present rates	11,756	12,005	12,335	12,666	12,970
Surcharge Revenue	1,001	1,035	1,068	1,101	1,070
Other Revenue	1,600	1,600	1,600	1,600	1,600
Interest Income	1,100	893	789	693	618
Rate Stabilization	1,160	2,013	2,003	1,679	1,123
Rate Change Revenue	811	1,280	1,798	2,420	3,091
Income from Invested Sinking Fund	0	0	0	0	0
Total Revenues w/ Rate Changes	**$16,617**	**$17,547**	**$18,165**	**$18,507**	**$18,571**
Total Operating Expenses	**$6,891**	**$7,086**	**$7,298**	**$7,517**	**$7,743**
Total Net Revenue	**$9,726**	**$10,461**	**$10,867**	**$10,990**	**$10,828**

USES OF NET REVENUE					
Debt Service	4,146	4,455	4,423	4,173	3,857
Utility Plant Improvement Fund	2,642	2,934	3,153	3,331	3,407
General Fund Transfer	2,938	3,072	3,291	3,486	3,564
Other Uses	0	0	0	0	0
Total Use of Net Revenue	**$9,726**	**$10,461**	**$10,867**	**$10,990**	**$10,828**
Water Fund Surplus (Deficit)	**0**	**0**	**0**	**0**	**0**

Source: GRU FY 00/01 Budget.

TABLE 6: 5-Year Projections of Revenues and Expenditures for the Wastewater Fund (in $1,000s)

WASTEWATER FUND REVENUES	**00/01**	**01/02**	**02/03**	**03/04**	**04/05**
Base rate revenue--present rates	14,632	14,998	15,354	15,710	16,049
Surcharge Revenue	1,264	1,299	1,333	1,367	1,399
Other Revenue	2,200	2,200	2,200	2,200	2,200
Interest Income	1,664	1,681	1,474	1,261	1,127
Rate Stabilization	2,406	3,201	4,242	2,895	1,875
PROGRAM OF RATE CHANGES					
Percentage Rate Increase	0	0	0	0	2
Cumulative Rate Increase	0	0	0	0	2
Rate Change Revenue	0	0	0	0	349
Total Revenues with Rate Changes	**$22,166,**	**$23,379**	**$24,602**	**$23,433**	**$22,999**
Total Operating Expenses	**$8,648**	**$8,905**	**$9,172**	**$9,447**	**$9,730**
Total Net Revenue	**$13,518**	**$14,474**	**$15,430**	**$13,986**	**$13,269**
USES OF NET REVENUE					
Debt Service	5,873	6,244	6,667	4,754	4,481
Utility Plant Improvement Fund	3,656	4,058	4,368	4,631	3,952
General Fund Transfer	3,656	4,172	4,395	4,602	4,836
Total Uses of Net Revenue	**$13,518**	**$14,474**	**$15,430**	**$13,986**	**$13,269**
Wastewater Fund Surplus (Deficit)	**0**	**0**	**0**	**0**	**0**

Source: GRU FY 2000/2001 Budget.

GRU's ability to issue new debt to fund improvements and additions to the System is limited only by GRU's ability to collect revenue sufficient to pay debt service (principal and interest) on the debt. For this reason, GRU covenants with the owners of its debt through its Bond Resolution that GRU will realize a level of net revenue that exceeds its projected debt service by 140%.

As part of its financial planning, GRU develops projections of debt service for its forecast and planning horizon. Current plans, that include all the capital additions necessary to meet and exceed projected service levels, indicate that GRU's revenue will exceed its projected debt service by at least 280%. This means that, on a prospective basis, GRU's projected level of revenue can support approximately twice as much debt service (and debt) as has been indicated to be needed within the planning horizon.

CITY GOVERNMENT

The City's need for capital improvements and its ability to finance those improvements are related to anticipated population growth and expected revenues. The City's population projections (see Future Land Use Data and Analysis Report) indicate slow growth over the ten-year planning period. Unless significant redevelopment or large-scale annexations occur, the need for new capital improvements to serve new city residents will be minimal.

In general, the City's General Government revenues are projected to have limited growth over the next 5 years, with no increase in the ad valorem millage rate foreseen. However, most of the funding for needed capital improvements shown in the Stormwater Management Data and Analysis Report does not come from General Government revenue sources. The projected revenues and expenditures for Stormwater Management are discussed separately after Tables 7 and 8 which show the General Government revenue and expenditure projections over the next 5 years.

The General Government revenue projections are based on the following assumptions (as shown in the City of Gainesville Proposed Financial & Operating Plan FY 2000-2001/2001-2002):

1. ad valorem taxes are projected based on anticipated growth in taxable value
2. no debt service millage levy in effect for FY 2001 or FY 2002
3. utility tax forecasts are based on historical trends
4. a static growth in local option gas tax due to an expected increase in transit ridership
5. a 1.5% growth in the hazardous waste facility tax
6. projections of revenues from licenses and permits are based on historical trends
7. increases in the federal CDBG entitlement
8. HOME grant revenue is expected to decrease
9. the General Fund share of the State Revenue Sharing funds is expected to decrease
10. other intergovernmental revenues will be relatively unchanged
11. a decrease in revenues from the City/County Fire Services Contract
12. other charges for services revenue are forecasted using historical trend analysis
13. miscellaneous revenues from interest on investments, rental of City property, sale of surplus property, etc. is expected to decrease

14. revised methodology for calculation of the transfer from the electric utility enterprise; the formula for transfer amounts for water, wastewater and gas system remains the same

15. transfer from the Solid Waste Collection Enterprise Fund to the General Fund will remain at a flat amount

TABLE 7: 5-Year Revenue Projections for General Government

Revenue Source	FY 00/01	FY 01/02	FY 02/03	FY 03/04	FY 04/05
Ad valorem Taxes	11,985,654	12,584,936	13,214,183	13,874,892	14,568,637
Other Taxes	11,346,103	11,634,981	11,929,755	12,233,332	12,546,074
Licenses and Permits	943,278	952,949	963,139	973,862	997,007
Intergovernmental Revenue	7,077,303	7,328,945	7,600,423	7,877,070	8,174,731
Charges for Services	5,873,811	5,965,565	6,072,391	6,181,465	6,292,839
Fines & Forfeitures	1,335,233	1,355,261	1,375,590	1,296,224	1,417,167
Miscellaneous Revenues	1,016,354	963,647	1,026,725	1,029,864	1,033,067
Transfers from GRU	24,039,986	25,273,878	26,205,668	27,174,174	28,180,936
Transfers & other Non-Revenues	397,858	398,674	399,507	400,357	401,224
TOTAL:	**$64,015,580**	**$66,458,836**	**$68,787,381**	**$71,141,240**	**$73,611,682**

Source: Office of Management and Budget (OMB), August 2000.

Table 8 lists the expenditure projections for General Government for the 5-year period beginning in FY 2000/2001. Included in this table are the operating cost considerations.

TABLE 8: 5-Year Expenditure Projections for General Government

Expenditure	FY 00/01	FY 01/02	FY 02/03	FY 03/04	FY 04/05
Departmental Expenditures					
Personal Services	43,543,231	45,019,181	46,549,833	48,132,527	49,769,033
Operating Expenses	10,618,842	10,585,640	10,797,353	11,013,300	11,233,566
Capital Outlay	328,193	327,240	333,785	340,460	347,270
Non-Departmental. Expenditures	5,943,241	6,737,615	6,818,452	7,347,346	7,933,576

Table 8 continued

Transfers to Other Funds					
Enterprise	146,986	96,879	100,000	100,000	100,000
Internal Service	1,750,000	2,200,000	2,200,000	2,200,000	2,200,000
Debt Service	1,272,920	1,023,035	1,500,000	1,500,000	1,500,000
Expendable Trust	317,167	374,246	392,958	412,606	433,237
Special Revenue	55,000	55,000	55,000	55,000	55,000
Capital Projects	40,000	40,000	40,000	40,000	40,000
TOTAL:	**$64,015,580**	**$66,458,836**	**$68,787,381**	**$71,141,240**	**$73,611,682**

Source: Office of Management and Budget, August 2000.

Based on the projected revenues in Table 7 and the projected expenditures in Table 8, Table 9 shows the anticipated surplus/(deficit) for each of the fiscal years. Fiscal years 00/01 through 04/05 show no projected deficits or surpluses for General Government.

TABLE 9: Projected Surplus/(Deficit) for 5-Year Period (FYs 00/01 – 04/05)

Projection	**FY 00/01**	**FY 01/02**	**FY 02/03**	**FY 03/04**	**FY 04/05**
Revenues	$64,015,580	$66,458,836	$68,787,381	$71,141,240	$73,611,682
Expenditures	$64,015,580	$66,458,836	$68,787,381	$71,141,240	$73,611,682
Surplus/(Deficit)	0	0	0	0	0

Source: Office of Management and Budget, August 2000.

The General Government projections do not include revenues or expenditures for the Stormwater Management Utility or Regional Transit System (Mass Transit). Therefore, the General Government projections are not very useful in evaluating the City's ability to finance capital improvements related to the Stormwater Management Element. As indicated above, each of these areas has a separate funding source or sources. These sources are discussed below.

Stormwater Management

The Stormwater capital improvements which have been identified are projected needs, as shown in the Stormwater Element Data and Analysis Report. The Stormwater improvements will not be funded through general city revenues. The Stormwater Management Utility (SMU) is an enterprise operation, which can use generated revenues for pay-as-you-go funding or for revenue bonding. Table 10 shows the projected revenues and expenditures from this dedicated funding source. At least $200,000 will be allocated annually to fund Stormwater Projects on a pay-as-you-go basis.

TABLE 10: Stormwater Management Utility Financial Projections (FYs 00/01 – 04/05)

REVENUES	**FY 00/01**	**FY 01/02**	**FY 02/03**	**FY 03/04**	**FY 04/05**
Rate ($/ERU) per month	$5.75	$5.75	$6.25	$6.25	$6.75
Number of ERU's	57,783	57,783	57,783	57,783	57,783
SMU Fees	3,987,027	3,987,027	4,333,725	4,333,725	4,680,423
Grants	500,000	0	0	0	0
Previous year balance		157,573			
Total	**4,487,027**	**4,144,600**	**4,333,725**	**4,333,725**	**4,680,423**

EXPENDITURES	**FY 00/01**	**FY 01/02**	**FY 02/03**	**FY 03/04**	**FY 04/05**
Operating	3,744,454	3,771,509	3,798,759	3,826,206	3,853,851
CIP FUNDING	585,000	1,075,000	1,320,000	600,000	300,000
Total	**4,329,454**	**4,846,509**	**5,118,759**	**4,426,206**	**4,153,851**
Year End Balance	157,573	(701,909)	(785,034)	(92,481)	526,572

Source: City Public Works Department, 2000.

Debt Service Obligations

General Government

Table 12 lists the projected debt service obligations for currently outstanding bond issues for General Government. These projections are to maturity. Based on these debt service obligations and the assumption of no increases in millage rate, the City's Finance Department has determined that General Government has no debt capacity.

TABLE 12: Projections of Outstanding Debt Service

Fiscal Period	Total Debt Service Requirements
2000/2001	2,046,725
2001/2002	2,993,026
2002/2003	2,991,739
2003/2004	2,984,406
2004/2005	2,989,731
2005/2006	2,995,000
2006/2007	2,829,220
2007/2008	2,825,280
2008/2009	2,824,710
2009/2010	2,824,985
TOTAL:	28,304,822

Source: City of Gainesville Finance Department, 2000.

All of the debt service shown in Table 12 is associated with revenue bond debt.

The ad valorem tax base is assumed to remain constant unless annexations occur. According to the Alachua County Property Appraiser's Office (2000), the assessment ratio for taxable property is 100%.

GRU

Table 13 contains GRU's projected debt service obligations for all of its outstanding bond issues (not just potable water and wastewater bonds).

TABLE 13: Projected Debt Service Requirements for GRU

Period ending October 1	Total Debt Service
2000	29,458,516
2001	29,765,187
2002	29,762,722
2003	29,769,389
2004	29,192,355
2005	28,036,308
2006	28,032,395
2007	32,223,754
2008	34,633,734
2009	34,635,408
2010	34,634,435
TOTAL	340,144,203

Source: City of Gainesville Finance Department, 2000.

Implementation of the Capital Improvements Element

Five-Year Schedule of Capital Improvements

Table 14 is the 5-Year Schedule of Capital Improvements, which must be adopted. Map 6 illustrates the general location of each project. The capital improvements projects listed in this table have been identified as necessary to maintain the adopted level of service standards in the respective data and analysis reports.

Capital Budget

The schedule of improvements will be updated annually during the City's regular budget adoption process. These updates will be forwarded to the Department of Community Affairs as a Plan amendment. Projects which appear in the 5-Year Schedule of Capital Improvements will become a part of the City's or GRU's capital projects program (unless the project is the responsibility of another agency, such as FDOT), which in turn means they will appear in the biennial budgets.

Adequate Public Facilities

In order to assure that adequate facilities exist when the impacts of development occur, the City adopted (effective June 1992), as part of its Land Development Regulations, an ordinance establishing a Concurrency Management System. This system monitors each of the public facilities, which have adopted level of service standards to insure that new development does not reduce the LOS standards. The concurrency definitions provided in the Goals, Objectives and Policies will be used to determine whether concurrency requirements have been met.

TABLE 14: 5-Year Schedule of Capital Improvements (FY 00/01 – 04/05) (in $1,000s)

No.	Project Description	Projected Total Cost	Cost to the City	FY[1] Schedule	General Location	Revenue Sources	Consistency with Other Elements
	Mass Transit						
	No capital improvements associated with LOS standards have been identified as necessary.						
	Potable Water						
1.	Murphree Water Plant Filter System Upgrade (expands max day capacity to 51 mgd)	250	250	2000/2001	See Map 6	Utility bond proceeds	Yes
2.	Murphree wellfield expansion (expands the number of wells by 2)	1,530	1,530	2000/2001	See Map 6	Utility bond proceeds	Yes
3.	Archer Road water main (I-75 to Tower Road)	665	665	2000/2001	See Map 6	Utility bond proceeds	Yes
	Recreation						
	No capital improvements associated with LOS standards have been identified as necessary						
	Stormwater Management						
4.	Northeast Boulevard/Duck Pond Improvements	800	500	2000/2001 2001/2002	See Map 6	Stormwater Utility & federal grant funds	Yes

5.	Brownfield Project	2,300	1,000	2001/2002	See Map 6	Stormwater Utility & State Revolving Fund	Yes

Table 14 continued

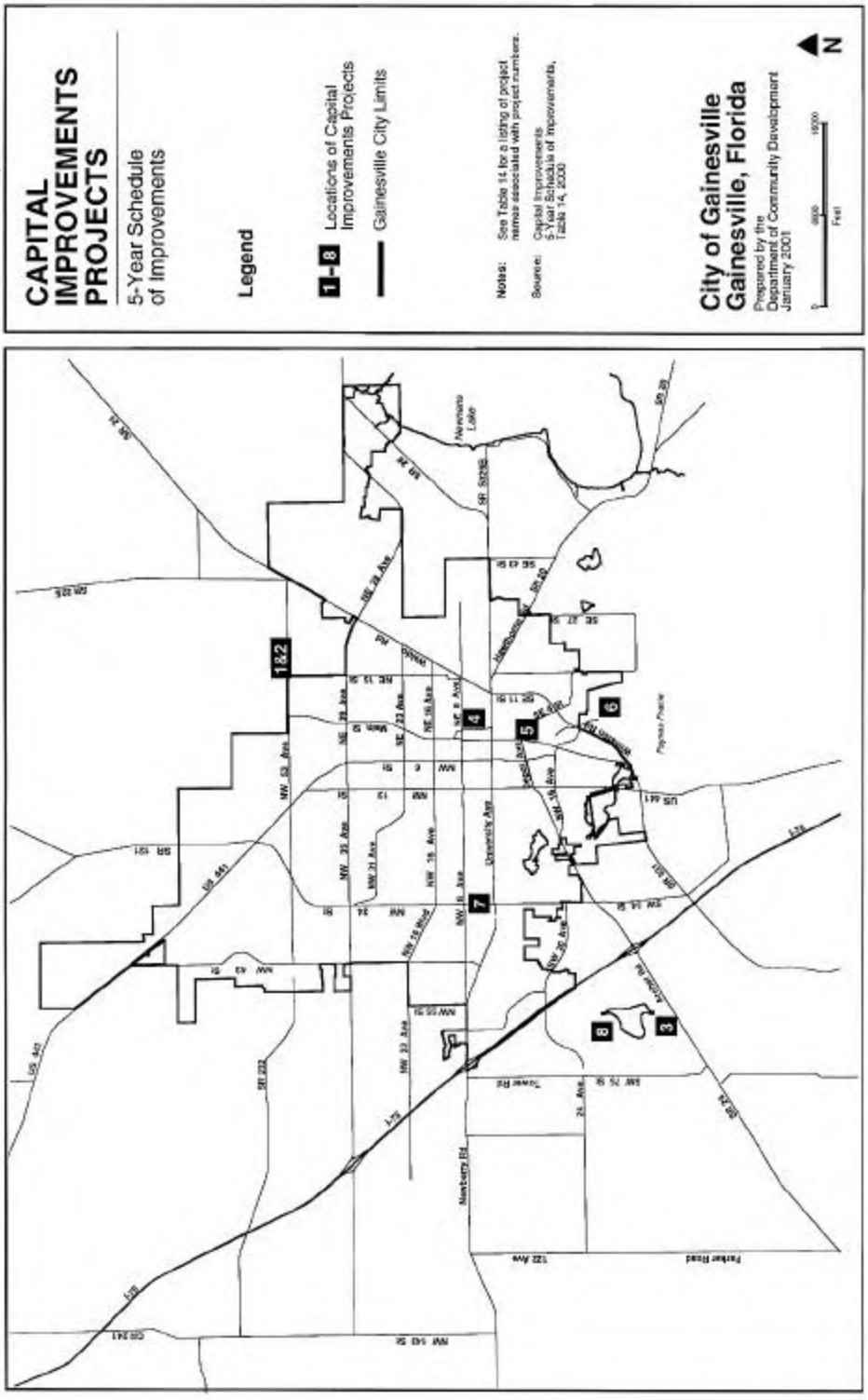
6.	Sweetwater Branch-Paynes Prairie Outfall Facilities	2000	500	2000/2001	See Map 6	Stormwater Utility & federal grant funds	Yes
7.	Hogtown Creek Sedimentation Project	2000	45	2000/2001	See Map 6	Stormwater Utility & State funds	Yes
	Transportation Mobility						
	No City capital improvements associated with LOS standards have been identified as necessary.						
	Wastewater						
8.	2.5 mgd expansion of Kanapaha Wastewater Plant	10,600	10,600	2000/2001 through 2002/2003	See Map 6	Utility bond Proceeds	Yes
	TOTAL:	**$20,145**	**$15,090**				

[1]Fiscal year for the City of Gainesville is October 1 through September 30 of the following year.

Source: GRU Capital Budget, 2000, Public Works Department, 2000.

City of Gainesville
Petition 171CPA-00 PB

Map 6



City of Gainesville
Petition 171CPA-00 PB

APPENDIX A

CITY CODE OF ORDINANCES CONCERNING WATER AND WASTEWATER

Sec. 27-122. Approval of plumbing and connections required.

No water service shall be connected until the plumbing and connections incident thereto shall have been inspected and approved by the building official, or his/her designee, as follows:

(1) *Water service to a residence.* Approval of a dwelling for water service must be obtained prior to initial provision of service.

(2) *Water service to other buildings.* Approval of a building for water service must be obtained prior to initial provision of service or transfer of water service.

(3) *Copy of approval.* Each applicant for water service must submit a copy of such approval where required as part of the application for service.

(Code 1960, § 28-52; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-123. Liability of city; right to restrict use of water.

The city shall not be liable from any damage resulting from the bursting of any main, service pipe or cock, from the shutting off of water for repairs, extensions or connections or from the accidental failure of the water supply from any cause whatsoever. In case of emergency the city shall have the right to restrict the use of water in any reasonable manner for the protection of the city and its water supply.

(Code 1960, § 28-53; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-124. Inspection service fee.

No on-site facilities constructed or purchased by the developer will be accepted by the city for connection to the city's water system unless the design and construction of such facilities meet all standards and specifications of the city. The facilities shall be inspected by the city prior to connection to the city's water system to ensure such compliance. For such inspection, the developer shall pay to the city an inspection service fee according to the schedule set out in Appendix A.

(Code 1960, § 28-37.1; Ord. No. 3114, § 1, 3-18-85; Ord. No. 3697, §§ 4, 5, 2-18-91; Ord. No. 3740, § 3, 9-30-91; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-125. Main tapping charges.

A charge shall be made for tapping into the water main when required according to the schedule set out in Appendix A. If an existing tap is to be replaced, any additional cost associated with the removal of an existing tap shall be added to the appropriate tapping charge. All tap charges shall be paid prior to service being rendered.

(Code 1960, § 28-34.1; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-126. Meters—Furnished by city; change in size.

(a) *City to furnish.* All necessary water meters shall be furnished by the city and shall remain the property of the city.

(b) *Increase in size.* A customer desiring a water meter larger than the size of the water meter then in service shall pay to the city the engineering estimate for material, labor and equipment costs plus overhead for installing the larger meter less the salvage value of the smaller water meter removed. In addition, the customer shall also pay the difference in the cost of the associated water and wastewater connection charges, if applicable, of the larger and smaller water meters.

(c) *Reduction in size.* A customer desiring a water meter smaller than the size of the meter then in service shall pay to the city the engineering estimate for material, labor and equipment costs plus overhead for installing this smaller size water meter less the salvage value of the larger water meter removed. If this water meter size reduction occurs within two (2) years after the original meter was installed, the difference in the larger and smaller connection charges shall be refunded. The burden of proof of payment of the original connection charges shall be the customer's.

(Code 1960, § 28-38; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-126.1. Same—Installation charges.

(a) *Meter assembly and service lateral.* Upon filling out the appropriate application forms and payment to the city of the charges required, the city shall furnish all labor, material, and equipment necessary, in accordance with the "Water and Wastewater Construction Standards" of the

(c) *Estimated consumption and billing.* When a water meter is found to have been tampered with or water has been otherwise diverted, the consumer shall be billed for the estimated water consumed, based on the rate in effect at the time of such billing. The consumption shall be estimated on the basis of previous consumption, consumption after replacement of the meter, or any other method in accordance with generally accepted utility practices which produces a reasonable estimate. In addition, the consumer shall be billed for the actual cost of the investigation of the meter tampering, including cost associated with the estimation of consumption and the labor, supplies, materials and equipment used in connection with such investigation. The consumer shall also be liable to the city for the cost of collection, including agency, attorneys' fees and court costs if the account is placed in the hands of an agency or attorney for collection or legal action because of the customer's failure to pay any amount due.

(d) *Prima facie evidence.* The presence, on property in the actual possession of the consumer where the meter tampering has occurred, of any connection, pipe, meter alteration, or device whatsoever which affects the diversion or use of water so as to avoid the registration of such use by or on a meter installed or private provided by the city shall be prima facie evidence of an intent to violate this section if:

(1) The presence of such a device or alteration can be attributed only to a deliberate act in furtherance of an intent to avoid payment for utility services;

(2) The customer charged with the violation of this section has received the direct benefit of the reduction of the cost of such utility service; and

(3) The customer or recipient of the utility service has received the direct benefit of such utility service for at least one (1) full billing cycle.

(Ord. No. 3696, § 13, 2-18-91; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-127. Only city employees to make connections on supply side of meters.

No person shall tap the city's water mains or make any other connection to pipes on the supply side of any meter except those persons duly employed by the city for that purpose.
(Code 1960, § 28-35(a); Ord. No. 3697, § 7, 2-18-91; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-128. Base rates for service.

(a) *Rates.* The rates to be charged and collected for water furnished by the city to consumers shall be in accordance with the schedule set out in Appendix A.

(b) *Surcharge for consumers outside corporate limits.* The rates to be charged and collected from consumers of water furnished by the city to consumers outside the corporate limits of the city shall be the same as set forth above, plus a surcharge equal to twenty-five (25) percent. The United States of America, the State of Florida and all political subdivisions, agencies, boards, commissions and instrumentalities thereof and all recognized places of religious assembly of the State of Florida are hereby exempt from the payment of the surcharge imposed and levied hereby.
(Code 1960, § 28-44; Ord. No. 3468, § 1, 9-26-88; Ord. No. 3565, § 4, 9-18-89; Ord. No. 3697, § 8, 2-18-91; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-129. Water flow-based connection charges.

(a) *Identification of water flow-based connection charges.* The water flow-based connection charges specified in this section shall consist of a water flow-based connection charge and a transmission and distribution connection charge. Each applicant for water service shall pay to the city, prior to service being rendered, the applicable water treatment plant connection charges. Water flow-based connection charges shall be in accordance with the schedule set out in Appendix A.

(b) *For water meters larger than two (2) inches.* The applicant shall provide the city a detailed estimate of the expected ultimate demand in gallons per day annual average daily flow (GPD-ADF) to be served by the water meter to be installed. It is the applicant's responsibility to coordinate the preparation of this estimate with the city so as to ensure the provision of sufficient detail and proper documentation of estimated demand. Such detail shall include an ultimate site

City of Gainesville
Petition 171CPA-00 PB

plan for all properties served by the subject water meters. The city reserves the right to perform its own estimate of service demand, which if greater than the applicant's estimate, shall take precedence for the purpose of calculating the charge.

(c) The water flow-based connection charge shall be assessed prior to the meter installation:

(1) *For two (2) inches and smaller water meters.* After water meters of this size are installed and whether or not any connection charges were assessed at the time of installation, no additional water connection charge shall be assessed unless one (1) of the following conditions occurs:

a. *Additional water meter installed.* If an additional water meter is installed, the water flow-based connection charge shall be calculated per Appendix A.

b. *Larger water meter replacing existing water meter.* If a larger water meter is installed replacing the existing water meter, the amount charged the applicant shall be the difference between the current water flow-based connection charge for the larger meter to be installed less the current water flow-based connection charges for the smaller meter to be replaced.

c. *Smaller water meter replacing existing water meter.* If a smaller water meter is installed replacing the existing water meter within two (2) years after the existing water meter was installed, the applicant shall be refunded the difference between the current water flow-based connection charges for the existing larger water meter less the current charge for the smaller water meter to be installed. The burden of proof of payment of the original connection charges shall be the customer's.

d. *Actual demand exceeds estimated demand.* If the actual annual average service demand measured over a twelve-month period should exceed the estimated demand upon which a previous connection charge payment or payment exemption was based, the city reserves the right to review and revise the previous demand estimate and to assess an additional charge for the increased demand calculated in accordance to Appendix A.

(2) *For three (3) inches and larger water meters.* The purpose of this subsection is to provide for adjustment of water flow-based connection charges when major and significant changes of water consumption patterns associated with an existing service occurs. The purpose of this subsection is not to adjust for insignificant errors in estimates of annual average daily flow, flow changes due to weather variations, or other normal changes in consumptive use of water. The city may use building permits, water consumption records, and other reasonable information to enforce the provisions of this subsection. After meters of this size are installed and whether or not any water flow-based connection charge were assessed at the time of installation, an adjustment in the water flow-based connection charges paid or a new charge may be assessed if one (1) or more of the following conditions occur:

a. *Additional water meter installed.* If an additional water meter is installed, the amount charged the applicant shall be calculated according to Appendix A.

b. *Actual demand exceeds estimated.* If the actual annual average service demand measured over a twelve-month period should exceed the estimated demand on which a previous connection charge payment was based, the city reserves the right to review and revise the previous demand estimate and to assess an additional charge for the increased demand calculated according to Appendix A.

c. *Actual demand less than estimated.* If within the twenty-four-month period following meter installation, the applicant can demonstrate to the city's satisfaction that the applicant's average daily flow (ADF) has been and will continue to be less than that estimated and used as a basis for assessing the con-

nection charges, then the applicant may petition the city for a refund. The petition shall include the applicant's copy of the original service demand estimate which shall be annotated and accompanied by sufficient explanation of the lower than estimated demand. If the city approves the petition, the city shall pay a refund to the applicant based on the difference between the original service demand estimate and the new service demand estimate, times the current charge(s) for that demand calculated according to Appendix A.

d. *Construction of new structures or facilities.* If new structures or facilities are constructed causing additional demands for water service and these facilities were not included or properly described in the applicant's original detailed service demand estimate (and site plan) of service demand, then additional water flow-based connection charge shall be assessed by the city. If the additional structures or facilities are served by an identifiable internal water service line, each such structure or facility shall be assessed a water treatment plant connection charge equal to that assessed for a water meter of the same size as the service line according to Appendix A. If no water service line can be identified, or at the city's option, the city shall estimate the facility's or structure service demand based on the proposed use of the facility or structure and assess a connection charge according to Appendix A.

e. *Larger water meter replacing existing water meter.* If a larger water meter replaces an existing water meter, an adjustment shall be determined according to Appendix A.

f. *Smaller water meter replacing existing water meter.* If a smaller water meter replaces an existing water meter, an adjustment shall be determined according to Appendix A depending on the size of the new water meter.

(d) The water transmission and distribution connection charges shall not be applicable to any property that has been duly designated, by the general manager for utilities or his/her designee, as having had the city's relevant water transmission and distribution system costs recovered previously for such property.

(Code 1960, § 28-37.2; Ord. No. 3565, § 2, 9-18-89; Ord. No. 3697, § 9, 2-18-91; Ord. No. 3740, § 4, 9-30-91; Ord. No. 3754, § 80, 1-27-92; Ord. No. 3962, § 2, 2-28-94)

Sec. 27-130. Requirement for additional CIAC.

In any instance where the city determines that the city's share of cost to construct new facilities prompted by an application for water service is greater than the city is willing and/or able to afford, the applicant may be allowed to pay a contribution in aid of construction (CIAC), which may be required by the city in order to reduce the city's share of cost to an amount acceptable to the city. The city shall determine the amount of CIAC which is necessary under this section. Water flow-based connection charges shall not be credited towards any required CIAC.

(Code 1960, § 28-37.4; Ord. No. 3740, § 6, 9-30-91; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-131. Fire support and standby sprinkler line charges.

Fire support and standby sprinkler line charges shall be in accordance with the schedule set out in Appendix A.

(Code 1960, § 38-37.6; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-132. Refunds of prepaid charges.

Prepaid water meter installation charges, prepaid water transmission and distribution charges, prepaid water treatment plant connection charges, and prepaid standby fire sprinkler line connection charges which are paid prior to installation of the facilities at the site for which they are paid, may be refunded to the current owner of the property for which charges were prepaid upon application made, provided that the facilities for which payment was made have not been installed, and provided that all costs of the city incurred in con-

nection therewith, including but not limited to administrative and engineering costs shall first be deducted prior to making any such refund. No interest shall be paid by the city on such refund for prepayments. The burden of proof of any such prepayments shall be the applicant's.
(Code 1960, § 28-37.7; Ord. No. 3740, § 7, 9-30-91; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-133. Temporary service.

(a) Temporary service, such as service for circuses, fairs, carnivals, and construction projects that, when completed, will require a water line on the customer's side of the meter larger than one (1) inch shall be rendered upon written application accompanied by a meter installation and removal charge and a deposit, in accordance with the schedule set out in Appendix A, which will be applied against the final bill. A five-eighths-inch by three-quarter-inch water meter shall be installed on all temporary construction meter installations.

(b) At the option of the city, temporary service, such as for circuses, fairs, carnivals, swimming pool filling and construction projects that, when completed, will require a water line on the customer's side of the meter larger than one (1) inch may also be rendered by installing a meter on an existing fire hydrant at the site or very near to the site. Service may be rendered in this manner upon written application accompanied by a nonrefundable meter installation and removal charge and a deposit, in accordance with the schedule set out in Appendix A, which will be applied against the final bill, assuming the safe return of the meter. Water used through such a temporary meter shall be paid for at the prevailing general water service rate. This type of temporary connection shall be allowed for a maximum time period of sixty (60) days, but may be extended at the discretion of the general manager for utilities or his/her designee. It shall be illegal to utilize or in any manner tamper with any fire hydrant except for employees of the fire department in performing their duties, or an employee of the city engaged in testing, installing or maintaining fire hydrants, or for connecting or disconnecting temporary fire hydrant service as defined in this section.
(Code 1960, § 28-36; Ord. No. 3696, § 14, 2-18-91; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-134. Oversized mains.

The city reserves the right to require oversized water lines to serve any development. The city shall pay the oversizing costs based on the difference between the city's engineering estimates of the cost for the oversized line and the cost of the size line which is normally required to serve the development or an eight-inch line whichever is greater.
(Code 1960, § 28-36.1; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-135. Cross-connection control; backflow prevention devices.

(a) The "Manual of Cross-Connection Control," identified for purposes of this section as "Attachment A," is hereby adopted and incorporated by reference as part of this section.

(b) Copies of the "Manual of Cross-Connection Control" have been duly deposited with the clerk of the commission and shall be kept in his/her office for public use, inspection and examination. Copies of the "Manual of Cross-Connection Control" may be obtained from the department of water engineering.

(c) Backflow preventers, as specified by the city in the "Manual of Cross-Connection Control," shall be required, tested and maintained on the following types of facilities:

(1) Aircraft and missile plants;

(2) Automotive plants;

(3) Auxiliary water systems;

(4) Beverage bottling plants;

(5) Breweries;

(6) Buildings with house pumps and/or water storage tank;

(7) Buildings with sewage ejectors;

(8) Canneries, packing houses and reduction plants;

(9) Car washes with water reclamation systems;

(10) Centralized heating and air conditioning plants;

be billed to and be the responsibility of the customer responsible for paying the water bill at any specific location. However, no water customer of the city that is not connected to the wastewater collection system of the city and is not otherwise subject to wastewater service charges shall be charged for wastewater service.

(b) *Surcharge for consumers outside corporate limits.* The rates to be charged and collected from customers for the use of wastewater collection, treatment and disposal services furnished by the city to customers outside the corporate limits of the city shall be the same as set forth above, a plus a surcharge equal to 25 percent. The United States of America, the State of Florida and all political subdivisions, agencies, boards, commissions and instrumentalities thereof and all recognized places of religious assembly of the State of Florida are hereby exempt from the payment of the surcharge imposed and levied hereby.

(c) *Applicability.* For any property required to be connected to the public sanitary sewer system, the owner and/or occupant of such property shall pay to the city the monthly rates and charges for the use of the sanitary sewer system in accordance with the schedule set out in Appendix A, regardless of whether an actual connection is made. The charges for sewerage shall commence on the date the property is connected, or required to be connected to the sanitary sewer system as provided in sections 27-169 and 27-170, whichever date occurs first.
(Code 1960, § 28-64; Ord. No. 3087, § 1, 12-17-84; Ord. No. 3467, § 1, 9-26-88; Ord. No. 3564, § 1, 9-18-89; Ord. No. 3697, § 11, 2-18-91; Ord. No. 3754, §§ 18, 80, 1-27-92)

Sec. 27-170. Deferred payment of residential wastewater service connection charges.

Notwithstanding the provisions of sections 27-176 entitled "Wastewater Flow-Based Connection Charges," if the criteria listed below are met, each applicant for residential wastewater service shall have the option to defer payment of all wastewater flow-based connection charges during construction for a period of not more than six months from the date of application.

(1) *Criteria for deferring payment:*

a. All dwelling units to be served by the residential meter must be unoccupied at time of application and applicant must agree that no dwelling unit shall be occupied until all deferred charges have been paid.

b. Inspection for permanent electrical service must not have been made.

c. Permanent electric service must not have been installed.

d. Applicant must present service location addresses for all buildings at the time of application.

e. Application must be made pursuant to procedures established by the city and any required deposit must be paid.

f. Applicant must request payment deferral.

(2) *Payment of deferred fees.* No permanent electric power will be provided by the city to any single-family dwelling or to any unit in a residential building with multiple-dwelling units until all wastewater flow-based connection charges.

(3) *Nonpayment.* All fees and charges must be paid within six months of the meter application date. If the fees and charges are not paid within such period, service will be discontinued and the account will be closed. Service shall not be restored at such location until all applicable fees and charges have been paid.

(Ord. No. 3428, § 3, 4-4-88; Ord. No. 3739, § 1, 9-30-91; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-171. Wastewater flow-based connection charges.

(a) *Identification of wastewater flow-based connection charges.* The wastewater connection charges under this section shall consist of the following charges: Collection system connection charge, treatment plant connection charge, pump station con-

nection charge, and force main (base system) connection charge. Each applicant for wastewater service shall pay to the city, prior to service being rendered, the applicable wastewater connection charges. Wastewater flow-based connection charges shall be assessed in accordance with the schedule set out in Appendix A.

(b) *For water meters larger than two inches.* The applicant shall provide the city a detailed estimate of the expected ultimate water demand in annual average daily flow (GPD-ADF) to be served by the water meter to be installed. The wastewater service demand shall be equal to the estimated water service demand. It is the applicant's responsibility to coordinate the preparation of this estimate with the city in order to ensure the provision of sufficient detail and proper documentation of estimated demand. Such detail shall include an ultimate site plan for the development indicating what properties are to be served by the subject water meter(s). The city reserves the right to perform its own estimate of service demand, which if greater than the applicant's estimate, shall take precedence for the purpose of calculating the charge.

(c) Wastewater flow-based connection charges shall be assessed prior to water meter installation:

(1) *For two inches and smaller water meters.* After water meters of this size are installed and whether or not any connection charge was assessed at the time of installation, no new or additional wastewater connection charge shall be assessed unless one of the following conditions occurs:

a. *Additional water meter installed.* If an additional water meter is installed, the amount charged the applicant shall be calculated per Appendix A.

b. *Larger water meter replacing the existing water meter.* If a larger water is installed replacing the existing water meter, the connection charge shall be the difference between the current connection charges for the water meter to be installed less the current charge for the water meter to be replaced.

c. *Smaller water meter replaces existing water meter.* If a smaller water meter replaces the existing water meter within two years after the existing water meter was installed, the applicant shall be refunded the difference between the current wastewater connection charges for the existing water meter and the current wastewater connection charges for the water meter to be installed. The burden of proof of payment of the original connection charges shall be the customers.

(2) *For water meters larger than two inches.* The purpose of this subsection is to provide for adjustment of wastewater flow-based connection charges when major and significant changes of water consumption associated with an existing service occur. The purpose of this subsection is not to adjust for insignificant errors in estimates of annual average daily flow, flow changes due to weather variances, or other normal changes in consumptive use of water. The city may use building permits, water consumption records, and other reasonable information to enforce the provisions of this subsection. After water meters of this size are installed and whether or not any connection charges were assessed at the time of installation, an adjustment in the connection charges paid or new charges may be assessed if one or more of the following conditions occur:

a. *Additional water meter installed.* If an additional water meter is installed, the amount charged the applicant shall be calculated per Appendix A.

b. *Actual demand exceeds estimated.* If the actual annual average service demand measured over a 12-month period should exceed the estimated demand on which a previous connection charge payment was based, the city reserves the right to review and revise the previous demand estimate and to assess additional charges for the increased demand calculated according to Appendix A.

c. *Actual demand less than estimated.* If within the twenty-four-month period following meter installation, the applicant can demonstrate to the city's satisfaction that the applicant's service demand has been and will continue to be less than that estimated and used as a basis for assessing the wastewater flow-based connection charges, then the applicant may petition the city for a refund. The petition shall include the applicant's copy of the original service demand estimate which shall be accompanied by sufficient explanation of the lower than estimated demand. If the city approves the petition, the city shall pay a refund to the applicant based on the amount of excess service demand originally assessed and the current charge for that demand calculated according to Appendix A.

d. *Construction of new structures or facilities.* If new structures or facilities are constructed causing additional demands for wastewater service and these facilities were not included or properly described in the applicant's original detailed estimate (and site plan) of service demand, then additional wastewater connection charges shall be assessed by the city.

If the additional structures or facilities are served by an identifiable internal water service line, each such structure or facility shall be assessed wastewater flow-based connection charges equal to that assessed for a water meter of the same size as the service line according to Appendix A. If no water service line can be identified, or at the city's option, the city shall estimate the structure's or facility's service demand based on the proposed use of the structure or facility and assess connection charges according to Appendix A.

(d) The city is authorized to adjust wastewater connection charges assessed at the time of original water meter installation or assessed thereafter, as provided by Appendix A, to reflect reduced wastewater loadings from approved individual graywater disposal systems. These adjustments shall be determined by procedures and engineering calculations contained in policies approved by the city commission.

(e) The wastewater collection system connection charges shall not be applicable to any property that has been duly designated, by the general manager for utilities or his/her designee, as having had the city's relevant wastewater collection system costs recovered previously for such property. The wastewater treatment plant flow-based connection charges shall be applicable in any instance as provided for in this section. The wastewater pump station and wastewater force main (base system) connection charges shall not be applicable when the applicant's wastewater does not flow to or through any city-owned or operated pumping station or force main en route to the wastewater treatment plant.
(Code 1960, § 28-64.1; Ord. No. 3087, § 5, 12-17-84; Ord. No. 3564, § 2, 9-18-89; Ord. No. 3581, § 1, 12-4-89; Ord. No. 3697, § 12, 2-18-91; Ord. No. 3739 § 2, 9-30-91; Ord. No. 3754, § 80, 1-27-92; Ord. No. 951541, § 2, 6-10-96)

Sec. 27-172. Inspection service fee.

No on-site facilities will be accepted by the city for connection to the city's wastewater system unless the design and construction of such facilities meet all standards and specifications of the city. The facilities shall be inspected by the city prior to connection to the city's wastewater system to insure such compliance. For such inspection, the developer shall pay to the city an inspection service fee as set out in Appendix A, to be assessed on the amount of developer installed mainline collection piping.
(Code 1960, § 28-64.2; Ord. No. 3564, § 3, 9-18-89; Ord. No. 3697, § 13, 2-18-91; Ord. No. 3739, § 3, 9-30-91; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-173. Pump station (primary).

(a) Where a pumping station is constructed to receive the gravity wastewater flow from a development, the developer shall pay all costs associated with pump station design and construction required to serve the proposed development including all future phases. The city may elect to

pay oversizing costs, if required, to serve existing or future customers outside of the proposed development.
(Code 1960, § 28-64.4; Ord. No. 3087, § 6, 12-17-84; Ord. No. 3564, § 4, 9-18-89; Ord. No. 3754, § 80, 1-27-92; Ord. No. 951541, § 3, 6-10-96)

Sec. 27-174. Force main extension (CIAC).

Where force mains are constructed by the city to extend wastewater service to a lot or development, the applicant for such wastewater service shall pay to the city a contribution in aid of construction (CIAC) prior to the commencement of construction of the force main. The force main CIAC shall be calculated as the cost as estimated by the city of constructing a force main sized (the smallest possible to serve the project, four inches minimum) and routed at the shortest practicable length to the closest point in the existing wastewater system capable of providing service to the applicant's development only. Sizing and routing of the force main will be determined by the city.
(Code 1960, § 28-64.5; Ord. No. 3739, § 5, 9-30-91; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-175. Requirement for additional CIAC.

In any instance where the city determines that the city's share of cost to construct new facilities (including oversizing costs) prompted by an application for wastewater service is greater than the city is willing and/or able to afford, the applicant may be allowed to pay an additional contribution in aid of construction (CIAC), which may be required by the city in order to reduce the city's share of cost to an amount acceptable to the city. The city shall determine the amount of CIAC which is necessary under this section. Wastewater flow-based connection charges shall not be credited towards any required CIAC.
(Code 1960, § 28-64.6; Ord. No. 3739, § 6, 9-30-91; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-176. Gravity line or pump station/force main construction.

In the instance where it is physically feasible to construct either gravity line or a pump station/force main to serve a development, the facilities to be constructed shall be determined by the city. The applicant shall pay the lesser of:

(1) CIAC for gravity line extensions; or

(2) Pump station (primary) CIAC plus force main extension CIAC plus any additional CIAC that may be assessed by the city.

(Code 1960, § 28-64.7; Ord. No. 3739, § 7, 9-30-91; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-177. Refunds of prepaid charges.

Prepaid wastewater connection charges which are paid prior to installation of the facilities at the site for which they are paid, may be refunded to the current owner of the property for which the charges were paid upon application made, provided that the facilities for which payment was made have not been installed, and provided that all costs of the city incurred in connection therewith, including but not limited to administrative and engineering costs shall first be deducted prior to making any such refund. No interest shall be paid by the city on any such refund for prepayments. The burden of proof of any such prepayments shall be the applicant's.
(Code 1960, § 28-64.8; Ord. No. 3739, § 8, 9-30-91; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-178. Maintenance of laterals.

The customer shall be responsible for keeping the wastewater lateral free of all obstructions from his/her premises to the main wastewater collection line within a public right-of-way or easement. The customer will be responsible for any damage occurring to the customer's property due to an obstruction in the wastewater lateral.
(Code 1960, § 28-60; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-179. Oversized facilities.

The city reserves the right to require oversizing of any wastewater facility (gravity wastewater lines, lift stations, force mains and package treatment plants) and shall pay the developer for such oversizing on the basis of additional costs incurred because of the oversizing. The city shall pay oversizing costs based on the difference be-

City of Gainesville
Petition 171CPA-00 PB

tween the engineering estimates for the cost of oversized facility and the cost of the facility which is required to serve the development.
(Code 1960, § 28-60.1; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-180. Pretreatment program—Generally.

(a) The objectives of this section are to:

(1) Prevent the introduction of pollutants into the city wastewater treatment system that will cause interference with its operation or pass through inadequately treated into receiving waters.

(2) Provide protection for the general public and city personnel who may be affected by wastewater and sludge in the course of their employment.

(3) Ensure compliance of the city with applicable federal and state laws.

(4) To promote reuse and recycling of industrial wastewater and sludge from the wastewater system.

(5) To provide for the equitable distribution of the cost of operation, maintenance, and improvement of the wastewater system.

(b) Compliance with this division may not under some circumstances constitute compliance with the Alachua County Hazardous Material Management Code. Industrial users should contact the Alachua County Environmental Protection Department for further information on compliance with the Hazardous Material Management Code.
(Code 1960, § 28-61; Ord. No. 3602, § 2, 3-5-90; Ord. No. 3696, § 20, 2-18-91; Ord. No. 3735, § 2, 8-19-91; Ord. No. 3754, § 80, 1-27-92; Ord. No. 980894, § 2, 6-14-99)

Sec. 27-180.1. Same—Prohibited substances.

(a) No user shall introduce or cause to be introduced into the wastewater system any pollutant or wastewater, which either singly or by interaction with other pollutants causes pass through or interference. This general prohibition applies to all users of the wastewater system whether or not they are subject to categorical pretreatment standards or any other federal, state, or local pretreatment standards or requirements.

(b) It shall be unlawful for any person willfully or with culpable negligence to discharge or cause to be discharged into the wastewater system of the city any substance which:

(1) Is harmful to the wastewater system, or is hazardous to the wastewater system because it contains flammable or explosive liquids, solids or gases, which by reason of their nature or quantity are, or may be, sufficient, either alone or by interaction with other substances, to cause fire or explosion or be injurious in any other way to the wastewater system or to the operation of the wastewater system. No substance may be discharged with a closed cup flashpoint of less than 60° C (140° F) using test methods specified in 40 CFR 261.21. At no time shall two successive readings on an explosion hazard meter, at the point of discharge into the system (or at any point in the system) be more than five percent, nor any single reading over ten percent, of the lower explosive limit (LEL) of the meter. Such materials shall include, but are not limited to, gasoline, kerosene, naphtha, benzene, toluene, xylene, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides and any other substances which the city determines to be a fire hazard, health hazard or a hazard to the system.

(2) Has a temperature which would have adverse effects on the wastewater system. In no case shall discharges cause the temperature of influent to the wastewater treatment plant to exceed 40° C (104° F).

(3) May cause stoppages in the wastewater system because of size, quantity, volume or any other characteristic. Solid or viscous substances which may cause obstruction to the flow in the sewer or other interference with the operation of the

wastewater treatment facilities shall not be discharged into the wastewater system.

(4) Has a pH less than 5.5 or more than 11.0, or wastewater having any other corrosive property capable of causing damage or hazard to structures, equipment and/or personnel of the wastewater system.

(5) May cause the wastewater system's effluent or any other product of the wastewater system, such as residues, sludges or scums to be unsuitable for reclamation and reuse, or to interfere with the reclamation process.

(6) Contains any pollutant, including oxygen demanding pollutants (BOD, etc.), released at a flow rate and/or pollutant concentration which either singly or by interaction with other pollutants, will cause interference or pass through in the wastewater system. No user shall discharge flow at a rate that will be disruptive to the wastewater system or cause interference or pass through in the wastewater system.

(7) Results in the presence of toxic gases, vapors, or fumes in any part of the wastewater system in a quantity that may cause acute worker health and safety problems.

(8) Contains pollutants in sufficient quantity, either singly or by interaction with other pollutants, which constitute a hazard to humans or animals, or create a toxic effect in the receiving waters of the wastewater system.

(9) Contains waste exceeding the instantaneous maximum discharge limit of any parameter listed below:

Parameter	*Instantaneous Maximum Discharge Limit (mg/L)*
Arsenic	0.15
Barium	450
Cadmium	0.08
Chromium	3.0
Copper	0.5
Cyanide	0.15
Fluoride	20
Iron	100
Lead	0.2
Manganese	7.0
Mercury	0.0002
Molybdenum	0.35
Nickel	0.8
Oil and Grease	100
pH, lower limit (standard units)	5.5
pH, upper limit (standard units)	11.0
Selenium	0.15
Silver	0.1
Zinc	2.5

(10) Discharge limits for sulfate, sulfide, and organic pollutants not included in this section shall be determined by the general manager for utilities or his/her designee with considerations for acceptable worker exposure levels or prevention of damage, interference or pass through in the wastewater system, whichever provides the lower discharge limit.

(11) The discharge limits in this section shall apply at the point where the wastewater is discharged to the wastewater system. All concentrations for metallic substances are for "total" metal.

(c) No user shall ever increase the use of process water, or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment, to achieve compliance with an instantaneous maximum daily discharge limitation, prohibited discharge standard, or categorical pretreatment standard. The general manager for utilities or his/her designee may impose mass limitations when appropriate.

(d) No user shall discharge petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through in the wastewater system.

City of Gainesville
Petition 171CPA-00 PB

(e) No user shall discharge trucked or hauled wastes to the wastewater system except at points designated by special agreement with the city.

(f) The city may establish standards for substances not contained in this section.

(g) The National Categorical Pretreatment Standards found at 40 CFR Chapter I, Subpart N and Chapter 62-660, F.A.C., as may be amended from time to time, are hereby incorporated by reference.
(Ord. No. 980894, § 3, 6-14-99)

Sec. 27-180.2. Same—Conditional requirements for specific discharges.

(a) *Grease.* Wastewater containing such amounts of grease as may be determined by the general manager for utilities or his/her designee to be detrimental to the wastewater system shall not be discharged into the wastewater system. An efficient grease trap shall be utilized prior to discharge to the wastewater system and maintained appropriately for these wastewaters. Wastewater from restaurants or places where cooking is done shall be presumed to contain grease and grease traps shall be required at all such locations. When an owner or operator cleans grease traps, the only approved location for disposal of grease shall be a sanitary landfill. Grease traps shall only be cleaned by licensed septic tank cleaners, except as noted above. The use of chemicals to dissolve the grease is not permitted in the wastewater system. The owner or operator shall have the grease trap cleaned at least every 30 days or more often, if deemed necessary by the city. If grease accumulates in the wastewater collection lines, the owner or operator will be billed for cleaning collection lines and for any other expenses incurred by the city.

(b) *Private wells.* Where private wells are used, disposal into the wastewater system shall be done only by special agreement with the city.

(c) *Storm water, air-conditioners and similar wastes.* Storm water, air-conditioning water, condenser waters, swimming pool waters or other similar type wastes shall be discharged into the wastewater system only by special agreement with the city.

(d) *Septic tank and portable toilet waste.* Septic tank and portable toilet waste shall be introduced into the city's wastewater system only when specifically authorized and only at the time, place and manner prescribed by the city.
(Ord. No. 980894, § 3, 6-14-99)

Sec. 27-180.3. Same—Permitting.

(a) Industrial wastes shall not be discharged into the wastewater system without written permission of the general manager for utilities or his/her designee. All significant industrial users who are proposing to connect or contribute to the wastewater system shall obtain an industrial wastewater discharge permit before connecting to or contributing to the wastewater system. Industrial wastewater discharge permits shall contain but are not limited to the following conditions:

(1) *Duration.* The duration shall not exceed five years from the effective date of the permit.

(2) *Renewal.* The user shall apply for permit renewal a minimum of 180 days prior to the expiration of the existing permit.

(3) *Transferability.* The permit may not be sold, transferred, or reassigned.

(4) *Limits.* Effluent limits shall be specified based on applicable pretreatment standards.

(5) *Monitoring.* Self-monitoring, sampling, reporting, notification, and record-keeping shall be specified, including identification of pollutants to be monitored, sampling location, sampling frequency, and sample type based on applicable federal, state, and local laws.

(6) *Penalties.* Applicable civil and criminal penalties for violation of pretreatment standards and requirements and any applicable compliance schedule shall be stated. Such schedule shall not extend the compliance date beyond applicable state or federal deadlines.

(b) Significant industrial users shall be required to complete an industrial wastewater discharge application as provided by the general manager for utilities or his/her designee prior to receiving a permit.

(c) Industrial users shall be required to submit a waste minimization plan when submitting either an industrial wastewater discharge application or an application for permit renewal. The waste minimization plan must include but is not limited to the following items:

(1) A detailed description of the components and estimated volume of all waste streams that comprise the industrial wastewater discharge.

(2) Practices currently employed or future plans to minimize the amount of waste in the industrial wastewater discharge.

The plan will be forwarded to the Alachua County Environmental Protection Department for comment. Any comments received within 14 days of delivery of the plan to the Alachua County Environmental Protection Department shall be considered by the general manager or his/her designee when making waste minimization plan approval decisions.

(d) The general manager for utilities or his/her designee may require an industrial user to perform self-monitoring as a prerequisite to being granted an industrial wastewater discharge permit.

(e) The general manager for utilities or his/her designee may require other users, who are not significant industrial users, to obtain industrial wastewater discharge permits.

(f) Modifications. The general manager for utilities or his/her designee may modify any industrial wastewater discharge permit. The industrial user shall be informed of any substantive modifications to the permit at least 30 days prior to the effective date of the change.

(g) Approval decisions. The general manager for utilities or his/her designee will review and evaluate the application and waste minimization plan and determine whether or not to issue an industrial wastewater discharge permit. The general manager for utilities or his/her designee may deny any application for an industrial wastewater discharge permit. Industrial users shall comply with the standards set forth in Chapter 62-625, Florida Administrative Code, as amended from time to time.

(h) Appeals. Any person, including the user, may petition the general manager for utilities or his/her designee to reconsider the terms of an industrial wastewater discharge permit within 30 days of notice of its issuance.

(1) Failure to submit a timely petition for review shall be deemed to be a waiver of the administrative appeal.

(2) In its petition, the appealing party must indicate the industrial wastewater discharge permit provisions objected to, the reasons for this objection, and the alternative condition, if any, it seeks to place in the industrial wastewater discharge permit.

(3) The effectiveness of the industrial wastewater discharge permit shall not be stayed pending the appeal.

(4) If the general manager for utilities or his/her designee fails to act within 30 days, a request for reconsideration shall be deemed to be denied. Decisions not to reconsider an industrial wastewater discharge permit, not to issue an industrial wastewater discharge permit, or not to modify an industrial wastewater discharge permit shall be considered final administrative actions for purposes of judicial review.

(i) The general manager for utilities or his/her designee may require any user connected prior to the effective date of this division to obtain a industrial wastewater discharge permit.
(Ord. No. 980894, § 3, 6-14-99)

Sec. 27-180.4. Same—Monitoring, reporting, and notification.

(a) *Baseline monitoring report.* Within 180 days after the effective date of a categorical pretreatment standard or 180 days after the final administrative decision made upon a category determi-

City of Gainesville
Petition 171CPA-00 PB

APPENDIX A—SCHEDULE OF FEES, RATES AND CHARGES

Subject	*Amount*
	Monthly Charge
35-foot wood	3.76
35-foot concrete	5.42
40-foot wood	4.01
40-foot concrete	7.12
45-foot concrete	7.59
*Not available for new installations.	
(2) *Solid waste and recyclables:*	
a. Residential service (§ 27-76):	
1. Redemption of impounded containers:	
(i) First impoundment, per container	5.00
(ii) Subsequent impoundments within 12 months from the same place, per container	10.00
2. Rates:	
(i) Uniform curbside service for each single family residence or dwelling unit or living unit, or multifamily unit (any building containing two but not more than four permanent living units) or mobile home unit, per month:	
18 gallon cart	10.00
35 gallon cart	13.00
64 gallon cart	16.00
96 gallon cart	20.00
(ii) Other charges:	
Account set up charge	10.00
Pre-paid approved bag, each	not to exceed 2.00
Exchange of cart for larger size	10.00
Exchange of cart for smaller size	no charge
Fixed cost of service per month (for computing vacation credit)	5.00
(iii) Backyard service, per month:	
18 gallon cart	16.34
35 gallon cart	19.62
64 gallon cart	23.78
96 gallon cart	29.62
b. Application for commercial services franchise (§ 27-80):	
1. Container provision only	100.00
2. Collection (with or without container provision)	250.00
c. Application or renewal of registration (§ 27-86)	50.00
✔ (3) *Water:*	
a. Inspection service fee (§ 27-124)	565.00
Plus, an amount to be assessed on the amount of development installed mainline distribution piping, per linear foot	0.41

City of Gainesville
Petition 171CPA-00 PB

GAINESVILLE CODE

Subject *Amount*

b. Water main tapping charges (§ 27-125):

Tap Size (inches)	*Charge*
1½	$ 400.00
2	400.00
4	1,200.00
6	1,350.00
8	1,500.00
12	2,100.00

c. Reserved.

d. Reserved.

e. Meter installation charges (§ 27-126.1):

1. Meter assembly and service lateral:

Water Meter Size (inches)	*Water Meter Installation Charge*
⅝ × ¾	$ 205.00
¾	320.00
1	520.00
1½	805.00
2	880.00
3	6,100.00
4	6,880.00
6	12,600.00
8	14,965.00

For meters larger than six inches, the water meter installation charge shall be established on a site specific basis by the general manager for utilities or his/her designee.

2. Meter only:

Water Meter Size (Inches)	*Water Meter Installation Charge*
⅝ × ¾	$ 115.00
¾	140.00
1	185.00
1½	190.00
2	235.00

3. Wastewater customers on private wells:

Water Meter Size (Inches)	*Water Meter Installation Charge*
⅝ × ¾	$ 115.00
¾	140.00

City of Gainesville
Petition 171CPA-00 PB

APPENDIX A—SCHEDULE OF FEES, RATES AND CHARGES

Subject		*Amount*
	Water Meter Size (Inches) — *Water Meter Instaliation Charge*	
	1	185.00
	1½	285.00
	2	350.00
	For meters larger than two inches, the meter installation charge shall be established on a site specific basis by the city.	
f.	Reserved.	
g.	Base rates for service (§ 27-128):	
	1. Nonresidential water service:	
	(i) Customer service charge, per month, per bill rendered	3.00
	(ii) Rate per 1,000 gallons	0.99
	2. Residential water service:	
	(i) November through March:	
	Customer service charge, per month, per bill rendered	3.00
	Rate per 1,000 gallons	0.98
	(ii) April through October:	
	Customer service charge, per month, per bill rendered	3.00
	Rate per 1,000 gallons, first 9,000 gallons	0.98
	Rate per 1,000 gallons, over 9,000 gallons	1.29
	3. University of Florida water service:	
	(i) On-campus facilities:	
	Customer service charge, per month, per bill rendered	3.00
	Rate per 1,000 gallons	0.68
	(ii) Off-campus facilities:	
	Customer service charge, per month, per bill rendered	3.00
	Rate per 1,000 gallons	0.88
h.	Reserved.	
i.	Water transmission and distribution connection charges (§ 27-129):	
	1. For two inches and smaller water meters. For applicants requiring water meters up to and including two-inch meter size, the water transmission and distribution connection charge shall be based on the size(s) of the water meter(s) installed according to the following:	

Water Meter Size (inches)	*Transmission and Distribution Connection Charge*
⅝	$ 135.00
¾	418.00
1	459.00
1½	1,082.00
2	2,021.00

Subject *Amount*

2. For water meters larger than two inches. For applicants requiring water meters greater than two-inch meter size, the water transmission and distribution connection charge shall be based on the estimated demand for service in accordance with the following:
   (i) $0.486 per gallon per day (GPD) of annual average daily flow (ADF); or
   (ii) $2,021.00, whichever is greater.

j. Water treatment plant connection charges (§ 27-129):

1. For two inches and smaller water meters. For applicants requiring water meters up to and including two-inch meter size, the water treatment plant connection charge shall be based on the size of the water meter installed according to the following:

Water Meter Size (inches)	*Water Treatment Plant Connection Charge*
5/8	$ 305.00
3/4	910.00
1	1,001.00
1 1/2	2,358.00
2	4,404.00

2. For water meters larger than two inches. For applicants requiring water meters greater than two-inch meter size, the water treatment plant connection charge shall be based on the estimated demand for service in accordance with the following:
   (i) $1.059 per gallon per day (GPD) of annual average daily flow (ADF); or
   (ii) $4,404.00, whichever is greater.

k. Water Connection Charge Installment (§ 27-103):

Installment payments for water transmission and distribution connection charges and water treatment plant connection charges made in accordance with § 27-103 are as follows:

Water Meter Size (inches)	*Monthly Charge*
5/8	$ 5.57

City of Gainesville
Petition 171CPA-00 PB

APPENDIX A—SCHEDULE OF FEES, RATES AND CHARGES

Subject		*Amount*
	Water Meter Size (inches) — *Monthly Charge*	
	¾ 16.82	
	1 ..... 18.49	
	1½ 43.58	
	2 ..... 81.39	
	>2 (per gpd) 0.01957	
l.	Fire support and standby fire sprinkler line charges (§ 27-131):	
1.	Monthly fire support charges:	
(i)	For all fire hydrants installed, maintained and supported by the city, per hydrant	18.98
(ii)	For all fire hydrants installed by others but maintained and supported by the city, per hydrant	14.27
(iii)	For all fire hydrants installed and maintained by others but supported by the city, per hydrant	11.67
2.	Standby fire lines:	
(i)	Each applicant for standby fire line service shall pay to the city, in advance of the construction of the line, the following charges per connection:	
	Line Size (inches) — *Charge Per Connection*	
	6 ..... $6,000.00	
	8 ..... 8,600.00	
	For lines larger than eight inches, the charge shall be established on site specific basis by the general manager for utilities or his/her designee.	
(ii)	If a line of adequate size to the applicant's property does not exist, an extension contribution in aid of construction (CIAC) according to section 27-130 is also applicable when the city is required to install a water line in order to provide a standby fire connection.	
m.	Temporary service (§ 27-133):	
1.	Generally:	
(i)	Meter installation and removal, nonrefundable.	30.00
(ii)	Deposit	75.00
2.	Meter installed on existing fire hydrant:	
(i)	Meter installation and removal, nonrefundable.	30.00
(ii)	Deposit	75.00
(4)	*Sewerage:*	
a.	Plumbing and sewerage installation (§ 27-167):	
1.	New plumbing, sewer or drainage work; alterations, repairs; per fixture	1.00*
	*A fee in double the above amount shall be charged for any work commenced before a permit therefor has been issued.	

Subject	*Amount*
2. Building or house sewer connection to city's sewer system, each	5.00
b. Reserved.	
c. Rates for normal strength wastewater (§ 27-169):	
1. Residential dwellings (including single-family dwellings, mobile homes, apartments and residential customers on metered private wells):	
(i) Charges for winter months (January and February billing periods):	
(A) Customer service charge per bill rendered, per month	2.11
(B) Rate per 1,000 gallons of wastewater (wastewater equals city water usage), per 1,000 gallons	2.43
(ii) Charges for March through December billing periods:	
(A) Customer service charge per bill rendered, per month	2.11
(B) Rate per 1,000 gallons of wastewater (wastewater equals (i) city water usage, or (ii) the individual customer's winter maximum), per 1,000 gallons	2.43
Calculation of the individual customer's winter maximum shall be 30.4 days times the maximum of average daily water usage for the immediately preceding January or February billing periods. A customer that has not established an individual winter maximum shall use the wastewater system average residential winter maximum, provided however, that the winter maximum shall never be less than 1,000 gallons. The general manager for utilities or his/her designee may adjust the customer's winter average in extraordinary circumstances.	
2. Current residential customers who are not connected to the wastewater system, but are subject to rates and charges under section 27-169(c), per month	19.69
3. Single-family dwellings on private wells discharging unmetered water to the wastewater system, per month	19.69
4. Multiple-family dwellings (including apartments, and mobile homes in approved mobile home parks) on private wells discharging unmetered water to the wastewater system (does not include the customer service charge):	
(i) Per month, per unit	12.06
(ii) Customer service charge per bill rendered	2.11
5. Nonresidential rate (wastewater is calculated as 95 percent of city water usage in such month):	
(i) No maximum, per 1,000 gallons	2.43
(ii) Customer service charge per bill rendered	2.11
6. Tacachale:	
(i) Fixed monthly charge	2,591.14
(ii) Variable monthly charge, per 1,000 gallons	0.81
7. Where monthly wastewater service charges for nonresidential customers are based on the amount of the monthly water billed from the city, separate meters may be allowed at the expense of the customer and an allowance may be made for measured water not entering the city's wastewater system.	

APPENDIX A—SCHEDULE OF FEES, RATES AND CHARGES

Subject	*Amount*

8. Where wastewater meters are required by the city or requested by the customer, the customer shall pay to the city a monthly charge based on the cost to the city of all operation and maintenance costs of the meter or meter installation plus depreciation. The initial cost of any and all such installations shall be paid for by the user.

9. The general manager for utilities or his/her designee is authorized to adjust residential monthly wastewater service charges to reflect reduced wastewater discharges from approved individual graywater disposal systems, as determined by procedures and engineering calculations contained in policies approved by the city commission.

d. Rates for excess strength wastewater (§ 27-169):

1. A customer discharging excess strength wastewater into the city's wastewater system shall be assessed a laboratory charge based on the cost of collecting and analyzing samples used to determine the strength and characteristics of the waste.

2. Where automatic sampling equipment is required by the city or requested by the customer and such equipment is owned and/or maintained by the city, a monthly sampling charge shall be assessed based on the cost to the city of operation and maintenance of the equipment plus depreciation.

3. A customer discharging excess strength waste into the wastewater system shall be assessed normal strength wastewater charges in addition to excess strength charges calculated according to the following formula:

$$\left[\frac{Y}{X} - 1 \right] \times \left[Z \right] \times \left[0.5 \times A \right]$$

Y = Measured concentration of the wastewater constituent.
X = Concentration of constituent in normal strength wastewater.
Z = Thousands of gallons of excess strength wastewater discharge into the city's wastewater system.
A = Normal strength wastewater rate per thousand in [subsection] c.5(i) above.

Note: Excess strength charges shall be applicable only to the following conventional constituents: COD, BOD, total suspended solids, nitrogen and phosphorus. When COD is indicative of the excess wastewater strength, it shall be the preferred measurement parameter. Where the wastewater contains more than one excess strength constituent, the charge shall be based on the constituent which results in the greatest charge.

e. Rates for septic tank and portable toilet waste (§ 27-169): Septic tank and portable toilet waste shall not be introduced into the city's wastewater system, except when specifically authorized and only at the time, place and manner prescribed by the city. This wastewater shall be metered and excess strength wastewater charges and industrial user charges shall be assessed.

f. Rates for industrial charges (§ 27-169): Any industrial user discharging into the city's wastewater system shall be assessed a permit application fee for each five-year permit of..... 270.00

Subject *Amount*

g. Right to assess other fees (§ 27-169): The city reserves the right to assess consumers other fees as necessary to carry out the requirements contained within article IV of chapter 27. These fees relate solely to the matters covered by such article, and are separate from all other fees chargeable by the city.

h. Wastewater flow-based connection charges (§ 27-171):

1. For two inches and smaller water meters. For applicants of wastewater service requiring water meters up to and including two-inch meter size, the wastewater flow-based connection charge shall be based on the size(s) of the water meter(s) installed according to the following:

WASTEWATER FLOW-BASED CONNECTION CHARGES

Water Meter Size (inches)	*Collection System*	*Treatment Plant*	*Pump Station*	*Force Main (Base System)*	*Total*
⅝	$ 83.00	$ 552.00	$ 115.00	$ 176.00	$ 926.00
¾	256.00	1,713.00	357.00	547.00	2,873.00
1	282.00	1,884.00	393.00	602.00	3,161.00
1½	664.00	4,439.00	925.00	1,417.00	7,445.00
2	1,241.00	8,289.00	1,727.00	2,647.00	13,904.00

2. For water meters larger than two inches. For applicants of wastewater service requiring water meters greater than two-inch meter size, the wastewater flow-based connection charge shall be based on the estimated demand for service in accordance with the following:

WASTEWATER FLOW-BASED CONNECTION CHARGES

	Collection System	*Treatment Plant*	*Pump Station*	*Force Main (Base System)*	*Total*
(A)	$0.314/GPD-ADF	$2.098/GPD-ADF	$0.441/GPD-ADF	$0.670/GPD-ADF	$3.523/GPD-ADF
			or		
(B)	$1,241.00	$8,289.00	$1,727.00	$2,647.00	$13,904.00
			whichever is greater		

3. Wastewater flow-based connection charge installment (§ 27-103).

Installment payments for wastewater flow-based connection charges made in accordance with § 27-103 are as follows:

Water Meter Size (inches)	*Monthly Charge*
⅝	$ 11.73
¾	36.39
1	40.04
1½	94.31
2	176.13
>2 (per gpd)	0.04463

4. For customers discharging excess strength wastewater. In addition to wastewater flow-based connection charges assessed pursuant to subsec-

City of Gainesville
Petition 171CPA-00 PB

APPENDIX A—SCHEDULE OF FEES, RATES AND CHARGES

Subject		*Amount*
	tion 1. or 2. above, customers discharging excess strength wastewater into the city's wastewater system shall be assessed excess strength flow-based treatment plant connection charges calculated according to the following formula:	
	[Y/X-1] × A	
	Y = Measured concentration of wastewater constituent. X = Concentration of constituent in normal strength wastewater. A = Wastewater flow-based treatment plant connection charge assessed pursuant to subsection 1. or 2. above.	
i.	Inspection service fee (§ 27-172)	1,015.00
	Plus, an amount to be assessed on the amount of developer installed mainline collection piping, per linear foot	1.45
j.	Off-site force main extension (CIAC) (§ 27-174): To be determined by the city.	
k.	Requirement for additional CIAC (§ 27-175): To be determined by the city.	
l.	Permit for construction of private sewerage disposal system (§ 27-183.1(a))	5.00
(5)	*Natural gas:*	
a.	Appliance service and repair charges (§ 27-279):	
1.	Trip charge	25.00
2.	Labor charge, per one-half hour	18.50
	Minimum charge of one-half hour; total charge in one-half hour increments	
3.	In addition, for other than normal working hours (8:00 a.m. to 5:00 p.m., M—F, excluding city holidays), per one-half hour	18.50
b.	Residential service rates (§ 27-272):	
1.	Base rate. The rates to be charged and collected for natural gas sales on a firm basis furnished by the city to consumers for residential service are hereby fixed as follows:	
(i)	Customer charge, per month per bill rendered	6.60
(ii)	Energy charge, per therm	0.38031
2.	Minimum monthly bill. The minimum monthly bill shall be equal to the customer charge.	
3.	Purchased gas adjustment. (See section 27-273.)	
c.	General service rates (§ 27-272):	
1.	Base rate. The rates to be charged and collected for natural gas sales on a firm basis furnished by the city to consumers for general service are hereby fixed as follows:	
(i)	Customer charge, per month per bill rendered	16.50
(ii)	Energy charge, per therm	0.22037
2.	Minimum monthly bill. The minimum monthly bill shall be equal to the customer charge.	
3.	Purchased gas adjustment. (See section 27-273.)	

Subject	*Amount*
d. Interruptible service rates (§ 27-272):	
1. Base rate. The rates to be charged and collected for natural gas sales on an interruptible basis furnished by the city to consumers for interruptible service are hereby fixed as follows:	
(i) Customer charge, per month per bill rendered	330.00
(ii) Energy charge, per therm	0.16093
2. Minimum monthly bill. The minimum monthly bill shall be equal to the customer charge plus a minimum billing volume of natural gas as specified in the interruptible service contract.	
3. Purchased gas adjustment. (See section 27-273.)	
4. Make-up gas. If, in any month, the consumer does not take the minimum monthly quantity and as a consequence is required to pay a non-fuel energy charge for natural gas not taken, then and in that event, the consumer shall be entitled to receive from the city without payment of a further non-fuel energy charge, at any time within the subsequent 11 months, a quantity of make-up gas equal to the quantity paid for but not taken; provided, however, that consumer shall be entitled to receive make-up gas in a subsequent month only if and to the extent that the consumer has actually taken natural gas (excluding any natural gas taken in violation of an interruption or curtailment order) in excess of the minimum monthly quantity during such subsequent month. The minimum monthly quantity shall in each subsequent month be the first natural gas taken. Consumer shall pay the purchased gas adjustment charge applicable to such make-up gas at the time it is taken.	
5. Availability. This service is available to consumers in the natural gas service area both within and outside the corporate limits of the city who have executed an interruptible gas service contract with the city and only to the extent that supplies are available for this service under the city's service contracts with its suppliers.	
e. Contract interruptible service rates (§ 27-272):	
1. Base rate. The rates to be charged and collected for natural gas sales on an interruptible basis furnished by the city to consumers for contract interruptible service are hereby fixed as follows:	
(i) Customer charge, per month, per bill rendered.....	330.00
(ii) Energy charge, per therm. A contract rate which is not less than the adjusted current cost of alternative fuel and which is not greater than the non-fuel energy charge for interruptible service. In no event shall the contract rate be less than $0.00 per therm. The non-fuel energy charge for a consumer not complying with the provisions of section 5(ii) below shall be equal to the current non-fuel energy charge for interruptible service.	
2. Minimum monthly bill. The minimum monthly bill shall be equal to the customer charge plus a minimum billing volume of natural gas as specified in the contract interruptible service contract.	
3. Purchased gas adjustment. (See section 27-273)	

pay oversizing costs, if required, to serve existing or future customers outside of the proposed development.
(Code 1960, § 28-64.4; Ord. No. 3087, § 6, 12-17-84; Ord. No. 3564, § 4, 9-18-89; Ord. No. 3754, § 80, 1-27-92; Ord. No. 951541, § 3, 6-10-96)

Sec. 27-174. Force main extension (CIAC).

Where force mains are constructed by the city to extend wastewater service to a lot or development, the applicant for such wastewater service shall pay to the city a contribution in aid of construction (CIAC) prior to the commencement of construction of the force main. The force main CIAC shall be calculated as the cost as estimated by the city of constructing a force main sized (the smallest possible to serve the project, four inches minimum) and routed at the shortest practicable length to the closest point in the existing wastewater system capable of providing service to the applicant's development only. Sizing and routing of the force main will be determined by the city.
(Code 1960, § 28-64.5; Ord. No. 3739, § 5, 9-30-91; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-175. Requirement for additional CIAC.

In any instance where the city determines that the city's share of cost to construct new facilities (including oversizing costs) prompted by an application for wastewater service is greater than the city is willing and/or able to afford, the applicant may be allowed to pay an additional contribution in aid of construction (CIAC), which may be required by the city in order to reduce the city's share of cost to an amount acceptable to the city. The city shall determine the amount of CIAC which is necessary under this section. Wastewater flow-based connection charges shall not be credited towards any required CIAC.
(Code 1960, § 28-64.6; Ord. No. 3739, § 6, 9-30-91; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-176. Gravity line or pump station/ force main construction.

In the instance where it is physically feasible to construct either gravity line or a pump station/ force main to serve a development, the facilities to be constructed shall be determined by the city. The applicant shall pay the lesser of:

(1) CIAC for gravity line extensions; or

(2) Pump station (primary) CIAC plus force main extension CIAC plus any additional CIAC that may be assessed by the city.

(Code 1960, § 28-64.7; Ord. No. 3739, § 7, 9-30-91; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-177. Refunds of prepaid charges.

Prepaid wastewater connection charges which are paid prior to installation of the facilities at the site for which they are paid, may be refunded to the current owner of the property for which the charges were paid upon application made, provided that the facilities for which payment was made have not been installed, and provided that all costs of the city incurred in connection therewith, including but not limited to administrative and engineering costs shall first be deducted prior to making any such refund. No interest shall be paid by the city on any such refund for prepayments. The burden of proof of any such prepayments shall be the applicant's.
(Code 1960, § 28-64.8; Ord. No. 3739, § 8, 9-30-91; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-178. Maintenance of laterals.

The customer shall be responsible for keeping the wastewater lateral free of all obstructions from his/her premises to the main wastewater collection line within a public right-of-way or easement. The customer will be responsible for any damage occurring to the customer's property due to an obstruction in the wastewater lateral.
(Code 1960, § 28-60; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-179. Oversized facilities.

The city reserves the right to require oversizing of any wastewater facility (gravity wastewater lines, lift stations, force mains and package treatment plants) and shall pay the developer for such oversizing on the basis of additional costs incurred because of the oversizing. The city shall pay oversizing costs based on the difference be-

Goals, Objectives & Policies

Conservation, Open Space & Groundwater Recharge Element

GOAL 1

ESTABLISH AND MAINTAIN AN INTEGRATED AND URBAN-DEFINING OPEN SPACE NETWORK THAT PROTECTS AND CONSERVES KEY ENVIRONMENTAL FEATURES.

Objective 1.1 **The City shall protect significant environmental lands and resources identified in the Environmentally Significant Land and Resources Series within the Future Land Use Map Series. The City shall identify environmentally significant open space and recreation sites for acquisition.**

Policy 1.1.1 The following minimum standards shall be used to protect environmentally sensitive resources identified in the Geographic Information Systems (GIS) Map Library located on the City's Planning and Development Services Department website. The Environmentally Significant Land and Resources Map Series within the Future Land Use Map Series shall be updated as annexations occur and when additional resources are identified; however, the GIS Map Library shall be the reference source for land use decisions and in applying land development regulations because it contains the most up-to-date, best available information. The City shall develop and adopt land development regulations that, at a minimum, meet the standards addressed below.

a. Creeks: Between 35 and 150 feet from the break in slope at the top of the bank, there is a rebuttable presumption that development is detrimental to the regulated creek. Development must conform to applicable provisions of the land development regulations that prohibit

Revised 06/10/02, Ord. 000882
Revised 01/05/12, Ord. 110246
Revised 08/15/13, Ord. 120370

development within a minimum of 35 feet of the break in slope at the top of the bank of any regulated creek.

b. Wetlands: Developments containing wetlands must avoid loss of function or degradation of wetland habitat and/or wetland hydrology as the highest priority. Where impact is unavoidable, degradation or loss of function shall be minimized, and the applicant must demonstrate that the project is clearly in the public interest. The City shall develop and implement land development regulations that at a minimum:

1. Establish criteria that are at least consistent with the relevant criteria of Section 373.414(1), F.S., for determining whether the project is clearly in the public interest.
2. Require the use of the most current functional assessment methodology that is in use by regulatory agencies in Florida for determining mitigation requirements for impacts on wetlands.
3. Specify wetland creation as a mitigation strategy that shall be considered only after substantial evidence, based on the functional assessment referenced in Policy 1.1.1.b.2., indicates that the preservation, enhancement, or restoration of existing wetlands is less desirable or effective as an option.
4. Establish bonding, long-term monitoring and enforceable long-term maintenance requirements for wetland mitigation projects to ensure that the negative impacts have been mitigated. Monitoring reports shall be reviewed by the City of Gainesville or other appropriate monitoring agency or reviewing entity to ensure that mitigation criteria are met, with regulatory fees paid by the permitted applicant. The mitigation plan must be approved prior to the approval and initiation of the project.
5. Require off-site mitigation to be performed within the same basin and sub-basin (the basins are depicted on the map entitled Wetland Mitigation Basins that is on file with the Planning & Development Services Department) in which the impact occurred, unless it is shown that mitigation within the basin is not feasible or that mitigation outside the basin is more appropriate. The order of preference for the location of the mitigated area(s) in relation to the impacted areas will be established in the land development regulations (LDRs).
6. Require that development shall not cause indirect or secondary wetland impacts off-site.

7. Require a minimum buffer distance of 35 ft. and an average buffer distance of 50 feet between the landward extent of any wetland and the developed area. Larger buffers may be warranted. The criteria for buffer expansion will be developed in the land development regulations.

8. Specify that the protections for wetlands shall be extended to all wetlands delineated in accordance with Chapter 62-340, F.A.C., regardless of whether they are currently mapped by the City of Gainesville.

9. Require review and approval of wetland mitigation projects by qualified professionals.

10. Require protection of listed species in wetlands.

11. Require that wetlands impacted as a result of noncompliance or unauthorized excavation, filling, drainage, mechanical land clearing or other development activity on or subsequent to the effective date of this policy be, at the owner's expense, either restored to their original function and condition prior to such damage, or mitigated for pursuant to the mitigation requirements of this Comprehensive Plan or the Land Development Code.

c. Lakes: Developments containing or adjacent to a natural lake (or lakes) must not adversely impact the condition of the lake. Dredge and fill shall be discouraged and other alternatives considered. Development shall be prohibited within 75 feet of the landward extent of a lake.

d. Wellfields: Development must be consistent with Policies 2.3.2 and 2.3.3 of this Element.

e. Floridan Aquifer High Recharge Areas: Development within this area must be consistent with Policies 2.3.3, 2.3.6, 2.3.7, and 2.3.8 of this Element.

f. Natural and Archaeological Resource Areas: Developments within or including an upland area identified as a significant natural community, listed species habitat, strategic ecosystem, significant geological resource feature, or a significant archaeological resource must submit a resource inventory and assessment for the parcel. Based on the inventory and any required verification of the extent of the resource area, land development regulations shall provide for the set-aside of identified resource areas for conservation and resource protection.

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Revised 01/05/12, Ord. 110246
Revised 08/15/13, Ord. 120370

Policy 1.1.2 Minimum buffer and/or setback distances for creeks, lakes, and wetlands designated as Outstanding Florida Waters, as listed in Rule 62-302.700, F.A.C., shall be established. The buffer and/or setback distances shall at a minimum meet the respective minimum buffer and/or setback distances established by Policy 1.1.1.

Policy 1.1.3 The City shall keep in force land development regulations that require new developments to dedicate land and easements, within federal constitutional guidelines, particularly for the creation of buffers along and around surface waters and natural reservations and to facilitate the development of greenways and other open space.

Policy 1.1.4 The City shall allocate a minimum of $300,000 per year for the purchase and/or management of environmentally significant open space and of active and passive recreation sites.

Policy 1.1.5 The City shall collaborate with local, regional and state environmental agencies (including Alachua County and the St. Johns and Suwannee River Water Management Districts) to develop basin management plans, which shall identify wetlands of special concern, disturbed wetlands, and appropriate sites for mitigation. The plans shall also consider those factors affecting the structure and functions of wetlands.

Policy 1.1.6 The City shall incorporate by reference the General Soil Map – Alachua County Florida, that is in the Soil Survey of Alachua County (1985, United States Department of Agriculture, Soil Conservation Service).

Objective 1.2 The City shall coordinate with Alachua County on the Alachua County Forever program, and with other potential funding sources for land acquisition for environmental and open space protection.

Policy 1.2.1 The City shall seek to maximize the protection of environmentally sensitive lands through the nomination of properties for acquisition with Alachua County Forever and other relevant funds.

Policy 1.2.2 The City shall maintain a registry of real properties owned by the City of Gainesville that are acquired or used for conservation, recreation or cultural purposes, and that are deemed by the City Commission to be worthy of the highest level of protection.

GOAL 2

MITIGATE THE EFFECTS OF GROWTH AND DEVELOPMENT ON ENVIRONMENTAL RESOURCES.

Objective 2.1 **Wetland acreage and functions within the listed basins (shown on the map entitled Wetland Mitigation Basins that is on file with the Planning & Development Services Department) shall be maintained to the extent feasible through the planning period.**

Policy 2.1.1 The City shall implement and update land development regulations designed to conserve wetland acreage and preserve natural functions within the listed basins (shown on the map entitled Wetland Mitigation Basins that is on file with the Planning & Development Services Department). When wetlands are unavoidably lost to development, mandatory mitigation shall be required to ensure no net loss of acreage and functions occurs. Mitigation location protocol shall follow Policy 1.1.1 b.5.

Policy 2.1.2 Each basin management plan shall include, if technically and scientifically justifiable, the creation of one or more local mitigation banks or offsite regional mitigation areas in accordance with Section 373.4135, F.S.

Objective 2.2 **The City shall improve the quality of stormwater entering surface waters by requiring development and redevelopment to meet the adopted water quality standards of this Element and the Stormwater Management Element.**

Policy 2.2.1 The City shall require stormwater quality treatment facilities for redevelopment.

Policy 2.2.2 The City's land development regulations shall include provisions to reduce the amount of impervious parking surface allowed.

Policy 2.2.3 The City's land development regulations shall include provisions that meet or exceed best management practices for stormwater management.

Policy 2.2.4 The City's land development regulations shall require the handling of hazardous materials in such a way as to prevent degradation of the natural environment. At a minimum, this shall be achieved by complying with the Alachua County Hazardous Materials Management Code and the Alachua County Murphree Wellfield Protection Code, which:

a. Prohibit certain new hazardous materials facilities and underground storage tank systems from siting within the unconfined zone of the Floridan aquifer;

b. Prohibit new hazardous materials facilities from siting within the primary and secondary wellfield protection zones of the Murphree wellfield, and establish requirements for siting of hazardous materials facilities within the tertiary protection zones of the Murphree wellfield.

Within the secondary zone, vehicular fuel storage subject to Section 376.317, F.S., may be allowed;

c. Require new Class C and D hazardous materials facilities, as identified in the Alachua County Hazardous Materials Management Code, to maintain large setbacks from surface waters, wells, and floodplains; and

d. Require stringent hazardous materials storage and containment designs, periodic monitoring, inspections, a management plan, fees, and penalties for non-compliance.

Policy 2.2.5 The City's land development regulations shall supplement the standards of the applicable Water Management District to promote the maintenance of water quality in surface waters. Such standards include:

a. Protecting the surface water resource by prohibiting excavation, filling, channelization, mechanized land clearing, and other development activities, except as may be authorized by the Land Development Code;

b. Requiring sedimentation controls during and after construction;

c. Protecting creek banks and vegetation;

d. Requiring treatment of the first "one inch" of stormwater runoff; and

e. Restoring previously channelized creeks identified for restoration by the City, when feasible.

Policy 2.2.6 The City shall maintain an inventory of altered creek segments suitable for restoration to a more natural condition.

Objective 2.3 The City shall conserve and protect the quality and quantity of current and projected water sources through the planning period.

Policy 2.3.1 The City shall coordinate with the Alachua County Environmental Protection Department, the Florida Department of Environmental Protection (FDEP), the Water Management Districts, and the Environmental Protection Agency (EPA) and shall support the appropriate agencies with efforts to:

a. Identify areas of pollution to surface waters and groundwater;

b. Provide on-going monitoring programs that include periodic reports that describe environmental conditions and cleanup status; and

c. Identify parties responsible for polluted areas, and require such parties to mitigate pollution problems.

Policy 2.3.2 The City shall allow land uses and facility design within wellfield protection zones (and other "community water system" cones of influence as defined by Rule 62-550.200, F.A.C.) as identified in the Environmentally Significant Land and Resources Map Series within the Future Land Use Map Series, and that are in compliance with the Murphree Wellfield Protection Code.

Policy 2.3.3 The City shall allow new development in commercial, institutional, and industrial districts to only place septic tanks:

a. In compliance with the Wellfield Protection Special Use Permit process of the City's Land Development Code, and if the development is in compliance with the Alachua County Hazardous Materials Management Code; and

b. In areas not identified as regulated surface waters and wetland areas in the Environmentally Significant Land and Resources Map Series of the Future Land Use Map Series.

Policy 2.3.4 The City shall maintain water conservation programs that are consistent with the Water Management Districts' plans (Sections 373.175 & 373.246, F.S., and Chapters 40B-21 & 40C-21, F.A.C.). These programs shall include strategies to: deal with emergency conditions; implement public education campaigns regarding the nature of groundwater resources and the need to protect and conserve them; provide the public with information on water reuse systems; and employ potable water rate structures to encourage water conservation.

Policy 2.3.5 The City shall cooperate with the water management districts during declared water shortage emergencies by conserving water resources and by assisting with the implementation of water shortage emergency declarations, orders, and plans.

Policy 2.3.6 Pursuant to Section 373.0397, F.S., Water Management Districts are to map "prime" groundwater recharge areas for the Floridan aquifer. Should such areas be identified within City limits, the areas will be mapped and included in the adopted Comprehensive Plan, and City land development regulations shall be amended to protect such areas if they are not already protected by existing regulations and programs. City land development regulations shall protect the Floridan aquifer groundwater resource through recognition of geographic areas of relative vulnerability and high aquifer recharge characteristics. Mapping of these high aquifer recharge areas shall include surface waters that convey flow directly to groundwater via sinkholes (stream-to-sink surface

water basins), and areas where the Floridan aquifer is otherwise vulnerable or highly vulnerable to degradation through recharge from land surfaces.

Policy 2.3.7 Until such time as prime groundwater recharge areas for the Floridan aquifer are mapped, the City shall use the map entitled "Floridan Aquifer High Recharge Area" of the Environmentally Significant Land and Resources Map Series within the Future Land Use Map Series, which is compiled from the Alachua County Floridan Aquifer High Recharge Area Map (Alachua County Environmental Protection Department, March 27, 2009) and modified for coverage of the Gainesville Urban Reserve Area. This map may be updated in the Geographic Information System (GIS) Map Library located on the City's Planning and Development Services Department website for reference in land use decisions and in applying land development regulations for areas of relative vulnerability and high aquifer recharge.

Policy 2.3.8 The City shall require effective groundwater recharge in accordance with the Gainesville Comprehensive Plan's Stormwater Management Element, Objective 1.8 and Policy 1.8.1.

Policy 2.3.9 Final development orders shall require compliance with State, County and City septic tank rules.

Policy 2.3.10 The City shall inform the public of the requirements of Section 373.62, F.S., regarding automatic lawn sprinkler systems.

Policy 2.3.11 The City shall conserve potable water supplies by using the methods shown in the Gainesville Comprehensive Plan's Potable Water & Wastewater Element, Objective 1.5 and Policies 1.5.1 through 1.5.9.

Objective 2.4 The City shall amend its land development regulations as necessary to conserve natural systems of surface waters and wetlands; areas subject to high rates of Floridan aquifer recharge; listed species of plants and animals; significant natural communities, and other significant natural and archaeological resource areas, including strategic ecosystems and significant geological resource features; and minimize the spread of invasive vegetation. The adopted regulations shall be designed to maintain these characteristics and resources, and the functions and values which they provide, and allow development activities which are compatible with the conservation of these resource areas as identified in the Comprehensive Plan or by provisions of the Land Development Code.

Policy 2.4.1 The City shall maintain an updated inventory of identified environmentally significant resources in the Geographic Information System (GIS) Map Library located on the City's Planning and Development Services Department website. If additional resources are identified or as annexations occur, these properties shall be subject to regulations keyed to the resource present at the

site. The Environmentally Significant Land and Resources Map Series within the Future Land Use Map Series shall be updated as annexations occur and when additional resources are identified; however, the GIS Map Library shall be the reference source for land use decisions and in applying land development regulations because it contains the most up-to-date, best available information.

Policy 2.4.2 The City shall maintain land development regulations that protect listed species of plants and animals, significant natural communities, significant geological resource features, and strategic ecosystems based on areas identified and described in the KBN/Golder Associates Report, "Alachua County Ecological Inventory Project" (1996). These regulations shall require that applications for development on parcels within the environmentally significant areas shall include an ecological inventory of the parcel that meets requirements specified in the Land Development Code.

Policy 2.4.3 The City shall maintain guidelines for the design of stormwater basins that require the use of native vegetation and basin slopes suitable for stormwater treatment that promote highly diverse plant and animal habitats, particularly within stream-to-sink basins, and that enhance the hydrological and ecological functions of related wetland areas.

Policy 2.4.4 Future road alignments shall minimize their impact on environmentally significant natural communities, wildlife corridors, and listed species habitats.

Policy 2.4.5 The City shall require construction design consistent with existing terrain by discouraging contouring, cut and fill, or other practices that cause soil erosion.

Policy 2.4.6 The City shall maintain land development regulations for regulated surface waters and wetlands that require:

a. Buffers and/or setbacks from regulated surface waters and wetlands;

b. Development to minimize erosion and sediment pollution to regulated surface waters and wetlands;

c. No net increase in the rate of runoff from development sites adjacent to regulated surface waters and wetlands;

d. Retention or detention of runoff from developments adjacent to regulated surface waters and wetlands, through on-site filtration in accordance with the Public Works Design Manual;

e. Retention of vegetation integral to the ecological value of regulated surface waters and wetlands;

f. Compliance with the City's adopted criteria for controlling sediment and erosion;

g. Allowance of transfer of development intensity and density from lower to higher elevations of a site; and

h. Prohibition on the installation of all septic tanks.

Policy 2.4.7 The City shall periodically inventory environmentally significant plants, animals, and habitats within City-owned parks or open space parcels; update on an on-going basis a list of plants, animals, and habitats that are to be protected; and maintain and monitor the viability of populations of these plants and animals.

Policy 2.4.8 The City shall coordinate with Alachua County, the U.S. Fish & Wildlife Service, the Florida Fish & Wildlife Conservation Commission, and the Florida Natural Areas Inventory to conserve environmentally significant natural communities. Such coordination may include the submittal of relevant land development proposals to these entities for comment and recommendation.

Policy 2.4.9 The City shall protect floodplains and flood channels through land development regulations that at a minimum meet all applicable State and federal requirements and regulations.

Policy 2.4.10 The City's land development regulations shall protect environmentally significant lands and resources by:

a. Providing opportunities for alternative and innovative site development;

b. Providing setback and parking standards;

c. Providing mandatory mitigation to ensure no net loss of functions and values when wetlands are unavoidably lost;

d. Allowing for, or requiring the clustering of development away from environmentally significant resources;

e. Restricting on-site waste disposal systems; and,

f. Allowing transfer of land use density and/or intensity to retain development potential from set-aside areas that are required to meet the goals, policies, and regulations of this Element and the Land Development Code.

Policy 2.4.11 Conservation strategies for significant natural communities, listed species habitats, and strategic ecosystem resources shall include, at a minimum:

a. Conservation of natural resource of uplands, including areas of significant natural communities, listed species habitats, significant geological resources features and strategic ecosystem resource areas, through set-aside, management, and buffering requirements;

b. Installation of native vegetation landscaping and removal of invasive trees and shrubs; and

c. Setbacks.

Objective 2.5 The City shall develop and maintain programs as necessary to ensure air quality levels comply with state and national ambient air quality standards through the planning period.

Policy 2.5.1 The City shall develop new programs and strategies as may be needed, and continue existing policies that encourage public transit use, bicycling, walking, and higher urban development densities.

Policy 2.5.2 Except for designated incinerators and landfills, the City shall continue to prohibit the burning of refuse, trash or garbage, in accord with applicable provisions of Chapters 10 and 27, Gainesville Code of Ordinances.

Objective 2.6 The City shall promote and practice natural resource conservation and pollution prevention in order to reduce negative impacts on the environment. To accomplish this, the City shall implement policies that encourage the conservation and protection of natural resources, energy conservation, and pollution prevention in this Element and other elements of the Comprehensive Plan (such as Solid Waste, Potable Water & Wastewater, Future Land Use, and Transportation Mobility).

Policy 2.6.1 The City and GRU shall provide customers with education and incentive programs to encourage natural resource conservation, energy conservation, and pollution prevention.

Policy 2.6.2 The City shall maintain a Green Building Program that encourages environmentally friendly and energy-efficient construction.

GOAL 3

IMPROVE URBAN SPACES THROUGH PRESERVATION AND ENHANCEMENT OF THE URBAN FOREST. MAINTAIN THE CITY'S COMMITMENT TO PRESERVATION OF THE URBAN FOREST AND STREET TREES AS A DEFINING FEATURE OF OUR COMMUNITY.

Objective 3.1 **Total tree canopy coverage within the City shall not fall below 50 percent, as estimated by the City Manager or designee, except in the event of natural catastrophe.**

Policy 3.1.1 The City shall plant at least 400 trees (or 650 inch-diameters at chest height) within City limits annually, and encourage developers and citizens to plant at least 600 trees annually. At least 75 percent of the trees should be native to north Florida.

Policy 3.1.2 The City shall adopt land development regulations for new development that require the following:

a. Use of "Florida-friendly landscaping" as defined in Section 373.185, F.S., and a reduction in allowable turf area;

b. Energy conservation through tree and shrub canopy requirements in the Land Development Code that result in shade for buildings and pavement;

c. Species diversity in new plantings in order to reduce the effect of tree species loss due to insect or disease outbreaks. No more than 50 percent of any one genus shall be allowed on any site plan, except within airport flight paths and street tree plantings. Although street tree diversity shall be attained citywide, a given street should be uniform with respect to genus, size, and shape; and

d. A plan for the removal of invasive trees and shrubs, which shall be submitted at the time of development review.

Policy 3.1.3 The City shall require that removal of regulated trees that are not subject to development plan approval shall be mitigated by on or off-site tree planting (or an equivalent payment in lieu).

Policy 3.1.4 The City shall promote tree-lined streetscapes that preserve trees and are compatible with existing infrastructure. Strategies such as placing overhead utilities underground, using aerial (tree) cabling, planting trees compatible with overhead utilities and reserving street right-of-way for trees shall be implemented, when economically feasible. All trimming within the public right-of-way shall follow the standards of the American National Standards Institute (ANSI) A300 and Z133.1, in order to minimize the physical and aesthetic harm to trees that must be pruned.

Policy 3.1.5 The City shall remove invasive trees and shrubs from its rights-of-way and property, and shall inform private property owners of the benefits of removing invasive vegetation.

Policy 3.1.6 The City shall exclude invasive vegetation from plant material permitted in landscape plans, and continue to encourage the use of native plants in landscape plans.

Policy 3.1.7 The City shall maintain land development regulations that protect heritage, champion, and other regulated trees as an important community resource. The regulations at a minimum shall include provisions for:

a. Modifications to land development regulations in order to protect and preserve regulated trees;

b. Levying of fines for the unlawful removal of trees as provided by the Code of Ordinances;

c. Setback requirements to protect trees before, during and after construction; and

d. Adequate underground space for root development of newly planted trees.

GOAL 4

PROVIDE ONGOING MONITORING OF ENVIRONMENTAL RESOURCES AND MITIGATE CURRENT POLLUTION PROBLEMS AND POTENTIAL POINT SOURCES OF POLLUTION.

Objective 4.1 The City shall identify pollution problems and parties responsible, and establish strategies to mitigate, remediate, or assist in the mitigation or remediation of these problems in all watersheds within Gainesville's city limits.

Policy 4.1.1 The City shall maintain its National Pollutant Discharge Elimination System (NPDES) permit from FDEP in order to improve surface water quality.

Policy 4.1.2 The City shall explore projects for improving water quality in its watersheds.

Policy 4.1.3 To enhance the quality of water entering Sweetwater Branch, the City shall complete the construction of a master stormwater basin to treat flow from downtown Gainesville.

Policy 4.1.4 The City shall complete the Payne's Prairie Sheet Flow Restoration project during the planning period.

Policy 4.1.5 The City shall remain actively engaged as a stakeholder in the cleanup of the Cabot Carbon/Koppers Superfund Site.

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Revised 01/05/12, Ord. 110246
Revised 08/15/13, Ord. 120370

Policy 4.1.6 The City shall coordinate with the Alachua County Environmental Protection Department and other governmental entities in identifying pollution problems and providing documentation and other relevant assistance as appropriate and feasible towards the mitigation and remediation of pollution problems, including assistance as necessary in cases where sanctions may be imposed for violations of applicable environmental regulations.

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TABLE OF CONTENTS

Page

EXECUTIVE SUMMARY 1

INTRODUCTION 3
THE VISION 3
Gainesville's Green Network 3
Trees and Creeks 4
Restoration and Preservation of the Green Network 5
Trees & Tree-Lined Streets 7
Urban Forest Protections and Restoration Objectives 12
Creeks 13
Open Space 13
Identification of Environmentally Significant Open Space 14
Regulation of Environmentally Significant Open Space 16
Environmental Management of Public Parks & Open Space 17
Acquisition of Environmentally Significant Open Space 19
GAINESVILLE'S NATURAL ENVIRONMENT: THE COMPONENTS 21
GROUNDWATER 21
Physical Geography 21
Inventory of Groundwater 22
Surficial Zone 22
Intermediate Zone 23
Floridan Zone 23
Major Natural Groundwater Recharge Areas 26
Artificial Recharge 29
Movement of Groundwater in Floridan Aquifer System 30
Supply and Conservation of Groundwater 31
Use of Floridan Groundwater 34
Assessment of Groundwater Quality 37
Functions of Aquifer Systems 40
Strengths & Deficiencies of Existing Regulations & Programs in Maintaining the Natural Functions of the Floridan Aquifer 41
Potential for Conservation, Use or Protection 45
Existing and Recommended Conservation Strategies 45
SURFACE WATERS AND WETLANDS 47
Inventory of Surface Waters and Wetlands 47
Wetlands 51
Assessment of Surface Water Quality 54
Functions of Surface Waters 58
Existing and Potential Commercial and Recreational Uses 59
Existing and Recommended Conservation Strategies 60
PLANTS, ANIMALS, AND THEIR HABITATS 61
Inventory & Problems Regarding Plants, Animals 61
Vacant Lands Inventory/Environmental Regulations Update 70
Functions of Plants and Animals 70
Existing & Potential Commercial, Recreational Uses 71
Potential for Conservation, Use or Protection 72
Existing and Recommended Conservation Strategies 75
AIR 76
Inventory of Air Quality 76
Indoor Air Pollution 81

page
Functions of Healthy Air Quality 84
Existing and Recommended Conservation Strategies 85
SOILS AND MINERALS 85
Inventory of Soils 85
Functions of Soils 88
Soil Limitations 89
Inventory of Minerals 91
Existing & Potential Commercial, Recreational Uses of Minerals 91
Potential for Conservation, Use or Protection of Minerals 91
Potential for Conservation, Use or Protection of Soils 91
Existing and Recommended Conservation Strategies 93
OPEN SPACE 93
Inventory of Open Space 93
Existing & Potential Commercial, Recreational Uses 94
Potential for Conservation, Use or Protection 95
POINT SOURCES OF POLLUTION 98
ENVIRONMENTAL QUALITY MONITORING PROGRAM 101
HAZARDOUS WASTES 101
ECONOMIC COSTS OF DAMAGE TO GAINESVILLE'S NATURAL ENVIRONMENT 103
APPENDIX
DEFINITIONS A-2
TABLE 3 ..... A-6
TABLE 4 ..... A-7
TABLE 5 ..... A-22
TABLE 7 ..... A-24
TABLE 8… A-27
VACANT LANDS INVENTORY REPORT A-33
BIBLIOGRAPHY B-1

LIST OF TABLES

Page
Table 1. Projected Demand for Potable Water from Murphree Wellfield 36
Table 2. Inventory of Creeks, Lakes and Wetlands 78
Table 3. Basin-By-Basin Surface Water Inventory Within the GUA A-6
Table 4. Special Protection Species of Alachua County A-7
Table 5. Catalog of Ecological Communities by Site Location A-22
Table 6. Hazardous Waste from Large Quantity Generators 102
Table 7. Park Inventory A-24
Table 8. Invasive Exotics A-30

LIST OF MAPS

		Page
Map 1.	Creek Segments That May Be in Need of Restoration	6
Map 2a.	Green Network :Environmental Overlay	9
Map 2b.	Green Network: Trail Network	10
Map 2c.	Green Network: Parks, Agriculture and Vacant Lands	11
Map 3.	Floridan Aquifer System: Degree of Confinement	25
Map 4.	Environmentally Significant Land and Resources: Floridan Aquifer Recharge	28
Map 5.	Community Wellfield	35
Map 6.	Environmentally Significant Land and Resources: Creeks, Lakes and Wetlands	49
Map 7.	Water Basins	50
Map 8.	Potential and Known Point Source Pollution Problems	57
Map 9.	Ecological Inventory: Ecological Inventory Site Boundaries	68
Map 10.	Significant Ecological Communities	69
Map 11.	Significant Flora and Fauna: Rare and Endangered Species Survey	74
Map 12.	General Soil Associations	87
Map 13.	Urban Soil Limitations	90
Map 14.	Commercial Excavation Sites	92
Map 15.	100-Year Floodplain	96
Map 16.	Abandoned Dumps and Known and Potential Hazardous Waste Sites	100
Figure 1.	Project Parcels	B-21
Figure 2.	Ranking Scores of Project Parcels	B-22
Figure 3.	Water Quality and Creek Connections	B-23
Figure 4.	Connectivity to Conservation Areas	B-24
Figure 5.	Rare and Exemplary Natural Communities	B-25

CONSERVATION, OPEN SPACE, AND GROUNDWATER RECHARGE ELEMENT

DATA & ANALYSIS REPORT

EXECUTIVE SUMMARY

The Conservation, Open Space, and Groundwater Recharge Element of the City of Gainesville Comprehensive Plan identifies the environmental resources of the city and describes the functions of those resources. The Element also identifies the key community priorities for environmental conservation, and proposes strategies for the attainment of such conservation. The following is a summary of the Element:

THE VISION: A GREEN NETWORK

A plan for environmental conservation and open space should include a grand vision which illustrates what the community expects Gainesville to look like in the future. This Element proposes a "Green Network" vision, which includes tree-lined creeks, tree-lined streets, and interconnected open spaces for recreation and wildlife habitat with the goal of connecting with the state network of wildlife corridors.

Gainesville's plan for a citywide green network includes:

> The Network Maps. Identifies "gateway" streets, linear creek and open space corridors, rail-trails, and important natural resource areas.
>
> Restoring, Conserving and Preserving the Green Network. Several miles of city creeks and tree-lined streets offer visual beauty, wildlife habitat, and recreation for the community. Certain segments, however, have been damaged as a result of poor development practices in the past that are no longer permitted and also human activity. This section identifies some of the known segments in need of restoration and proposes preservation, conservation and restoration strategies.
>
> Regulating Environmentally Significant Open Space. This section describes how environmentally significant areas of the city are identified. It also describes strategies to protect environmentally significant land owned by the public and private sectors. Furthermore, the section discusses areas where there are environmental overlay zones (zones which apply special development regulations to properties containing

environmentally significant attributes). In addition, the section describes environmental management of public parks and open space.

Acquiring Land to Expand the Network. This section describes the ranking system used to identify properties that are most important for acquisition. The section also describes types of acquisition and acquisition issues.

A Healthy Tree Canopy. A healthy tree canopy that supports urban wildlife, provides shade, stabilizes soil, and ameliorates the environment by moderating the effects of temperature extremes and stormwater run-off.

GAINESVILLE'S NATURAL ENVIRONMENT: THE COMPONENTS

There are five broad components of Gainesville's natural environment:

- Groundwater (includes wellfields, aquifer/groundwater recharge)
- Surface Waters
- Natural Communities (includes threatened and endangered species)
- Urban Forest/Tree Canopy
- Air
- Soils

The Element describes the importance of each of the 6 components by discussing the functions of these natural resources. Functions are presented in such a way as to illustrate the benefits they provide. Current and potential problems associated with the abuse of these resources are also presented, as are the strategies available to protect natural resources.

OTHER ISSUES

The Element contains sections describing (1) "point source" pollution problems; (2) a proposal to establish a comprehensive and ongoing environmental monitoring program; (3) hazardous waste issues; and (4) economic costs of damage to the environment.

INTRODUCTION

Despite its urban character, the Gainesville area contains relatively high-quality air, soil, water, tree canopy and urban wildlife. Gainesville's natural environment provides essential services for the community. In addition to providing beauty, the natural environment stores, transports, and cleans surface waters and drinking water. It assimilates and filters pollutants. It offers recreational opportunities, and supports various economic activities such as tourism, mining, and agriculture. It provides habitat for plants and animals. Most importantly, Gainesville's natural environment is self-managing. That is, when allowed to function naturally, it provides services without the need for large public expenditures. Trees and wetlands, for example, filter pollutants much more cheaply than smokestack scrubbers or sewage treatment plants.

The primary purpose of the Conservation, Open Space, and Groundwater Recharge Element is to identify Gainesville's natural environmental features, describe the functions and services they provide to the community, and describe the actions that should be taken to preserve, conserve, or restore the functions of the natural features found in the community. By protecting the natural environment, substantial protection is provided for Gainesville's long-term quality of life, and the cost of pollution and hazard control is minimized.

THE VISION

Gainesville's Green Network

The Gainesville urban area contains several outstanding natural features. These features, such as Paynes Prairie, Newnans Lake, Bivens Arm, and Hogtown Prairie, are islands of spectacular environmental quality interspersed throughout the urban landscape. The Recreation Element Data Collection & Analysis Section refers to these islands as "gems" of an "Emerald Necklace."

Tying the gems together are a series of connecting strands, or green corridors that connect the “urban” forest with the “real” forest. In the most densely populated areas, the corridors consist of tree-lined streets and gateway streets. These will connect to areas along creeks and trails, which will then connect with larger natural areas, such as Paynes Prairie, San Felasco Hammock, the Austin Carey Forest, Newnans Lake, or Gumroot Swamp, which in turn are connected to very large natural areas like the Ocala and Osceola National Forests. At a local level, then, our green corridors form the 'Gainesville’s Green Network," shown in the series of maps 2a, 2b and 2c. Protecting the network and restoring parts of it that have been degraded provide the following benefits:

* A maximum amount of visual and physical public access to the natural environment at minimum cost.

* Habitat corridors and islands for urban wildlife, so Gainesville continues to enjoy large and diverse populations of birds and small animals.

* Preservation of representative samples of the ecological communities of Alachua County.

* Conservation of the "forest" function of the urban forest.

Trees and Creeks

Trees and creeks are the most visible ingredients of the Green Network. Gainesville's trees and creeks are either directly or indirectly associated with almost all categories of environmental preservation, conservation, and restoration:

* Creeks receive large volumes of untreated stormwater runoff. Such runoff is probably the most significant source of urban pollution. Creeks are therefore essential to the cleansing of runoff before it reaches our aquifer system.

* Soil erosion and septic tank effluent may negatively affect creeks. Maintaining a buffer of trees and other vegetation along creeks helps to protect creek water quality.

* Creekside lands contain the largest and most important acreages of complete plant communities including trees and other forms of vegetation, and habitat for wildlife.

* A strong connection between conservation and passive recreation exists. Publicly accessible recreation along the greenways of the network provides environmental education and stimulates appreciation for the natural environment.

* Several lakes and wetlands are physically connected to creeks.

* Flow from creeks and lakes enters the Floridan Aquifer directly through sinkholes and wells.

* Gainesville is known as a "City in a Forest." The excellent quality of Gainesville's tree canopy is recognized nationally [1997 Florida Tree City of the Year; first Florida recipient (1998) of the International Society of Arboriculture Gold Leaf Award]. Our many street trees offer Gainesville residents and out-

of-town visitors a view of the natural beauty of the area. Trees are an important part of our image as a place where residents value the environment.

* Trees are important in reducing air pollution and ameliorating rising global temperatures through the sequestration of carbon. They curtail soil erosion and enhance stormwater management. Properly placed trees can abate noise pollution. Strategically planted, they help reduce energy consumption by providing shading and cooling due to transpiration.

* Trees and understory vegetation support the populations of songbirds, raptors and waterfowl in the city. They serve the same function for small amphibians (frogs and toads), reptiles (lizards, including anoles and skinks) and beneficial snakes (which aid in rodent control), and small mammals.

Restoration and Preservation of the Green Network

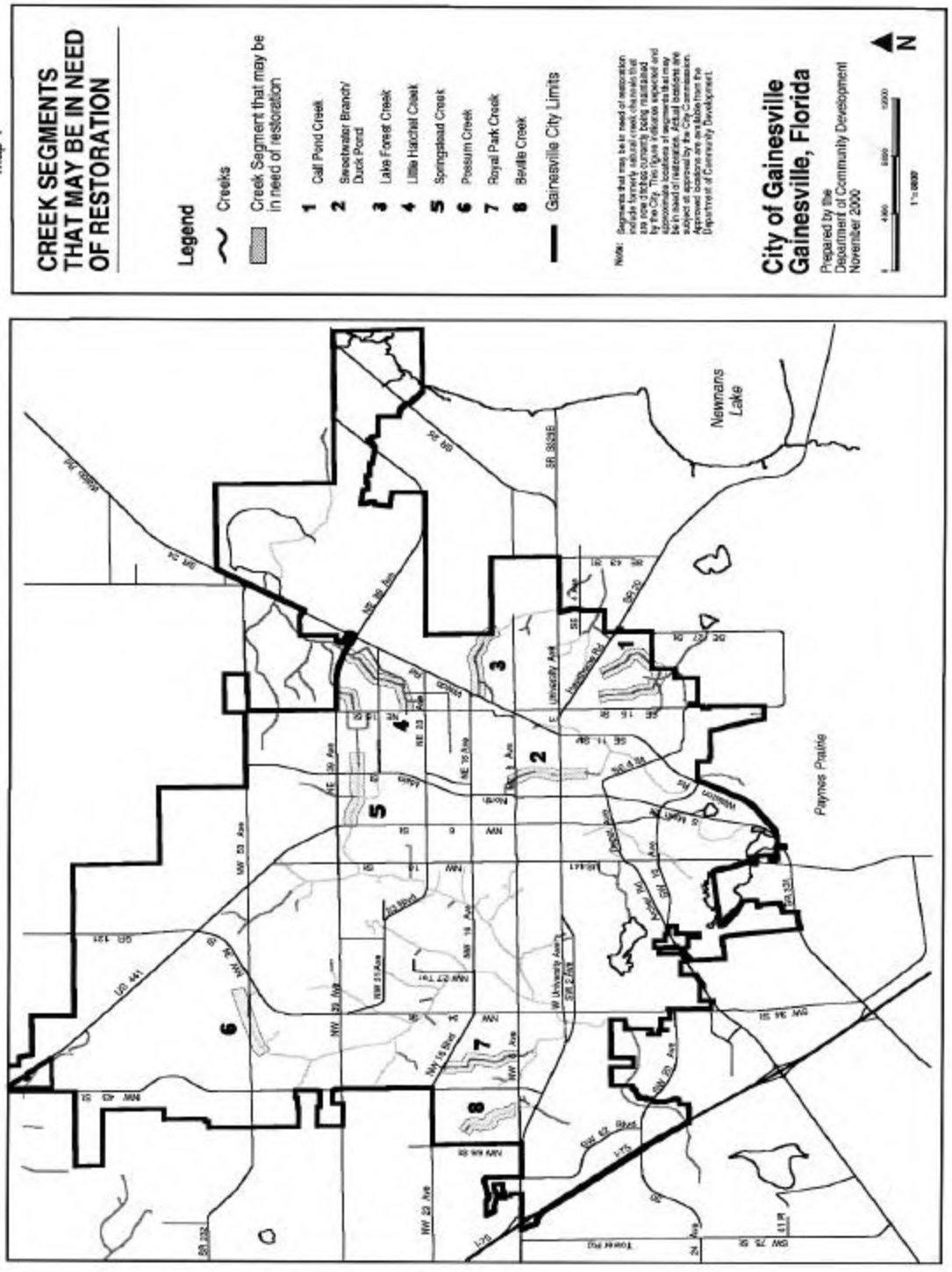
The quality of the Green Network can be improved dramatically through various restoration projects.

Several formerly natural creeks are now little more than drainage ditches. Since drainage ditches typically lack most of the features necessary to provide for environmental quality (such as habitat, pollution and flood control, and aesthetics), the City should investigate the feasibility of restoring certain ditches to their formerly natural condition. Restoration strategies would vary based on the opportunities and constraints of each, but would generally strive to promote the list of "Creek Protection and Restoration Objectives".

Examples of restoration techniques would include (but are not limited to) replacement of invasive exotic species with vegetation more suited to restoration objectives, reconfiguring the ditch from a straight-line channel to a more curvilinear pattern, establishing appropriate vegetation in areas with insufficient vegetation, and reducing the intensity of certain ditch maintenance efforts that tend to conflict with restoration objectives. Map 1 indicates creek segments that may be in need of restoration. 1967 acres are being restored in the Hogtown Creek basin.

The City of Gainesville is currently involved in a project to revitalize Sweetwater Branch Creek, which drains into Paynes Prairie Preserve, part of the State of Florida Park System. The Sweetwater Branch surface water basin contains approximately 1,710 acres and is located in the southeast central portion of the City of Gainesville. The majority of

Map 1


CREEK SEGMENTS
THAT MAY BE IN NEED
OF RESTORATION
Legend
Creeks
Creek Segment that may be in need of restoration
1 Call Pond Creek
2 Sweetwater Branch/ Duck Pond
3 Lake Forest Creek
4 Lilla Hatchet Creek
5 Springstead Creek
6 Possum Creek
7 Royal Park Creek
8 Beville Creek
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
November 2000
N
Newnans Lake
Paynes Prairie

surface water runoff from the Sweetwater Branch watershed is discharged directly to the creek without receiving treatment. The City's strategy is to construct a stormwater treatment facility to assist in reducing the nutrient and sediment load in the creek.

Trees and Tree-Lined Streets

More than any other factor, Gainesville's visual image is shaped by its trees. With a 60 percent canopy coverage, Gainesville compares very favorably with the national standard recommended by the American Forestry Association of 40%. The relative benefit of the national standard of 40% canopy is as follows:

> Increasing the tree cover in cities to the recommended level would improve the quality of air, water, and soil. In a metropolitan area with a population of around 2 million, planting more trees would mean a savings of more than $2 billion a year in stormwater management costs.
> (Moll, G. 1997. America's Urban Forests: Growing Concerns. *American Forests* 103:3.)

In 1993, Gainesville received a grant through the USDA Forest Services Urban and Community Forestry Program to conduct an urban tree assessment. The University of Florida School of Forest Resources and Conservation provided the City Arborist with a database of 21,380 records generated from a partial survey of trees on the public right-of-way. Of these records, 6,049 were a comprehensive assessment of the condition of street trees 12" in diameter or greater in the older parts of Gainesville; 11,286 records identified vacant planting spaces; 4,045 records were generated as a random sample that would enable statistical inference about the urban forest in general.

Study of the database reveal that although Gainesville has an apparently plentiful urban forest, it lacks diversity in tree age and structure. Furthermore, only about half of the available planting spaces for trees actually have trees.

The majority of large trees in Gainesville are oaks and pines. Laurel Oak and Water Oak, two species notorious for their inability to seal off internal decay, represent 32% of the large trees. The majority of emergency work orders requiring City tree crews to clear roads of fallen branches or uprooted trees are in response to tree failure by these two species. Live Oak, which is much more durable, comprises 16% of the urban forest. Loblolly Pine and Slash Pine represented 19% in 1993, but between 1994 and 1996, 3,450 pines were lost from the public right-of-way when Gainesville became the epicenter of an infestation of Southern Pine Beetle.

Gainesville's innovative program to remove the invasive exotic Tallow trees from public property was featured in an article in the Journal of Arboriculture 25(2) entitled "Controlling invasive exotics: A tallow tree replacement program campaign in Florida". The program has resulted in the removal of more than 300 Tallow trees from City streets. It coordinated the efforts of school children (through our Arbor Day celebrations), volunteers from the local chapter of the Florida Native Plant Society, University of Florida students, and local newspapers to locate the trees, which were then removed by government tree surgeons.

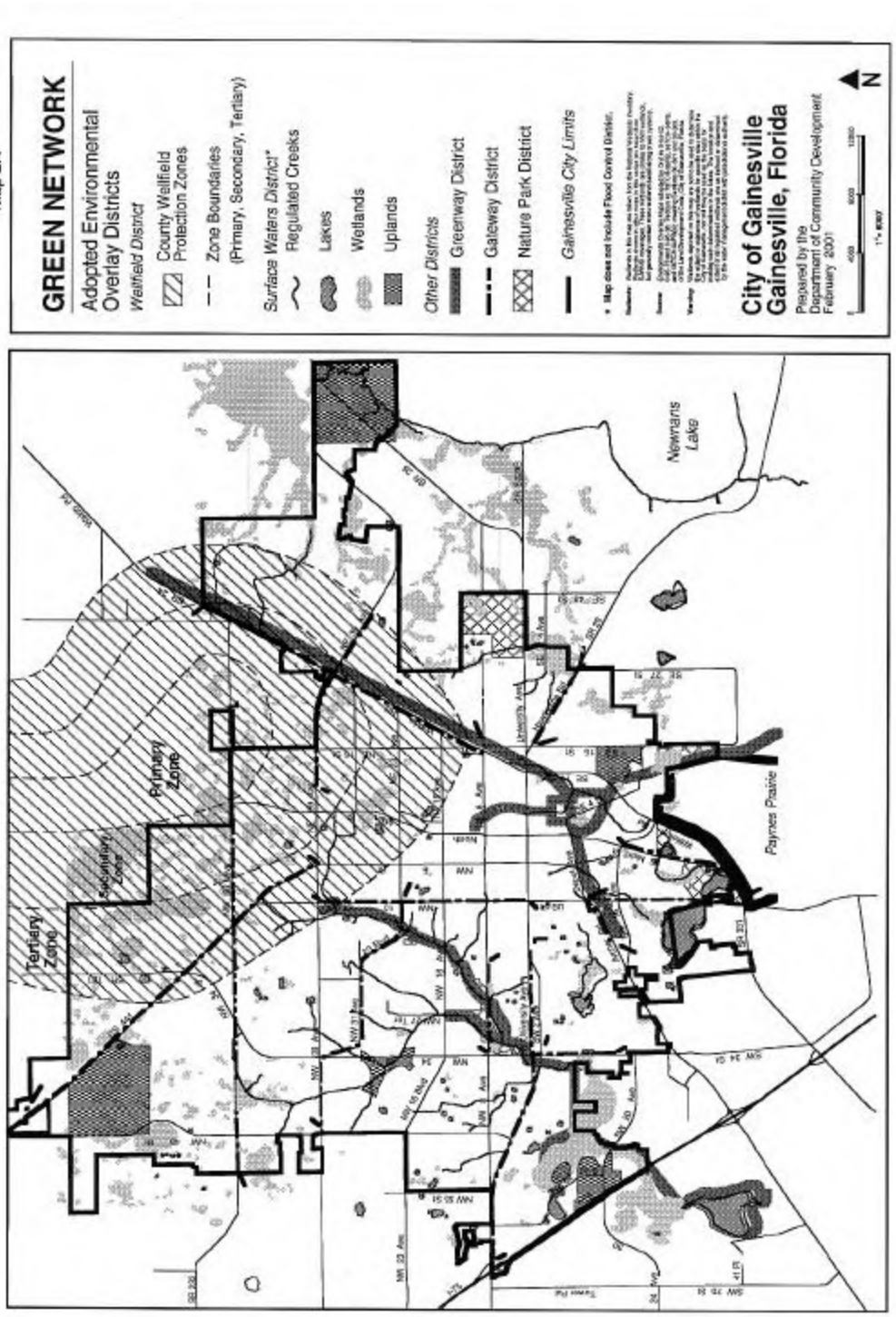
Gainesville was also the site of important research on identifying hazardous trees ("The predictability of tree decay based on visual assessment", Journal of Arboriculture 22(6)). This research was funded by the City of Gainesville in response to citizen disappointment resulting from the removal of many large laurel oaks identified in the 1993 Urban Tree Assessment as being in poor condition.

Gainesville is the only city in the United States that has a "Tree Appeals Board." Whenever a regulated tree is to be removed from public property, a sign is posted and nearby residents are informed of the proposed action. If anyone wants to protest the removal, an appeal is filed. A panel of three professionals with certification in the plant sciences hears the case and render a decision.

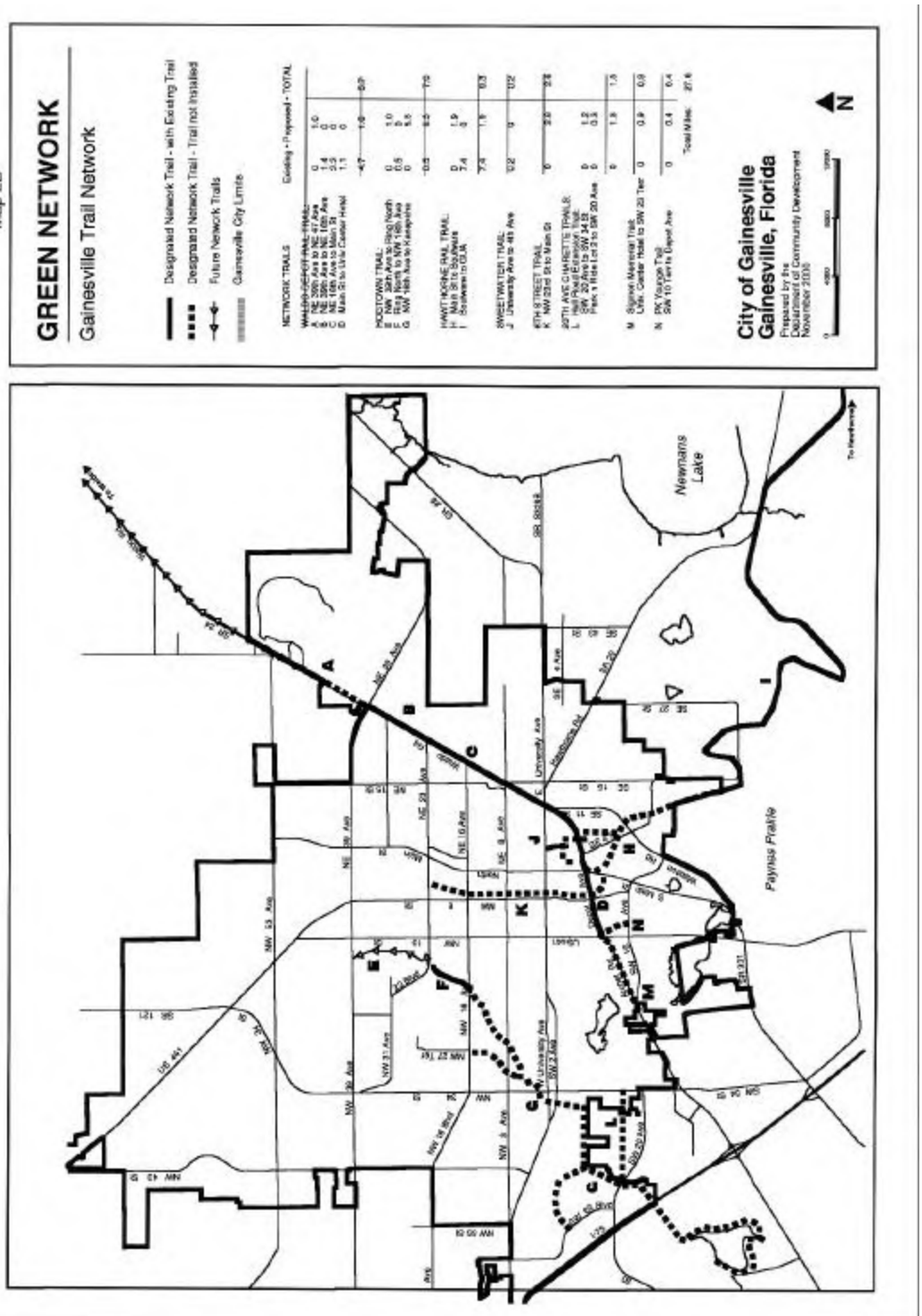
The ***Tree-mendous Gainesville*** program was established in 1995 to plant 1000 trees/year on public properties—street rights-of-way, parks, drainage retention basins, etc. This program assures Gainesville will meet its code requirements for replanting after trees are removed, whether the removals were a result of a construction project or a consequence of becoming structurally unsound and therefore a hazard to public safety. Besides addressing the quantity of trees in the urban forest, the Tree-mendous Gainesville program strengthens the quality of the urban forest. A diversity of species is planted each year. In 1998 and 1999, more than 75% of the plantings were White Ash, Pop Ash, Basswood, Bald Cypress, Florida Elm, Winged Elm, Southern Magnolia, Fringe Tree, Florida Maple, Red Maple, Live Oak, Bluff Oak, Bluejack Oak, Shumard Oak, Chickasaw Plum, Redbud, Tulip Poplar and Tupelo.

Along many streets, trees are in a healthy condition. Other streets, however, require various forms of tree restoration. New streets should be designed with dedicated places for trees to the extent feasible. Development projects require planting trees both to shade parking areas so that their canopy coverage will be 50% within 20 years and to buffer streets. At a minimum, stormwater management areas must be planted with the equivalent of one tree for every 35' of basin perimeter; the trees may be planted more closely to achieve aesthetic effects.

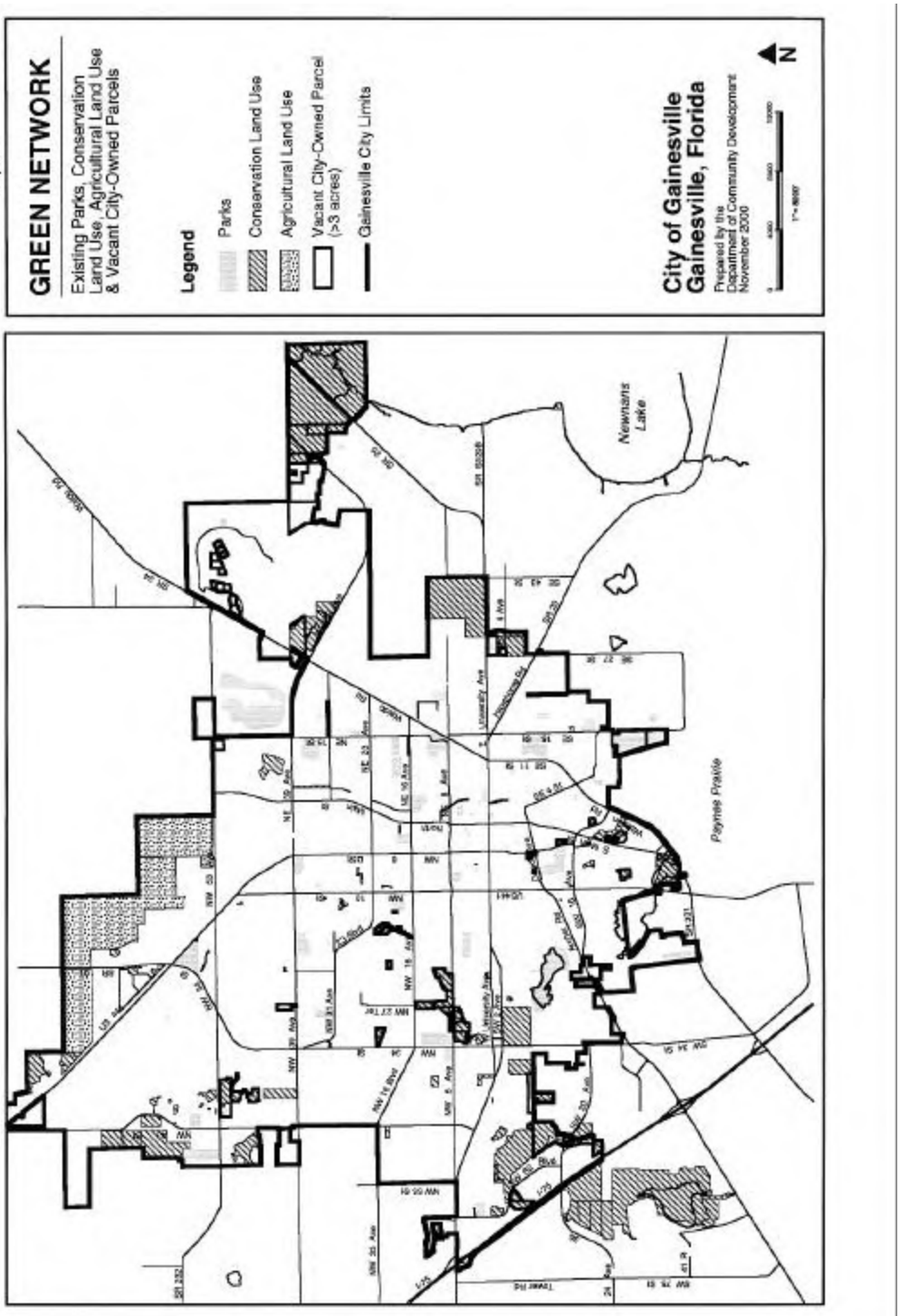
Map 2A


GREEN NETWORK
Adopted Environmental Overlay Districts
Wellfield District
County Wellfield Protection Zones
Zone Boundaries (Primary, Secondary, Tertiary)
Surface Waters District*
Regulated Creeks
Lakes
Wetlands
Uplands
Other Districts
Greenway District
Gateway District
Nature Park District
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
February 2001
N
Primary Zone
Secondary Zone
Tertiary Zone
Newnans Lake
Paynes Prairie

Map 2B


GREEN NETWORK
Gainesville Trail Network
Designated Network Trail - with Existing Trail
Designated Network Trail - Trail not Installed
Future Network Trails
Gainesville City Limits
NETWORK TRAILS
Existing
Proposed
TOTAL
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
November 2000
N
Newnans Lake
Paynes Prairie

Map 2C


GREEN NETWORK
Existing Parks, Conservation Land Use, Agricultural Land Use & Vacant City-Owned Parcels
Legend
Parks
Conservation Land Use
Agricultural Land Use
Vacant City-Owned Parcel (>3 acres)
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
November 2000
N
Newnans Lake
Paynes Prairie

URBAN FOREST PROTECTION AND RESTORATION OBJECTIVES

* Maximizing street tree canopy coverage.

* Ensuring that gateway streets convey the message that Gainesville is a Tree City.

* Promoting use of tree species native to north Florida (or otherwise appropriate for Gainesville streets) and representative of the diversity of trees that can be grown in this environment.

* Minimizing the conflict between trees, paved streets and sidewalks, and utility lines through innovative urban forest management techniques (the use of bio-barrier cloth, engineered soil, growth regulators, etc.).

* Promoting species diversity by striving to have no more than 20 percent of any one tree genus citywide. (According to the City's 1993 Urban Tree Assessment, the most common tree species in Gainesville are laurel oak, live oak, sweetgum, slash pine, loblolly pine, water oak, camphor, magnolia, sugarberry, and red maple. Rather than these species, the City encourages future plantings, when appropriate, to consist of less common species, especially native elms, ash, oaks, magnolias, and maples. Refer to the List of Approved Trees of Gainesville, available from the Gainesville Department of Community Development.)

* Continue to follow the pruning standards articulated in the American National Standard for Tree Care Operations "Tree, Shrub and Other Woody Plant Maintenance" so that as trees grow, they are structurally strong. This will reduce future pruning by guiding the trees to a natural "cathedral" structure. It will diminish the need for hazardous tree removals by eliminating included bark and codominant branching while trees are young.

* Continue the effort to remove all Chinese Tallow trees from public property. This invasive exotic poses a serious threat to the stability of natural ecosystems, particularly wetlands.

* Continue participation in the Tree City USA program. Gainesville has been a Tree City for 17 years and has received Growth Awards since the inception of that program. In 1997 Gainesville was selected "Florida Tree City of the Year by the Florida Urban Forestry Council.

* Continue to post signs explaining the reasons why trees must be removed and informing them that the Tree Appeals Board can be convened when citizens wish to present counter-arguments that might result in the preservation of such trees.

* Continue review of development proposals to assure they do not result in unnecessary tree removals, that trees to be preserved are adequately protected during construction, and that sufficient new trees are planted to maintain the citywide 60% tree canopy coverage.

* Make sure that an inspector with horticultural training approves the installation of landscaping on sites with approved landscape plans.

Creeks

The approximate 56 miles of creeks within the city form another green network traversing the city. The creek networks are lined with a diverse array of vegetation, and form the most important wildlife habitat within the city. Because of their attractiveness, creek networks are identified as an important component in Gainesville's active and passive recreation plans.

CREEK PROTECTION AND RESTORATION OBJECTIVES

* Maximize creek water quality by protecting wetlands and headwaters of significant creeks, discouraging construction activities close to creek banks which will result in sedimentation, and encouraging citizens who live along creeks to avoid planting exotics and over-fertilization.

* Maximize the wildlife habitat and vegetative stability of the creek network.

* Minimize the need for creek maintenance.

* Provide public access, through publicly owned creek segments, in ways that will minimize disturbance to natural ecological communities.

Open Space

In urban areas such as Gainesville, open space is generally patchy, isolated, and disconnected. A key planning objective, which promotes public access and environmental awareness, wildlife habitat, and overall environmental quality, is to connect these isolated spaces with corridors. A

connected green network provides opportunities for a greater diversity of wildlife, as well as creates the impression that there is more space than really exists. There are several categories of open space in Gainesville -- many of which can be part of the corridor-promoting Green Network. Table 7 in the appendix has an inventory of existing public and private park sites.

OPEN SPACE OBJECTIVES AND FUNCTIONS

* Urban definition, promotion of compact development, and control of urban sprawl

* Space for recreation, and linkages to recreation and nature sites
* Promoting public health and safety by controlling hazards and nuisances

* Improving aesthetics and the image of the community, promoting pleasant and quiet surroundings, and therefore increasing property values.

* Promoting environmental conservation, particularly through provision of natural habitat to support native wildlife diversity, habitat corridors, and preservation of important environmental features.

* Moderating extreme climate conditions by controlling wind, temperature, and water.

* Reducing air and water pollution.

The following sections describe identification, regulation, and acquisition of environmentally significant open space.

Identification of Environmentally Significant Open Space

Although much of the natural environment in the Gainesville urban area has been developed for urban uses, the city retains many environmentally significant features (in addition to areas that can be restored to a more natural condition). In the Gainesville area, environmentally significant features include:

Creeks Noted elsewhere in this Element for possessing a wide range of essential ecological and recreational functions. The City's "Regulation of Development Near Creeks" Ordinance in Gainesville's Land Development Code, Article VIII, Environmental Management recognizes the high value the community assigns to the creeks.

Lakes Possess a wide range of essential ecological and recreational functions.

Wetlands An important component of the ecology of the urban area.

Floodplain Floodplains are widely recognized for providing important species habitat and wildlife corridors, pollution mitigation, recreational and visual amenities, and storage of floodwaters.

Threatened and Endangered Species Habitat

Preservation of such species is critical to the maintenance of biological diversity. The ability of these species to survive is an indicator of the ecological health of an area. Diversity promotes ecosystem survival and preserves species that may be important to humans in the future.

Semiconfined Aquifer Zone, Stream-to-Sink Basins, and MunicipalWellfield

The semiconfined zone of the Floridan aquifer system, stream-to-sink basins, and the municipal wellfield area merit similar protection; namely, land uses in these areas must be regulated to prevent the spilling of hazardous materials or polluted stormwater that can contaminate important groundwater resources.

Significant Uplands Because they are so attractive for urban development, upland ecological communities are becoming threatened and endangered in the same way various species have become. As with threatened and endangered species, preservation of significant uplands is critical to the maintenance of biological diversity, particularly because many species are only able to survive in upland ecosystems. Particular consideration will be given to preserving uplands associated with wetlands and to uplands that have not been cultivated during the past 100 years.

Radon Unlike other significant environmental features, radon is a feature to be minimized. Radon areas are a threat to human health, and regulations will be needed to reduce human exposure to radon gas. Some of the highest radon levels in the southeastern U.S. have been recorded in the Gainesville area.

In order to improve the city's ability to protect environmentally significant features, lands containing such features have been identified and mapped. The following lands are areas where environmental overlay zones have been needed (zones that apply special development regulations to properties with environmentally significant attributes):

Creeks: Land within 150 feet of the break in slope at the top of the creek bank regulated by the "Regulation of Development Near Creeks" ordinance"

Lakes: Land within 150 feet of the recognized shoreline of lakes adversely impacted by human-built structures or modifications

Wetlands: Land within 35 feet of

Floodplain: Flood channel lands, and to a lesser extent, floodplain lands.

Significant Uplands: Land showing a level of biological rarity, diversity, or ecosystem importance which is significant on at least a county-wide basis, as identified by the Alachua County Conservation Element (adopted July 11, 1989). And as may be expanded by the City's 2000 Vacant Lands/Natural areas.

Creeks, lakes, and wetlands have been chosen to identify environmental significance because: (1) they can be well defined on maps; and (2) they embody almost all of the significant environmental features of the city. (It should be noted that much of the city's groundwater recharge areas, floodplains, radon areas, and threatened and endangered species habitat areas are associated with creeks, lakes, and wetlands.) For significant features not associated with creeks, lakes, wetlands, floodplains, or significant uplands, specific regulations tailored to each feature should be adopted.

Regulation of Environmentally Significant Open Space

Lands within the environmental conservation areas receive special consideration by the City. The lands have been evaluated to determine whether some form of public acquisition is appropriate. If not appropriate, land development is governed by a special set of environmental regulations.

Prescriptive regulations are the more traditional approach to land regulation. The developer is given no flexibility as to how to comply with the regulation. An example of such a regulation is: "there shall be no development within 200 feet of Lake Sunshine." Similarly, land use prohibitions will state which land uses are not permitted at particular locations.

Performance-based regulations, on the other hand, describe what level of environmental protection is sought, and require that development projects be designed to attain that level of protection. They therefore give the developer increased flexibility in designing a site to attain environmental conservation objectives. In addition, they are much more sensitive to the natural features of individual sites. Performance controls ask the developer and site planner: "what are

the environmental constraints at the site, and how can/should you design the site to conserve such natural features?" An example of such a regulation is: "there shall be no net loss of wetland acreage or functions."

ENVIRONMENTAL CONSERVATION AREA OBJECTIVES

* Protecting or restoring surface water quality
* Protecting or restoring the wildlife habitat capability of urban ecological communities
* Protecting or restoring vegetation
* Protecting and enhancing Gainesville's tree canopy by replanting when and where trees are removed, fostering diversity of tree species, encouraging tree preservation and protection as construction activities are planned.
* Protecting the Floridan Aquifer System
* Minimizing exposure to radon gas
* Minimizing flood damage
* Protecting or providing scenic and passive recreational opportunities
* Minimizing soil erosion
* Removing invasive exotic plants and animals

Environmental Management of Public Parks & Open Space

Citizens of Gainesville and Alachua County have expressed great concern over development proposals in close proximity to environmentally significant areas. Citizen groups like the Women for Wise Growth, local chapters of the Audubon Society and the Sierra Club, Paynes Prairie Chapter of the Florida Native Plant Society often participate in the public comment portion of City Commission, Plan Board, and Development Review Board meetings. Many controversies exemplify the vulnerability of public parks and privately owned open spaces to the potentially harmful effects of human activity and development.

There are two general types of parks and recreational open spaces: (1) "active" parks and open space, which are generally designed for relatively intensive recreational activities such as tennis or baseball; and (2) "passive" parks and open space, which rely on the natural amenities of the site for their attractiveness and value. As a result, there are differences in how the two types of sites should be conserved.

For example, neighborhoods near active recreational sites may need to be protected from excessive noise and lighting. In addition, because persons using active sites are usually engaged in more intensive recreational activity, they are generally more tolerant of distractions from nearby land uses. (Nevertheless, many active park users will desire some level of site protection from nearby land uses.) On the other hand, passive sites may contain sensitive wildlife that must be protected from human disturbance from nearby land uses. Also, persons using passive sites typically expect a more peaceful and undisturbed environment.

In summary, while both active and passive sites require some degree of protection from nearby land uses, passive sites will generally require a greater degree of protection than active sites. Conservation of both active and passive parks and open spaces can be accomplished by adopting some or all of the following strategies:

* Adopting criteria and conditions that must be adhered to in instances where consideration is being given to selling public properties or converting such properties to a new use.

- Establishing buffers, when appropriate, to protect public parks and open spaces from nearby development. Land uses within buffer zones should be subject to performance standards that conform to the conservation objectives of public parks and open spaces. These objectives include:

* Continue preparing an environmental inventory and management plan for existing and future public parks and open spaces, including an investigation of existing nuisance problems, environmental problems, and opportunities at these public sites.

* Protecting or restoring viable populations of important plants and animals currently or historically found at the site from on- or off-site factors which threaten the viability of such features. Examples of threats include pesticides, vegetative clearing, noise, household pets, roads and vehicles, and soil erosion.

* Protecting the site from on or off-site factors that would adversely impact on-site wetlands.

* Protecting the site from on or off-site factors which would significantly modify the hydroperiod of the site wetlands, or degrade the quality of groundwater or surface waters at the site.

A group of citizens have organized a Political Action Committee "Legacy Lands" and have succeeded in having a bond referendum, "Alachua County Forever" placed on the ballot for the November 2000 election.

Acquisition of Environmentally Significant Open Space

The Gainesville urban area contains large expanses of State-owned, publicly protected open spaces. Continued encroachment by human activities, however, may reduce the long-term viability of these natural open space systems. Many of these natural areas (which are all outside of city limits) are linked by the green network, which includes the Gainesville creek system, various trails, and tree-lined streets. While Gainesville's goal is for all streets to have trees, in 1993 the Urban Tree Assessment revealed that only ½ the spaces available for trees are actually filled. Some spaces are unsuitable for tree planting because of underground water, sanitary sewer or storm sewer pipes or urban design consideration. Priority is given to tree planting along corridors that connect significant open spaces.

Other State-owned areas can be linked to the green network through various acquisition and regulatory strategies.

Implementing Gainesville's green network plan will require efforts to acquire additional areas to strengthen and expand the network. Possible acquisition strategies include fee simple purchase of land, purchase of development rights (such as conservation, trail or scenic easements), acceptance of land or development rights, or provision for private common areas as sites are developed. The inclusion of an option for clustering in subdivision development was intended to preserve natural areas. To achieve this goal, the stormwater basins should be removed from qualification as a natural area to be preserved.

During the past decade, the City of Gainesville applied for several grants through the Florida Communities Trust (FCT) Florida Forever (formerly Preservation 2000) Program. A major grant was awarded in 1991 to fund the acquisition of lands for a proposed Hogtown Creek Greenway, a 6-mile, 1,786 acre multi-objective study corridor. The primary purpose of the Hogtown Creek Greenway is to protect, restore and preserve the remaining ecologically sensitive and important features within the Project Site, and secondarily, to provide structured

and controlled access to these lands through a comprehensive network of trails and other public facilities. The matching funds for this grant were obtained from the City's greenspace allocation of $150,000/year. This funding was dedicated and bonded for 10 years. In 2001, this obligation will be completed. The City Commission may again consider allocation of a dedicated funding source for acquisition of parks and natural areas. These funds could be used as a match for acquisition grants aimed at properties not selected by the County Commission authorizing the disbursement of Alachua County Forever funds, if the bond referendum passes on November 7, 2000.

Most fee simple open space acquisition by the City is for the purpose of providing public parks. The Recreation Element Data Collection & Analysis Section calls for the acquisition of public conservation areas, community parks, neighborhood parks, and sports-complex parks. When parks are acquired, the City should survey the site for environmentally significant habitats, and establish a management plan for such areas.

Over the past 10 years, Gainesville's park acquisition program has added mostly passive park acreage to the existing stock of parks within the urban area. Because most of the recent acquisitions have not been developed for recreation, it is possible that the pace of future acquisitions may be slowed in order to provide funding for park development. However, continued population growth and development, along with the possibility of new funding sources for parks, may result in efforts to maintain or increase the pace of park acquisitions.

The Gainesville park and open space acquisition program uses a number of criteria to determine the value of properties being considered for acquisition. These criteria are designed to further the objectives of both the Recreation Element and the Conservation, Open Space, and Groundwater Recharge Element.

Whenever possible, public schools should provide an area within their open space acreage for native natural habitat. Recreation/Open Space impact fees should also be considered as a means of funding further acquisition of public lands.

GAINESVILLE'S NATURAL ENVIRONMENT:

THE COMPONENTS

There are six broad components of Gainesville's natural environment:

* Groundwater (includes wellfield, aquifer recharge)
* Surface Waters
* Natural Areas (including threatened and endangered species)
* Air
* Soils
* Urban Forest

GROUNDWATER

Physical Geography

Gainesville is located in an area of karst topography. This topography is associated with the presence of a fracture system in the limestone underlying Alachua County. Karstic activity and stream bank erosion are the primary forces currently modifying the topography of the urban area.

Four major physiographic regions are present in the Gainesville urban area: the Northern Highlands Plateau, the Northern Highlands Marginal Zone, the Western Valley and the Alachua Lake Cross Valley. The Northern Highlands Plateau is a relatively high flat area of low relief. From the surface down, it contains a layer of undifferentiated and unconsolidated Pleistocene to Holocene age sands and clayey sands, the Miocene Hawthorn Formation, a series of Eocene carbonate units (i.e., Ocala, Avon Park, Lake City and Oldsmar limestones) and the Paleocene Cedar Keys Formation. The Hawthorn Formation found in the Plateau is largely absent in the western and southern parts of the county due to erosion. Characteristic features of the Plateau include cypress hammocks, pine flatwoods and poorly drained swampy areas (e.g., Buck Bay, at the northern edge of the City).

There are substantial variations in the thickness of the Hawthorn Formation in the Marginal Zone because streams in it have cut and continue to cut headward into the Northern Highlands Plateau. Abandoned as well as active stream valleys (e.g., Hogtown Creek valley) are present. Solution of the underlying limestone has produced numerous sinkholes and sinkhole ponds perforating the Hawthorn. Streams in the zone flow into sinkholes either before or just after they enter the limestone plain to the west or south (e.g., Hogtown Creek drains into Haile Sink). Karst features are particularly well developed along a linear cross-county fracture zone that runs in a northwest to southeast direction through the marginal zone. Both the Hawthorn and underlying limestone are extensively fractured in this zone.

Inventory of Groundwater

Gainesville relies exclusively on groundwater for its water supply. There are three groundwater zones underlying all or part of the Gainesville urban area. The aquifers within these zones are associated with the geologic formations discussed above. The zones include: (1) the surficial zone, (2) the intermediate zone, and (3) the Floridan zone. Map 4 provides an overview of the aquifer systems present. It is important to stress that the above zones and systems extend beyond the boundaries of the urban area. It also should be noted that water may flow between aquifer systems. A downward hydraulic gradient exists in Alachua County where multiple aquifer systems are present. The amount of water able to move from higher into lower aquifers, however, is limited by the thickness and permeability of the confining beds between the aquifers.

Surficial Zone

The surficial groundwater zone consists of a sequence of undifferentiated, relatively porous sands and clayey sands that are typically 10 to 30 feet thick in the Gainesville urban area. There is a surficial aquifer system within this zone in places where an underlying confining unit is present. In the urban area, the underlying confining unit is either the original Hawthorn Formation or a thick layer of reworked Hawthorn or other relatively impermeable sediments. The surficial aquifer operates under mainly unconfined, water table conditions.

The surficial aquifer system is recharged primarily by percolating rainwater. Land use patterns, vegetation, topography and the permeability of local soils affect recharge efficiency. Water is stored for comparatively short periods of time, and flows within the system typically follow the topography of the land surface. Water is discharged through evapotranspiration; seepage to lakes, streams and wetlands; leakage to underlying aquifers where a downward hydraulic gradient is present; or pumpage from wells. In the Gainesville urban area, water withdrawn from wells in the surficial system is used for domestic and landscape irrigation purposes.

Intermediate Zone

The Hawthorn Formation is the intermediate groundwater zone. It consists of widely varying mixtures of clay, quartz sand, carbonate and phosphate. Single component beds (e.g., pure clay) are uncommon. The most common lithologies found are dolomitic, clayey sands and/or sandy dolomites. The intermediate aquifer system is found in highly variable, noncontinuous dolomitic, limestone and sandy layers within the Hawthorn Formation. Water-bearing lenses 20 to 40 feet thick were found at two sites in the Gainesville urban area in connection with groundwater contamination remediation studies (i.e., the Fairbanks Department of Transportation sandpit disposal site and the Cabot Carbon/Koppers Superfund site). These findings, however, do not constitute a comprehensive description of the intermediate aquifer system in the urban area.

The intermediate aquifer system contains water under confined conditions. It is recharged by leakage from the surficial aquifer where a downward hydraulic gradient is present. Also, where the surficial aquifer is absent, it may be recharged directly by downward leakage of rainwater. Water is discharged from the system by vertical leakage through confining units, lateral leakage (e.g., along the erosional escarpment in the Northern Highlands Marginal Zone), or pumpage from wells. It is difficult to predict the location and extent of downward leakage into the Floridan because the sequence of sediments in the Hawthorn is so complex and variable, and the data available to make such determinations is limited. Water withdrawn from the intermediate aquifer system in the urban area is used for domestic and landscape irrigation purposes.

Floridan Zone

The Floridan aquifer system located in the Floridan zone is a prolific regional water-yielding unit which serves as the Gainesville urban area's primary source of water for drinking and other uses such as industrial processing and power generation. The Floridan is approximately 1500 feet thick in the urban area and composed of a sequence of hydraulically connected formations composed of limestone and dolomite. From top to bottom, these formations include: the Ocala Group, the Avon Park Limestone, the Lake City Limestone and the Oldsmar Limestone.[1]

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[1] Estimated maximum thicknesses for these formations in Alachua County are 250 feet for the Ocala Group, 700 feet for the combined Avon Park and Lake City limestones and 530 feet for the Oldsmar Limestone. Solution features such as caverns are more prevalent in the Ocala Group than in other parts of the Floridan. This is because: (1) a significant amount of solution activity occurred in the unit before it was covered by deposits from later geologic ages; (2) the unit is closer to surface sources of carbon dioxide which induces additional solution; and (3) faster water movements through the unit promote the expansion and development of solution features. Also, the Ocala Group and Hawthorn, where present, dip gently to the northeast in the county.

The Floridan aquifer is over 100 feet below the surface in the northeastern part of the urban area where the Hawthorn Formation is continuous and operates a protective confining unit.[2] In the northwestern, central and southern parts of the urban area, the Hawthorn is variable in thickness and perforated by sinkholes, leaving the Floridan semiconfined. In the southwestern corner of the urban area, the Floridan is as little as 20 feet below the surface and unconfined because the Hawthorn is absent. It is particularly vulnerable to contamination in this area because of the lack of an overlying confining layer. Map 3 shows the generalized boundaries of the confined, semiconfined and unconfined zones in the urban area.[3]

According to well drilling records, the Floridan consists of three distinct zones and is not uniformly permeable from top to bottom at the Kanapaha Wastewater Treatment Plant, Murphree municipal wellfield and Lake Alice. Additional research is needed to determine whether the three-zone pattern exists throughout the urban area and the extent to which zone configurations vary from site to site.

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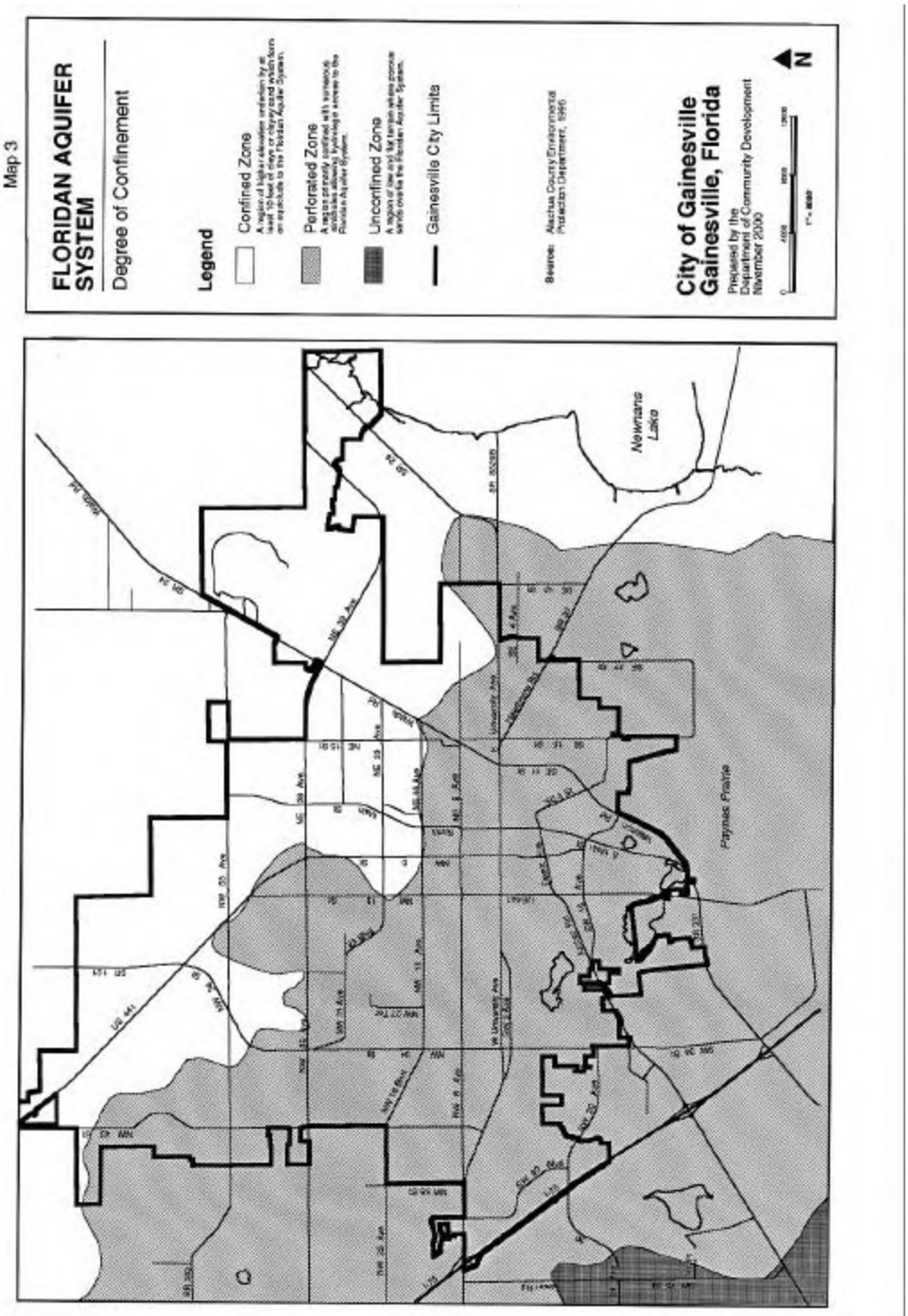
[2] It should be noted, however, that the Hawthorn Formation is not a completely impenetrable barrier even where it is continuous. It is more or less leaky depending on its components, thickness and structural integrity at a particular site.

[3] Map 5 was derived from a county-wide "degree of confinement map" prepared by the Florida Geological Survey (FGS). The degree of confinement in each of the map's three designated zones depends on the amount of clays and clayey sands present and whether the layer of clays and clayey sands is perforated by sinkholes. The clays and clayey sands may or may not be a part of the original Hawthorn Formation. As a consequence, the zone lines on the FGS's map do not exactly match physiographic region boundaries. Those boundaries are closely associated with the presence or absence of the Hawthorn.

Map 3


FLORIDAN AQUIFER SYSTEM
Degree of Confinement
Legend
Confined Zone
Perforated Zone
Unconfined Zone
Gainesville City Limits
Source: Alachua County Environmental Protection Department, 1996
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
November 2000
N
Newnans Lake
Paynes Prairie

Major Natural Groundwater Recharge Areas

It is important to identify and manage groundwater recharge areas to ensure the future availability of groundwater and protect water quality. In the Gainesville area, "major natural groundwater recharge areas" (which are surrogates for the "prime" recharge areas contemplated by the Florida Statutes). The water management districts have not designated "prime" areas, but areas of high groundwater recharge that are for regional planning rather than site specific purposes have been mapped by the St. Johns River and the Suwannee River Water Management Districts. City staff has prepared subsets of these maps for Gainesville. Map 4 is the resultant map depicting high groundwater recharge areas in Gainesville.

Stream-to-sink basins are an integral part of the karstic topography and natural drainage pattern of the region. Very little water leaves the urban area as surface water flow.[4] Instead, creeks, lakes and prairies drain into sinkholes and wells directly connected to the Floridan aquifer system. Creek and lake inflows include, among others, rainwater, urban stormwater and agricultural runoff, treated wastewater, power plant effluent, and air conditioner cooling water. Development has altered the quantity and quality of surface water flows, but the natural drainage system centered on stream-to-sink basins remains largely intact.

There are 6 stream-to-sink basins in the urban area.[5] Sweetwater Branch and Tumblin Creek (via several lakes and Paynes Prairie) drain into Alachua Sink, which discharges into the Ocala Group limestone and possibly into limestone zones in the Hawthorn Formation. Water from Lake Alice flows into drainage wells, which discharge into solution cavities in the Ocala Group and Avon Park Limestone.[6] Turkey and Blues Creeks enter the aquifer in San Felasco

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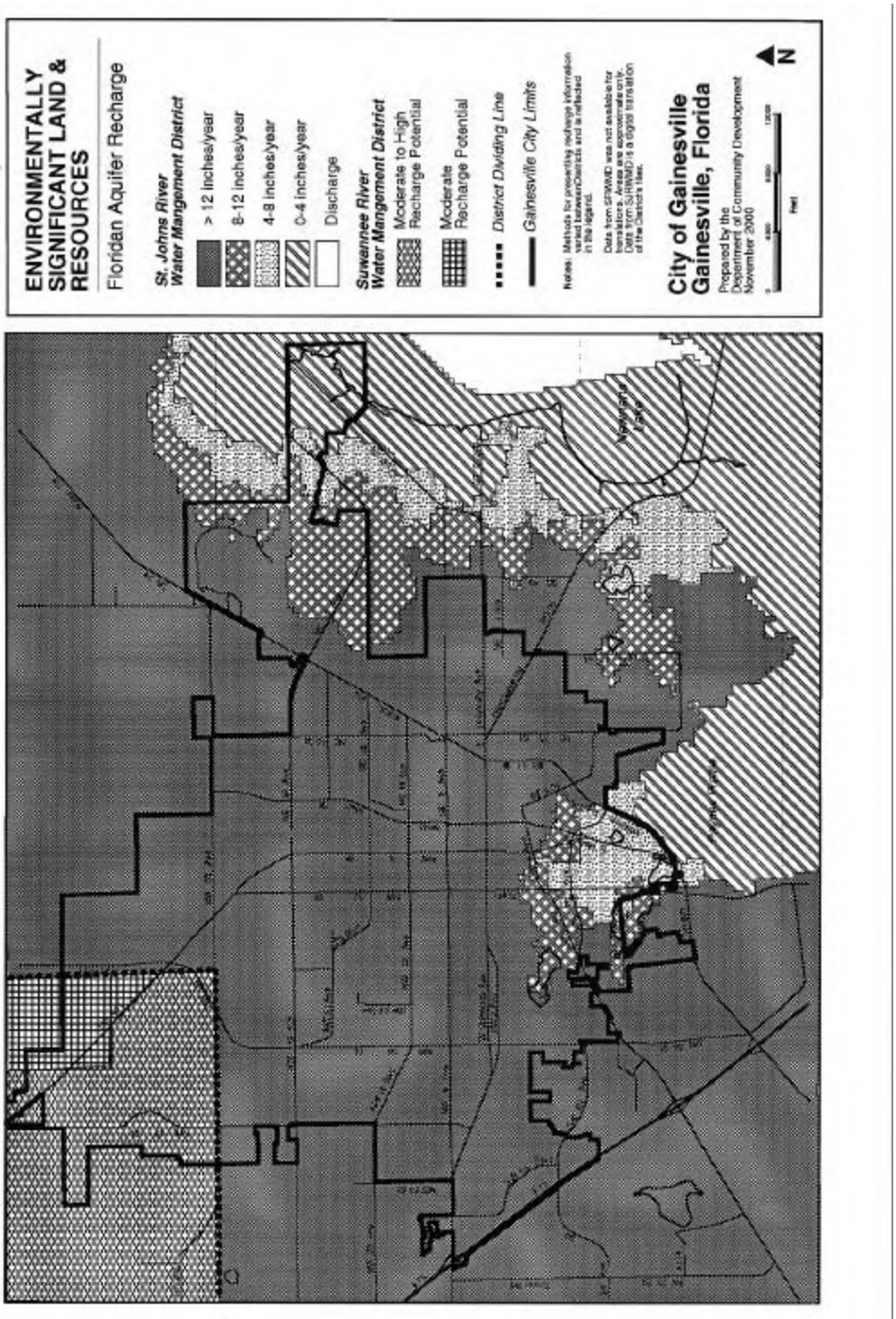
[4] Prairie Creek, which drains Newnans Lake, does flow out of the urban area and into Orange Lake. However, this creek would flow into Paynes Prairie and drain into Alachua Sink if the canal and control structures diverting it were removed. Some of the creek's flow has been rerouted to the prairie. According to a 1988 report, though, the amount of inflow rarely exceeds 15 percent of the creek's total volume and, in dry years, it is often insignificant due to the presence of a weir on the creek below Newnans Lake.

[5] It is possible to draw a hydrologic connection between waters in the Little Hatchet and Lake Forest creek basins and Alachua Sink since they all are related to Newnans Lake. Lake Forest Creek drains directly into the lake while Little Hatchet Creek drains into Gum Root Swamp which then discharges into the lake. Newnans Lake, as noted in footnote 6, drains into Prairie Creek, which provides some of the water entering Paynes Prairie and Alachua Sink.

[6] Before 1948, the area where Lake Alice is located was a low marshy area that drained during wet periods into a sinkhole near what is now the eastern end of the lake. Lake Alice was formed after dams were built to prevent outflow from the area and effluent from the University of Florida's Wastewater Treatment Plant and cooling water were added. The Lake Alice basin is treated as a natural stream-to-sink recharge area because lake overflows would drain into a sinkhole if they were not diverted into drainage wells. Also, the lake is very similar to Sweetwater Branch in terms of its inflows and it is hydrologically connected to Bivens Arm, Sweetwater Branch and Alachua Sink during some high water stages.

Hammock Preserve. Hogtown Creek drains into Haile Sink, which discharges into the lower part of the Ocala Group. The total drainage area of Alachua Sink, Lake Alice and Haile Sink is about 48 square miles. A United States Geological Survey (USGS) study conducted in the early 1980s estimated total recharge from the three sources was averaging 33 million gallons a day, including 7 million gallons of treated wastewater. It concluded these sources could account for 75 percent of the recharge occurring in the Gainesville area, assuming a recharge rate of 15 inches a year.

Map 4


ENVIRONMENTALLY SIGNIFICANT LAND & RESOURCES
Floridan Aquifer Recharge
St. Johns River Water Mangement District
> 12 inches/year
8-12 inches/year
4-8 inches/year
0-4 inches/year
Discharge
Suwannee River Water Mangement District
Moderate to High Recharge Potential
Moderate Recharge Potential
District Dividing Line
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
November 2000
N

The semiconfined zone is extensive in the urban area. In addition to recharge through numerous sinkholes, some recharge may occur in this zone as a result of downward leakage through the Hawthorn Formation.

The Floridan is not unconfined anywhere within the Gainesville city limits, according to the latest Florida Geological Survey (FGS) confinement map available. As indicated above, however, the southwestern corner of the urban area lies within the unconfined zone. This zone is a major recharge area because: (1) rain is able to percolate directly into the Floridan through sandy soils; (2) the aquifer is a sufficient distance below the surface to create a downward hydraulic gradient and limit evapotranspiration; and (3) the Floridan in this area has the ability to accept water and move it away quickly. An FGS study estimated the unconfined zone in southwestern Alachua County has an average recharge rate of at least 10 inches a year. That rate is equivalent to almost one-half million gallons a day of recharge per square mile.

According to a 1988 USGS map of predevelopment recharge and discharge statewide, most of the Gainesville urban area (roughly the semiconfined and unconfined zones) has provided recharge of over 10 inches a year. The rest of the urban area (roughly the confined zone) is included in a zone that has provided 1 to 10 inches of recharge a year. To date, the St. Johns River (SJRWMD) and Suwannee River (SRWMD) water management districts have not identified or mapped "prime" recharge areas in Alachua County pursuant to the requirements of Sec. 373.0395, FS.

Artificial Recharge

The Kanapaha Wastewater Treatment Plant is a tertiary treatment facility under permit by the Florida Department of Environmental Protection (DEP) which uses aquifer recharge wells to dispose of treated wastewater. The amount of recharge involved is substantial (i.e., average flow was 7.6 million gallons a day in 1999). This may increase up to the permitted maximum injection rate of 10 million gallons per day. The injection wells discharge to a deep zone of the Floridan, which extends from the lower part of the Avon Park Limestone into the Oldsmar Limestone (450 to 1020 feet below the surface at the plant site). The quantities of water injected have reversed the usual downward hydraulic gradient in the area surrounding the wells, and some upward "mounding" of water around wells has been observed. The potentiometric effects of injection have been nearly negligible at a regional scale, however, because the receiving zone is fractured and capable of transmitting large quantities of water away from the plant site. Increasing the amount of recharge will expand the localized area affected by the gradient reversal and raise the potentiometric head of the Floridan around the plant to some degree.

The University of Florida recently upgraded its wastewater treatment plant from a secondary into a tertiary treatment plant which produces effluent meeting drinking water quality standards. The plant primarily uses aquifer recharge wells for effluent disposal. Reclaimed water is added to Lake Alice as needed to maintain lake water levels.

FDEP and the SJRWMD and SRWMD (within their district boundaries) evaluate and permit artificial injection facilities. See Chap. 17-28, 40B-5 and 40C-5, FAC. Both the Kanapaha and University of Florida plants lie within the SJRWMD. State requirements relating to underground injection control are based on standards set in the federal Safe Drinking Water Act. The stated purpose of DEP's rules in Chap. 17-28 is to protect the quality of the state's underground sources of drinking water and to prevent further degradation of the quality of other aquifers adjacent to the injection zone that may be used for other purposes.

Movement of Groundwater in Floridan Aquifer System

The Floridan aquifer system is a vast reservoir of water which flows on a regional basis from areas of recharge to areas of discharge (e.g., along rivers and coasts). The potentiometric surface of the Floridan and topography tend to be high in recharge areas and low in discharge areas. Flow of the Floridan in Alachua County appears to be controlled primarily by the presence of an area of high potentiometric surface in the karstic highlands region in western Putnam and Clay counties and the presence of an area of low potentiometric surface along the Santa Fe River. The roughly oval highlands region is identified as an area of high recharge in the SJRWMD's 1990 Lower St. Johns/St. Marys Ground Water Basin Resource Availability Inventory.[7] Billions of gallons of recharge are attributed to this area annually and it is believed a portion moves in a westerly direction and eventually replenishes Gainesville's municipal wellfield. Also, some recharge occurs in eastern Alachua County as a result of leakage through the Hawthorn Formation. The travel time form the Lake Santa Fe region to the Murphree well field is estimated at approximately 1000 years. Groundwater leaving the urban area moves in a northwesterly direction and ultimately discharges into the Santa Fe River primarily through springs.

In the Gainesville urban area, the pattern of groundwater flow in the Floridan has changed dramatically in recent years. This change followed the 1975 relocation of the municipal wellfield

[7] There are differences in opinion about whether the karstic highlands region is in fact a discrete high recharge area. A 1988 USGS map not cited in the 1990 SJRWMD groundwater basin inventory, for example, shows part of the region as a comparatively low recharge area (e.g., less than 1 inch a year). These differences may be resolved as the SJRWMD proceeds with its program for delineating recharge areas within its district. A recharge area(s) other than or in addition to the karstic highlands may be a primary source of water replenishing the city's wellfield.

from Main Street in south Gainesville to northeast Gainesville. The predominant direction of groundwater flow under the city now appears to be toward the northeast and the wellfield's expanding cone of depression.

There are currently at least five major features capable of influencing the direction of groundwater movement in the urban area. As indicated above, the municipal wellfield is a major influence since pumping pulls additional groundwater toward the point of withdrawal and increases the rate of flow, and the amount of water being withdrawn is substantial. The other four influences include Alachua Sink, Haile Sink, and the University of Florida and Kanapaha Water Reclamation Facility (KWRF) recharge wells. Water tends to move away from these influences because they are points of recharge.

It should be noted that, while the direction of regional flows can be estimated for a karst aquifer, precise flows are extremely difficult to trace because of a karst aquifer's complex three-dimensional pattern of fractures, fissures and solution channels Also, it is important to note that flow rates tend to be highly variable in a karst aquifer. Groundwater typically moves slowly in porous rock (e.g., a few feet a day) but rapidly where solution features allowing conduit flow are present (e.g., hundreds of feet a day).

Supply and Conservation of Groundwater

Floridan groundwater resources tend to be plentiful in the Gainesville urban area. This is because, as indicated above, the urban area receives substantial amounts of recharge from adjacent largely undeveloped counties and it lies within a county that functions as a recharge area. Notably, the USGS in a 1988 study included Alachua County in an area designated as potentially "highly favorable" for large groundwater development. It also concluded pumpage from the Floridan has been and continues to be supplied primarily by the diversion of natural discharge and by induced recharge rather than by loss of water from aquifer storage. Another important consideration is that the urban area's water supply is not threatened by lateral saltwater intrusion due to Alachua County's inland location. The SJRWMD and SRWMD regulate the use of groundwater in the county through their issuance of consumptive or water use permits. See Chap. 40B-2 and 40C-2, FAC, which implement Part II of Chap. 373, FS (Florida Water Resources Act of 1972).

The supply issue, however, is complicated by a number of factors. First, although the Floridan aquifer system has the capacity to hold and transmit vast amounts of water, full utilization of that capacity depends on the availability of adequate amounts of rainfall. Extended rainfall deficits in recharge areas lead to declines in groundwater levels which, in turn, can leave shallower wells dry, create conflicts among water users with competing demands, cause harm to natural systems, lower water pressures in wellfields, and promote the formation of sinkholes.

The water management districts have the authority to declare water shortages and implement conservation measures when they determine insufficient water is available to
meet the present and anticipated needs or when conditions dictate a temporary reduction in total use to protect water resources from serious harm. Emergencies may be declared under extraordinary circumstances. See Sec. 373.175 & 373.246, FS. Both the SJRWMD and SRWMD water management districts have adopted water shortage plans. Under both plans, the districts seek assistance in enforcing declared water shortages from local government and law enforcement officials.

On the local level, GRU promotes water conservation by providing ongoing public education programs, maintaining its water distribution system properly to minimize water losses, and recycling water at its two power plants. Water conservation is also promoted through the city's ongoing water loss reduction program and allowance of graywater recycling systems (Sec. 27-190 of city code). In addition, it is fostered through implementation of the landscaping requirements in the city's zoning code which operate to protect the tree canopy, retard stormwater runoff, and encourage aquifer recharge and use of native vegetation (Chap. 29, Articles IV and XV). The City maintains a list of recommended landscape trees that includes many drought-resistant native species useful in conserving water.

Gainesville Regional Utilities has a water reuse program, which includes distribution of reclaimed water from the Kanapaha Water Reclamation Facility for use as irrigation and in aesthetic water recharge features. Irrigation uses include the Haile Plantation Golf Course, Kanapaha Park, Kanapaha Middle School and Kanapaha Botanical Gardens and irrigation of lawn and landscape areas in the southwest area. Aesthetic water features include features located at Kanapaha Botanical Gardens, Chapman Trails Park, Kanapaha Middle School and others.

Another consideration is that much of the water withdrawn from the Floridan for use in the urban area is reused indirectly because it is returned to its source through the wastewater disposal methods utilized by GRU and the University of Florida. In 1999, for example, 9.2 billion gallons of water were withdrawn from the Murphree wellfield and approximately 4.7 billion gallons of treated wastewater were returned to the Floridan via the Kanapaha plant's aquifer recharge wells and Sweetwater Branch/Paynes Prairie/Alachua Sink. The wastewater total does not include effluent from the University of Florida Wastewater Treatment plant, which enters the Floridan via aquifer recharge wells.

An additional factor complicating the groundwater supply issue is wellfield management. Careful management is needed to avoid adverse impacts on groundwater resources even where the supply is plentiful. In 1989, GRU installed a Supervisory Control and Data Acquisition (SCADA) System at the Murphree wellfield to enhance its ability to monitor and manage well

performance and regulate the wellfield's cone of depression. At that time, well drawdowns varied from 15 to 50 feet due to the fracture system within the Floridan. The need for the SCADA system became apparent in June 1989 when extensive pumping of wells in a set combination reduced artesian pressure in the Floridan almost to the bottom of the Hawthorn Formation due to interference among the wells. GRU considered this an unacceptable practice because it could have encouraged migration of water from the intermediate aquifer system into the Floridan. Contamination is present in the intermediate system at the Fairbanks DOT sandpit disposal site and possibly at the Cabot Carbon/Koppers Superfund site, both of which are approximately two miles from the wellfield. In 1990, GRU initiated construction of three additional production wells to increase wellfield capacity and provide redundancy. It also proceeded with its development of a wellfield operational management program designed to minimize further decline in artesian pressure in the Floridan and provide adequate well spacing.

During the year 2000, significant well drawdowns occurred due to low aquifer levels due to a prolonged period of drought, combined with extremely high demands resulting from high irrigation demands.

This resulted in the need to institute water restrictions. GRU has moved forward with the addition of two additional supply wells that are expected to be completed by May 2001. These wells should significantly increase capacity. GRU also has an aggressive program of upgrading the water distribution system in order to eliminate low pressure problems.

FDEP regulates the construction, operation and maintenance of public water systems, including the Murphree wellfield, treatment plant and distribution system. (See Chap. 17-550, 17-555 and 17-602, FAC). The city's code (Chap. 27) and GRU's associated technical manual provide standards governing private sector construction of water facilities that will connect with the municipal public supply system. The SJRWMD and SRWMD issue well construction permits and license well contractors under Chap. 40B-3 and 40C-3, FAC. Alachua County issues permits relating to well construction in designated management zones under its Murphree Wellfield Protection Code. Also, the water management districts provide local governments with information on existing and planned wellfield sites, existing and anticipated "cones of influence" and highly productive groundwater areas to inform local comprehensive planning relating to the management of groundwater resources. (See Sec. 373.0391, FS).

In October of 1999 the City of Gainesville in cooperation with Gainesville Regional Utilities, the St. Johns River Water Management District, and the Suwannee River Water Management District purchased a conservation easement from The Timber Company for 7,102 acres of silvicultural land in the north-east corner of Gainesville’s city limits. The primary purpose behind this purchase was to protect the City’s wellfields from potential pollution by urbanizing land uses. Secondary benefits included protection of large natural areas, creation of an urban growth

boundary to the north, habitat for listed species, and potential link in the Ocala to Osceola Conservation Greenway identified by DEP.

Under terms of the conservation easement, The Timber Company retains the right to sell, rent, mortgage, control public access, lease private hunting and conduct silvicultural operations in upland areas (with limited cutting in wetland areas). Rights purchased and retired by above cited governmental entities included prohibitions on residential, commercial, industrial and agricultural uses (other than silvicultural). Other prohibitions included use of fertilizers, herbicides and pesticides within five hundred feet of production wells, subdivision of parcels to less than a thousand acres, dumping and new road building.

Use of Floridan Groundwater

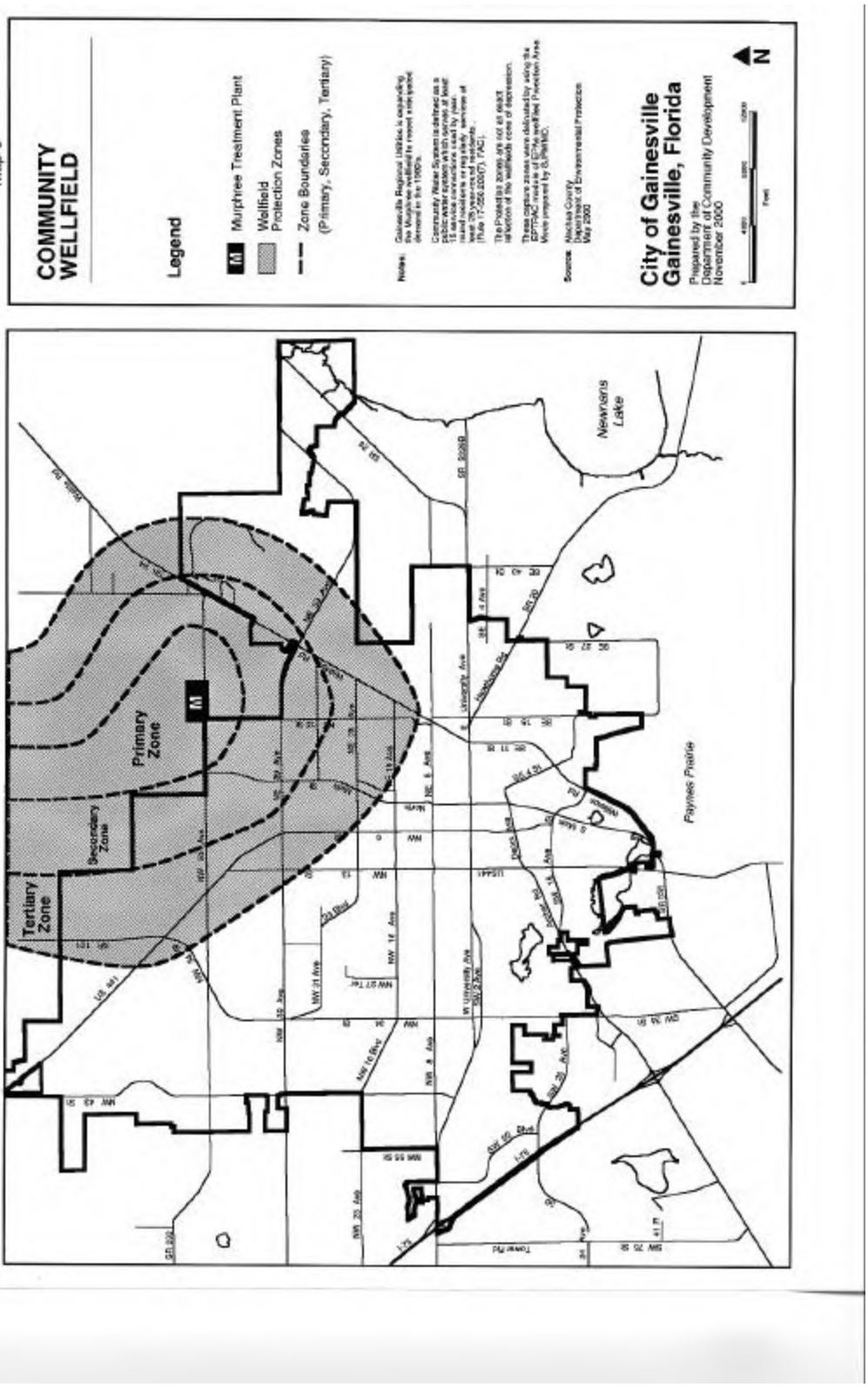
Historically, more than adequate resources have been available to meet demand for water in the Gainesville urban area. As noted above, the Floridan aquifer is the urban area's primary source of water for drinking and other uses such as industrial processing and power generation. Water withdrawals occur primarily at the Murphree wellfield which serves the city and a portion of the urbanized area around it. During calendar year 1999, an average of 25.2 million gallons of potable water was withdrawn at the wellfield each day. The annual total was approximately 9.2 billion gallons. There is one other community potable water system in the city at the Tacachale Community of Excellence. Although this system is currently not operating, according to the Alachua County Environmental Protection Department, there are plans to bring two of the three wells online in the near future. According to FDEP, average daily demand for this system was 250,000 gallons a day, in 1988. Map 5 shows the location of the two community wellfields. Currently Tacachale purchases its water from the City, although it still has its wellfield and has the capability of using its own wellfield in the future.

Adequate resources are expected to be available to meet demand for water through and beyond the 2010 planning horizon of the city's comprehensive plan. Table 1 shows projected demand for potable water from the Murphree wellfield for fiscal years 2000 to 2010. Annual totals based on projected water sales are included for residential, commercial/industrial, University of Florida and other water use categories. The current design capacity for the treatment plant is 40 million gallons a day. The plant capacity will be increased to 51 mgd by the end of fiscal year 2003. An additional expansion to 60 mgd is planned to be completed in approximately 2010. The totals in Table 1 indicate sufficient capacity will be available to meet projected average and peak daily potable water demand throughout the planning period.

During the spring of 2000, high water demands were experienced resulting from extreme drought conditions occurring at the time. The high flows appear to be caused primarily by irrigation. As a result of the high peak demands, and low aquifer levels resulting from extended

drought conditions, flows approached the capacity of the Murphree wells. In response, GRU enacted emergency water restrictions which reduced demands to avoid exceeding the wellfield capacity.

Map 5


COMMUNITY WELLFIELD
Legend
Murphree Treatment Plant
Wellfield Protection Zones
Zone Boundaries (Primary, Secondary, Tertiary)
Notes:
Source: Alachua County Department of Environmental Protection May 2000
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development November 2000
N
Primary Zone
Secondary Zone
Tertiary Zone
Newnans Lake
Paynes Prairie

GRU is taking several steps to improve capacity and alleviate the potential impacts of drought conditions. These include:

1. Installation of two additional wells;
2. Upgrades to the water distribution system to improve pressures;
3. Implementation of a third tier water rate; and
4. Emergency water restriction Ordinance.

Based on information provided by the St. Johns River Water Management District, the only current Commercial/Industrial consumptive use permit issued for inside the urban area is one for Clariant Life Science Molecules. The Kelly Generating Station has one on-site well and does not use potable water from the municipal wellfield for plant processing unless the well fails. The Kelly Plant is being repowered to incorporate a combined cycle generation unit. With the new unit, the plant is expected to use no more than 253 million gallons per year, and a maximum of 1.8 million gallons on any one day

Finally, it should be noted that substantial withdrawals from the Floridan are made from four on-site wells at GRU's Deerhaven Generating Station. The plant operates at full capacity during high demand periods, selling its excess power to other areas. At full capacity, it uses an average of 90 million gallons a month for cooling tower makeup and boiler fees and approximately 4 million gallons a month for feeders, coolers, bathroom, washdown hoses and other uses. These withdrawals are permitted under the plant's Florida Electrical Power Plant Siting Act certification, not a separate water use permit from the SRWMD. Potable water from the Murphree wellfield is used only in the administration area of the plant. Deerhaven has a “zero-discharge wastewater system” which treats and recycles all of the plant’s water on-site.

Table 1: Projected Potable Water Demands Murphree Wellfield

Year	Projected Demand Daily Flow (ADF)	Daily Flow (MDF)
2000	25.2	36.8
2001	26.0	37.9
2002	26.7	39.0
2003	27.5	40.1
2004	28.2	41.2
2005	28.9	42.3
2006	29.5	43.1
2007	30.1	43.9
2008	30.6	44.7
2009	31.1	45.5
2010	31.7	46.2
2011	32.4	47.3
2012	33.0	48.2
2013	33.7	49.2
2014	34.4	50.2
2015	35.1	51.2
2016	35.7	52.2
2017	36.4	53.2
2018	37.1	54.1
2019	37.7	55.1
2020	38.5	56.1

Source: Gainesville Regional Utilities, 2000

Assessment of Groundwater Quality

In 1995, the Alachua County Environmental Protection Department prepared A Comprehensive Contaminant Source and Well Inventory Near Wellfields Areas of Alachua County which notes that areas where the Floridan aquifer system is unconfined or the confining unit is perforated have the greatest potential for groundwater contamination.

Contamination Potential Near Murphree Wellfield

The report identified 348 potential contaminant sources that use or store hazardous materials or petroleum facilities located within the one-foot drawdown contour of the Murphree Wellfield. The potential contamination sources included facilities regulated under the Alachua County Hazardous Materials Management Code (HMMC), underground/aboveground vehicular fuel

tanks, wastewater treatment plants, and active/inactive landfills. Of the 251 regulated hazardous material sites within the one-foot drawdown, 195 were inspected of which 24% were found to be in compliance with the HMMC. Of the 139 tank sites, 58 sites contain active petroleum tanks and 6 sites have petroleum contamination. Two Superfund sites, Eleven small quantity generators, nine Class C facilities and two Class D facilities, two wastewater treatment plants and five landfills were among the potential contaminant sources within the Murphree Wellfield one foot drawdown contour.

Contamination is potentially a serious problem in the Northeast Gainesville Industrial Park which contains 72 (or 21%) of the regulated facilities within the drawdown contour. Most (68) of these sites are regulated by the Alachua County HMMC of which fifty-six are in violation, the majority (41) of which failing to provide adequate containment storage.

There are 66 documented cases of contamination of the surficial aquifer within the one foot drawdown, including two Superfund sites located at the Cabot/Koppers sites and Florida Department of Transportation site in Fairbanks, which are located within 1.5 miles of Murphree and are currently undergoing remediation. The remaining 64 sites have documented petroleum contamination of soil and/or groundwater.

Contamination Potential Near Tacachale Wellfield

In 1995, 89 facilities with a potential for contamination, 75 of which are regulated by the Alachua County HMMC within one-half mile of Tacachale. 52 of the hazardous materials facilities were found to be in violation of the Alachua County HMMC. 21 or 40% of the facilities inspected did not have proper disposal records. Forty-four (or 81%) of the facilities were found to have improper storage of waste and materials. 36 (or 69%) of the inspected facilities were found not to meet secondary containment requirements set forth in the Alachua County HMMC. Six of 14 FDEP regulated storage tank facility sites were reported to be in one of the petroleum cleanup programs.

The groundwater supply of the Gainesville urban area is vulnerable to contamination in various ways. Pollutants allowed to enter the Floridan in upstream recharge areas could eventually make their way into the municipal wellfield, given the regional nature of groundwater flows. Surface waters in local stream-to-sink basins convey contaminants directly into the Floridan aquifer through sinkholes and drainage wells. In addition, pollutants from surface sources (e.g., spills and pesticide applications) and subsurface sources (e.g., leaking underground storage tanks and septic tanks) may move downward into one or more aquifers, depending on site characteristics. Also, wells can act as conduits for contaminants and allow mixing of water among aquifers.

After years of increasing concern about protecting the community's wellfield (Murphree Water Plant) and water supply from development and uses which may pose a hazard to soil and groundwater, the City of Gainesville, in conjunction with the Alachua County Environmental Protection Department and Gainesville Regional Utilities, created an amended and improved wellfield protection zone area. The result was a new special use permit that must be approved by the City Commission called a Wellfield Protection Special Use Permit.

This Wellfield Protection Special Use Permit allows for a more intensive review of non-residential projects in the wellfield zones and allows the City to revoke permits for non-compliance.

A substantial number of groundwater and soil contamination incidents have occurred in or near the urban area. Water quality problems in a number of wells in the Floridan at the old municipal wellfield on Main Street have been attributed to recharge from Alachua Sink located about two miles to the south. In 1986-87, the Alachua County Department of Environmental Services (ACDES) identified 952 actual and potential point sources of water pollution in the county in conjunction with its development of an ambient groundwater-monitoring network. The sources include underground storage tank facilities (432), hazardous waste generators (456), wastewater package plants (33), active or recently active landfills (5), abandoned dumps and landfills (18), industrial contamination sites (6), the Cabot Carbon/Koppers Superfund site and a borrow pit. They are concentrated in the urban area and generally follow transportation routes. Known and suspected soil and groundwater contamination sites in the urban area other than those relating to leaking underground petroleum storage tanks are listed in the "Hazardous Waste" section of the Solid Waste Element Data Collection and Analysis Report. They involve a variety of contaminants including heavy metals (e.g., arsenic, chromium, lead and mercury) and organic compounds (e.g., phenols, benzene, and trichloroethylene). Also, 180 contamination sites involving leaking underground petroleum storage tanks were confirmed in Alachua County under FDEP's Early Detection Incentive Program that ended in December 1988. Approximately two-thirds of those sites are located in the urban area (over one-half within the city).

The City of Gainesville is spearheading a collaborative effort to cleanup and restore properties known as "brownfields" in the Depot Avenue and South Main Street area of downtown Gainesville. This brownfield pilot project, tentatively named "Depot Park", has received funding by the US EPA and the State of Florida. Its goals are to:

* Clean up a former manufactured gas plant site and create a stormwater park.
* Identify additional brownfields in the downtown area and facilitate their cleanup and redevelopment.
* Increase opportunities for business development, recreation and historic preservation.

* Help reduce urban sprawl by creating redevelopment opportunities downtown.

The stormwater park will consist of ponds that will be created by the excavation of soil contaminated by coal tar and other substances by nearby industrial operations. These ponds will naturally treat stormwater and reduce contaminants entering Paynes Prairie.

The stormwater park will tie together several projects planned for the Depot Avenue and South Main Street area. These projects involve environmental restoration, development of rail trails, historic preservation and infrastructure improvements. The site will be a park with walking paths, boardwalks, interpretive exhibits and native vegetation in a natural North Florida wetlands landscape.

Groundwater quality may also be affected, to a limited extent, by effluent discharges from the Kanapaha, Main Street and University of Florida wastewater treatment plants.
The Kanapaha Water Reclamation Facility (KWRF) and the University of Florida wastewater treatment plant are required to produce effluent that meets drinking water standards. Reclaimed water from these facilities is discharged into the aquifer via recharge wells. The Main Street Wastewater Treatment Plant (MSWWTF) discharges to Sweetwater Branch, which eventually enters the Floridan Aquifer via Alachua Sink. The KWRF and MSWWTF employ advanced wastewater treatment and reliably meet their effluent criteria. Groundwater monitoring in the vicinity of the KWRF recharge wells is required as a permit condition. Monitoring in these wells has indicated no significant impact of the KWRF discharge on groundwater quality.

Groundwater quality, particularly in the surficial aquifer, has been and will continue to be affected to some degree by effluent from on-site sewage disposal systems. A 1985 study estimated there are some 8,500 such systems (mostly septic tanks with soil absorption drainfields) in the urban area that treat and dispose of nearly 3 million gallons of wastewater per day. It found: (1) there was no clear evidence linking septic tanks to any health problems in Alachua County; (2) septic tanks are a significant source of recharge for the surficial aquifer, on the order of 10 percent for the urban area as a whole and 60 percent on a localized basis (a 0.4 acre lot with a septic tank); (3) other pollution sources (e.g., urban runoff) contribute more total loading than septic tanks on an urban area basis; and (4) septic tanks can be expected to degrade surficial groundwater quality on a localized basis (at densities of two or more units per acre). The study indicated any public health problems associated with on-site disposal systems would likely be site-specific (e.g., shallow private well contaminated by an upgradient source), rather than regional, since municipal potable water supplies are withdrawn from the Floridan. It did note, however, that it might be prudent to eliminate systems from areas where the potential exists for contaminating deep aquifers and surface waters.

There have been very few nuisance complaints relating to on-site sewage disposal systems in the city in recent years. Existing systems, however, will remain point sources of pollution and may pose an increasing risk as they age. Although information from the US Department of Agriculture Soil Conservation Service (USDA-SCS) confirmed that septic tanks do exist in areas with both moderate and severe limitations for septic tanks, the low number of septic tank complaints and an indication from the Health Department that corrections could easily be made with repairs, septic tanks do not appear to pose a major problem in the City of Gainesville. The Alachua County Health Department, which is authorized by HRS to implement Chap. 10D-6 in the county, could but currently does not require construction permits for system repairs. It is of note that the Alachua County Health Department is limited in its ability to enforce 10D-6's requirement that a system be upgraded if the use of a building is changed or if additions or alterations to a building are made which will increase sewage flow or change sewage characteristics.

It should also be noted that the use of septic tanks for new development is uncommon in the city. City Building Inspections Department personnel have indicated that over the last few years (1994-1999) very few new construction building permits have been issued for buildings using septic tanks (averaging about two per year). Most new construction hooks to existing wastewater lines or pays the cost of line extension from a proximate location.

Functions of Aquifer Systems

Aquifers perform the following functions:

* Water supply for drinking, irrigation and other uses.

* Water supply for creeks, lakes, rivers, wetlands and springs.

* Water storage.

* Purification of water and dilution of contaminants.

Strengths and Deficiencies of Existing Regulations and Programs in Maintaining the Natural Functions of the Floridan Aquifer

The Floridan Aquifer system, as it underlies Gainesville, is protected by several existing city, county, state, and federal regulations and programs. Remediation of contaminated groundwater at the Cabot Carbon/Koppers site and the Department of Transportation Fairbanks site are underway under the Superfund Program. At the federal level, the Superfund program is currently monitoring the Cabot Carbon/Koppers site and developing remediation strategies.

However, lack of Superfund funding slowed the speed at which the site is being remediated. The National Pollutant Discharge Elimination System (NPDES) program required a water quality treatment upgrade of the Main Street Wastewater Plant, which discharges into Sweetwater Branch, and then into Alachua Sink. This upgrade, which was completed in 1992, now allows the plant to meet the current effluent limits.

At the state level, FDEP, SJRWMD, and SRWMD regulate artificial injection facilities such as the UF and Kanapaha wastewater plants. As a part of these regulations, the UF Plant has been upgraded from a secondary to tertiary treatment system. The monitoring systems for both plants have identified only minor water quality violations historically. Therefore the existing regulation of these facilities is adequate.

FDEP regulates the construction, operation, and maintenance of public water systems including the City's Murphree Plant. The WMDs issue well construction permits. Again, historical monitoring of wells and potable water quality indicate these programs are successfully ensuring the adequate delivery of quality potable water. FDEP also regulates the construction, operation, and maintenance of wastewater plants in the city. The historical performance of the plants within the city indicate such regulation is adequate.

FDEP implements the federal Water Quality Assurance Act, in part, by establishing a groundwater quality monitoring network. FDEP has recently combined their surface and groundwater monitoring programs. The Alachua County Environmental Protection Department currently participates in 2 sampling programs, the Trend (or temporal variability network) and the Status network. The Trend network is designed to evaluate water quality changes over time. The Status network is designed to look more comprehensively at surface water and groundwater quality statewide by basin every 3-5 years. This program continues to be implemented by Alachua County. FDEP's Early Detection Incentive Program, also implemented by the County, identified a large number of leaking underground storage tanks. All the sites contaminated as a result of leaking underground storage tanks are assigned a priority ranking score by FDEP. Currently sites with a priority ranking score of 30 and above (a total of 93 sites) are being actively remediated in Alachua County.

At the county level, the County Health Department regulates on-site sewage disposal systems. In terms of public health, these regulations have effectively limited contamination from such systems to site-specific problems. The Alachua County Pubic Health Department continues to monitor all septic tank systems installed since 1989. The department also monitors septic tank systems installed before 1989, as any changes or modifications to an existing system, including changes in ownership, require involvement from the department. Nevertheless, the lack of personal responsibility in disposing of hazardous wastes (for instance pouring oil down the drain

of a sink) and maintenance of a system will always present the potential for pollution problems to occur.

As explained previously, the City of Gainesville planning staff has worked with the Alachua County Environmental Protection Department and Gainesville Regional Utilities to create an amended and improved wellfield protection ordinance for the community. The new ordinance created a new special use permit process to regulate certain types of developments and uses within the wellfield protection zone area. This new process allows for a more intensive review of non-residential projects in the wellfield zones and allows the City to revoke permits for noncompliance. The City requires a wellfield protection special use permit for all new development (with limited exceptions) within the primary, secondary and tertiary wellfield protection zones. Most expansions of existing development or changes at a site requiring any level of development plan review also require a wellfield protection special use permit.

The Murphree Water Treatment Plant, owned by Gainesville Regional Utilities (GRU), is the primary facility providing potable water for the City and urban fringe. The St. Johns River Water Management District or other local agencies having qualified professional hydrologists for the Murphree wellfield have designated no "cones of influence".

Wellfield "management" zones were originally designated in conjunction with the county's adoption of the wellfield management code in 1988. The Murphree Wellfield Protection Code, including revised wellfield protection zones, was substantially revised and improved in 2000. The wellfield protection zones were a reasonable substitute for a "cone of influence" around the municipal wellfield. The protection zones are based on travel time and were established after substantial technical investigation, including hydrogeological modeling.

The primary wellfield protection zone is the land area immediately surrounding the Murphree Wellfield, and the land area defined as the 2-year Floridan aquifer system travel time at a 60-mgd pumping rate. Requirements for this zone are the most restrictive of the three protection zones (the other two are the secondary and tertiary wellfield protection zones), and incorporate restrictions of both the tertiary and secondary zones.

In the primary zone, no new uses of land that involve the storage, use or manufacture of hazardous materials are allowed, and (with limited exceptions), no new septic tank systems are allowed. Transportation of hazardous materials is strictly limited to local traffic serving facilities within the zone. The provisions of the secondary and tertiary wellfield protection zones apply.

The secondary wellfield protection zone is the land area surrounding the primary wellfield protection zone, and the land area defined as the 10-year Floridan aquifer system travel time at a 60 mgd pumping rate. No new underground storage of hazardous materials is allowed, except

vehicular fuel storage subject to Florida Statutes 376.317. Variance approval is required for the temporary storage (up to 180 days) of hazardous materials in containers or tanks beyond a certain volume for use in normal agricultural or silvicultural (forestry) operations and construction activities. A Hazardous Materials Storage License is required for all regulated storage facilities as set forth in section 355.11 of the County Code. The provisions of the tertiary wellfield protection zone apply to the secondary protection zone.

The tertiary wellfield protection zone is the land area surrounding the secondary wellfield protection zone, and the land area defined as the 25-year Floridan aquifer system travel time at a 60 mgd pumping rate. New landfills are prohibited, and new excavations and mining activities are generally prohibited. Filling of existing or newly developing sinkholes or other solution features requires approval from the Alachua County Environmental Protection Department. Agricultural and silvicultural operations must follow or exceed accepted best management practices. No new wells are allowed in any aquifer, except as set forth in s. 355.09(b), Alachua County Code. Existing wells posing a threat to groundwater quality shall be properly abandoned or repaired, and all new and existing wells shall be registered. A Hazardous Materials Storage License is required for regulated facilities (per section 355.11, Alachua County Code) with non-residential septic tanks or wells.

The County enforces the Underground Storage Tanks ordinance, which requires secondary containment for such tanks. One of the stronger provisions of the ordinance is a requirement that both new activities and existing activities (through retrofitting) install such containment. The ordinance is therefore extremely effective in reducing the threat of aquifer contamination due to leaking storage tanks. The County has recently revised the Hazardous Materials Management Code (HMMC). Primarily, the Code regulates hazardous materials discharges to soil, surface water and groundwater by providing uniform standards for the proper storage, handling and monitoring of hazardous materials. New and existing commercial facilities that store or utilize hazardous materials are subject to the provisions of the Code and must register with the Alachua County Environmental Protection Department. Businesses handling hazardous materials are responsible for commercial hazardous waste management in accordance with state and federal regulations. Furthermore, such handlers must comply with the HMMC which, among other things, requires stringent monitoring, reporting and site design procedures. Household hazardous waste is currently collected by four rural collection centers and a temporary collection center located at the S.W. Landfill. These staffed facilities accept relatively low-hazard wastes such as used oil and paints. Relatively high-hazard wastes are collected by periodic special waste collection events. The program could be more effective through an increase in the frequency of collection and/or more convenient methods of collecting the materials from households.

At the city level, Gainesville Regional Utilities (GRU) promotes water conservation through public outreach and education, use of a conservation water rate structure, water reuse, water recycling its power plants, and its water distribution system water loss minimization and maintenance program. GRU's conservation services department provides advice and assistance to homeowners and businesses in energy and water conservation. This includes conducting of free energy and water conservation audits and advice on xeriscaping. GRU also provides public education and encourages water conservation as part of its overall public outreach program. GRU uses an inverted block water rate structure, which also encourages customers to conserve water. The City code allows for the use of graywater recycling systems, which can also be used to save water.

The city's landscaping ordinance helps protects the aquifer with stringent requirements for tree protection and replacement, and installation or retention of existing site vegetation. The ordinance is an important means of reducing stormwater pollution and promoting aquifer recharge. Aquifer (and surface water) protection has been improved through required landscaping and stormwater retention and detention areas. Like the landscaping ordinance, the city's flood control, creek setback, surface waters and wetlands overlay district and stormwater management requirements reduce stormwater pollution and promote recharge. For example, the flood and creek regulations restrict or prohibit development and vegetative removal near surface waters. Stormwater regulations require on-site retention or detention of the first inch of runoff. Additional information regarding regulations governing land use and development within natural recharge areas can be found in the Stormwater Management Element.

While existing city ordinances intend to provide a high level of aquifer protection, regulatory changes may be necessary for a higher level of protection of the aquifer from stormwater pollution or protection of recharge. Additional city regulations and programs to promote such objectives could include increasing setbacks and buffers for lakes and wetlands, further acquisition of lands associated with surface waters and restoring degraded creeks.

Potential for Conservation, Use or Protection

A dual approach emphasizing prevention and providing for remedial action is needed to conserve and protect groundwater and soil resources in the Gainesville urban area. A preventive component is needed to protect the public health, avoid adverse economic impacts, and prevent harm to the natural environment. A preventative approach also is important because it acknowledges the limitations of relying exclusively on monitoring strategies. Such strategies can be useful for identifying problems, diminishing potential impacts and promoting timely remedial action, but they do not prevent problems from occurring in the first place. To be effective, preventive measures must: (1) acknowledge the importance of groundwater resources to the community; (2) consider the complexity and vulnerability of groundwater resources in the

urban area and recognize they have a limited capacity to absorb the cumulative spills, runoff and other contamination that tend to accompany land development and human activity; (3) recognize that proper land use management is critical to the protection of groundwater and soil resources; (4) address the City's well-established land use pattern (e.g., by addressing the need for retrofits as well as protective standards for new development as appropriate); and (5) balance the costs of prevention against the typically high costs of cleanups, assuming they are technically possible. A remedial component is needed to ensure that existing problems affecting soil and groundwater quality or quantity are identified and effectively monitored and managed.

Existing and Recommended Conservation Strategies

Existing aquifer conservation strategies include:

* "Regulation of Development Near Creeks" Ordinance
* City Flood Control Ordinance
* City Subdivision Ordinance
* City Landscape Ordinance
* City Site Plan Review Requirements
* City Planned Development District
* City Zoning Code General Performance Standards
* Alachua County Murphree Well Field Management Code
* Alachua County Storage Tank Systems Code
* SJRWMD and SRWMD Permitting and Research Programs Relating to Water Use and Management, and Permitting Programs Relating to Stormwater Management
* DEP Rules Governing Construction and Operation of Wastewater Treatment Plants and Water Treatment Plant
* HRS Rules Governing Siting, Construction, and Maintenance of On-Site Sewage Disposal Systems.
* Alachua County Hazardous Materials Management Code (HMMC)
* City Wellfield Protection Ordinance

Strategies to conserve Gainesville's aquifer systems include:

* Given the interrelationship among surface water, groundwater and soil resources, the City pursues a combination of strategies designed protect or restore surface water quality and natural drainage features as part of its efforts to protect groundwater and soils. These include, among others, requiring development setbacks from creeks, lakes and wetlands; acquiring land along and around surface waters; restoring previously channelized creeks; periodic street sweeping; requiring sedimentation controls during construction; requiring the use of vegetated stormwater basins and swales particularly when sites are redeveloped for non-residential uses; developing regional stormwater management facilities to address existing drainage deficiencies; ensuring proper construction, operation and maintenance of public and private drainage systems; upholding strict standards for water quality treatment in stream-to-sink basins; and minimizing the use of impervious surfaces.

* Continue to have a strong wetlands protection ordinance, and revise it to allow off-site mitigation in narrowly defined cases. Wetlands cleanse water before it enters surface waters and sinkholes.

* Restore previously channelized creeks.

* Continue to promote effective enforcement of the county's wellfield management ordinance through the City's Wellfield Special Use Permit requirements and other applicable regulatory programs

.

* Continue programs that promote proper disposal, recycling or reuse of hazardous materials and wastes by both businesses and households.

* All new and revised landscape plans should prohibit the use of invasive exotic plants.

* Discourage the use of landscaping which requires large amounts of fertilizers, pesticides and water (e.g., by minimizing turf area and using native and drought-tolerant trees and plants). Existing programs promoting conservation and water reuse (e.g., public education and city water loss reduction program).

* Continue GRU's programs providing for pretreatment of industrial wastewater and regular inspection, maintenance and replacement of sewer pipes.

* Continue to identify and require proper closing of abandoned wells.

* Continue to provide public education programs on the nature of groundwater resources and the need to protect and conserve them.

* Continue GRU's use of state-of-the-art techniques for wellfield management and hydrologeologic studies relating to City wellfields.

* Continue to coordinate with county staff in monitoring surface water and groundwater quality.

* Use best available data, maps and other tools promoting effective management of groundwater resources generated by the county, water management districts and other sources.

* Cooperate with any regional efforts to further common interests in protecting the quality and availability of groundwater resources.

* Any project using wetlands for drainage retention should provide documentation of water quality and quantity monitoring.

SURFACE WATERS AND WETLANDS

Inventory of Surface Waters and Wetlands

Gainesville's surface waters consist of creeks, lakes, and wetlands:

CREEKS: There are approximately 56 miles of creeks within the city. About 32 of these miles are regulated by the Gainesville "Regulation of Development Near Creeks" Ordinance.

LAKES: Within city limits, there are 16 lakes at least one acre in size. Lakes cover approximately 2,885 acres of city surface area. A majority of the lakes are unnamed.

WETLANDS: Within city limits, there are 289 wetlands at least one acre in size. Wetlands cover approximately 3,370 acres of city surface area.

Surface waters are shown on Map 6. Note that there are no bays, fisheries, or estuarine marshes within city limits.

Surface waters can be grouped into "drainage basins." Drainage basins are like large bowls -- collecting creek flow and stormwater flow at its low point, and ultimately discharging this surface water flow. (In Gainesville, almost all of this discharge is into sinkholes and drainage wells.) Because much of the surface water flow of each basin is contained within the basin, much of the movement of animals, plants, pollution, and stormwater is relatively contained within each basin. As a result, each basin can be considered to have a unique ecological, hydrological, and geological identity that should be evaluated separately from other basins.

The Gainesville urban area fully contains 7 basins:

* Hogtown Creek Basin
* Sweetwater Branch Basin
* Lake Forest Creek Basin
* Little Hatchet Creek Basin
* Lake Alice Basin
* Calf Pond Creek Basin
* Tumblin Creek Basin

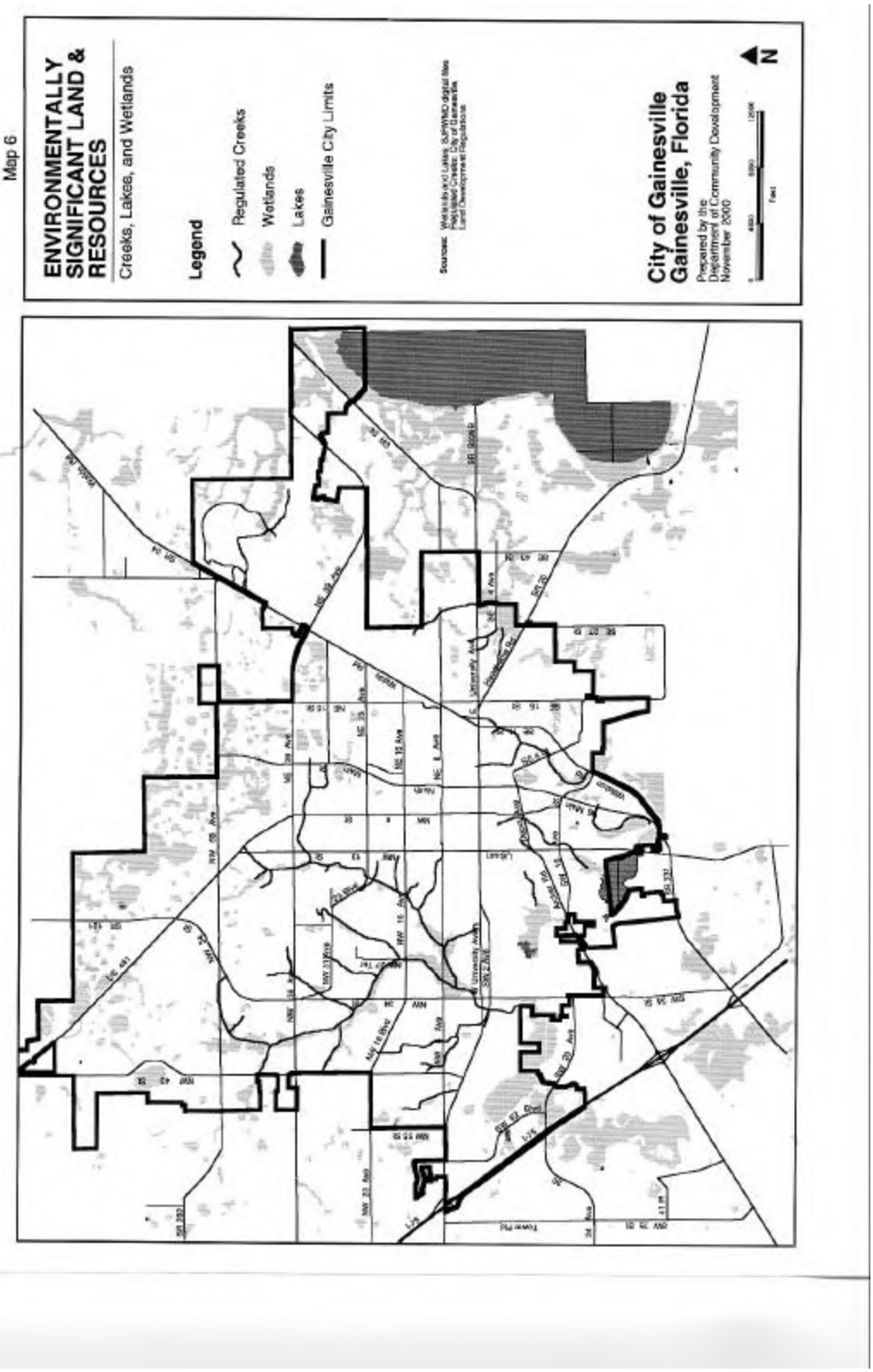
And partially contains:

* Blues Creek Basin
* Turkey Creek Basin

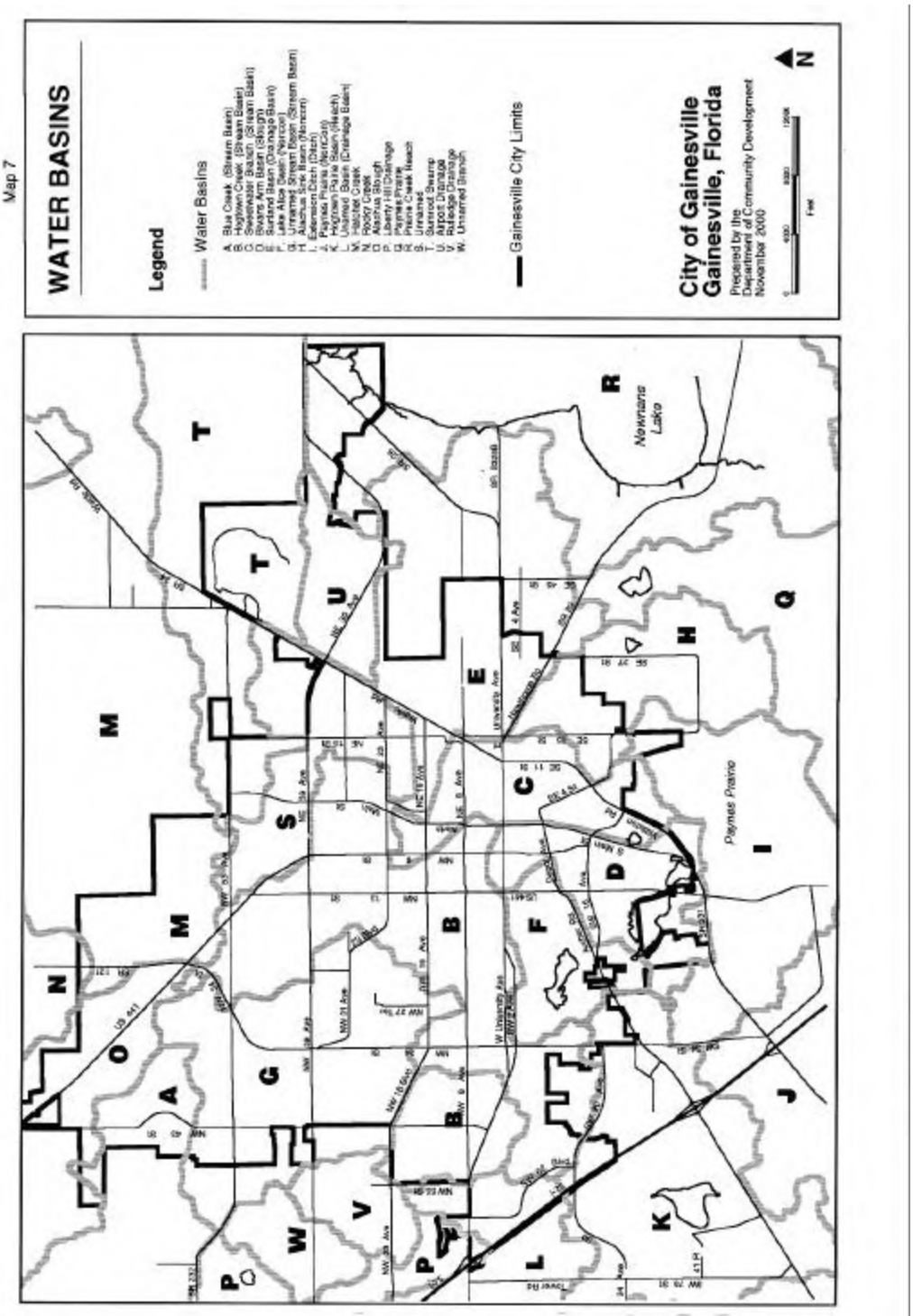
Map 7 shows the boundaries of each basin. Table 3 in the Appendix provides a surface water inventory for each basin.

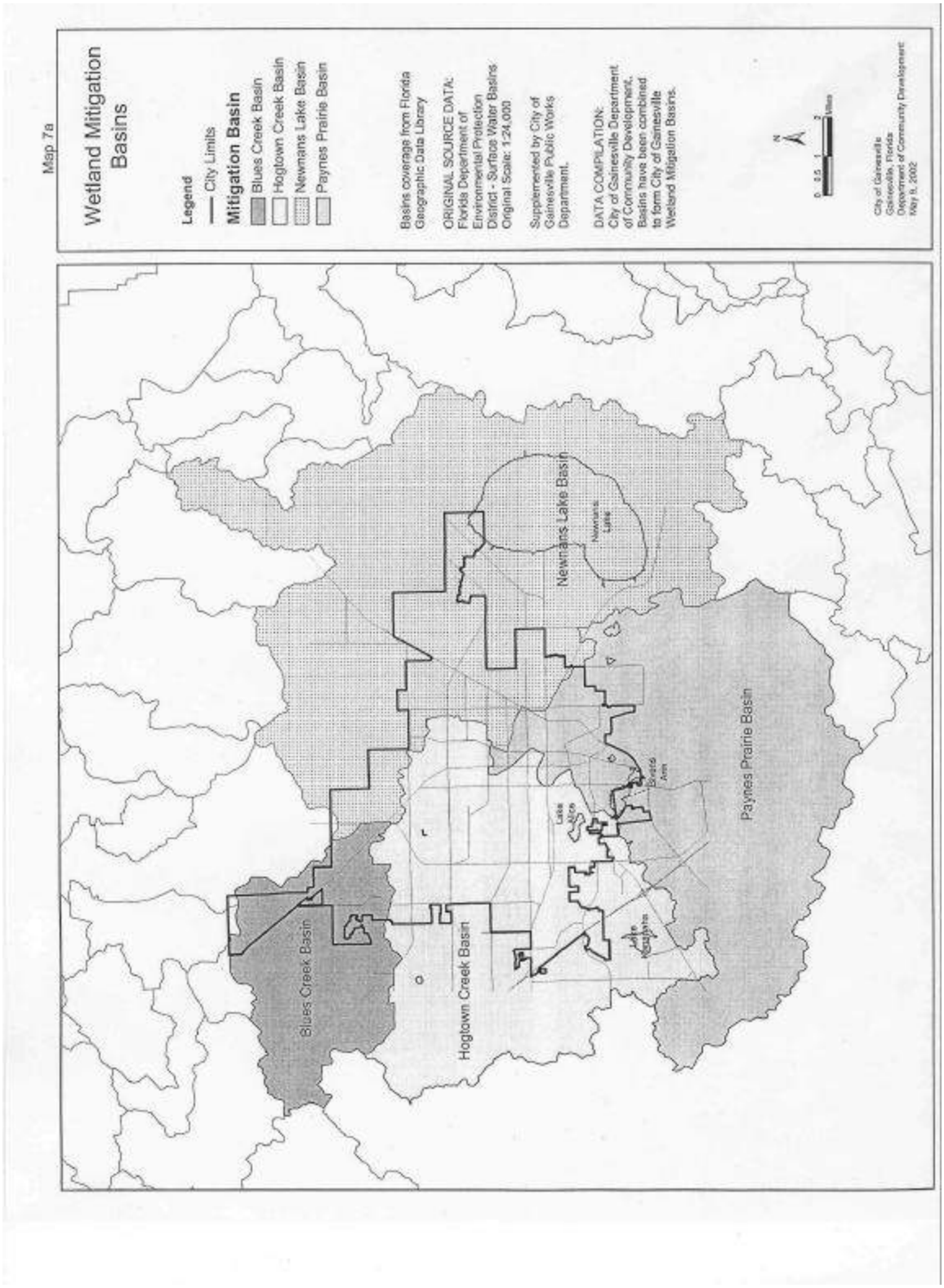
In addition to drainage basins, the city contains several "depression basins." Depression basins are those basins with no outlet for surface water runoff except by percolation into the groundwater aquifer system or by evapotranspiration.

Map 6


ENVIRONMENTALLY SIGNIFICANT LAND & RESOURCES
Creeks, Lakes, and Wetlands
Legend
Regulated Creeks
Wetlands
Lakes
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development November 2000
N

Map 7


WATER BASINS
Legend
Water Basins
A. Blue Creek (Stream Basin)
B. Hogtown Creek (Stream Basin)
C. Sweetwater Branch (Stream Basin)
D. Tumbling Creek (Stream Basin)
E. Sunland Basin (Drainage Basin)
F. Lake Alice Basin (Nonconn)
G. Unnamed Stream Basin (Stream Basin)
H. Alachua Sink Basin (Nonconn)
I. Extension Ditch (Ditch)
J. Paynes Prairie (Marsh)
K. Paynes Prairie (Ditch)
L. Unnamed Basin (Drainage Basin)
M. Hatchet Creek
N. Rocky Creek
O. Alachua Slough
P. Cherry Hill Drainage
Q. Prairie Creek
R. Prairie Creek Reach
S. Unnamed
T. Sunnyd Swamp
U. Airport Drainage
V. Burnage Drainage
W. Unnamed Stream
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
November 2000
N
Newnans Lake
Paynes Prairie


Map 7a
Wetland Mitigation Basins
Legend
City Limits
Mitigation Basin
Blues Creek Basin
Hogtown Creek Basin
Newmans Lake Basin
Paynes Prairie Basin
Basins coverage from Florida Geographic Data Library
ORIGINAL SOURCE DATA: Florida Department of Environmental Protection District - Surface Water Basins Original Scale: 1:24,000
Supplemented by City of Gainesville Public Works Department.
DATA COMPILATION: City of Gainesville Department of Community Development. Basins have been combined to form City of Gainesville Wetland Mitigation Basins.
N
0 .5 1 2 Miles
City of Gainesville Gainesville, Florida Department of Community Development May 8, 2002
Newmans Lake Basin
Paynes Prairie Basin
Hogtown Creek Basin
Blues Creek Basin

As noted before, there is very little surface water outflow from the Gainesville surface water system to areas outside of the urban area. Instead, creeks, urban stormwater runoff, agricultural runoff, and wetland runoff transport almost all surface water flow into aquifers through sinkholes and drainage wells. Refer to "Groundwater" section for more information.

Wetlands

The Water Management Advisory Committee (WMAC) over the course of various meetings in 2000, developed wetlands protection language proposed for inclusion in the Conservation, Open Space and Groundwater Recharge Element of the City of Gainesville 2000-2010 Comprehensive Plan. The recommended wetlands protection language was finalized in November 2000 (with minor revisions in January 2001) and is as follows:

"Projects within the City of Gainesville must comply with all regulatory protections that exist for surface waters and wetlands. City policy shall be to avoid loss of function or degradation of wetland habitat and/or wetland hydrology. Degradation that is unavoidable shall be minimized. Where degradation is anticipated due to a proposed activity, the applicant must demonstrate that the cause of the degradation is clearly in the public interest. Such degradation must be mitigated consistent with the City of Gainesville Land Development Regulations and must be reviewed and approved by qualified biological and engineering professionals.

Prior to initiation of the proposed activity causing wetland impacts, all approved mitigation must be completed and inspected to ensure compliance with the proposed plan, or an assurance bond must be submitted by the applicant to the City of Gainesville. The bond must be sufficient to cover the cost of mitigation and monitoring as proposed in the approved mitigation plan."

The Water Management Advisory Committee (WMAC) over the course of various meetings in 2000, in response to a City Commission referral, developed recommended language for the City's Land Development Code with respect to protection of wetlands and surface waters. This recommendation is a result of considerable deliberation of the WMAC and of input from professional biologists and engineers that are not members of the WMAC. This recommendation is included in the Data and Analysis section as relevant background information for any proposed revisions to adopted Goals, Objectives and Policies with respect to wetlands and surface waters. The WMAC-recommended language was finalized in November 2000 and is as follows:

1. City policy shall be to avoid loss of function or degradation of wetland habitat and/or wetland hydrology. Degradation that is unavoidable shall be minimized. Where degradation is anticipated due to a proposed activity, the applicant must demonstrate that the cause of

the degradation is clearly in the public interest as per Item 5. Such degradation must be mitigated consistent with the following provisions:

a. The following mitigation ratios shall be applied in determining the amount of area that must be mitigated in exchange for impacting wetlands:

Mitigation Type	**Mitigation Ratio**
Creation	
Forested Wetland (swamp)	50:1
Herbaceous Wetland (marsh)	20:1
Restoration	
Forested Wetland (swamp)	10:1
Herbaceous Wetland (marsh)	5:1
Preservation	
Wetland	20:1
Upland Associated with Wetlands	5:1

b. Wetlands creation is the least acceptable mitigation alternative, and shall be considered solely when the applicant can demonstrate that the proper hydrology and geology exists to make a created wetland sustainable. The applicant will further agree to enforceable monitoring to ensure that the created wetland continues to function.

c. Any mitigation shall include long term monitoring and maintenance. Appropriate and specific bonding shall be provided by the applicant to ensure performance.

d. Off-site mitigation shall be performed within the same sub-basin and basin in which the impact occurred, unless it is shown that mitigation outside the sub-basin is more appropriate. The order of preference for the location of the mitigated area(s) in relation to the impacted area(s) will be:

1) In the same basin and sub-basin;
2) In an adjacent sub-basin within the basin;
3) In an adjacent sub-basin outside the basin; and
4) In an adjacent basin.

e. Mitigation will be performed within the city limits of Gainesville. Where special circumstances prohibit this option, mitigation must remain within Alachua County.

2. Development shall not cause hydrological or wetland impacts off-site.

3. A minimum buffer distance of 50 ft shall be required between the landward extent of any wetland or surface water and the developed area. In some instances larger buffers may be warranted.

4. The above protection shall be extended to all water bodies and wetlands, regardless of whether they are currently mapped.

5. In determining whether or not a proposed activity is clearly in the public interest, the City must balance, and the applicant must address, the following criteria:

    a. Whether the activity is consistent with the City of Gainesville Comprehensive Plan;

    b. Whether adequate and reasonably proximate infrastructure is available to serve the project;

    c. Whether the activity will adversely affect the public health, safety, or welfare or the property of others;

    d. Whether the activity will adversely affect the conservation of fish and wildlife, including endangered or threatened species, or their habitats;

    e. Whether the activity will adversely affect the flow of water or cause harmful erosion or shoaling;

    f. Whether the activity will adversely affect fishing or recreational values in the vicinity of the activity;

    g. Whether the activity will be of a temporary or permanent nature;

    h. Whether the activity will adversely affect or will enhance significant historical and archaeological resources; and

Whether the current condition and relative value of functions being performed will be affected by the proposed activity.

Assessment of Surface Water Quality

Almost all surface waters in Gainesville, except for certain localized sites such as Hogtown Creek in the vicinity of the Cabot Carbon/Koppers Superfund site have been designated as "Class III" (suitable for recreation, propagation and management of fish and wildlife).

The Alachua County Environmental Protection Department currently monitors 15 surface water sites quarterly for selected inorganic parameters including nutrients and coliform bacteria. The current monitoring sites include 3 stations on Blues Creek, 3 stations on Hogtown Creek, 2 stations on Mill Creek, 1 station on Possum Creek, 3 stations on Sweetwater Branch, 2 stations on Tumbling Creek and 1 station on Turkey Creek.

One of the primary surface water features in Alachua County is the Orange Creek Basin (OCB). This basin contains those areas that drain into Newnans Lake, Lochloosa, and Orange Lakes and eventually into Orange Creek downstream to the Ocklawaha River (Rodman Reservoir). The OCB also encompasses Paynes Prairie (which drains into Alachua Sink) and the streams in Gainesville that flow either to Newnans Lake, Paynes Prairie or Hogtown Creek.

The St. Johns River Water Management District has identified several projects to upgrade water quality within the district. According to the May 2000 District Water Management Plan for the Orange Creek Basin, by FY 04-05, a complete diagnostic effort assessing the cause for the poor water quality and sediment accumulation in Newnans Lake shall be finalized.

Water quality in Newnans Lake is poor. The lake is presently hypereutrophic, with chlorophyll concentrations reaching levels seen on problem lakes such as Lake Apopka. The cause for the deterioration in Newnans Lake is unclear, but nutrient loading from the lake sediments to the water column is the likely cause. Newnans Lake is receiving increasing attention through implementation of the OCB surface water management plan. Goals of this plan include:

* Develop and begin implementation of a restoration plan for Newnans Lake to improve water quality and fisheries by FY 04-05.

* Submit reports to the OCB Partnership agencies on select stream restoration needs, the impact of stream water quality on Paynes Prairie wetlands, and the impact of discharge of Hogtown Creek and Sweetwater Branch to the Floridan aquifer.

* Submit status reports assessing water quality and stream discharge/lake level conditions to the OCB Partnership agencies.

The major sources of actual and potential surface water pollution in Gainesville are:

* Urban stormwater runoff from parking lots, service aprons, and roads.

* Leaks from underground hazardous materials storage tanks (particularly gas station tanks).

* Treated sewage from municipal and private wastewater systems.

* Leaks and spills from industrial, commercial, and residential hazardous materials storage and handling sites.

* Septic tanks (on-site sewage disposal systems).

* Sediment from soil erosion.

* Animal waste.

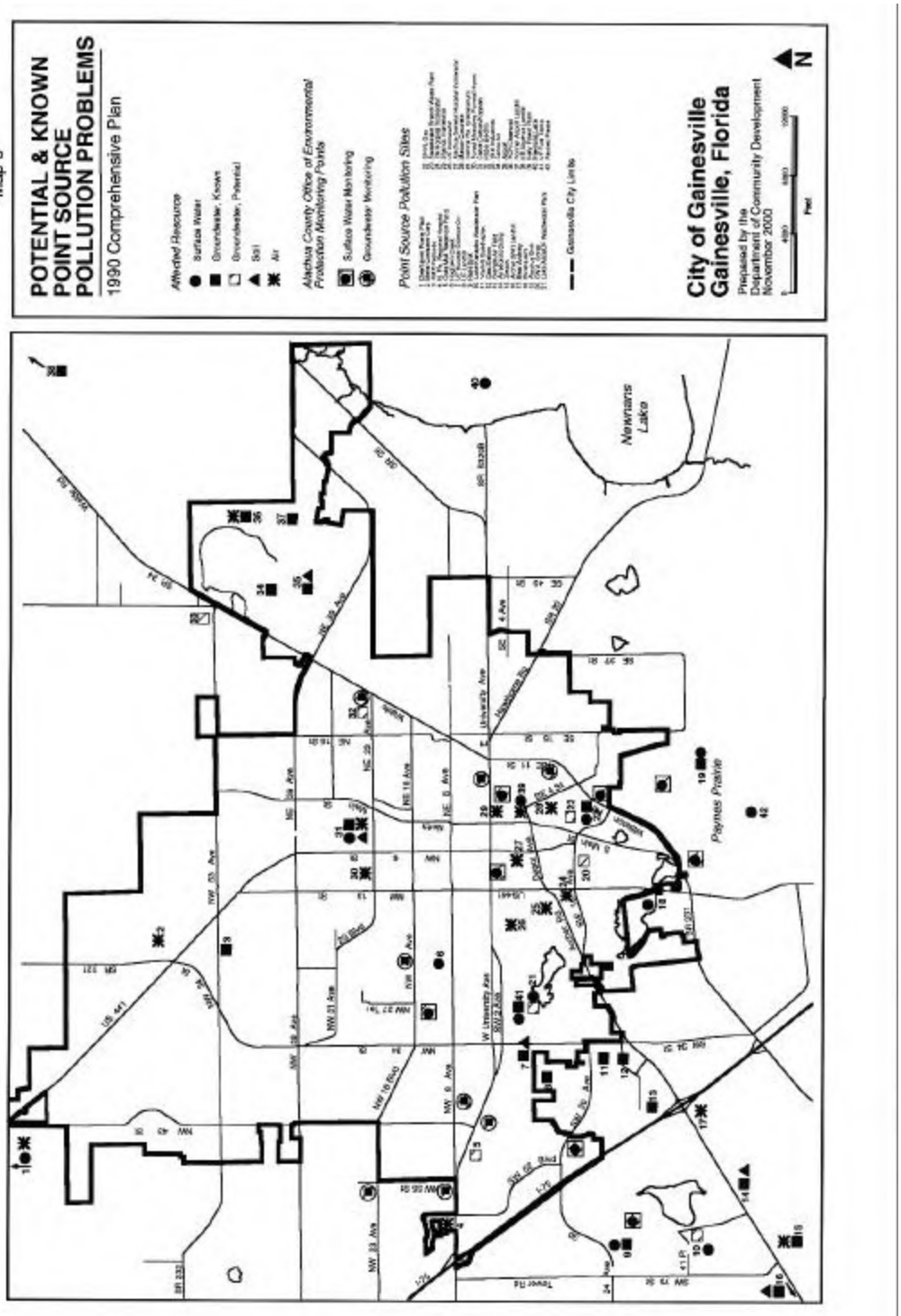
* Runoff from horticultural applications (particularly residential applications of fertilizers, pesticides, and herbicides).

Of these, municipal and septic sewage has traditionally been the primary source of surface water pollution. However, over the past several decades, due to local, state, and federal statutory and regulatory initiatives, Gainesville has mitigated much of the pollution from these sources. This mitigation has been attained through the construction of secondary and tertiary wastewater treatment plants, and subsequent utility system hook-up of several sewage sources that previously discharged directly to surface water or groundwater.

Currently, the most significant sources of surface water pollution in Gainesville are "non-point" sources, particularly urban stormwater runoff and sediment from soil erosion. See Map 8 for the location of identified "point" sources of pollution within the Gainesville urban area. To date, however, extensive sampling has failed to identify any significant human health-related contamination of surface water in Gainesville. Based on cursory studies, however, a pilot study to analyze water samples obtained from Tumblin Creek has resulted in the identification of E. Coli strains that are isolates from both human and non-human origin.

GRU is conducting tests of sewer lines to trace the source of pollution. Other partners in the project are community organizations, the Alachua County Health Department, and the Florida Department of Environmental Protection.

Map 8


POTENTIAL & KNOWN
POINT SOURCE
POLLUTION PROBLEMS
1990 Comprehensive Plan
Affected Resource
Surface Water
Groundwater, Known
Groundwater, Potential
Soil
Air
Alachua County Office of Environmental Protection Monitoring Points
Surface Water Monitoring
Groundwater Monitoring
Point Source Pollution Sites
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
November 2000
N
Newnans Lake
Paynes Prairie

Based on standards set forth by DEP, all lakes within or near the City of Gainesville have poor water quality, while Hogtown Creek, Possum Creek and Gumroot Swamp are considered to have "good" water quality. Hatchet Creek has fair water quality while Sweetwater Branch has poor water quality. Water quality for lakes within or near the City is considered "poor" based on the trophic state index. The "trophic state index" is a method of classifying lakes based on their chlorophyll, Secci depth, nitrogen and phosphorous concentrations. For a more in-depth explanation of the index, refer to the Florida Department of Environmental Protection's *Central Florida District Water Quality Assessment: 305 (b) Technical Appendix (November 1996).*

Paynes Prairie State Preserve is being managed by the Florida Department of Environmental Protection (FDEP). The Prairie is potentially affected by surface waters from Sweetwater Branch and Tumblin Creek. The proliferation of woody vegetation in the northern part of the Prairie has been thought by DEP biologists to be caused by sediment and/or nutrient inputs from Sweetwater Branch and Tumblin Creek. Tumblin Creek passes through Bivens Arm before entering the Prairie, which likely reduces the sediment load to the Prairie.

There has been interest in determining the cause(s) for the woody plant proliferation on the northern part of the Prairie for more than a decade, and various causative hypotheses have been proposed. There has also been recent interest in assessing the potential for the sheet-flow of water from the Sweetwater Branch into the northern part of the Prairie, rather than continuing the channelization of this water into Alachua Sink. In both cases, the impact of this stormwater runoff to the Prairie vegetative communities needs to be assessed. During the early to mid-1990's, a concerted, multi-agency working group meet to discuss various approaches to address these issues.

Alachua County has secured a federal "Environmental Justice" grant to help find and clean up pollution in the Tumblin Creek Watershed. Twenty disadvantaged youths are helping to look for pollution sources and let the community know about ways to prevent it.

Functions of Surface Waters

Surface waters (creeks, lakes, and wetlands) provide the following functions:

* Moderation of air temperatures.

* Storage of water, control of flood waters during storms, and recharge of groundwater.

* Cycling of nutrients needed to support a diversity of natural communities.

* Provision of habitat and corridors for urban wildlife, and dispersal of seeds.

* Provision of important sites for education/research, recreation, scenic views, and open space.

* Provision of urban fire protection.

* Provision of buffering from noise, unattractive views, and other nuisances and hazards (by creeks and wetlands).

* Provision of oxygen, absorption of carbon dioxide, filtration of air pollutants and water pollutants (especially suspended solids, heavy metals, and biological oxygen demand), breakdown of harmful levels of organic matter, and reduction of erosion and sedimentation (by wetlands).

Existing and Potential Commercial and Recreational Uses

Commercial use of surface waters in Gainesville is limited to the diversion of stormwater runoff to surface waters from commercial operations, and the economic benefits accruing to commercial operations because of the aesthetic qualities of surface waters.

There is very little recreational use of surface waters within the city. Creeks and lakes are used to a limited extent by the local population for nature walks, fishing and wading. Portions of Bivens Arm and Lake Alice are incorporated into local nature parks that feature boardwalks, interpretive signage and observation platforms. Newnans Lake, most of which is outside of city limits, accommodates a large amount of boating and fishing, other than during drought events.

The City's acquisition of Gum Root Swamp Park and Gum Root Swamp Conservation Area, which opened in April of 1994, also provides for passive recreation on Newnans Lake, however access to the lake is limited due to the environmental sensitivity of the area. The park and conservation area together comprise 741 acres of protected vital floodplains and a sanctuary for wildlife and plants. The City also acquired Palm Point on Newnans Lake in the 1990s, which is outside of City limits, as well as a parcel of land on Clear Lake in southwest Gainesville that is presently undeveloped.

The St. Johns River Water Management District has identified parcels ringing Newnans Lake on the east, south and north side as potential acquisition sites through the Conservation and Recreation Lands program which would help link it with the District's 372-acre purchase of portions of Gum Root Swamp.

Surface waters in Gainesville represent a valuable future recreational resource for two primary reasons: (1) much of the remaining undeveloped land in Gainesville contains, or is in close proximity to surface waters; and (2) acquisition of surface waters and surrounding properties for recreation helps preserve the ecological integrity of surface waters and increases public access to such resources. For these reasons, the city should consider the acquisition (and when appropriate, the recreational development) of additional properties associated with surface water systems as part of its parks and recreation program.

Existing and Recommended Conservation Strategies

Existing local surface water conservation strategies include:

* Surface Water and Wetlands District
* City Wellfield Protection Ordinance
* City Flood Control Ordinance
* City Landscape Ordinance
* City Subdivision Ordinance
* City Site Plan Review Requirements
* City Planned Development District
* City Zoning Code General Performance Standards
* SJRWMD and SRWMD Permitting and Research Programs Relating to Water Use and Management
* DEP Rules Governing Construction & Operation of Wastewater Treatment Plants
* HRS Rules Governing Siting, Construction, & Maintenance of On-Site Sewage Disposal Systems

Recommended strategies to conserve Gainesville's surface waters and wetlands include:

* Continued coordination with the County in monitoring surface water quality in the urban area.

* Continue to require creek, lake and wetland setbacks designed to prevent erosion and drops in the level of the water table, trap sediment in stormwater runoff, and allow for periodic flooding without damage to structures.

* Develop additional land development regulations pertaining to wetlands mitigation.

PLANTS, ANIMALS, AND THEIR HABITATS

Inventory & Problems Regarding Plants, Animals

The Gainesville urban area contains an outstanding variety of plants, animals, and ecological communities. Some are remnants from pre-urban Gainesville, and others are adapted to survive in the urban landscape of Gainesville. As is true with most or all counties in Florida, Alachua County contains a relatively large number of threatened and endangered species.[8] Note that there are no fisheries, marine habitats, or intact forests within city limits.

The most important sanctuaries for plants, animals, and ecological communities in Gainesville are the creek, lake, and wetland areas. These habitat areas and corridors provide ample food, water, and cover that are typically lacking in areas where land has been developed. Note, however, that the effectiveness of urban wildlife corridors is only as effective as the relative space that the corridor provides to maintain a viable population of plants and animals.

The value of creeks, lakes, and wetlands is not necessarily a function of size. For example, temporary wetlands less than one-half acre in size may serve as habitat for a large and diverse population of species, especially if the wetland is remote from other wet areas. In addition, many species can only survive in smaller wetlands which exhibit characteristics that are not found in larger wetland systems (such as periodic dry periods, lower energy levels, etc.).

On the other hand, preservation and management of larger upland and wetland areas is critical to species that depend on such factors as continuous standing water, large feeding areas, and isolation from human activity. Larger habitat areas also help preserve and promote species diversity.

Upland communities are critical for a wide range of species adapted to a drier habitat. In addition, many uplands in the urban area are important groundwater recharge areas. Although most of the more significant upland communities within Gainesville city limits have been lost to urban development, there are numerous and significant uplands in the unincorporated urban area that merit protection. (See Maps 9, 10 and 15)

Ecological communities are defined as an integrated association of plants and animals adapted to and dependent on a particular environment. In the Gainesville urban area, there are roughly 12 major categories of ecological communities.

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[8] For a complete inventory of "Special Protection Species" found in Alachua County, see Table 4 in the Appendix.

As defined by KBN (1996), the Soil Conservation Society of America, the Florida Natural Areas Inventory, and the University of Florida Center for Wetlands, they include:

Scrub (or Grassy Scrub)

A dry, old dune community. Dominant vegetative species include: sand live oak (shrub), saw palmetto, rosemary, wiregrass, and reindeer moss. Dominant animals include: scrub lizard, deer, and sand skink. Historically rare in Alachua County. Less than 1,000 acres remain in the county. Loss of scrub occurring rapidly throughout state, primarily due to desirable conditions for real estate development. Small patches observed near Hatchet Creek and in southwest urban area in early 1970s. Soils are often important for aquifer recharge. Requires a periodic fire to maintain identity. “Endangered, threatened, and special protection" species that may occur in community: scrub jay, blue-tailed mole skink, short-tailed snake, gopher tortoise.

Mesic Hammock

A moderately moist community with a sparse understory. Dominant vegetative species include: laurel oak, pignut hickory, magnolia, sweetgum, ironwood. Dominant animals include: turkey, squirrels, raccoons, possums, and several song birds such as bluebirds, cardinals, mockingbirds. Most widespread ecological community in Alachua County. Some communities are so exceptional in quality that they are of state and national significance. San Felasco Hammock contains the highest quality hammock in the county, as does Sugarfoot Hammock, Fred Bear Hammock and Buzzard's Roost. Large tracts in Paynes Prairie, and smaller communities at Kanapaha Prairie and Serenola. Must be protected from fire to maintain identity. "Endangered, threatened, and special protection" species that may occur in community: Florida panther, eastern indigo snake, black bear, auricled spleenwort, dwarf spleenwort, sinkhole fern.

Hydric Hammock

A wet, lowland community typically found in floodprone areas. Dominant vegetative species include: cabbage palm, water oak, red maple, red cedar, bays, blackgum, needle palm, ironwood, wax myrtle (shrub), sword and royal fern. Dominant animals include: squirrels, otter, turtle, and raccoons. Almost as widespread in Alachua County as mesic hammock. Excellent tracts in Paynes Prairie. Best county tract at Prairie Creek. Important for water quality and quantity control. "Endangered, threatened, and special protection" species that may occur in community: Florida panther, black bear, auricled spleenwort, climbing dayflower.

Sandhill

A dry, upland community. Dominant vegetative species include: longleaf pine, turkey oak, bluejack oak, wiregrass, and reindeer moss. Dominant animals include: white-tailed deer, pocket gopher, fox squirrel, quail, fence lizard. In the past covered almost half of Alachua County, primarily in southwest. Community is now extremely rare, primarily due to desirable conditions for real estate development, fire suppression, and fragmentation. Occurrences in or near the urban area include Morningside Nature Center, Paynes Prairie, Austin Cary Forest, San Felasco Hammock, Kanapaha Prairie, Hatchet Creek-Gum Root Swamp-Little Hatchet Creek. Soils are often important for aquifer recharge. Requires a periodic fire to maintain identity. "Endangered, threatened, and special protection" species that may occur in community: Godfrey's blazing star, Florida panther, southeastern kestrel (sparrow hawk), red-cockaded woodpecker, blue-tailed mole skink, eastern indigo snake, short-tailed snake.

Dome Swamp (or cypress dome)

A wet, poorly drained depression community found along lakes, creek margins, prairies, and flatwoods. Dominant vegetative species include: bald cypress, blackgum, bays, pond cypress, red maple, cinnamon fern, Spanish moss. Dominant animals include: deer, mink, raccoon, and otter. Community is associated with pine (wet) flatwoods and hydric hammock. Occurrences in or near the urban area include Hatchet Creek and Buck Bay. Important for water quality and quantity control, wildlife habitat. Requires fluctuating water levels to maintain identity. "Endangered, threatened, and special protection" species that may occur in community: black bear, ivory-billed woodpecker, wood stork, bald eagle, bird's nest spleenwort, fuzzy-wuzzy air plant, giant water dropwort, hidden orchid, nodding catopsis, grass-of-parnassus, climbing dayflower.

Freshwater (or Floodplain) Marsh

An open expanse of grasses, sedges, and rushes in soils seasonally inundated. Dominant vegetative species include: beak rushes, common reed, flat sedge, sawgrass, cattail. Dominant animal species include: otter, raccoon, marsh rabbit, water rat, ibis, heron. Highly endangered both statewide and in the Gainesville urban area. Community is associated with pine (wet) flatwoods and hydric hammock. Occurrences throughout the urban area. Important for water quality and quantity control, wildlife habitat. Requires fluctuating water levels to maintain identity. "Endangered, threatened, and special protection" species that may occur in community: wood stork, sandhill crane, crested caracara, alligator.

Upland Pine Forest

A moderately dry, upland community characterized by flat terrain. Dominant vegetative species include: longleaf and loblolly pine, red oak, saw palmetto, wiregrass. Typical animal species include: deer, fox squirrel, cottontail rabbit, brown-headed nuthatch, cotton rat. In the past covered much of western Alachua County. Community is now rare, primarily due to fire suppression and fragmentation. Degraded or fragmented communities found throughout urban area. Relatively large patches in or near the urban area include Paynes Prairie, Hickory Sink, San Felasco Hammock. Requires a periodic fire to maintain identity. "Endangered, threatened, and special protection" species that may occur in community: Florida panther, southeastern kestrel (sparrow hawk), red-cockaded woodpecker, eastern indigo snake, bald eagle, black bear, sandhill crane.

Wet Flatwoods

A wet, flatland community seasonally inundated and associated with hydric hammock. Dominant vegetative species include: slash and pond pine, cabbage palm, loblolly bay, sweetbay, wax myrtle, saw palmetto, wiregrass. Typical animals include: rabbit, raccoon, opossum, skunk, fox squirrel, fox. Occurrences in or near the urban area include Hatchet Creek-Gum Root Swamp, Paynes Prairie, Prairie Creek. Important for water quality and quantity control, wildlife habitat. Requires fluctuating water levels to maintain identity.

Xeric Hammock

The driest of the hardwood hammock communities. Community is found throughout urban area. Xeric Hammock is typically a former sandhill or scrub that has become too fragmented to burn. Dominant vegetative species include: sand live oak, turkey oak, live oak, pignut hickory, saw palmetto, scrub rush. Typical animals include: gray squirrel, turkey, screech owl, bluejay, barking tree frog, fence lizard, hog-nose snake, gopher tortoise. Excellent example at Prairie Creek. Also at Hickory Sink.

Mesic Flatwoods

A moderately wet, flatland pine community. Dominant vegetative species include: longleaf, slash, and loblolly pine, saw palmetto, gallberry, wiregrass. Typical animals include: white-tailed deer, cotton rat, gray fox, raccoon, brown-headed nuthatch, southeastern kestrel. Formerly covered large areas of Alachua County, particularly north and east of Gainesville. Ecological

communities found at Paynes Prairie, Austin Cary Forest, San Felasco Hammock, Hatchet Creek, Millhopper Flatwoods, Gum Root Swamp.

Scrubby Flatwoods

Represents the xeric (dry) version of the three flatwood types and is least abundant of the three. Dominant vegetative species include: longleaf, slash, and loblolly pine, saw palmetto, sand live oak (shrub), Chapman's oak (shrub), wiregrass. Typical animal species include: gray fox, raccoon, red rat snake, white-tailed deer, cotton rat, brown-headed nuthatch. Prairie Creek may have the county's best example. Other examples are found at Paynes Prairie, Austin Cary Forest, Hatchet Creek-Gum Root Swamp.

Baygall

Occur as small wetland patches at the base of slopes. Dominant vegetative species include: sweetbay, red maple, dahoon holly, white cedar, blackgum, cinnamon fern. Typical animals include: southern dusky salamander, marsh rabbit, southeastern shrew, raccoon, opossum, southern mink. Best example in county is at Hatchet Creek. Also found at Paynes Prairie, Millhopper Flatwoods.

See Table 5 in the Appendix for a catalog of these communities as they appear on several properties found in the urban area.

Annexation has brought several thousand acres of environmentally significant areas into the City limits as well as moved it closer to other significant areas in the unincorporated areas. In 1996, Alachua County completed a habitat inventory, which supplements the KBN study from 1987, identifying significant habitat still in private ownership. The following habitats lie within or near the City limits and are identified on Map 9. Map 10 “Significant Ecological Communities” illustrates the distribution of communities found in Table 5 Catalog of Natural Ecological Communities located in the appendix.

HOGTOWN PRAIRIE-SUGARFOOT HAMMOCK. This 1782-acre site is the number three-rated site in the entire county based on the KBN/Golder priority ranking of 49 sites.

The habitat is located generally at the intersection of I-75 and SW 20th Avenue and straddles the City-County boundary. The study noted that Sugarfoot Hammock “is one of the most outstanding calcareous mesic hammocks in the county.” The site is situated within the lower Hogtown Creek floodplain, where the Hogtown Creek empties into the Floridan aquifer.

Sugarfoot Hammock contains mature hardwood forest, prairie, a lake, and "perhaps the finest…slough in north Florida."

GUM ROOT SWAMP. This 4,246-acre site was rated number 8 in priority by KBN/Golder and is located on the northern edge of Newnans Lake east of Gainesville Regional Airport. The site includes the majority of Gum Root Swamp acquired by the City and St. Johns River Water Management District. The area includes large portions outside the City limits and is a large complex of wetlands and pinelands that provides key regional ecosystem linkages with Newnans Lake and Hatchet Creek. Although the bulk of Gum Root Swamp is a central wetlands basin, community types also include mesic flatwoods, wet flatwoods, scrubby flatwoods, and sandhill.

The KBN/Golder study identified several listed faunal species including alligator, wood stork, little blue heron, tri-colored heron and bald eagle. Fox squirrels and canebrake rattlesnakes have been reported in this vicinity. The Sandhill community provides habitat for gopher tortoise, and perhaps Florida mice and eastern indigo snakes. The Florida Game and Freshwater Fish Commission indicate "Gum Root Swamp and the lake shore swamp are among the highest rated areas in the County on the priority wetlands for listed species map for Alachua County".

MILLHOPPER FLATWOODS. This 1,600-acre site was ranked 23rd on KBN/Golder's study which is considered average in priority. It sits astride NW 43rd Street, north of NW 53rd Avenue and west of US 441 and provides much of the headwaters for Blues Creek.

The FGFWFC habitat distribution maps show habitat for alligator, wood stork, snowy egret, and little blue heron." The 1996 study also indicated a "pair of swallow-tailed kites is sometimes observed in the area and may be nesting here." Needle palms have been located in the hammock forest and three commercially exploited listed plant species—royal fern, cinnamon fern and greenfly orchid—are on the site.

Although the KBN study's rating places Millhopper Flatwoods as an "average" priority, the study noted that its connections with Fox Pond and San Felasco Hammock State Park were good, and those with the Devil's Millhopper State Park and Hague Flatwoods were fair. Furthermore, the study noted a good diversity of habitat, but a prescribed burning program is needed to support wildlife and plants. Suggested conservation strategies noted that "purchase does not seem to be the best option due to the modest resource value and the high price of land." Instead, the best strategy was to secure the most wetland protection, the widest possible setbacks along the creeks, clustering of development away from streams and wetlands, and a low density of development. However, its connections with Fox Pond, San Felasco Hammock, Buck Bay, and the Hague Flatwoods suggest portions of this site could serve as a wildlife corridor.

BUCK BAY FLATWOODS. Buck Bay is a diverse collection of pine flatwood forest and wetlands directly north of Gainesville. Comprising 18,018 acres, the flatwoods are a major headwaters area "rather like a miniature Green Swamp". Rare, threatened and endangered species for the flatwoods include the Florida gopher frog, gopher tortoises, wood stork, snowy egret, little blue heron and alligator. KBN indicates that the site is large enough to be "potential habitat for the red-cockaded woodpecker, but is not close to being suitable in its present condition due to the young age of the trees." It is also potential habitat for a number of listed terrestrial orchids, butterworts and rare wildflowers.

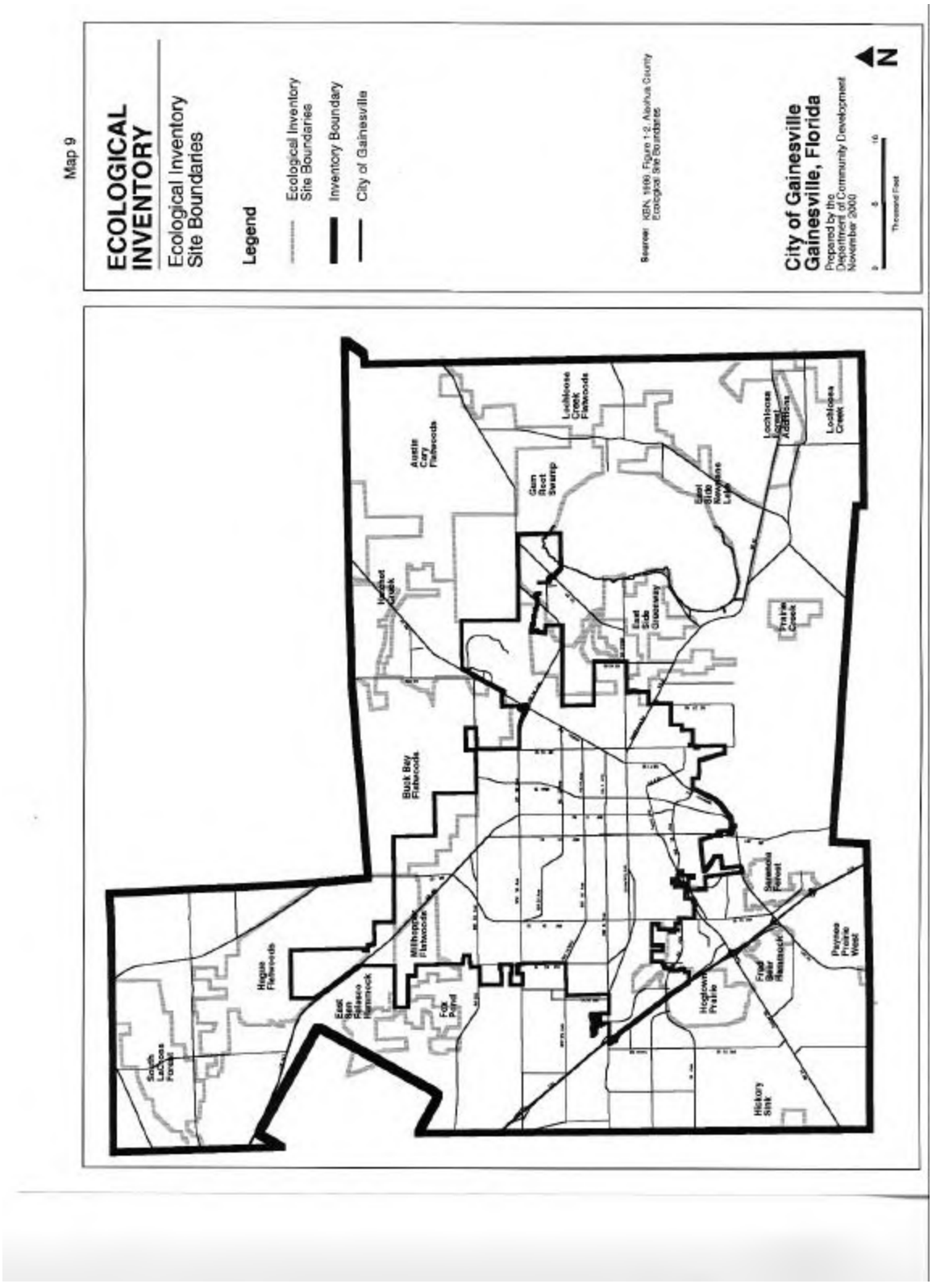
EASTSIDE GREENWAY (MORNINGSIDE GREENWAY). This 3,221-acre site lies east of Morningside Nature Center, west of Newnans Lake and south of Gum Root Swamp, substantial portions of which are located in the County. The "East Side Greenway", ranked fourteenth in priority by the KBN/Golder study, is designed to connect all three of these diverse and complex habitats. The study indicated that the "significance for Morningside Nature Center of remaining connected to the larger areas of wildlife habitat is also high".

Rare, threatened and endangered species within the East Greenway include alligators that travel throughout the greenway wetlands. Gopher tortoises, Florida gopher frogs and Florida pine snakes and a few Sherman fox squirrels and Eastern indigo snakes "probably need the greenway to survive". Two active bald eagle nests are on the site near Palm Point Hill. Florida Game and Freshwater Fish Commission habitat distribution maps show habitat in the East Side Greenway for wood storks, little blue herons, sandhill cranes, bald eagles, gopher frogs and alligators. Several plants are listed and include Catesby's lily, yellow-fringed orchid, rosebud orchid, royal fern, cinnamon fern and greenfly orchid.

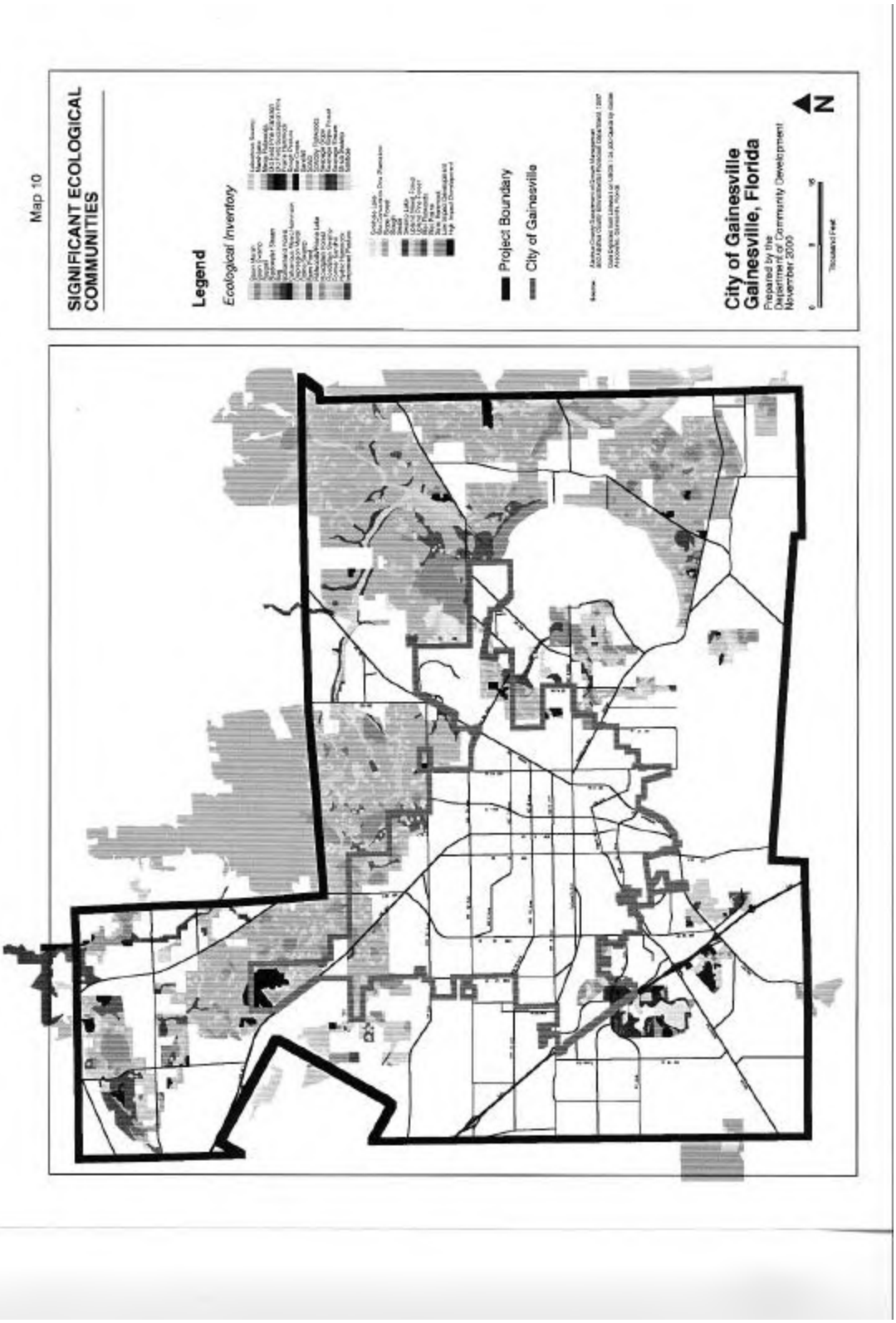
Various invasive exotics have established themselves on the site and are a threat to the ecology including paper mulberry, Chinese tallow tree, camphor tree, mimosa, air-potato and elephant ear. Other non-threatening invasives include chinaberry, Spanish gold, wax begonia, centipede grass and bahia grass.

The KBN/Golder study noted that the land between Paynes Prairie and Morningside Nature Center is the "most valuable and important connector…and the best option is to purchase it and add it to the preserve". The lands by Newnans Lake would also be protected by purchase, probably by a cooperative effort involving the St. Johns River Water Management District, the Conservation and Recreation Lands Committee and perhaps the City and County. The lands owned by the prison system, Tacachale and other public agencies could be managed by cooperative agreement.

HAGUE FLATWOODS. This is a 6,344-acre site between, and north of, the Millhopper and Buck Bay Flatwoods, and contains the Deerhaven Power Station. Rated 23rd in priority by the KBN/Golder study, the site contains large areas of basin swamp, many cypress domes, and is part of the headwaters of both Rocky Creek and Turkey Creek.


Map 9
ECOLOGICAL INVENTORY
Ecological Inventory Site Boundaries
Legend
Ecological Inventory Site Boundaries
Inventory Boundary
City of Gainesville
Source: KBN, 1999, Figure 1-2, Alachua County Ecological Site Boundaries
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
November 2000
N
Thousand Feet
Austin Cary Flatwoods
Lochloosa Creek Flatwoods
Gum Root Swamp
East Side Glades
Lochloosa Creek
Prairie Creek
Buck Bay Flatwoods
Hogtown Prairie
Hickory Sink

Map 10


SIGNIFICANT ECOLOGICAL COMMUNITIES
Legend
Ecological Inventory
Project Boundary
City of Gainesville
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
November 2000
N

The FGFWFC habitat distribution maps indicate habitat for wood stork, snowy egret, little blue heron, Florida gopher frog and alligator. The presence of a gopher frog also indicates the likelihood of gopher tortoise. The only listed plant species are commercially exploited royal fern and cinnamon fern. KBN also indicates the likelihood of some listed terrestrial orchid species and two of the listed butterworts.

The main threats to the Hague Flatwoods include insufficient prescribed burning in fire adapted communities, timbering activities including the application of herbicides, and real estate development. Because the site is valuable for timber production, the study recommended continuing the use but in combination with other management strategies. These would include continuing the agricultural exemption, seeking conservation easements to protect resource values, and cooperative agreements with landowners to do prescribed burns. The study recommended protecting points of connection to adjacent ecological communities such as Millhopper Flatwoods, Buck Bay Flatwoods and Rocky Creek.

Environmental Resource Report

The City Commission directed staff to explore an environmental regulations overlay or other appropriate changes to environmental regulations in the Land Development Code, with particular emphasis on appropriate vacant lands in the city. Staff has prepared a full report on vacant parcels within the City, assessing the environmental features of those parcels, both by type and by an overall ranking of the most significant parcels. See the appendix for a copy of this report.

Functions of Plants and Animals

Plants and animals provide the following functions:

* Control of pest species, such as mosquitoes and rats, through plant and animal diversity.

* Nutrient/food cycling.

* Propagation/seed dispersal.

* Provision of important sites for education/research and recreation.

* Aesthetic and emotional satisfaction.

Plants and ecological communities protect the quality of life in Gainesville in the following ways, which are listed in addition to those cited above:

* Production of oxygen and absorption of carbon dioxide.

* Filtering out air pollutants and absorbing excessive solar radiation/heat, noise.

* Absorption or decomposition of soil pollutants.

* Reducing extremes of hot or cold temperatures and wind.

* Reducing flood damage and filtering out water pollutants.

* Reducing soil erosion.

* Providing habitat for urban wildlife.

Existing & Potential Commercial, Recreational Uses

From 1980 to 1995, the area of statewide commercial forest land declined by 6 percent. Nearly all of this decline was due to conversion to urban uses. 52 percent of the land area in Alachua County in 1995 was comprised of commercial forest. Approximately 40 percent of this forest was owned by forest industry and most of the remainder by other private interests. According to the U.S. Forest Service, commercial forests in the county can be broken down into the following broad types:

Planted Pine.....44 percent
Upland Hardwood.....26 percent
Natural Pine.....10 percent
Lowland Hardwood.....13 percent
Oak-Pine.....7 percent

It is assumed that these percentages are reflective of existing commercial forest land within the urban area. Other than commercial forest activity, the only commercial use of vegetation in Gainesville is associated with the economic benefits that accrue to commercial operations because of the aesthetic qualities of vegetation (landscaped and natural vegetation). There is no significant commercial use of animals in the city. However, the collection and sale of reptiles and amphibians is permitted by the State and probably results in a limited amount of collection and sale within city limits.

Plants and animals currently provide recreational amenities at several public and private parks throughout the city. These amenities are also enjoyed in residential areas. Because of the ecological and aesthetic benefits of plants and animals, the City should encourage the acquisition

and management of exemplary ecological communities as a part of its parks and recreational program. Such a program should, in part, strive to maintain (or in some instances restore) wildlife species diversity.

Potential for Conservation, Use, or Protection

In Gainesville, the three hammock types are increasing in abundance due to urban fire control. Scrub, sandhill, cypress, marsh, upland pine, and the three flatwood types are decreasing in abundance due to urban fire control, drainage of wet areas, fragmentation, and real estate development. For the purposes of promoting diversity, therefore, those communities that are declining in abundance are those most important to preserve or restore.

Urban wildlife dependent on these communities will change in abundance and diversity as the communities they depend on change in abundance, composition, and structure. In general, many historical populations of wildlife in the urban area (particularly larger mammals) will decline as a result of:

* Habitat fragmentation and loss
* Animals being killed on roads
* Domestic pesticide and herbicide use
* Soil erosion
* Diseases borne by humans or domestic plants and animals
* Predation by domestic animals
* Loss of woodland understory
* Introduction of exotic species
* Loss of dead trees
* Discontinuous noise from residences and parks
* Toxic degradation of water bodies

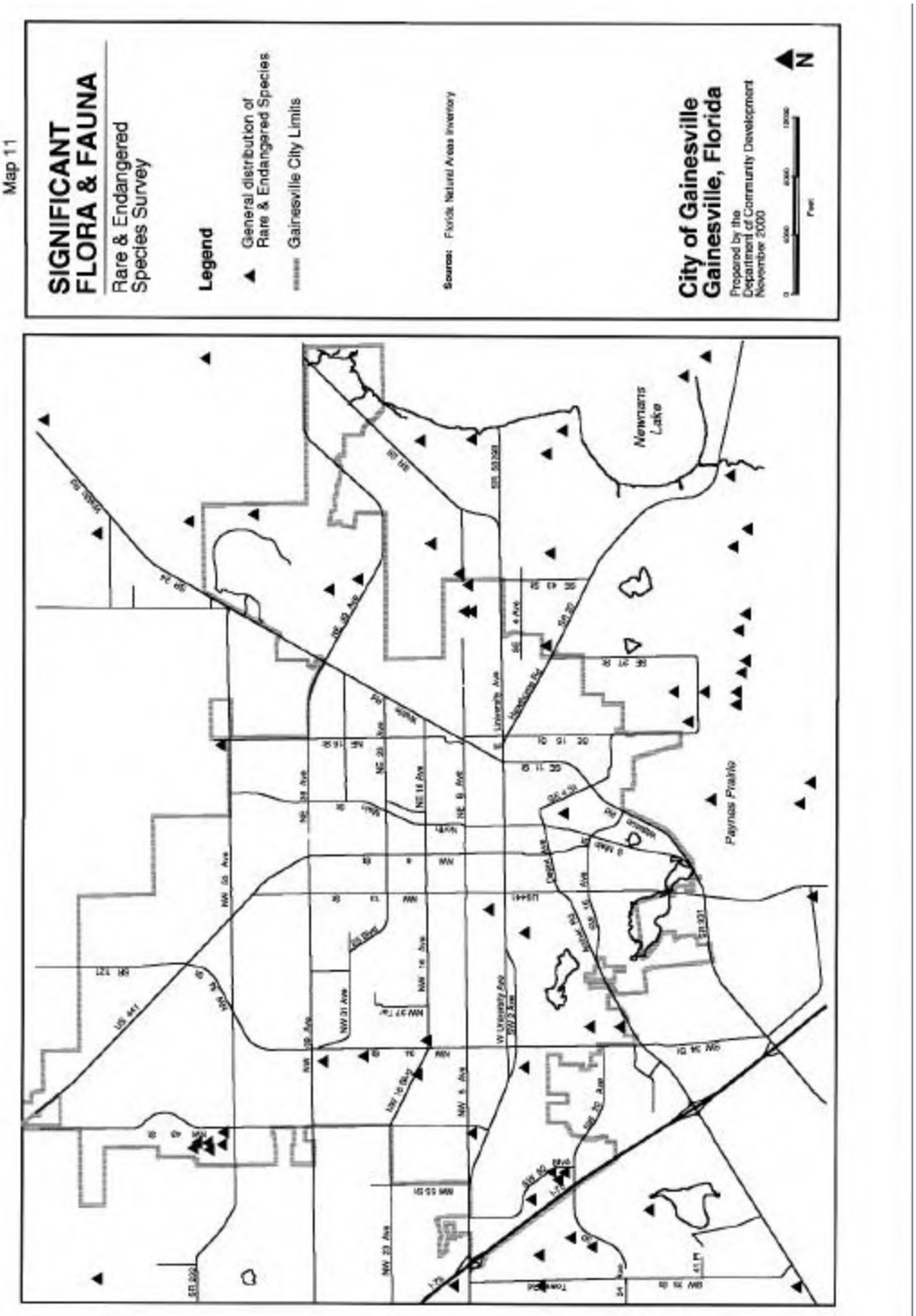
The natural integrity of Gainesville's ecological systems and bird diversity within these communities are in jeopardy. Breeding bird surveys by the local Audubon Society Chapter indicate the common nighthawk and brown-headed nuthatch are showing population declines. Colonial wading and water birds, such as herons, ibis, and wood storks, were once much more likely to nest at Lake Alice or Bivens Arm. The red-cockaded woodpecker, spotted at Morningside Nature Center as recently as the late 1970's, is no longer found in Gainesville. Similar surveys of other animals and plants have not been conducted in Gainesville. However, ecologists point out that when bird populations decline, we can assume other forms of wildlife with similar habitat requirements are also declining.

Limited protection of endangered, threatened, or "special concern" species is primarily accomplished through landscaping, subdivision, planned development, and flood control regulations enforced by the city. Additional protection of such species is through the following special environmental districts within the City's Land Development Code: the Surface Waters and Wetland District, the Nature Park District, Greenway District and the Upland District. (See Map 11: Florida Natural Areas Inventory- Rare and Endangered Species Survey).

Compact urban development would have both positive and negative effects on the viability of wildlife in the future. On the positive side, such development will preserve larger "clumps" of connected open space outside of urbanized areas and therefore improve habitat for species requiring both a large range and protection from human activity. Compact development tends to minimize the amount of road mileage and reduce auto travel, thereby reducing the potential for road kills and further habitat fragmentation.

On the negative side, the "infilling" associated with compact development will remove many of the "pockets" of open space, particularly relatively dry, upland open space now providing urban habitat.

Map 11


SIGNIFICANT
FLORA & FAUNA
Rare & Endangered
Species Survey
Legend
General distribution of
Rare & Endangered Species
Gainesville City Limits
Source: Florida Natural Areas Inventory
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
November 2000
N
Newnans
Lake
Paynes Prairie

Existing and Recommended Conservation Strategies

Existing local plant, animal, and habitat conservation strategies include:

* City Surface Water and Wetland Overlay District
* City Nature Park District
* City Upland District
* Greenway District
* City Flood Control Ordinance
* City Landscape Ordinance
* City Subdivision Ordinance
* City Site Plan Review Requirements
* City Planned Development District
* SJRWMD and SRWMD Permitting and Research Programs Relating to Water Use and Management
* FDEP Rules Governing Construction & Operation of Wastewater Treatment Plants
* HRS Rules Governing Siting, Construction, & Maintenance of On-Site Sewage Disposal Systems

Recommended strategies to conserve Gainesville's plants, animals, and habitat include:

* Establish a city- or county-managed monitoring program for trends in plant and animal populations.

* Continue acquiring and maintaining exemplary ecological communities.

* Apply development regulations designed to protect and restore native plants and animals to properties associated with creeks, lakes, and wetlands.

* Work with Alachua County to adopt protection and restoration guidelines for significant uplands, farms, and forested areas in anticipation of future annexation of such areas into the city.

* Encourage the clustering of buildings, xeriscaping, establishment and protection of native vegetation, and tree protection for all land uses within the city. On cluster developments, discontinue accepting stormwater management areas to meet the requirement of “preserved open space”, since the water quality in basins is often detrimental to wildlife.

* Ensure that future road alignments are minimizing disturbance of important upland and wetland habitats, and design roads to reduce the incidence of animals being killed on roads.

* Continue the "Tree-mendous Gainesville" tree planting program and require that through the annual re-certification of "Tree City USA" status, an accounting be made to prove that the City is meeting the Code requirements for replanting as trees are removed for safety reasons, to accommodate public works projects, and new construction.

* Encourage the use of "engineered soil" that meets the required Proctor densities for construction, yet also has large pore spaces that permit tree root growth under pavements. This will facilitate tree preservation and minimize the root disturbance to paved infrastructure.

* Ensure that drainage projects are designed and maintained to maximize the use of the natural environment as a tool to meet drainage objectives.

* Ensure compliance with the urban design standards for landscaping roadways and retention basins passed by the Metropolitan Transportation Planning Organization.

* Ensure that city mosquito control and utility corridor management activities are not detrimental to species diversity.

* Coordinate with Alachua County in development of regulations for the protection of significant upland communities, and threatened, endangered or otherwise important species.

* Adopt development standards for properties adjacent to nature parks that will include the requirement that only native or non-invasive exotics can be planted within 150' of nature parks.

AIR

Inventory of Air Quality

Air quality in the Gainesville urban area is better than in most Florida cities when quality is measured by state air quality standards. According to GRU, Alachua County has the lowest per capita residential energy consumption in Florida. There are state standards for the following pollutants:

	Primary Sources in Gainesville
* Ozone	Cars, Industry
* Carbon Monoxide	Cars
* Sulfur Dioxide	Power Plants, Industry, Home Heating
* Particulates (dust)	Power Plants, Cars, Construction, Industry
* Nitrogen Oxides	Cars, Power Plants
* Lead	Cars
* Hydrocarbons	Cars, Power Plants, Industry

Air pollution can be defined as a condition in which any foreign and/or natural substance is discharged, released or propagated into the atmosphere at levels that produce a measurable and undesirable effect on humans, animals, vegetation or materials. Constituents of air pollution are either anthropogenic (man-made) or biogenic (naturally occurring) in nature. Man-made emissions emanate primarily from vehicular and manufacturing/industrial sources. Biogenic sources include volcanic eruptions, vegetation, microbial activity, seas and windstorms, among others.

National Ambient Air Quality Standards (NAAQS) have been established by the United States Environmental Protection Agency. These standards are to protect public health and welfare with an adequate margin of safety. The current list of pollutants, known as criteria pollutants, consists of: carbon monoxide, nitrogen dioxide, sulfur dioxide, PM10, PM 2.5, ozone and lead.

Table 2: Florida Ambient Air Quality Standards

Florida Ambient Air Quality Standards

Criteria Pollutant	**ppm**	****Ug/m3**
Carbon Monoxide (CO)		
-8-hour Average	9	10,000
-1-hour Average	35	40,000
Ozone (O3)		
-8-hour Average	.08	157
-1-hour Average *	.12	235
Sulfur Dioxide (SO2)		

-Annual Average	.023	60
-24-hour Average	.1	260
-3-hour Average	.5	1,300
Nitrogen Dioxide (NO2)		
-Annual Arithmetic Mean	N/A	100
Criteria Pollutant	**ppm**	****Ug/m3**
Particulate Matter (PM10)		
-Annual Average	N/A	50
-24-hour Average	N/A	150
Particulate Matter (PM2.5)		
-Annual Average	N/A	15
-24-hour Average	N/A	65
Lead (Pb)		
-Quarterly Average	N/A	1.5

*The ozone 1-hour standard applies only to areas that were designated nonattainment when the ozone 8-hour standard was adopted in July 1997.
** Ug/m3- microns per cubic meter of air.

Source: Alachua County Environmental Protection Department, 2000

In December of 1998, the Alachua County Commission unanimously adopted a resolution establishing the Alachua County Air Quality Commission (AQC). The AQC, an accomplished and diverse group of scientists, engineers and medical professionals accepted a charge to study and report on a number of air quality issues for the Commission. The AQC produced the Alachua County Air Quality Commission Report. The report is the first comprehensive scientific review of air quality issues in Alachua County, and contains key findings and recommendations from the AQC regarding these pertinent air quality issues.

The following provides general information on each of the criteria pollutants, as well as key findings regarding ambient air quality in Alachua County:

Carbon Monoxide (CO)
Carbon monoxide is a poisonous, odorless, and colorless gas that enters the bloodstream and impairs the transport of oxygen to vital organs and tissues, contributes to cardiovascular disease, harms mental functions, and endangers fetal development. Most carbon monoxide is generated by motor vehicle emissions. Currently, there is no FDEP or USEPA sponsored monitoring activity for carbon monoxide. The Alachua County Air Quality Commission (AQC), appointed by the Alachua County Board of County Commissioners, anticipates that county levels of this pollutant will most likely be equal to or lower than the heavily urbanized Florida counties where such monitoring is underway. The pollutant levels, for these counties, are well below the NAAQS across the state.

Nitrogen Dioxide (NO2)

Nitrogen Dioxide is formed in the ambient air through the oxidation of nitric oxide (NO). Nitrogen oxides (Nox) is the term used to describe the sum of NO and NO2, Nox principally enters the ambient air from high temperature combustion sources such as automobiles and fossil fuel fired combustion sources (e.g., electric utilities). Nitrogen dioxide aggravates respiratory and cardiovascular problems, impairs visibility, interferes with plant growth, and contributes to the formation of acid rain and urban smog. As with carbon monoxide, the AQC anticipates that county levels of this pollutant will most likely be equal to or lower than the heavily urbanized Florida counties where such monitoring is underway. Pollutant levels, across the state, even within the heavily urbanized counties, have been well below the NAAQS across the state.

Sulfur Dioxide (SO2)

Sulfur Dioxide, a major source of acid rain, is a gas created when fuel containing sulfur (primarily fossil fuels) is burned and during metal smelting and other industrial processes. High concentrations of SO2 can result in temporary breathing impairment for exposed people. The AQC anticipates that county levels of this pollutant will most likely be equal to or lower than the heavily urbanized Florida counties where such monitoring is underway. Pollutant levels, across the state, even within the heavily urbanized counties, are well below the NAAQS across the state.

Volatile Organic Compounds (VOCs)

Volatile Organic Compounds are emitted by a variety of sources, including motor vehicles, refineries, manufacturing plants producing fiberglass items, factories, consumer and commercial products, other industrial sources, and a wide variety of natural sources (primarily vegetation and microorganisms). Under the influence of heat and light, VOCs and Nox readily react to form ozone, the primary constituent of urban smog. Alachua County does not measure speciated VOC levels to verify the results of the emission inventory. Measurement would allow better estimation of the relative contribution and reactivities of biogenic versus anthropogenic sources of VOC. This information would aid in choosing appropriate ozone control strategies.

Ozone (O3)

Ozone, the principle constituent of smog, is not emitted directly into the atmosphere. Rather, ozone is indirectly produced as the result of a complex photochemical reaction when nitrogen oxides and VOCs are exposed to heat and sunlight. Ozone gas is toxic to living organisms and causes respiratory and cardiovascular diseases. Ozone episodes are often regional in nature as a result of weather patterns producing conditions favorable to ozone formation over a large area and the effective intermixing of emissions from sources located throughout the nation. FDEP began monitoring for ozone in 1997. During the summer months, county ozone levels occasionally approach and exceed the new ozone National Ambient Air Quality Standard

(NAAQS). Continued growth in the number of additional vehicles and industrial sources that emit Nox and VOC will most likely increase the number and severity of these ozone episodes. In 1997, 41 ozone exceedences of the NAAQS were recorded at 19 different monitors in 11 counties. Alachua County's eight hour 4th highest ozone reading (used for attainment purposes) was 93 parts per billion (ppb), which is above the NAAQS of 80 ppb. (See Table 10)

Particulate Matter (PM)

Particulate Matter consists of solid or liquid particles, such as soot, ash, dust and chemicals, which remain suspended in the air after being released by various industrial and natural processes, such as burning fuel and automobile emissions. Suspended particulates adversely affect the human respiratory system and cause or exacerbate asthma and other respiratory and cardiovascular illnesses. USEPA's PM10 standard focuses on smaller particles of 10 microns or less in diameter. Smaller particulates, which can be breathed into the lungs more easily, represent a greater health hazard than the larger particulates. These smaller, or finer particulates, known as PM 2.5, can penetrate to the deepest levels of the lung and are thought to be the most harmful component of PM10. In Alachua County, PM10 levels have been well below the annual arithmetic mean standard of 50 microns per cubic meter, however, the county's fine particulate matter (PM2.5) levels may be near the new NAAQS; but more monitoring is needed to confirm this.

Air emission inventories, of both anthropogenic and biogenic sources, are by their nature, incomplete and uneven in their accuracy. Nevertheless, they are an effective tool for managing air pollution when combined with data collected from ambient air monitors and air pollution modeling.

To summarize the emission inventory for Alachua County:

* The largest source of nitrogen oxides (Nox) in Alachua County is on-road vehicles, followed by stationary point sources. Gainesville Regional Utilities (GRU) Deerhaven is the largest permitted source. The Florida Rock Industries (FRI) kiln will be the second largest permitted source when it becomes operational.
* In Alachua County, natural or biogenic sources of volatile organic compounds (VOC) emissions are a significant portion of the overall VOC emission total, probably contributing at least 67 percent of the total VOC emissions. Vehicles, off-road engines, and directly related sources account for 25 percent of VOC emissions.
* The majority (55 percent) of PM10 (particulate matter less than 10 microns) emissions in Alachua County is attributed to paved and unpaved roads. The largest permitted source is now GRU Deerhaven, although the FRI kiln will become the second largest permitted source when operational. Permitted sources are about 1.5 percent of the total PM10 emissions.

* Primary industrial particulate emissions are estimated to be about 60 to 70 percent PM2.5 (particulate matter less than 2.5 microns).
* The forms of mercury emitted from industrial sources such as coal-fired utility boilers and cement kilns are not fully understood and remain controversial. The methods of measuring the forms of mercury have improved, and it is becoming increasingly clear that reactive gas mercury (RGM) releases from industrial sources are more important than previously believed. Existing US Environmental Protection Agency and Florida Department of Environmental Protection regulations are currently deficient in not requiring mercury species to be measured when mercury monitoring is required for compliance purposes.

Indoor Air Pollution

Indoor air contains a number of potentially hazardous pollutants. According to the USEPA, "studies of human exposure to air pollutants indicate that indoor air levels of many pollutants may be two to five times, and occasionally more than 100 times, higher than outdoor levels." Exposure to indoor pollutants is believed to have increased, and is due to a variety of factors, such as, the widespread use of air conditioning, the proliferation of chemicals in building materials and furnishings, construction of more tightly sealed buildings, reduced ventilation rates to save energy, and the use of personal care products, pesticides and household cleaners. A few select indoor pollutants are discussed below:

* Carbon Monoxide:

Carbon monoxide is produced from malfunctioning gas heaters or vehicles operating in enclosed spaces.

* Radon:

Radon comes from the natural breakdown of uranium. It can be found in high concentrations in soils and rocks containing uranium. Radon becomes a health hazard when it accumulates in high levels in buildings. The only known health effect from long-term exposure to high levels of radon is an increased risk of developing lung cancer.

*Asbestos:

Asbestos is a mineral fiber, and in the past, was used to strengthen products for insulation and for fire protection. Inhaling asbestos fibers increases the risk of lung cancer. According to the USEPA, the best thing to do with materials containing asbestos in good condition is to leave them intact. If the material is slightly damaged, or will be disturbed, it is best to have a professional remove it.

*Mold Spores:

Florida has high humidity, which often leads to mold growth in buildings and ventilation systems. Mold spores bloom sporadically outdoors, especially during wet times of the year. Indoor mold problems can be quite serious and difficult to detect and correct in buildings. Studies indicate that mold in buildings is an emerging air pollution problem that probably has serious, widespread and previously unrecognized consequences in Florida.

*Nitrogen Dioxide (NO2):

Much higher NO2 levels occur in homes than in the natural environment. Levels between 200 and 500 ppb over a few hours occur in homes during intensive gas stove use or during unvented space heating (Harlos, et. al. 1987). However, significant evidence of health impacts from these levels is scant.

Volatile Organic Compounds (VOCS):

VOCs are emitted by a variety of sources. Indoor pollutant sources include insulation, plywood, and home furnishings. Some VOCs are known to be toxic, although a clear relationship between the majority of VOCs and toxicity to human systems has not yet been determined

Because of reduced air circulation within buildings, these pollutants are often at much higher concentrations than are found in outdoor air. By reducing the amount of air leakage, energy conservation techniques for buildings have probably increased the concentrations of indoor pollutants in Gainesville. However, several air exchange techniques are now being used to reduce concentrations.

Radon is a naturally occurring, radioactive gas. It cannot be seen, smelled, or tasted. In Gainesville, radon is released from phosphate in the Hawthorn clays which predominate underlie large areas of the city. In outdoor air, radon is too diluted to pose a health hazard. However, reduced air circulation within buildings sometimes allows radon concentrations to reach a level where it becomes a serious threat to public health. The health threat posed by radon increases as the time of exposure to the gas increases and as the concentration of radon in the air increases.

Generally, buildings located in areas where radon occurs will show higher radon levels as the "footprint" of the building increases. Buildings with a "slab" foundation show higher levels than buildings with an elevated (crawlspace) foundation. Cracks, joints, and pores in the floor can allow radon to seep into buildings.

Geographic location plays perhaps the most significant role in the level of radon found in buildings. Areas in Gainesville that show the highest levels of radon are those where the

Hawthorn is either near or at the surface. Surface exposure to the Hawthorn clays is particularly likely in:

* Areas with considerable relief, such as steep slopes associated with creek channels. These areas typically expose the Hawthorn as a result of erosional processes that have cut into the clay layer. In some areas where this cutting extends below the elevation of the Hawthorn layer, clays from the Hawthorn have eroded and moved downward to be mixed with the sandy soils of creek lowlands to produce moderate radon levels.

* Areas that are between 105 feet and 145 feet above sea level. This elevation corresponds to the elevation of the Hawthorn in the Gainesville area.

Because the "semiconfined" zone in the city is characterized by such geologic features, high levels of radon have been measured in that area of Gainesville. (See Map 3 for the location of the semiconfined zone.) Some studies obtained by the Alachua County Office of Environmental Protection indicate that areas in western Gainesville and Marion County have some of the highest radon levels recorded in the southeastern United States. The "unconfined" zone shows lower levels of radon, although there are pockets of high levels indicating that patches of the Hawthorn exist in the zone. The lowest levels of radon are observed in the "confined" zone, where the Hawthorn is the farthest from the surface.

Levels of radon in several buildings west of NW 13th Street have in the past exceeded 20 picocuries per liter (pCi/l), with a few measurements exceeding 100 pCi/l. The U.S. EPA currently recommends that immediate remedial action be taken when levels exceed 20 pCi/l. EPA is currently of the opinion that levels at or below 4 pCi/l are reasonably safe.

Certain factors impede the migration of radon to the surface, and therefore reduce the health risk. Undifferentiated sands, which overlay much of Alachua County, can retard radon movement. Groundwater also reduces radon movement to the surface. In addition, building design can reduce exposure to radon.

Functions of Healthy Air Quality

Clean air provides the following functions:

* Capacity to absorb and dilute air pollutants at concentrations that will not harm humans, animals, plants.

* Source of oxygen and carbon dioxide for humans, other animals, plants.

* Visual clarity, aesthetics.

Although currently none of the hospitals except for the VA Medical Center conduct medical waste incineration, hospital incineration tends to produce more dioxins and furans per gram incinerated than municipal incineration. The risks associated with biohazardous waste include illegal dumping, accidents during the handling of the waste, and emissions and ash from incinerators.

Air pollutants judged by the AQC to be of the greatest health concern for Gainesville and Alachua County are ozone, nitrogen dioxide, fine particulates (PM2.5) and mercury. It is important to note that County air pollution levels are currently approaching the new (and as yet not implemented) NAAQS for PM2.5 and ozone and that they could be exceeded as additional air pollution is generated in and around Alachua County by continued population and industrial growth.

In 1997, the Deerhaven plant contributed almost 77 percent or about 214 tons out of a total of 279 tons of carbon monoxide. The only other significant source in the county is the Florida Power Corporation Co-Generation Unit on the University of Florida campus, which contributed about 12 percent of the total CO emissions. The AQC report included the Florida Rock Industries (FRI) cement kiln. Although currently it is not yet operational, it will be the second largest permitted industrial source in the county once it becomes operational. Based on computer modeling required by the Florida Department of Environmental Protection, the cement kiln is not expected to increase ambient air concentrations above the NAAQS.

For a more in-depth discussion of air quality in Alachua County, see the County's Air Quality Commission Final Report.

Existing and Recommended Conservation Strategies

Existing local air quality conservation strategies include:

* City Landscape Ordinance
* City Subdivision Ordinance
* City Site Plan Review Requirements
* City Zoning Code General Performance Standards
* State and Federal Rules Under the Florida Air and Water Pollution Control Act and the (federal) Clean Air Act
* City Noise Control Ordinance
* City Clean Indoor Air Ordinance
* Regional Mass Transportation, Bicycle, and Pedestrian Programs

* GRU Energy Conservation Program

Recommended strategies to conserve Gainesville's air quality include:

* Continue the City's aggressive tree planting program.

* Continue to implement compact development strategies and other techniques to encourage non-auto travel.

* Continue to discourage the burning or incineration of toxic air pollutants, such as the combustion by-products of plastics.

* Continue to encourage energy conservation through, energy audits and the enforcement of the City's tree code.

* Provide radon information to homebuyers and homeowners.

* Continue efforts to increase the use of mass transit

* Encourage the use of alternative (non-fossil) fuels.

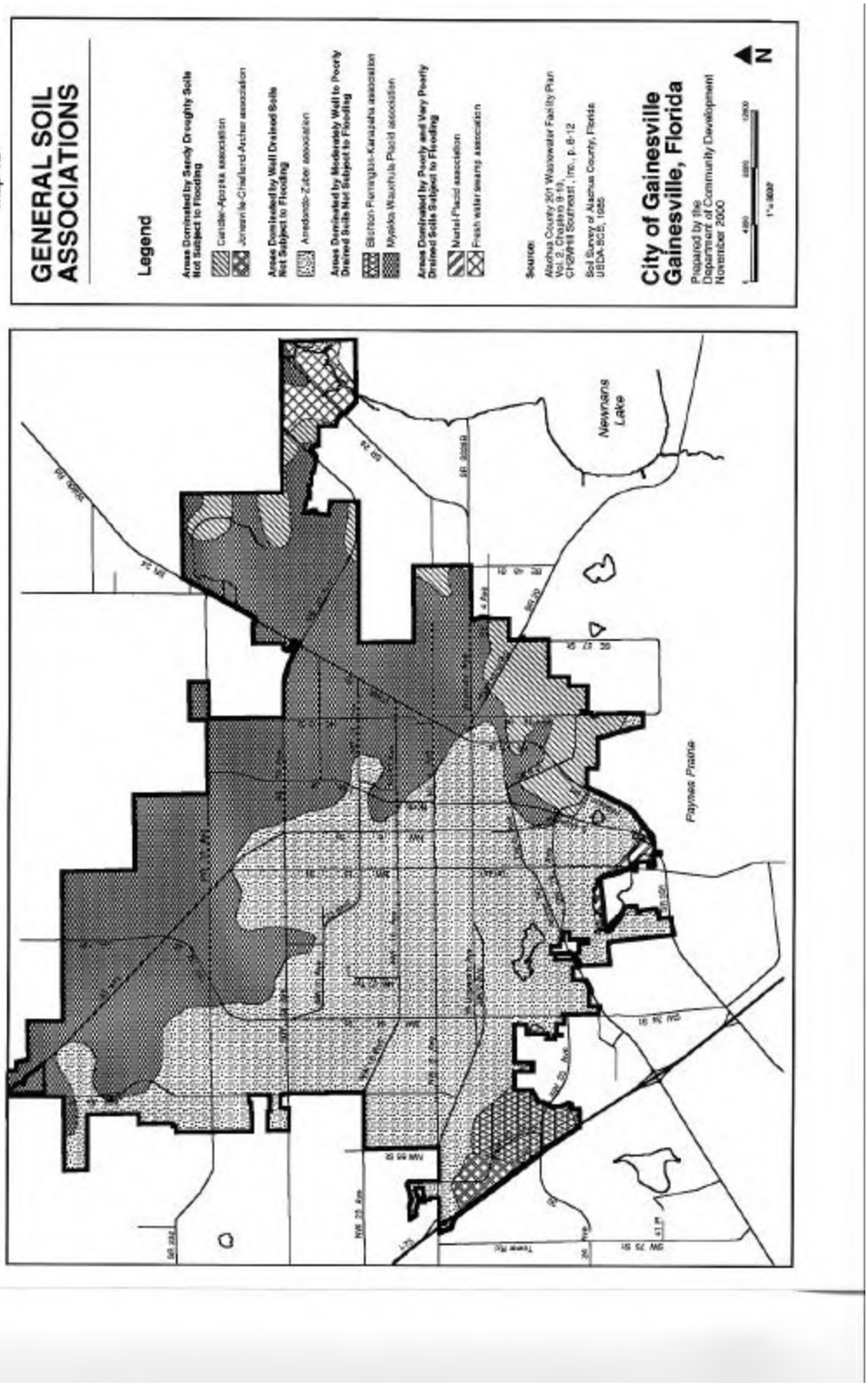
SOILS AND MINERALS

Inventory of Soils

Soils within the city are neutral to acidic sands underlain by sandy loams or clay subsoils. Much of the land area east of Main Street and in the northwestern portion of the city north of 53rd Avenue is level and poorly drained. (See Map 12.) These soils, known as the Myakka-Wauchula-Placid association, retain high water tables several months of the year.

Most of the remaining city land has level to gently rolling, well-drained sandy or sandy loam soils well suited to development. Development problems are restricted to the floodplains of the Hogtown-Possum Creek system and to small ponds or marshes lacking drainage outlets. Clay subsoils are occasionally present in the Arrendondo-Zuber association, causing shrink-swell problems for building foundations and roads. There is no current or expected extraction of commercially valuable minerals within city limits.

Map 12


GENERAL SOIL ASSOCIATIONS
Legend
Areas Dominated by Sandy Droughty Soils Not Subject to Flooding
Candler-Apopka association
Jonesville-Chiefland-Archer association
Areas Dominated by Well Drained Soils Not Subject to Flooding
Arredondo-Zuber association
Areas Dominated by Moderately Well to Poorly Drained Soils Not Subject to Flooding
Blanton-Pomona-Kanapaha association
Mylakka-Wauchula-Placid association
Areas Dominated by Poorly and Very Poorly Drained Soils Subject to Flooding
Nutall-Placid association
Fresh water swamp association
Source:
Alachua County 201 Wastewater Facility Plan Vol 2, Chapters 8-10, Chiefland Southeast, Inc., p. 8-12
Soil Survey of Alachua County, Florida USDA-SCS, 1985
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development November 2000
N
Newnans Lake
Paynes Prairie

Functions of Soils

Soils provide the following functions:

* Foundation for buildings, roads, and other development.

* Foundation and nutrient source for vegetation; including trees.

* Habitat for various wildlife.

* Storage of groundwater and surface waters.

* Protection from flooding.

* Adsorption of pollutants.

Soil Limitations

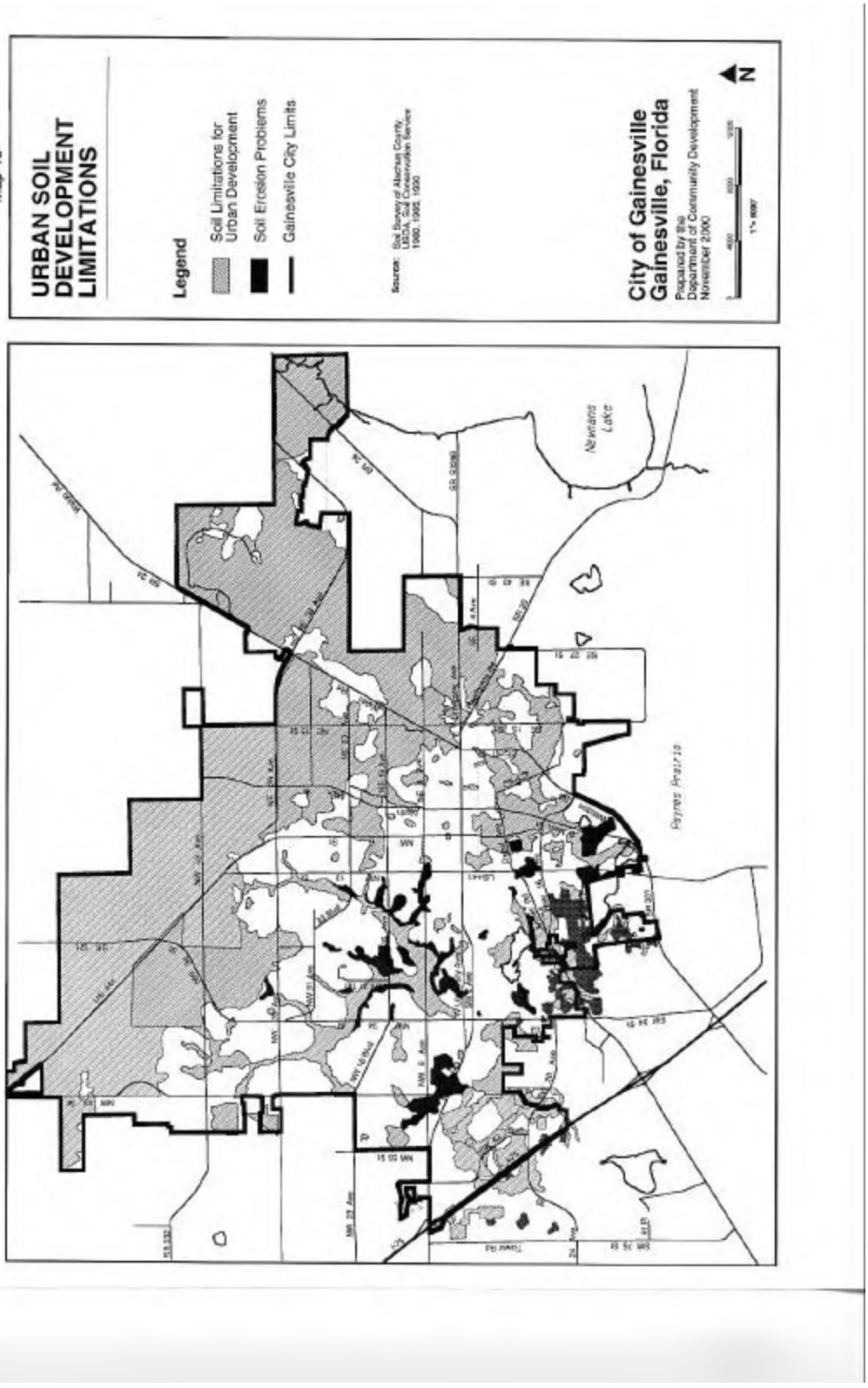
General development limitations include soil drainage potential, shrink-swell potential, bearing capability, erosion, and trafficability. Some of these limitations are referred to in the inventory section above. Refer to Map 13 for general soil limitations and erosion problem areas in Gainesville.

The soils of Gainesville are subject to erosion and to contamination from pollutants. Erosion is primarily due to previous development requirements that have since been strengthened and unpaved shoulders in older subdivisions lacking curb and gutters, and other activities where soils are left unprotected by the removal of vegetation. Without the binding provided by plant roots, soils in Gainesville are primarily eroded by water.

Contamination of soils in urban areas such as Gainesville is poorly inventoried. However, soils near industrial areas, roads, gas stations, and parking lots have been exposed to some degree of contamination.

Both soil erosion and contamination reduce the ability of urban soils to contribute to healthy plant life and animal habitat. Water storage capability is also reduced and stream sedimentation increases. The stability of buildings and other structures can be threatened.

Map 13


URBAN SOIL DEVELOPMENT LIMITATIONS
Legend
Soil Limitations for Urban Development
Soil Erosion Problems
Gainesville City Limits
Source: Soil Survey of Alachua County, USDA, Soil Conservation Service 1980, 1982, 1990
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development November 2000
N
Newnans Lake
Paynes Prairie

Inventory of minerals

The following minerals display actual or potential commercial value in the Gainesville urban area:

* Limestone
* Sand
* Phosphate

Despite extensive mining in the past, limestone deposits remain quite large and are expected to be mined in the future for such uses as roadfill or in construction as crushed rock. While active limestone mining is taking place in the county, there are presently no active mines within the city or urban area.

Sand deposits can be found throughout the urban area, and there is no foreseeable threat to the availability of this resource. Although the Florida Mining Atlas (DER, 1982) does not list any active sand mines in the county, USGS maps (1982) indicate the existence of 5 sand pits, 3 gravel pits, and 5 quarries within the urban area (Map 14). Presently, mined sand is used for general building and road construction purposes within the city.

Phosphate mining in the county has occurred in the past, but there are presently no active mining operations. Because of the relatively lower grade quality of local deposits, it is expected that resumption of phosphate mining will not occur until local deposits become comparable in quality to deposits being mined elsewhere in the state.

Existing & Potential Commercial, Recreational Use of Minerals

Existing mineral extraction companies with sites inside the city limits are Florida Rock industries and Rinker cement. Because of the urban character of the city, extraction of minerals elsewhere within city limits is unlikely.

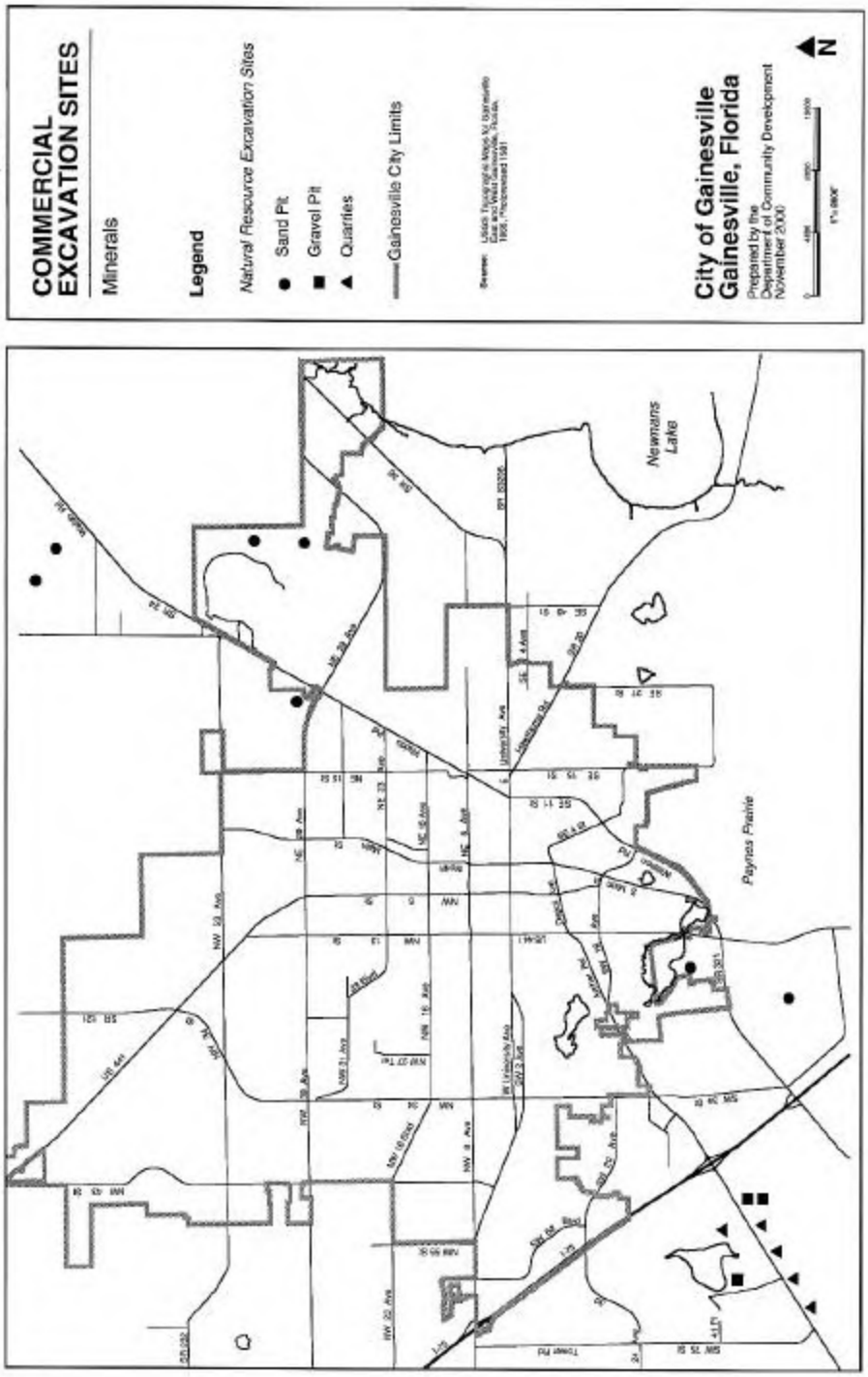
There is no recreational use of minerals within the city. No future recreational use of minerals is expected.

Potential for Conservation, Use or Protection of Minerals

As described above, there are no existing or anticipated threats to the availability of minerals within the city or urban area.

For Potential for Conservation, Use or Protection of Soils, see Existing and Recommended Conservation Strategies.

Map 14


COMMERCIAL
EXCAVATION SITES
Minerals
Legend
Natural Resource Excavation Sites
Sand Pit
Gravel Pit
Quarries
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
November 2000
N
Newnans
Lake
Paynes Prairie

Existing and Recommended Conservation Strategies

Existing local soil conservation strategies include:

* City Surface Water and Wetlands Overlay District
* City Wellfield Protection Permit
* City Upland District, Greenway District and Nature Park District
* City Flood Control Ordinance
* City Landscape Ordinance
* City Subdivision Ordinance
* City Site Plan Review Requirements
* City Zoning Code General Performance Standards
* Alachua County Murphree Well Field Management Code
* Alachua County Storage Tank Systems Code
* HRS Rules Governing Siting, Construction, & Maintenance of On-Site Sewage Disposal Systems

Recommended strategies to conserve Gainesville's soils include:

* Encourage construction design consistent with existing terrain by discouraging contouring or cut and fill.

* Continue to provide residents and small businesses with convenient programs for properly disposing of household hazardous waste.

* Maintain, and where necessary re-establish vegetative ground cover, particularly in areas near surface waters.

* Continue erosion control practices during development of individual residential lots.

* Continue to encourage the composting of yard and food waste for use as a soil conditioner.

OPEN SPACE

Inventory of Open Space

Open space can be defined as any vegetated or surface water area set aside for recreation, public gathering, aesthetics, buffering, urban definition, protection of public health and safety,

and/or preservation of ecosystem functions. Using this definition, Gainesville open space can be placed in four broad (and in some cases, overlapping) categories:

Public Safety Open Space

* Floodplains and Steep Slopes
* Airport and Road Noise Contour Zones
* Wasteland (such as abandoned dumps and waste sites)
* Undeveloped rights-of-way.

Natural Resource Open Space

* Public Conservation Areas
* Significant Ecological Communities
* Wildlife Management Areas
* Wetlands
* Lakes
* Creeks and Creekbanks

Recreation Open Space

* Active Public Parks
* Passive Public Parks
* Public School Recreation Areas
* Golf Courses

Other Open Spaces

* Rights-of-Way and Easements
* Cemeteries
* Vacant Urban Land
* Farms/Agricultural

The 100-year floodplain areas (Map 15) and land in the Environmentally Significant Land Resources map series within the Future Land Use Map Series contain most of the open spaces found in the above categories.

Existing & Potential Commercial, Recreational Uses

Utility open space in Gainesville is used by commercial operations for expansion. Economic benefits accrue to commercial operations because of the aesthetic and social qualities of open space.

An inventory of existing public and private open space sites providing some form of public recreation can be found in Table 8 in the Appendix. This inventory identifies the types of facilities found at each site and whether the site is resource-based or activity-based.

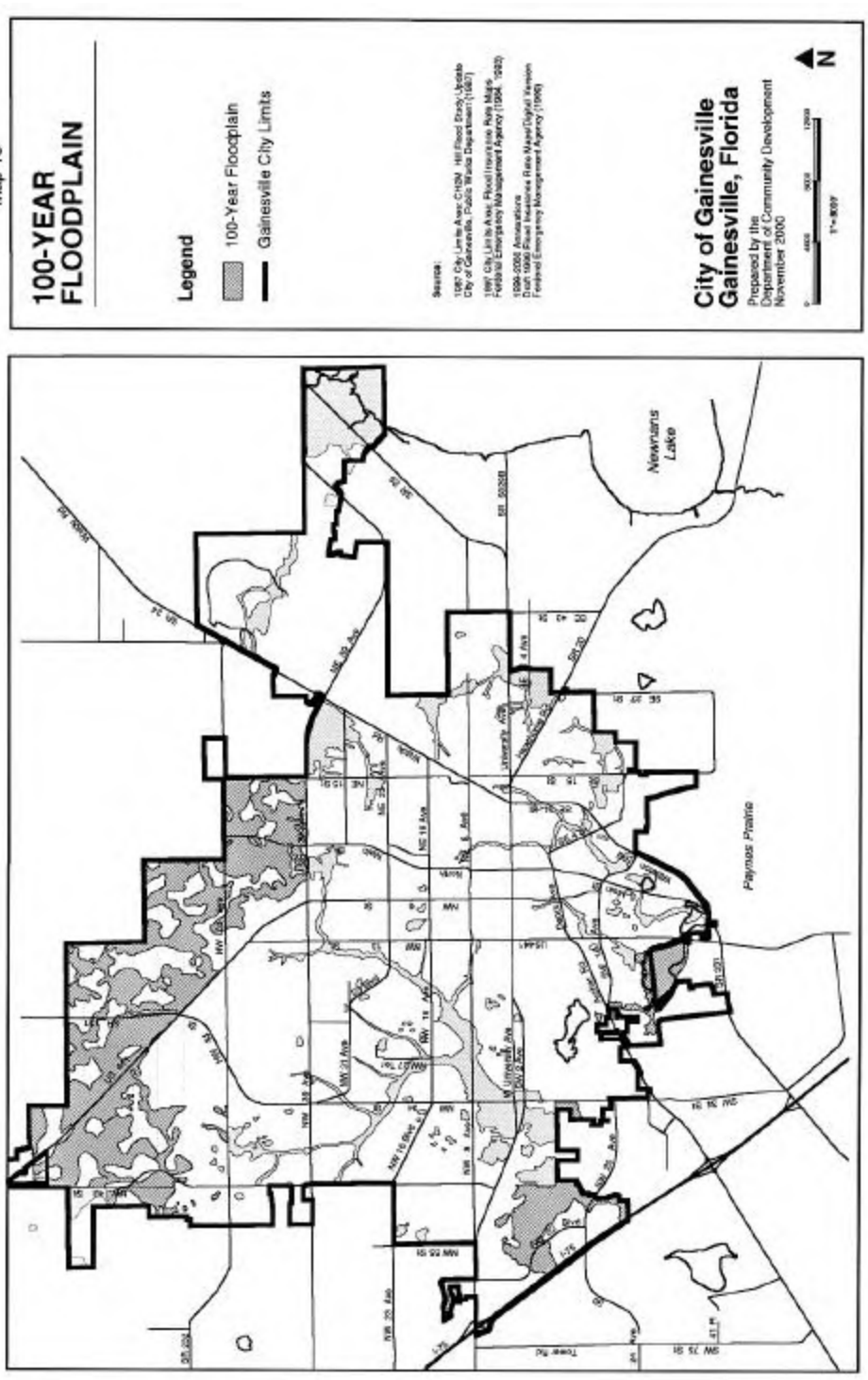
Potential for Conservation, Use or Protection

As described in the Recreation Element, the following active and passive park acreage level-of-service standards will be maintained:

Proposed Park Standards

Park Type	**2000 LOS Standard**	**Current LOS**
Nature Park	6 ac per 1000	17.02 acres
Sports Complex	0.5 ac per 1000	1.01 acres
Community Park	2 ac per 1000	2.27 acres
Neighborhood Pk	.8 ac per 1000	1.51 acres

Map 15


100-YEAR FLOODPLAIN
Legend
100-Year Floodplain
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
November 2000
N
Newnans Lake
Paynes Prairie

Over the past 10 years, Gainesville's park acquisition program has added mostly passive park acreage to the existing stock of parks within city limits. As the table shows, there are projected deficiencies for nature parks and neighborhood parks.

Continued population growth and development, along with the possibility of new funding sources for parks, may result in efforts to maintain or increase the pace of future park acquisitions.

The Gainesville urban area contains large expanses of State-owned (and therefore publicly protected) open spaces. Continued encroachment by human activities, however, may reduce the long-term viability of these habitat islands. In addition to these wildlife management areas (none of which are found within city limits), the urban area contains several linear corridors of creek floodplain.

A partnership that includes Alachua County's Land Conservation Advisory Committee, the Legacy Lands organization and many community groups is currently working to protect as much of the county's environmentally sensitive land as possible. The Land Conservation Advisory Committee has developed a process for ranking environmentally sensitive land within the county. Legacy Lands obtained enough signatures to place on the November 2000 ballot a bond issue that would raise $29 million to purchase environmentally significant land.

As for private open space, existing flood control, planned development, and subdivision ordinances limit the development of this open space, as do the additional Nature Park, Greenway, Surface Water and Wetland, and Uplands Districts. The flood control ordinance often requires that retention or detention basins be constructed. These basins can add to the stock of public and private open space. Furthermore, existing planned development and cluster subdivision ordinances increase the likelihood that privately owned common areas will be created as a supplement to future residential development.

Protection of privately-owned floodplains and significant ecological communities are accomplished primarily through establishment of special environmental overlay regulations (as described in the "Identification of Environmentally Significant Open Space" section of this Report).

Public school sites are another source of open space acreages. Additionally, older schools that may be converted to non-school (or special education) use typically retain their open space acreage. Both old and new schoolyards can offer excellent locations for maintaining or creating natural habitat areas. If designed properly, such areas reduce maintenance costs and provide outdoor ecology laboratories.

However, many local schools are reducing the availability of school open space. The primary reasons for this include: (1) add-ons to schools which encroach upon existing open space; and (2) increasing liability and maintenance concerns which are leading school administrators to adopt policies restricting public use of school open space. Add-ons are likely to continue, but will not result in a significant loss of school open space. Agreements between the School Board of Alachua County and the City may be necessary to preserve the current level of public access to open space being threatened by liability and maintenance problems.

Operation and maintenance costs can be minimized, however, through the use of landscaping practices which minimize the need for maintenance. For example, xeriscaping techniques can reduce the need for water, fertilizers, pesticides, pruning, and energy.

POINT SOURCES OF POLLUTION

There are two general sources of pollution: "point" sources and "non-point" sources. "Non-point" sources of pollution were discussed in a previous section. "Point" sources will be discussed here.

Many sites in Gainesville have experienced significant pollution problems in the past. Several of these "point" sources of pollution are identified in Map 8. As the map demonstrates, the locations of these pollution sites generally correspond to areas in close proximity to the major arterials of the Gainesville urban area.

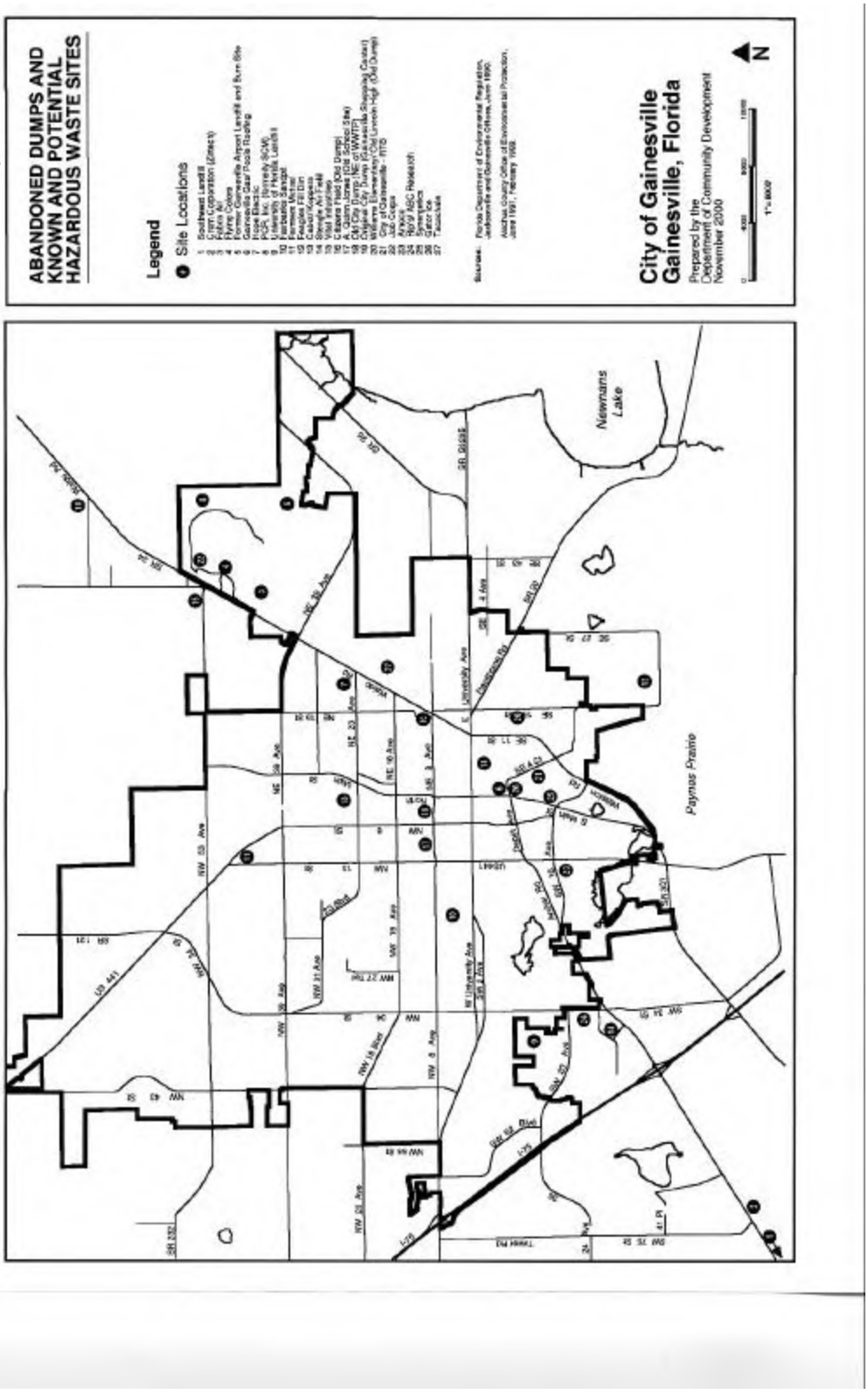
The Florida Legislature has established a state-funded program to cleanup properties that are contaminated as a result of the operations of a dry-cleaning facility or wholesale supply facility (Chapter 376, Florida Statues). The Dry-cleaning Solvent Cleanup Program is administered by Florida Department of Environmental Protection. Gainesville currently contains approximately 19 contaminated sites within city limits.

Alachua County, through the Alachua County Environmental Protection Department, is under contract with Florida Department of Environmental Protection Bureau of Petroleum Storage Systems (FDEP) to also manage the assessment and remediation of petroleum contaminated facilities through the County's Petroleum Cleanup Program. Currently, there are approximately 310 petroleum contaminated sites in Alachua County, the majority of which are located within Gainesville city limits. The number of petroleum contaminated facilities being cleaned up has been increasing steadily with time and the number is expected to continue to increase, according to the Alachua County Environmental Protection Department. For more information, refer to the "Hazardous Waste" section of the Solid Waste Element of the Data and Analysis section.

In general, Gainesville gives priority to the correction of point source pollution problems resulting from activities associated with some form of City ownership or management.

Nevertheless, the City strongly encourages the immediate mitigation of private sector point source pollution problems.

Map 16


ABANDONED DUMPS AND KNOWN AND POTENTIAL HAZARDOUS WASTE SITES
Legend
Site Locations
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
November 2000
N
Newnans Lake
Paynes Prairie

ENVIRONMENTAL QUALITY MONITORING PROGRAM

Environmental quality monitoring is an essential ingredient for environmental planning. The city currently does not have in place an environmental quality monitoring program, but it hopes to implement such a program in the future. By carrying out a detailed, comprehensive, and on-going monitoring program of natural areas and features, a community can:

* Determine whether existing regulations relating to protection or improvement of the environment are having a beneficial effect.

* Determine whether new regulations are necessary, or whether existing regulations should be modified or abandoned.

* Provide strong legal justification for regulations should they be challenged in court.

* Determine whether certain natural features (such as air quality or tree populations) are improving or being degraded.

* Make sure current and comprehensive information relating to the status and management of natural resources is available to inform local land use decision-making.

* Determine whether pollution at contaminated sites is being contained, or whether the pollution is migrating off of the site.

HAZARDOUS WASTES

Based on 1997 data provided by the Alachua County Environmental Protection Department, the top five hazardous wastes generated by small quantity generators (SQGs), by weight, are as follows:

Hazardous Waste	Pounds/Year	Percent of Total
Oil Filters	8,504,762	51
Used Oil and Other Lubricants	2,946,844	18
Lead Acid Batteries	2,447,905	15
Absorbents with listed Non halogenated Solvent	749,560	4.5
Spent anti-freeze w/low lead	614,282	3.7

The largest large quantity generators (LQGs) in Alachua County as reported in 1997 were Perma-Fix with 3,479 tons generated, Eveready Battery Company with 591 tons generated, Clariant Life Science Molecules (within City limits, formerly known as PCR) with 448 tons generated and Koppers Industries (located within City limits) with 194 tons of waste generated.

Facilities that produce or handle more than 200 pounds of hazardous waste in any one month are classified as Large Quantity Generators of Hazardous Waste and are required to file a report on their hazardous waste generation with the Florida Department of Environmental Protection every other year. Nine facilities located in Alachua County filed a report in 1995. The following Table 6 lists the facilities and tons of materials classified as either hazardous waste, exempted hazardous waste treated on site, or hazardous waste held at a transfer facility.

Table 6: Hazardous Waste from Large Quantity Generators:

Facility:	**Pounds of material reported in 1995**
Quadrex Environmental	6,850,309
Gates Energy Products, Inc.	2,689,472
Clariant Life Science Molecules.	857,812
Beaker East, Inc.	352,349
University of Florida	143,840
Hunter Marine	63,006
Metal Container Corp	38,981
Farchan Laboratories, Inc.	33,668
US Department of Agriculture	2,345

Source: *State of the Environment Report 1995-1996*, Alachua County Environmental Protection Department

The Alachua County Environmental Protection Department staff operates the permanent Household Hazardous Waste Collection Center at the Leveda Brown Environmental Park/Transfer Station. The center began operation in the fall of 1999.

There are 10 hazardous waste and contamination sites within city limits. There are also several abandoned dump sites (e.g., Citizens Field, Arredondo, A. Quinn Jones, Old City Dump northeast of the Main Street WWTP, the Original City Dump at Gainesville Shopping Center, Williams Elementary/Lincoln Middle School) which are not included because they were used primarily for household waste (Map 16).

There are 21 abandoned dumpsites (areas used for unmanaged solid waste disposal and considered to pose a threat to surface water and groundwaters) and known and potential hazardous waste sites relevant to the Gainesville urban area. 14 of these 21 sites are located within city limits.[9]

ECONOMIC COSTS OF DAMAGE TO GAINESVILLE'S NATURAL ENVIRONMENT

* If contamination in the Floridan Aquifer were to reach the municipal wellfield, the cost of drinking water would increase due to the need for special water treatment techniques, construction of a new municipal wellfield, or importation of water from outside of Alachua County.

* Significant loss of vegetation (particularly trees) would increase the cost of air conditioning, wind buffering, sun screening, and heating. Such loss would require the construction of flood control works needed as a result of increased flooding. Costs would also be incurred due to flood damage to public and private structures. In addition, the need for storm sewer networks and creek channel modifications would increase.

* Significant contamination of, or damage to any portion of Gainesville's natural environment could reduce property values immediately surrounding the affected area, resulting in declines in public revenues from ad valorem taxation. In addition, industries seeking a high quality of life for their employees might be less likely to locate in Gainesville.

* Uncontrolled soil erosion increases the need to remove sediment from creeks and undertake programs to improve surface water quality for fish and wildlife harmed by sedimentation. In addition, excessive sedimentation interferes with the ability of sinkholes to accept and move water. Erosion also increases the need for fertilization of soils, and soil leveling or stabilization.

* Loss of community attractiveness would result in a decline in tourism.

* Increases in air pollution would increase the need for air pollution abatement equipment and monitoring devices. Also, such pollution would result in increased public health costs.

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[9] See also the "Hazardous Waste" section of the Solid Waste Element Data Collection & Analysis Section.

APPENDIX

DEFINITIONS

AQUIFER: a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

ASSIMILATIVE CAPACITY: the greatest amount of a pollutant loading that a water or wetland can receive without violating state water quality standards.

BUFFER: the use of naturally occurring vegetation or open space for the purposes of limiting the effects of development on natural areas, nearby land uses, or recreational resources.

CHANNELIZATION: cutting a ditch into, or otherwise modifying the channel of, a creek; usually for the purpose of increasing the storm water conveyance capacity of the creek and/or draining saturated areas.

CONE OF DEPRESSION: a roughly conical concavity (or dimple) in the potentiometric surface around a pumping well. It relates to the events that occur in an aquifer when withdrawal of well water exceeds recharge.

CONFINED AQUIFER: an aquifer bounded above and below by impermeable beds or by beds of distinctly lower permeability than that of the aquifer itself.

CONNECTED WETLAND: a vegetative community which is part of a flowing water system or a runoff system where waters flow through during times of heavy rainfall.
A-1.
CONSERVATION: the prudent use and protection or restoration of natural areas and features consistent with the continued functioning of the natural areas and features.

DEPRESSION BASIN: natural depression watershed areas which have no outlet for surface water outflow except by percolation or evapotranspiration.

DEVELOPMENT: any man-made change to property including, but not limited to, building or erecting a structure, locating a mobile home, mining, dredging, filling, grading, paving, excavating, or drilling operations.

ECOLOGICAL COMMUNITY: an integrated association of plants and animals adapted to and dependent on a particular environment.

ECOSYSTEM: an interacting system of living and non-living components of the environment.

ENVIRONMENTALLY SIGNIFICANT (or SENSITIVE): natural features prone to damage due to development and necessary for (1) the protection of public health, safety, and welfare; and (2) the conservation of the natural environment.

GEOLOGIC FEATURES: a prominent or conspicuous characteristic of naturally occurring earth materials in the landscape. Includes sinkholes, caves, stream bluffs, escarpments, outcroppings, and springs.

GROUNDWATER: water occurring beneath the surface of the ground in zones of saturation, whether or not flowing through known or definite channels.

HABITAT: the natural abode of a plant or animal. The kind of environment in which a plant or animal normally lives, as opposed to the range, or spatial distribution.

HABITAT CORRIDOR: a naturally vegetated transportation route for plants and animals that connects larger natural areas. Wild plants and animals typically require avenues for dispersal to different feeding and breeding sites in order to survive.

HAZARDOUS MATERIAL: materials, as defined in the Alachua County Hazardous Materials Management Code, which are potentially harmful to the natural environment and/or to the public health, safety, and welfare.

HYDROPERIOD: the annual period of inundation.

IMPERVIOUS: incapable of being penetrated, as by moisture.

INVASIVE EXOTIC PLANT SPECIES: A non-indigenous species, or one introduced to the state, either purposefully or accidentally, that is either invading and disrupting native plant communities in Florida, or has the potential to disrupt native plant communities.

ISOLATED (or EPHEMERAL) WETLAND: a wetland where no naturally occurring outfall exists. Examples are cypress domes, shallow marshes, and bayheads.

KARST TOPOGRAPHY: a type of topography characterized by closed depressions, sink holes, underground caverns and solution channels.

LISTED SPECIES: Those species of plants and animals listed as endangered, threatened, rare, or species of special concern by an official state or federal plant or wildlife agency, the Florida Natural Areas Inventory (FNAI), or the Florida Committee on Rare and Endangered Plants and Animals (FCREPA). These species are targeted for protection for a number of reasons, e.g. they are in imminent danger of extinction, are rapidly declining in number or habitat, or have an inherent vulnerability to habitat modification, environmental alteration, or human disturbance which puts them at risk of extinction.

MAJOR NATURAL GROUNDWATER RECHARGE AREAS: those areas where stream-to-sink basins occur and the Floridan Aquifer system is unconfined or semiconfined.

MITIGATE: actions taken before, during or after development to preserve, replace, or restore various environmental functions or features of a natural area, or to buffer nearby land uses from adverse impacts of the development.

NATIVE (or NATIVE BIOTA): the natural occurrence of species of plants and animals in a specific region. Native biota does not include species that are exotic or introduced by humans and that have become "naturalized."

NATURAL COMMUNITY (or NATURAL AREA or NATURAL FEATURE or NATURAL RESOURCE): a distinct and reoccurring assemblage of populations of plants, animals, fungi and microorganisms naturally associated with each other and their physical environment. (Department of Natural Resources and Florida Natural Areas Inventory)

OPEN SPACE: any vegetated or surface water area set aside for recreation, public gathering, aesthetics, buffering, urban definition, protection of public health and safety, preservation of ecosystem functions, or a combination of these features.

OUTSTANDING FLORIDA WATERS (OFW): water designated, by the State, worthy of special protection because of its natural attributes. This special designation is applied to certain waters with the intent of maintaining existing good water quality.

POLLUTION: undesirable change in the physical, chemical, or biological characteristics of the air, water, or soil, that can harm humans, animals, vegetation, or structures.

POLLUTION, NON-POINT SOURCE: contamination arising from a relatively wide area such as a parking lot or construction site, rather than a specific point such as a pipe.

POLLUTION, POINT SOURCE: contamination arising from a specific point such as a pipe or smokestack, rather than from a relatively large area such as a parking lot or construction site.

POTENTIOMETRIC SURFACE: an expression of the pressure under which water is found or held, the level to which water from an aquifer will rise in tightly cased wells that penetrate an aquifer. The water table is a particular potentiometric surface.

PRESERVATION: the perpetual maintenance of areas in their natural state.

RECHARGE: the entry into the saturated zone of water made available at the water table surface, together with the associated flow away from the water table within the saturated zone.

RESTORATION: the revival or rehabilitation of a natural area or feature such as a wetland, plant or animal habitat, etc., to a condition in which the area or feature functions in a relatively self-maintaining, historically natural condition.

SEMICONFINED AQUIFER: according to the USGS, an aquifer with an overlying confining bed which is generally less than 100 feet thick, breached, or both.

SHEETFLOW: the pattern of water movement where large quantities of water move in broad-spread, shallow layers across the ground's surface. Typically seen in wetlands, marshes, grasslands, pine flatwoods, and prairies.

SINKHOLE: a natural depression in a land surface community with a subterranean passage, generally occurring in limestone regions and formed by solution or by collapse of a cavern roof (American Heritage Dictionary, 3rd edition)

STORMWATER (OR RUNOFF): flow of water which results from, and which occurs during and immediately following, a rainfall event.

TERTIARY TREATMENT: An enhancement of normal sewage treatment operations to provide water of potable quality using further chemical and physical treatment; the highest drinking water standard achieved in the U.S.

TREE CANOPY COVERAGE: the cover or leaves of branches formed by the tops or crowns of plants as viewed from above the cover; measured by the vertical projection downward of the extend of the cover and expressed as a percentage of the ground so covered. (Resource Conservation Glossary, 3rd edition).

UNCONFINED AQUIFER: an aquifer that has no impermeable layer between the zone of saturation and water table.

UPLAND COMMUNITY: non-wetland, non-aquatic areas not subject to regular flooding. Includes scrub, mesic hammock, sandhill, upland pine forest, xeric hammock, mesic flatwoods, and scrubby flatwoods.

URBAN FOREST: the woody vegetation within an urban area including trees along streets, in parks or undeveloped areas, and the understory vegetation. The urban forest provides wildlife habitat, provides food and shelter for bird and small animal populations. The value of the vegetative urban web of trees and vegetation on public property is enhanced by undeveloped land, commercial forestry operations, and the upland buffers associated with wetlands and surface water areas.

WATERSHED: The area of land that catches precipitation and drains or seeps into a marsh, stream, river lake or groundwater.

WATER TABLE: the surface of an unconfined aquifer at which the pressure is atmospheric. It is defined by the level at which water stands in wells that penetrate the water body far enough to hold standing water.

WETLAND: those areas that are inundated (flooded) or saturated (soaked) by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence (majority) of vegetation typically adapted (adjusted) for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. (US Army Corps)

WILDLIFE CORRIDOR: Travel path through open space used by animals. Keeping these functional is essential to maintaining the genetic diversity of animal populations and thus enabling species to buffer cataclysmic environmental or disease incidents and to respond to changing niche requirements.

XERISCAPE: a landscaping method that maximizes the conservation of water by the use of site-appropriate plants and an efficient watering system. The principles of Xeriscape include planning and design, appropriate choice of plants, soil analysis which may include the use of solid waste compost, efficient irrigation, practical use of turf, appropriate use of mulches, and proper maintenance.

Table 3. Basin-by-Basin Surface Water Inventory

*City of Gainesville, Florida**

Drainage Basins	Wetands (acres)	Lakes (acres)	Creeks (miles)**
Airport Drainage	84.70		
Alacua Sink	52.28		
Alachua Slough	269.92	0.43	0.53
Bivans Arm	116.70	31.36	2.60
Blue Creek	94.40		
Gumroot Swamp	227.99		1.88
Hatchet Creek	488.43	6.79	
Hogtown Creek	622.04	4.18	15.67
Hogtown Prairie Reach	77.00		
Lake Alice	95.72	24.17	0.14
Liberty Hill Drainage	2.75		
Prairie Creek Reach	355.99	112.44	1.43
Rocky Creek	5.49		
Sunland Drainage	166.31		2.28
Sweetwater Branch	75.78		3.07
Unnamed Drainage(s)	278.15	5.09	
Unnamed Stream(s)	357.31		11.52
Totals	**3370.98**	**184.46**	**39.12**

Notes:
Data compiled thru Arcview analysis. Source drainage basins and wetlands, St Johns River Water Management District. Source regulated creeks, City of Gainesville, Land

Development Code.

**Data is for inside November 2000, Gainesville city limits.*
***Data for creeks is for regulated creeks only.*

Table 4: Endangered, Threatened and Species of Special Concern
FDEP, 2000

PREFACE

This document consolidates the state and federal official lists of endangered species, threatened species, and other species categorized in some way by the respective jurisdictional agencies as meriting special protection or consideration. The state lists of animals are maintained by the Florida Game and Fresh Water Fish Commission and categorized as endangered, threatened and of special concern, and constitute Rules 39-27.003, 39-27.004 and 39-27.005, respectively, Florida Administrative Code (F.A.C.). The state lists of plants are categorized into endangered, threatened and commercially exploited, and are administered and maintained by the Florida Department of Agriculture and Consumer Services via Chapter 5B-40, F.A.C. The federal lists of animals and plants are administered by the U.S. Fish and Wildlife Service and categorized into endangered and threatened, and are published in 50 CFR 17 (animals) and 50 CFR 23 (plants). The abbreviations used in part one are:

- GFC = Florida Fish and Wildlife Conservation Commission
- FDA = Florida Department of Agriculture and Consumer Services
- FWS = United States Fish and Wildlife Service
- E = Endangered
- T = Threatened
- T(S/A) = Threatened/Similarity of Appearance
- T(E/P) = Threatened/Experimental Population
- SSC = Species of Special Concern
- C = Commercially Exploited

NUMERICAL SUMMARY OF SPECIES LISTED BY STATE AND FEDERAL AGENCIES AS ENDANGERED, THREATENED OR OTHERWISE CATEGORIZED AS OF CONCERN

Status Designation	Fish	Amphibians	Reptiles	Birds	Mammals	Invertebrates	Plants	Total
GFC								
E	3	0	6	8	20	3	--	40
T	2	0	10	11	4	0	--	27
SSC	11	5	7	17	6	4	--	50
TOTAL	**16**	**5**	**23**	**36**	**30**	**7**	**--**	**117**
FDA								
E	--	--	--	--	--	--	337	337
T	--	--	--	--	--	--	66	66
C	--	--	--	--	--	--	10	10
TOTAL							**413**	**413**
FWS								
E	2	0	5	7	18	1	44	77
T	1	0	5	6	1	2	10	25
T(S/A)	0	0	1	0	0	0	0	1
T(E/P)	0	0	0	1	0	0	0	1
TOTAL3		**0**	**11**	**14**	**19**	**3**	**54**	**104**

OFFICIAL LISTS

Scientific Name	Common Name(s)	Designated Status GFC	FWS
Fish			
Acipenser brevirostrum	Shortnose sturgeon	E	E
Acipenser oxyrhynchus	Atlantic sturgeon	SSC	T*
Ammocrypta asprella	Crystal darter	T	
Centropomus undecimalis	Common snook	SSC	
Cyprinodon variegatus hubbsi	Lake Eustis pupfish	SSC	
Etheostoma histrio	Harlequin darter	SSC	
Etheostoma okaloosae	Okaloosa darter	E	E
Etheostoma olmstedi maculaticeps	Southern tessellated darter; tesselated johnny darter	SSC	
Fundulus jenkinsi	Saltmarsh topminnow	SSC	
Menidia conchorum	Key silverside	T	
Micropterus notius	Suwannee bass	SSC	
Micropterus n. sp. cf *coosae*	Shoal bass; Chipola bass	SSC	
Notropis melanostomus	Blackmouth (=Pond Creek) shiner	E	
Pteronotropis welaka	Bluenose shiner	SSC	
Rivulus marmoratus	Mangrove rivulus; rivulus	SSC	
Starksia starcki	Key blenny	SSC	
* Applicable only to the subspecies *A.o. desotoi* (Gulf sturgeon)			
Amphibians			
Haideotriton wallacei	Georgia blind salamander	SSC	
Hyla andersonii	Pine Barrens treefrog	SSC	
Rana capito	Gopher (=crawfish) frog	SSC	
Rana okaloosae	Bog frog	SSC	
Reptiles			
Alligator mississippiensis	American alligator	SSC	T(S/A)
Caretta caretta	Atlantic loggerhead turtle	T	T
Chelonia mydas mydas	Atlantic green turtle	E	E
Crocodylus acutus	American crocodile	E	E
Dermochelys coriacea	Leatherback (=leathery) turtle	E	E
Diadophis punctatus acricus	Big Pine Key ringneck snake	T	
Drymarchon corais couperi	Eastern indigo snake	T	T
Elaphe guttata guttata	Red rat snake; corn snake	SSC*	

Scientific Name	Common Name(s)	Designated Status GFC	FWS
Eretmochelys imbriccata imbratica	Atlantic hawksbill turtle	E	E
Eumeces egregius egregius	Florida Keys mole skink	SSC	
Eumeces egregius lividus	Bluetail mole skink	T	T
Scientific Name	**Common Name(s)**	**GFC**	**FWS**
Graptemys barbouri	Barbour's map (=sawback) turtle	SSC	
Kinosternon bauri	Striped mud turtle	E*	
Lepidochelys kempi	Atlantic ridley turtle	E	E

Macroclemys temmincki	Alligator snapping turtle	SSC	
Scientific Name	**Common Name(s)**	**GFC**	**FWS**
Neoseps reynoldsi	Sand skink	T	T
Nerodia fasciata taeniata	Atlantic salt marsh snake	T	T
Pituophis melanoleucus mugitus	Florida pine snake	SSC	
Pseudemys concinna suwanniensis	Suwannee cooter	SSC	
Stilosoma extenuatum	Short-tailed snake	T	
Storeria dekayi victa	Florida brown snake	T*	
Tantilla oolitica	Miami black-headed snake; rimrock crowned snake	T	
Thamnophis sauritus sackeni	Florida ribbon snake	T*	
*Applicable in lower Florida Keys only			
Birds			
Ajaia ajaja	Roseate spoonbill	SSC	
Ammodramus maritimus juncicolus	Wakulla seaside sparrow	SSC	
Ammodramus maritimus mirabilis	Cape Sable seaside sparrow	E	E
Ammodramus maritimus peninsulae	Scott's seaside sparrow	SSC	
Ammodramus savannarum floridanus	Florida grasshopper sparrow	E	
Aphelocoma coerulescens	Florida scrub-jay	T	T
Aramus guarauna	Limpkin	SSC	
Campephilus principalis	Ivory-billed woodpecker	E	E
Charadrius alexandrinus tenuirostris	Southeastern snowy plover	T	
Charadrius melodus	Piping plover	T	T
Cistothorus palustris griseus	Worthington's marsh wren	SSC	
Cistothorus palustris marianae	Marian's marsh wren	SSC	
Columba leucocephala	White-crowned pigeon	T	
Dendroica kirtlandii	Kirtland's warbler	E	E
Egretta caerulea	Little blue heron	SSC	
Egretta rufescens	Reddish egret	SSC	
Egretta thula	Snowy egret	SSC	
Egretta tricolor	Tricolored (=Louisiana) heron	SSC	
Eudocimus albus	White ibis	SSC	
Falco peregrinus tundrius	Arctic peregrine falcon	E	
Falco sparverius paulus	Southeastern American kestrel	T	

		Designated Status	
Scientific Name	**Common Name(s)**	**GFC**	**FWS**
Grus americana	Whooping crane	SSC	T(E/P)
Grus canadensis pratensis	Florida sandhill crane	T	
Haematopus palliatus	American oystercatcher	SSC	
Haliaeetus leucocephalus	Bald eagle	T	T
Mycteria americana	Wood stork	E	E
Pandion haliaetus	Osprey	SSC*	
Pelecanus occidentalis	Brown pelican	SSC	
Picoides borealis	Red-cockaded woodpecker	T	E
Polyborus plancus audubonii	Audubon's crested caracara	T	T
Rostrhamus sociabilis	Snail kite	E	E
Rynchops niger	Black skimmer	SSC	
Speotyto cunicularia	Burrowing owl	SSC	
Sterna antillarum	Least tern	T	
Sterna dougallii	Roseate tern	T	T
Vermivora bachmanii	Bachman's warbler	E	E
*Applicable in Monroe County only			
Mammals			
Balaena glacialis	Right whale	E	E
Balaenoptera borealis	Sei whale	E	E
Balaenoptera physalus	Finback whale	E	E
Blarina carolinensis (=brevicauda) shermani	Sherman's short-tailed shrew	SSC	
Eumops glaucinus floridanus	Florida (=Wagner's) mastiff bat	E	
Felis concolor coryi	Florida panther	E	E
Megaptera novaeangliae	Humpback whale	E	E
Microtus pennsylvanicus dukecampbelli	Duke's (=Florida) saltmarsh vole	E	E
Mustela vison evergladensis	Everglades mink	T	
Myotis grisescens	Gray bat	E	E
Myotis sodalis	Indiana bat	E	E
Neotoma floridana smalli	Key Largo woodrat	E	E
Odocoileus virginianus clavium	Key deer; toy deer	E	E
Oryzomys argentatus	Silver rice rat	E	E
Oryzomys palustris sanibeli	Sanibel Island rice rat	SSC	
Peromyscus gossypinus allapaticola	Key Largo cotton mouse	E	E
Peromyscus polionotus allophrys	Choctawhatchee beach mouse	E	E
Peromyscus polionotus niveiventris	Southeastern beach mouse	T	T
Peromyscus polionotus peninsularis	St. Andrews beach mouse	E	
Peromyscus polionotus phasma	Anastasia Island beach mouse	E	E
Peromyscus polionotus trissyllepsis	Perdido Key beach mouse	E	E
Physeter catodon	Sperm whale; cachalot	E	E
Podomys floridanus	Florida mouse	SSC	
Sciurus niger avicennia	Big Cypress (=mangrove) fox squirrel	T	
Sciurus niger shermani	Sherman's fox squirrel	SSC	

Scientific Name	Common Name(s)	Designated Status GFC	FWS
Sorex longirostris eionis	Homosassa shrew	SSC	
Sylvilagus palustris hefneri	Lower Keys marsh rabbit	E	E
Tamias striatus	Eastern chipmunk	SSC	
Trichechus manatus	West Indian (=Florida) manatee	E	E
Ursus americanus floridanus	Florida black bear	T*	
*Not applicable in Baker and Columbia counties and Apalachicola National Forest			
Corals			
Dendrogyra cylindrus	Pillar coral	E	
Crustaceans			
Palaemonetes cummingi	Squirrel Chimney (=Florida) cave shrimp	T	
Procambarus econfinae	Econfina crayfish	SSC	
Procambarus erythrops	Sims Sink crayfish	SSC	
Procambarus pictus	Black Creek crayfish	SSC	
Insects			
Heraclides aristodemus ponceanus	Schaus' swallowtail butterfly	E	E
Molluscs			
Liguus fasciatus	Florida tree snail	SSC	
Orthalicus reses	Stock Island tree snail	E	T*
*Applies only to the subspeceis *O.r. reses*			

		Designated Status	
Scientific Name	**Common Name(s)**	**FDA**	**FWS**
Plants			
Acacia choriophylla	Tamarindillo	E	
Acrostichum aureum	Golden leather fern	E	
Acrostichum danaeifolium	Giant leather fern	C	
Actaea pachypoda	Baneberry; doll's eyes	E	
Adiantum melanoleucum	Fragrant maidenhair fern	E	
Adiantum tenerum	Brittle maidenhair fern	E	
Alvaradoa amorphoides	Alvaradoa	E	
Amorpha crenulata	Crenulate (=Miami) lead plant	E	E
Anemia wrighti	Parsley fern	E	
Aquilegia canadensis	Wild (=Southern; =Canadian) columbine	E	
Arabis canadensis	Sicklepod	E	
Argythamnia blodgettii	Blodgett's wild-mercury	E	
Aristolochia tomentosa	Dutchman's pipe; pipevine	E	
Asclepias curtissii	Curtiss' (=sandhill) milkweed	E	
Asclepias viridula	Apalachicola (=green) milkweed	T	
Asimina tetramera	Four-petal (=opossum) pawpaw	E	E
Asplenium auritum	Auricled spleenwort	E	
Asplenium monanthes	San Felasco (=single sorus) spleenwort	E	
Asplenium pumilum	Dwarf (=chervil) spleenwort	E	
Asplenium serratum	Bird's nest spleenwort; wild birdnest fern	E	
Asplenium subtile	Slender spleenwort	E	
Asplenium trichomanes-dentatum	Slender spleenwort	E	
Asplenium verecundum	Delicate spleenwort	E	
Aster hemisphericus	Aster (unnamed)	E	
Aster spinulosus	Pinewoods aster	E	
Athyrium filix-femina	Southern lady fern	T	
Baptisia hirsuta (=B. calycosa var. *hirsuta*)	Pineland (=hairy) wild indigo	T	
Baptisia megacarpa	Apalachicola wild indigo	E	
Baptisia simplicifolia	Coastal Plain wild indigo; scare-weed	T	
Basiphyllaea corallicola	Carter's orchid	E	
Bigelowia nuttalli	Nuttal's rayless goldenrod	E	
Blechnum occidentale	Sinkhole fern	E	
Bletia purpurea	Pine pink orchid	T	
Bonamia grandiflora	Florida (=large-flowered) bonamia	E	T
Bourreria cassinifolia	Little strongback	E	
Brassia caudata	Long-tailed spider orchid	E	
Brickellia cordifolia	Flyr's brickell-bush	E	
Brickellia eupatorioides var. *floridana* *(=B. mosieri)*	Florida brickell-bush; Florida boneset	E	
Bulbophyllum pachyrrhachis	Rattail orchid	E	
Bumelia anomala	Clark's buckthorn	E	
Bumelia lycioides	Gopherwood buckthorn	E	

Scientific Name	Common Name(s)	Designated Status GFC	FWS
Bumelia thornei	Thorne's buckthorn	E	
Burmannia flava	Fakahatchee burmannia	E	
Byrsonima lucida	Locust berry	E	
Cacalia diversifolia	Variable-leaved Indian plantain	T	
Calamintha ashei	Ashe's savory; lavender basil	T	
Calamovilfa curtissii	Curtiss' reedgrass; Curtiss' sand grass	T	
Callirhoe papaver	Poppy mallow	E	
Calopogon barbatus	Bearded grass pink	T	
Calopogon multiflorus	Many-flowered grass pink	E	
Calycanthus floridus	Sweetshrub	E	
Calyptranthes zuzygium	Myrtle of the river	E	
Calystegia catesbaeiana	Catesby's bindweed	E	
Campanula robinsiae	Robins' (=Chinsegut) bellflower	E	E
Campylocentrum pachyrrhizum	Leafless orchid	E	
Campyloneurum angustifolium	Narrow strap fern	E	
Campyloneurum costatum	Tailed strap fern	E	
Campyloneurum phyllitidus	Long strap fern	E	
Canella winteriana	Wild cinnamon	E	
Carex baltzelli	Baltzell's sedge	T	
Cassia keyensis (=Chaemecrista lineata var. *keyensis*)	Big Pine partridge pea; Florida Keys senna; Key cassia	E	
Catesbaea parviflora	Small-flowered (=dune) lily-thorn	E	
Catopsis berteroniana	Powdery (=yellow) catopsis	E	
Catopsis floribunda	Many-flowered air plant	E	
Catopsis nutans	Nodding catopsis	E	
Celtis iguanaea	Iguana hackberry	E	
Celtis pallida	Spiny hackberry	E	
Cereus eriophorus	Indian River prickly apple	E	E
Cereus gracilis	West coast prickly apple	E	
Cereus pentagonus	Dildoe (=barbed wire) cactus	E	
Cereus robinii	Tree cactus	E	E
Chamaesyce cumulicola	Sand dune spurge	E	
Chamaesyce deltoidea ssp. *deltoidea*	Wedge (=deltoid; =rockland) spurge	E	E
Chamaesyce garberi	Garber's spurge	E	T
Chamaesyce porteriana	Porter's spurge	E	
Cheilanthes microphylla	Southern lip fern	E	
Chionanthus pygmaeus	Pygmy fringetree	E	E
Chrysophyllum oliviforme	Satinleaf	E	
Chrysopsis cruiseana (=C. gossypinus crioseana)	Cruise's golden aster	E	
Chrysopsis floridana	Florida golden aster	E	E
Cienfuegosia yucatanensis (=C. heterophylla)	Yellow hibiscus	E	
Cladonia perforata	Perforate reindeer lichen; deer moss	E	E
Cleistes divaricata	Rosebud orchid; spreading pogonia	T	
Clitoria fragrans	Pigeon-wing (=sandhill) butterfly-pea	E	T

Scientific Name	Common Name(s)	Designated Status GFC	FWS
Clusia rosea	Balsam apple	E	
Coccothrinax argentata	Silver palm	E	
Colubrina cubensis	Colubrina	E	
Conradina breviflora	Short-leaved rosemary	E	E
Conradina etonia	Etonia rosemary	E	E
Conradina glabra	Apalachicola (=panhandle) rosemary	E	E
Conradina grandiflora	Large-flowered rosemary	E	
Corallorhiza odontorhiza	Autumn coralroot	E	
Cordia sebestena	Geiger tree	E	
Cornus alternifolia	Pagoda dogwood	E	
Cranichis muscosa	Moss orchid	E	
Crataegus phaenopyrum	Washington thorn	E	
Croomia pauciflora	Few-flowered croomia	E	
Crossopetalum ilicifolium	Christmas berry	E	
Crossopetalum rhacoma	Rhacoma	E	
Crotolaria avonensis	Avon Park rattlebox; Avon Park harebells	E	E
Cryptotaenia canadensis	Honewort	E	
Ctenitis sloanei	Red-hair comb fern; Florida tree fern	E	
Ctenitis submarginalis	Brown-hair comb fern	E	
Cucurbita okeechobeensis	Okeechobee gourd; Indian pumpkin	E	E
Cupania glabra	Cupania	E	
Cyrtopodium punctatum	Cowhorn (=cigar) orchid	E	
Deeringothamnus pulchellus	White squirrel-banana; beautiful pawpaw	E	E
Deeringothamnus rugelii	Yellow squirrel-banana; Rugel's pawpaw	E	E
Delphinium carolinianum	Carolina larkspur	E	
Dennstaedtia bipinnata	Cuplet (=hay-scented) fern	E	
Dicerandra christmanii	Garrett's mint	E	E
Dicerandra cornutissima	Long-spurred balm; Robins' mint	E	E
Dicerandra frutescens	Scrub balm; Lloyd's mint	E	E
Dicerandra immaculata	Lakela's (=Olga's) mint	E	E
Digitaria pauciflora	Florida pineland crabgrass	E	
Dodecatheon meadia	Shooting star	E	
Drosera filifolia	Dew-thread	E	
Drosera intermedia	Water sundew	T	
Eltroplectris calcarata (=Centrogenium setaceum)	Spurred neottia	E	
Encyclia boothiana	Dollar (=dogtooth) orchid	E	
Encyclia cochleata	Shell (=clamshell) orchid	E	
Encyclia pygmaea	Dwarf epidendrum	E	
Encyclia tampensis	Butterfly orchid	C	
Epidendrum acunae	Acuna's epidendrum	E	
Epidendrum anceps	Dingy-flowered epidendrum	E	
Epidendrum conopseum	Greenfly orchid	C	
Eidendrum difforme	Unbelled epidendrum	E	

Scientific Name	Common Name(s)	Designated Status GFC	FWS
Epidendrum nocturnum	Night-scent orchid	E	
Epidendrum rigidum	Rigid epidendrum	E	
Epidendrum strobiliferum	Matted epidendrum	E	
Epigaea repens	Trailing arbutus	E	
Eragrostis tracyi	Sanibel Island lovegrass	E	
Eriogonum longifolium var. *gnaphalifolium* (=*E. floridanum*)	Scrub buckwheat	E	T
Ernodea cokeri	One-nerved ernodea	E	
Ernodea littoralis	Beach creeper	T	
Eryngium cuneifolium	Wedge-leaved button snake-root; scrub celery	E	E
Erythronium umbilicatum	Dogtooth lily; dimpled dogtooth violet	E	
Eugenia confusa	Redberry ironwood	E	
Eugenia rhombea	Red stopper	E	
Eulophia alta	Wild (=ground) coco	T	
Euphorbia telephioides	Telephus spurge	E	T
Forestiera godfreyi	Godfrey's swamp privet	E	
Galactia smallii	Small's milkpea	E	E
Galeandra beyrichii	Helmet orchid	E	
Garberia heterophylla	Garberia	T	
Gentiana pennelliana	Wiregrass gentian	E	
Goodyera pubescens	Downy rattlesnake orchid	E	
Gossypium hirsutum	Wild cotton	E	
Govenia utriculata	Gowen's orchid	E	
Guaiacum sanctum	Lignum-vitae tree	E	
Guzmania monostachia	Fuch's bromeliad	E	
Habenaria distans	Rein orchid (unnamed)	E	
Harperocallis flava	Harper's beauty	E	E
Harrisella filiformis	Threadroot orchid	T	
Hartwrightia floridana	Florida hartwrightia	T	
Hasteola robertiorum	Gulf Hammock Indian plantain	E	
Helianthus carnosus	Lakeside (=flatwoods) sunflower	E	
Hepatica nobilis (=H. americana)	Liverleaf	E	
Hexalectris spicata	Crested coralroot	E	
Hexastylis arifolia	Heartleaf	T	
Hippomane mancinella	Manchineel	E	
Hybanthus concolor	Green violet	E	
Hydrangea arborescens	Wild hydrangea	E	
Hymenocallis henryae	Henry's spiderlily	E	
Hypelate trifoliata	Inkwood; white ironwood	E	
Hypericum cumulicola	Highlands scrub St. John's-wort	E	E
Hypericum edsonianum	Edison's St. John's-wort	E	
Hypericum lissophloeus	Smooth-barked St. John's-wort	E	
Ilex krugiana	Krug's holly	E	
Illicium floridanum	Florida anise	T	

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Illicium parviflorum	Yellow star anise	E	
Ionopsis utricularioides	Delicate ionopsis; violet orchid	E	
Ipomoea microdactyla	Wild potato morning glory	E	
Ipomoea tenuissima	Rocklands morning glory	E	
Isoetes engelmannii	Engelmann's quillwort	E	
Isotria verticillata	Whorled pogonia	E	
Jacquemontia curtissii	Pineland (=Curtiss') clustervine	E	
Jacquemontia reclinata	Beach (=reclined) clustervine	E	E
Jacquinia keyensis	Joewood	T	
Justicia cooleyi	Cooley's water willow	E	E
Justicia crassifolia	Thick-leaved (=large-flowered) water willow	E	
Kalmia latifolia	Mountain laurel	T	
Lantana depressa	Pineland lantana	E	
Lechea cernua	Nodding (=drooping; =scrub) pinweed	T	
Lechea divaricata	Pine (=spreading) pinweed	E	
Lechea lakelae	Lakela's pinweed	E	
Leitneria floridana	Florida corkwood	T	
Leochilus labiatus	Lipped orchid	E	
Lepanthopsis melanantha	Harris' tiny orchid	E	
Lepuropetalon spathulatum	Little people	E	
Liatris ohlingerae	Florida gayfeather; scrub blazing star	E	E
Liatris provincialis	Godfrey's gayfeather	E	
Licaria triandra	Gulf licaria	E	
Lilium catesbaei	Catesby's lily	T	
Lilium iridollae	Panhandle lily	E	
Lindera melissifolia	Swamp spicebush; Jove's fruit; pondberry	E	E
Lindera subcoriacea	Bog spicebush	E	
Linum arenicola	Sand flax	E	
Linum carteri	South Florida (=Everglades) flax	E	
Linum westii	West's flax	E	
Liparis nervosa	Tall twayblade	E	
Listera australis	Southern twayblade	T	
Litsea aestivalis	Pond spice; pond bush	E	
Lobelia cardinalis	Cardinal flower	T	
Lomariopsis kunzeana	Climbing holly fern	E	
Lupinus aridorum (=L. westianus var. *aridorum*)	McFarlin's (=scrub) lupine	E	E
Lupinus westianus	Gulfcoast (=panhandle) lupine	T	
Lycopodium cernuum	Nodding clubmoss	C	
Lycopodium dichotomum	Hanging (=coneless) clubmoss	E	
Lythrum curtissii	Curtiss' loosestrife	E	
Macbridea alba	White birds-in-a-nest	E	T
Macradenia lutescens	Trinidad macradenia	E	
Macranthera flammea	Hummingbird flower	E	
Magnolia acuminata	Cucumber tree	E	

Scientific Name	Common Name(s)	Designated Status GFC	FWS
Magnolia ashei	Ashe's magnolia	E	
Magnolia pyramidata	Pyramidal magnolia	E	
Malaxis unifolia	Green adder's mouth	E	
Malus angustifolia	Crabapple	T	
Marshallia obovata	Barbara's buttons (unnamed)	E	
Marshallia ramosa	Southern barbara's buttons	E	
Matela alabamensis	Alabama milkweed; Alabama anglepod	E	
Matela baldwyniana	Baldwin's milkweed; Baldwin's anglepod	E	
Matela flavidula	Yellow-flowered anglepod	E	
Matela floridana	Florida milkweed; panhandle anglepod	E	
Matela gonocarpos	Anglepod (unnamed)	T	
Maxillaria crassifolia	Hidden orchid	E	
Maxillaria parviflora	Minnie-max	E	
Medeola viginiana	Indian cucumber-root	E	
Melanthera parvifolia	Small-leaved melanthera	E	
Microgramma heterophylla	Climbing vine fern	E	
Monotropa hypopithys	Pinesap (unnamed)	E	
Monotropsis reynoldsiae	Pygmy-pipes; sweet pinesap	E	
Myrcianthes fragrans (=Eugenia simpsonii)	Simpson's ironwood; Simpson's stopper	T	
Najas filifolia	Slender naiad	T	
Nemastylis floridana	Fall-flowering pleat-leaf; celestial lily	E	
Nephrolepis biserrata	Giant sword fern	T	
Neurodium (=Paltonium) lanceolatum	Ribbon fern	E	
Nolina atopocarpa	Florida beargrass	T	
Nolina brittoniana	Scrub (=Britton's) beargrass	E	E
Okenia hypogaea	Burrowing four-o'clock	E	
Oncidium bahamensis	Dancing lady orchid	E	
Oncidium floridanum	Florida oncidium	E	
Oncidium luridum	Mule-ear (=dingy-flowered) orchid	E	
Ophioglossum palmatum	Hand adder's tongue fern	E	
Opuntia spinosissima	Semaphore cactus	E	
Opuntia stricta	Shell mound prickly pear cactus	T	
Opuntia triacantha	Keys joe-jumper	E	
Osmunda cinnamomea	Cinnamon fern	C	
Osmunda regalis	Royal fern	C	
Oxypolis greenmanii	Giant water dropwort	E	
Pachysandra procumbens	Allegheny spurge	E	
Panicum abscissum	Cutthroat grass	E	
Parnassia caroliniana	Coastal (=Carolina) grass-of-parnassus	E	
Parnassia grandifolia	Grass-of-parnassus	E	
Paronychia chartacea	Papery whitlow-wort	E	T
Pecluma dispersa	Polypoda fern (unnamed)	E	
Pecluma plumula	Plume polypoda fern	E	
Pecluma ptilodon	Swamp plume polypoda fern	E	

		Designated Status	
Scientific Name	**Common Name(s)**	**GFC**	**FWS**
Pellaea atropurpurea	Cliff brake fern	E	
Peperomia glabella	Cypress peperomia	E	
Peperomia humilis	Pepper (unnamed)	E	
Peperomia magnoliifolia (=P. spathulifolia)	Spatulate peperonia	E	
Peperomia obtusifolia (=P. floridana)	Florida (=Everglades) peperomia	E	
Phoradendron rubrum	Mahogany mistletoe	E	
Phyllanthus liebmannianus	Pinewood dainties; Florida leaf flower	E	
Physocarpus opulifolius	Ninebark	E	
Pinckneya bracteata (=P. pubens)	Hairy fevertree	T	
Pinguicula caerulea	Blue flowered butterwort	T	
Pinguicula ionantha	Godfrey's (=panhandle) butterwort	E	T
Pinguicula lutea	Yellow flowered butterwort	T	
Pinguicula planifolia	Chapman's (=swamp) butterwort	T	
Pinguicula primuliflora	Primrose-flowered butterwort	E	
Pityopsis flexuosa	Panhandle (=Florida) golden aster	E	
Platanthera blephariglottis	Large white-fringed orchid	T	
Platanthera ciliaris	Yellow-fringed orchid	T	
Platanthera clavellata	Little club-spur orchid; green rein orchid	E	
Platanthera cristata	Golden (=crested) fringed orchid	T	
Platanthera flava	Southern tubercled orchid; gypsy-spikes	T	
Platanthera integra	Southern yellow fringeless orchid; orange rein orchid	E	
Platanthera nivea	Snowy orchid; bog torch	T	
Pleopeltis astrolepis	Star-scaled fern	E	
Pleurothallis gelida	Frosted orchid	E	
Pogonia ophioglossoides	Rose pogonia	T	
Poinsettia pinetorum	Everglades poinsettia	E	
Polygala lewtonii	Scrub milkwort; Lewton's polygala	E	E
Polygala smallii	Tiny (=Small's) milkwort	E	E
Polygonella ciliata var. *basiramia (=P. basiramia)*	Hairy (=tufted) jointweed	E	E
Polygonella macrophylla	Large-leaved jointweed	T	
Polygonella myriophylla	Small's jointweed; sandlace	E	E
Polygonum meisnerianum	Mexican tear-thumb	E	
Polyradicion (=Polyrrhiza) lindenii	Ghost orchid; palm polly	E	
Polystachya flavescens (=P. concreta; =P. extinctoria)	Pale-flowered polystachya	E	
Ponthieva brittoniae	Mrs. Britton's shadow witch	E	
Prescottia oligantha	Small-flowered orchid	E	
Prunus geniculata	Scrub plum	E	E
Pseudophoenix sargentii	Buccaneer (=Sargent's cherry) palm	E	
Pteris bahamensis	Cretan brake fern	E	
Pteroglossaspis (=Eulophia) ecristata	Non-crested coco; false coco	T	
Remirea maritima	Beach star	E	

		Designated Status	
Rhapidophyllum hystrix	Needle palm	C	
Scientific Name	**Common Name(s)**	**GFC**	**FWS**
Rhexia parviflora	Apalachicola (=small-flowered) meadowbeauty	E	
Rhipsalis baccifera	Mistletoe cactus	E	
Rhododendron alabamense	Alabama azalea	E	
Rhododendron austrinum	Florida flame (=orange) azalea	E	
Rhododendron canescens	Pink azalea	C	
Rhododendron chapmanii	Chapman's rhododendron	E	E
Rhus michauxii	Michaux's sumac	E	
Ribes echinellum	Miccosukee (=Florida) gooseberry	E	T
Roystonea elata	Florida royal palm	E	
Rudbeckia nitida	St. John's-susan; yellow coneflower	E	
Ruellia noctiflora	Night-flowering wild petunia	E	
Sachsia bahamensis	Bahama sachsia	E	
Salix eriocephala	Heart-leaved willow	E	
Salix floridana	Florida willow	E	
Salvia urticifolia	Nettle-leaved sage	E	
Sarracenia leucophylla	White-top pitcherplant	E	
Sarracenia minor	Hooded pitcherplant	T	
Sarracenia psittacina	Parrot pitcherplant	T	
Sarracenia purpurea	Decumbant pitcherplant	T	
Sarracenia rubra	Red-flowered (=sweet) pitcherplant	T	
Scaevola plumieri	Inkberry	T	
Schisandra coccinea	Bay star vine	E	
Schizaea germanii	Ray (=tropical curly-grass) fern	E	
Schwalbaea americana	American chaffseed	E	E
Scutellaria floridana	Florida skullcap; helmet-flowers	E	T
Selaginella eatonii	Pygmy spikemoss	E	
Silene polypetala	Fringed campion; fringed catchfly	E	E
Sphenomeris clavata	Parsley (=wedgelet) fern	E	
Sphenostigma coelestina	Bartram's ixia	E	
Spigelia gentianoides	Gentian (=panhandle) pinkroot	E	E
Spigelia loganioides	Florida (=Levy) pinkroot	E	
Spiranthes adnata	Pelexia	E	
Spiranthes brevilabris	Florida ladies' tresses	E	
Spiranthes costaricensis	Costa Rican ladies' tresses	E	
Spiranthes elata	Tall neottia	E	
Spiranthes laciniata	Lace-lip ladies' tresses	T	
Spiranthes longilabris	Long-lip ladies' tresses	T	
Spiranthes ovalis	Oval ladies' tresses	E	
Spiranthes polyantha	Florida Keys (=green) ladies' tresses	E	
Spiranthes torta	Southern ladies' tresses	E	
Spiranthes tuberosa	Little ladies' tresses; little pearl twist	T	
Stachydeoma araveolens	Mock pennyroyal	E	
Stachys crenata	Shade betony	E	

Scientific Name	Common Name(s)	Designated Status GFC	FWS
Stachys tenuifolia	Narrow-leaved betony	E	
Staphylea trifolia	Bladdernut	E	
Stenorrhynchos lanceolata	Leafless beak orchid	T	
Stewartia malacodendron	Silky camellia	E	
Strumpfia maritima	Pride-of-big-pine	E	
Stylisma abdita	Hidden stylisma	E	
Suriana maritima	Bay cedar	E	
Swietenia mahogani	West Indian mahogany	E	
Taxus floridana	Florida yew	E	
Tectaria coriandrifolia	Hairy (=Hattie Bauer) halberd fern	E	
Tectaria heracleifolia	Broad halberd fern	T	
Tectaria fimbriata (=T. lobata)	Least halberd fern	E	
Tephrosia angustissima	Narrow-leaved (=coastal) hoary pea	E	
Tetrazygia bicolor	Tetrazygia	T	
Thalictrum cooleyi	Cooley's meadowrue	E	E
Thalictrum thalictroides	Rue anemone	E	
Thelypteris augescens	Abrupt-tipped maiden fern	T	
Thalypteris grandis	Collier County maiden fern	E	
Thelypteris patens	Grid-scale maiden fern	E	
Thelypteris reptans	Creeping star-hair fern	E	
Thelypteris reticulata	Lattice-vein (=cypress) fern	E	
Thelypteris sclerophylla	Stiff star-hair fern	E	
Thelypteris serrata	Dentate lattice vein fern	E	
Thrinax morrissi	Brittle thatch palm	E	
Thrinax radiata	Florida thatch palm	E	
Tillandsia balbisiana	Inflated (=reflexed) wild pine	T	
Tillandsia fasciculata	Common (=stiff-leaved) wild pine	E	
Tillandsia flexuosa	Twisted and banded air plant	E	
Tillandsia pruinosa	Fuzzy-wuzzy (=hoary) air plant	E	
Tillandsia utriculata	Giant wild pine; giant air plant	E	
Tillandsia valenzuelana	Soft-leaved wild pine	T	
Tipularia discolor	Crane-fly orchid	T	
Torreya taxifolia	Florida torreya	E	E
Tournefortia gnaphalodes	Sea lavender	E	
Tragia saxicola	Florida keys (=rocklands) noseburn	E	
Trichomanes holopterum	Entire winged bristle fern	E	
Trichomanes krausii	Krause's bristle fern	E	
Trichomanes lineolatum	Lined bristle fern	E	
Trichomanes punctatum	Florida bristle fern	E	
Trillium lancifolium	Lance-leaved wake-robin	E	
Triphora craigheadii	Craighead's nodding-caps	E	
Triphora latifolia	Broad-leaved nodding-caps	E	
Triphora trianthophora	Three-birds orchid	T	
Tripsacum floridanum	Florida tripsacum	E	

Scientific Name	Common Name(s)	Designated Status GFC	FWS
Tropidia polystachya	Young-palm orchid	E	
Vanilla barbellata	Worm-vine orchid; link vine	E	
Vanilla dilloniana	Leafless (=Dillon's) vanilla	E	
Vanilla mexicana	Unscented vanilla	E	
Vanilla phaeantha	Leafy (=oblong-leaved) vanilla	E	
Vanilla planifolia	Commercial vanilla	E	
Veratrum woodii	Woods' false hellebore	E	
Verbena maritima	Coastal vervain	E	
Verbena tampensis	Tampa vervain	E	
Verbesina chapmanii	Chapman's crownbeard	T	
Vicia ocalensis	Ocala vetch	E	
Viola tripartita	Yellow violet	E	
Warea amplexifolia	Clasping (=wide-leaf) warea	E	E
Warea carteri	Carter's mustard	E	E
Xanthorhiza simplicissima	Yellowroot	E	
Xyris longisepala	Kral's (=karst pond) yellow-eyed grass	E	
Xyris scabrifolia	Harper's (=harsh-leaf) yellow-eyed grass	T	
Zamia floridana	Florida coontie	C	
Zamia integrifolia	Florida arrowroot	C	
Zamia umbrosa	East coast coontie	C	
Zanthoxylum americanum	Prickly ash	E	
Zanthoxylum coriaceum	Leathery prickly ash	E	
Zanthoxylum flavum	Yellowheart	E	
Zephyranthes atamasco	Rain lily	T	
Zephyranthes simpsonii	Simpson's zephyr lily	T	
Zephyranthes treatiae	Treat's zephyr lily	T	
Zigadenus leimanthoides	Coastal death camas	E	
Ziziphus celata	Florida (=scrub) jujube	E	E

Table 5. CATALOG OF NATURAL ECOLOGICAL COMMUNITIES BY SITE LOCATION

In 1996, KBN, A Golder Associates Company, submitted a report to the Alachua County Department of Planning and Development entitled “Alachua County Ecological Inventory Project”. This report identified, inventoried, map described and evaluated the most significant natural biological communities, both upland and wetland, that remain in private ownership in Alachua County and made recommendations for protecting these natural resources. The location of these sites is shown on the Ecological Inventory Map . The communities found at each site include:

Prairie Creek. Hydric, mesic, and xeric hammock, mesic and scrubby flatwoods, strand swamp, baygall, scrub, blackwater stream, swamp lake, basin marsh, cypress dome.

Hickory Sink. Upland pine forest, xeric hammock, terrestrial and aquatic cave, sinkhole, sinkhole lake.

Hague Flatwoods. Mesic flatwoods, basin swamp, dome swamp and baygall.

Austin Cary Flatwoods. Mesic flatwoods, dome swamp and basin swamp.

Fox Pond. Upland mixed forest.

Buck Bay Flatwoods. Mesic flatwoods, basin swamp, baygall, dome swamp and wet flatwoods.

East San Felasco Hammock. Mesic hammock.

Hogtown Prairie-Sugarfoot. Calcarious Mesic hammock, prairie hammock, wet prairie, and floodplain swamp.

Hatchet Creek. Mesic flatwoods, sandhill, blackwater stream, floodplain swamp, baygall, hydric and mesic hammock.

Kanapaha Prairie. Mesic hammock, sandhill, wet prairie, basin marsh, sinkhole, sinkhole lake, upland pine forest.

Gum Root Swamp. Mesic, wet, and scrubby flatwoods, sandhill, basin swamp.

East Side Greenway (Morningside Greenway). Mesic flatwoods, upland mixed forest, basin swamp.

East Side Newnans Lake. Mesic flatwoods, lake shore swamp and hydric hammock.

Millhopper Flatwoods. Mesic flatwoods, basin swamp, baygall.

Fred Bear Hammock. Mesic hammock, sinkhole, sinkhole lake, seepage stream.

Buzzard's Roost. Mesic hammock, seepage stream, sinkhole, floodplain forest.

North San Felasco Hammock. Mesic hammock, sinkhole lake, seepage stream.

Serenola Forest. Mesic hammock, sinkhole, sinkhole lake.

Paynes Prairie West. Mesic and hydric hammock, sandhill, upland pine forest, wet, scrubby, and mesic flatwoods, baygall.

Kincaid Flatwoods. Wet flatwoods.

Table 7. Gainesville Area Parks is on file at the Dept. of Community Development at Thomas Center B. 334-5022.

Table 7: Park Inventory

Table 8: Invasive Exotic Plants
Florida Exotic Pest Plant Council' s 1999 List of Invasive Species:

Florida Exotic Pest Plant Council's
1999
List of Florida's Most Invasive Species

Purpose: *To focus attention on:*

1. The impacts exotic pest plants have on native bio-diversity in Florida ecosystems.
2. The impact of exotic pest plants on the integrity of native plant community functions.
3. Habitat losses due to exotic plant infestations.
4. The impacts of exotic plants on endangered species via habitat loss and alteration (e.g., Cape Sable seaside sparrow).
5. The need to prevent such losses by comprehensive management for exotic pest plants.
6. The socioeconomic impacts of exotic pest plants (e.g., increased wildfires in *Melaleuca*).
7. Changes in the seriousness of different exotic pest plants over time.
8. The need to provide information that will help managers set priorities for management.

Definitions: *Exotic*–a non-indigenous species, or one introduced to this state, either purposefully or accidentally. A naturalized exotic, such as those listed here, has escaped into the wild where it reproduces on its own either sexually or asexually. *Native*–a species already occurring in Florida at the time of European contact (1500). *Invasive*– a variable condition defined by the category to which the species is assigned.
Abbreviations used: for "Government listed": P=Prohibited by Fla. Dept. of Environmental Protection, N=Noxious weed as listed by Fla. Dept. of Agriculture & Consumer Services and/or U.S. Department of Agriculture.
For information on distributions within Florida, see: http://www.usf.edu/~isb/projects/atlas/mapindex.html
For other information:
Langeland, K. A. and K. Craddock Burks (editors). 1999. Identification & Biology of Non-native Plants in Florida's Natural Areas. Production is supported by 14 federal and private agencies, including Florida EPPC.

Category I–Species that are invading and disrupting native plant communities in Florida. *This definition does not rely on the economic severity or geographic range of the problem, but on the documented ecological damage caused.*

Scientific Name	***Common Name***	***FLEPPC Rank***	***Government Listed***
Abrus precatorius	*rosary pea*	*I*	
Acacia auriculiformis	*earleaf acacia*	*I*	
Albizia julibrissin	*mimosa, silk tree*	*I*	
Albizia lebbeck	*woman's tongue*	*I*	
Ardisia crenata (= A. crenulata)	*coral ardisia*	*I*	
Ardisia elliptica (=A. humilis)	*shoebutton ardisia*	*I*	
Asparagus densiflorus	*asparagus-fern*	*I*	
Bauhinia variegata	*orchid tree*	*I*	
Bischofia javanica	*bischofia*	*I*	
Scientific Name	***Common Name***	***FLEPPC***	***Government***

		Rank	Listed
Calophyllum antillanum (=C. calaba; C. inophyllum, often misapplied in cultivation)	*santa maria (names "mast wood," "Alexandrian laurel" used in cultivation)*	*I*	
Casuarina equisetifolia	*Australian pine*	*I*	*P*
Casuarina glauca	*suckering Australian pine*	*I*	*P*
Cestrum diurnum	*day jessamine*	*I*	
Cinnamomum camphora	*camphor-tree*	*I*	
Colocasia esculenta	*wild taro*	*I*	
Colubrina asiatica	*lather leaf*	*I*	
Cupaniopsis anacardioides	*carrotwood*	*I*	*N*
Dioscorea alata	*winged yam*	*I*	*N*
Dioscorea bulbifera	*air-potato*	*I*	*N*
Eichhornia crassipes	*water-hyacinth*	*I*	*P*
Eugenia uniflora	*Surinam cherry*	*I*	
Ficus microcarpa (F. nitida andF. retusa var. nitida misapplied)	*laurel fig*	*I*	
Hydrilla verticillata	*hydrilla*	*I*	*P, N*
Hygrophila polysperma	*green hygro*	*I*	*P, N*
Hymenachne amplexicaulis	*West Indian marsh grass*	*I*	
Imperata cylindrica (Imperata brasiliensis misapplied)	*cogon grass*	*I*	*N*
Ipomoea aquatica	*waterspinach*	*I*	*P, N*
Jasminum dichotomum	*Gold Coast jasmine*	*I*	
Jasminum fluminense	*Brazilian jasmine*	*I*	
Lantana camara	*lantana, shrub verbena*	*I*	
Ligustrum sinense	*Chinese privet, hedge privet*	*I*	
Lonicera japonica	*Japanese honeysuckle*	*I*	
Lygodium japonicum	*Japanese climbing fern*	*I*	*N*
Lygodium microphyllum	*Old World climbing fern*	*I*	*N*
Macfadyena unguis-cati	*cat's claw vine*	*I*	
Melaleuca quinquenervia	*melaleuca, paper bark*	*I*	*P, N*
Melia azedarach	*Chinaberry*	*I*	
Mimosa pigra	*catclaw mimosa*	*I*	*P,N*
Nandina domestica	*nandina, heavenly bamboo*	*I*	
Nephrolepis cordifolia	*sword fern*	*I*	
Nephrolepis multiflora	*Asian sword fern*	*I*	
Neyraudia reynaudiana	*Burma reed; cane grass*	*I*	*N*
Paederia cruddasiana	*sewer vine, onion vine*	*I*	*N*
Paederia foetida	*skunk vine*	*I*	*N*
Panicum repens	*torpedo grass*	*I*	

Pennisetum purpureum	*Napier grass*	*I*

Scientific Name	*Common Name*	*FLEPPC Rank*	*Government Listed*
	water lettuce	*I*	*P*
Pistia stratiotes			
Psidium cattleianum (=P. littorale)	*strawberry guava*	*I*	
Psidium guajava	*guava*	*I*	
Pueraria montana (=P. lobata)	*kudzu*	*I*	*N*
Rhodomyrtus tomentosa	*downy rose-myrtle*	*I*	*N*
Rhoeo spathacea (=R. discolor; Tradescantia spathacea)	*oyster plant*	*I*	
Sapium sebiferum	*popcorn tree, Chinese tallow tree*	*I*	*N*
Scaevola sericea (=Scaevola taccada var. sericea, S. frutescens)	*scaevola, half-flower, beach naupaka*	*I*	
Schefflera actinophylla (=Brassaia actinophylla)	*schefflera, Queensland umbrella tree*	*I*	
Schinus terebinthifolius	*Brazilian pepper*	*I*	*P, N*
Senna pendula (=Cassia coluteoides)	*climbing cassia, Christmas cassia, Christmas senna*	*I*	
Solanum tampicense (=S. houstonii)	*wetland night shade, aquatic soda apple*	*I*	*N*
Solanum torvum	*susumber, turkey berry*	*I*	*N*
Solanum viarum	*tropical soda apple*	*I*	*N*
Syzygium cumini	*jambolan, Java plum*	*I*	
Tectaria incisa	*incised halberd fern*	*I*	
Thespesia populnea	*seaside mahoe*	*I*	
Tradescantia fluminensis	*white-flowered wandering jew*	*I*	
Urochloa mutica (= Brachiaria mutica)	*Pará grass*	*I*	

Category II—*Species that have shown a potential to disrupt native plant communities. These species may become ranked as Category I, but have not yet demonstrated disruption of natural Florida communities.*

Scientific Name	*Common Name*	*FLE PPC Rank*	*Government Listed*
Adenanthera pavonina	*red sandalwood*	*II*	
Agave sisalana	*sisal hemp*	*II*	
Aleurites fordii	*tung oil tree*	*II*	
Alstonia macrophylla	*devil-tree*	*II*	
Alternanthera philoxeroides	*alligator weed*	*II*	*P*
Anredera leptostachya	*Madeira vine*	*II*	
Antigonon leptopus	*coral vine*	*II*	
Aristolochia littoralis	*calico flower*	*II*	
Asystasia gangetica	*Ganges primrose*	*II*	
Begonia cucullata	*begonia*	*II*	
Broussonetia papyrifera	*paper mulberry*	*II*	
Callisia fragrans	*inch plant, spironema*	*II*	
Casuarina cunninghamiana	*Australian pine*	*II*	*P*
Cereus undatus (=Hylocereus undatus)	*night-blooming cereus*	*II*	
Clerodendrum bungei	*strong-scented glorybower*	*II*	
Cryptostegia madagascariensis	*rubber vine*	*II*	
Cyperus alternifolius (=C. involucratus)	*umbrella plant*	*II*	
Cyperus prolifer	*dwarf papyrus*	*II*	
Dalbergia sissoo	*Indian rosewood, sissoo*	*II*	
Eleagnus pungens	*thorny eleagnus*	*II*	
Enterolobium contortisilquum	*ear-pod tree*	*II*	
Epipremnum pinnatum cv. Aureum	*pothos*	*II*	
Ficus altissima	*false banyan*	*II*	
Flacourtia indica	*governor's plum*	*II*	
Flueggea virosa	*Chinese waterberry*	*II*	
Hibiscus tiliaceus	*mahoe, sea hibiscus*	*II*	
Hiptage benghalensis	*hiptage*	*II*	
Jasminum sambac	*Arabian jasmine*	*II*	
Koelreuteria elegans	*golden rain tree*	*II*	
Leucaena leucocephala	*lead tree*	*II*	
Ligustrum lucidum	*glossy privet*	*II*	
Livistona chinensis	*Chinese fan palm*	*II*	
Melinis minutiflora	*molasses grass*	*II*	
Merremia tuberosa	*wood-rose*	*II*	
Murraya paniculata	*orange-jessamine*	*II*	

Myriophyllum spicatum	*Eurasian water-milfoil*	*II*	*P*
Ochrosia parviflora (=O. elliptica)	*kopsia*	*II*	
Oeceoclades maculata	*ground orchid*	*II*	
Passiflora biflora	*twin-flowered passion vine*	*II*	

Scientific Name	***Common Name***	***FLEPPC Rank***	***Government Listed***
Passiflora foetida	*stinking passion-flower*	*II*	
Phoenix reclinata	*Senegal date palm*	*II*	
Phyllostachys aurea	*golden bamboo*	*II*	
Pteris vittata	*Chinese brake*	*II*	
Ptychosperma elegans	*solitary palm*	*II*	
Rhynchelytrum repens	*Natal grass*	*II*	
Ricinus communis	*castor bean*	*II*	

Scientific Name	***Common Name***	***FLEPPC Rank***	***Government Listed***
	Mexican petunia	*II*	
Ruellia brittoniana (=R. tweediana)			
Sansevieria hyacinthoides (=S. trifasciata)	*bowstring hemp*	*II*	
Sesbania punicea	*purple sesban, rattlebox*	*II*	
Solanum diphyllum	*twinleaf nightshade*	*II*	
Solanum jamaicense	*Jamiaca nightshade*	*II*	
Syngonium podophyllum	*arrowhead vine*	*II*	
Syzygium jambos	*rose-apple*	*II*	
Terminalia catappa	*tropical almond*	*II*	
Tribulus cistoides	*puncture vine, burnut*	*II*	
Triphasia trifoliata	*lime berry*	*II*	
Urena lobata	*Caesar's weed*	*II*	
Wedelia trilobata	*wedelia*	*II*	
Wisteria sinensis	*Chinese wisteria*	*II*	
Xanthosoma sagittifolium	*malanga, elephant ear*	*II*	

Citation example:

Florida Exotic Pest Plant Council. FLEPPC 1999 List of Florida's Most Invasive Species. Internet: http://www.fleppc.org/99list.htm

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Vacant Lands Inventory Report is on file at Dept. of Community Development, Thomas Center B. 334-5022

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Goals, Objectives & Policies

Cultural Affairs Element

EXPAND THE ROLE OF THE CITY TO MEET THE NEED FOR SERVICES, COORDINATION, LEADERSHIP AND FUNDING FOR THE CULTURAL GROWTH OF THE COMMUNITY.

GOAL 1

The City shall recognize and support Arts and Cultural organizations as an important factor in the economic prosperity of the community.

Objective 1.1

1.1.1 The City shall maintain a funding commitment of $145,000 at a minimum, annually to the arts through a general government grants program.

1.1.2 The City shall continue investigating methods to increase arts funding, such as additional dedicated funding sources.

1.1.3 The City shall participate in reliable economic impact surveys at least every four years and educate the business community regarding the benefits of supporting our cultural resources.

Policies

The City shall increase its visibility and recognition as the Local Arts Agency (LAA), in cooperation with the Gainesville/Alachua County Cultural Affairs Board.

Objective 1.2

1.2.1 The City shall hold at least two workshops yearly to address issues of concern, such as: sponsorships, audience development, tourist development, marketing and grant writing and others.

Policies

Established 8/22/94, Ord. 4011
Revised 7/24/00, Ord. 990215
Revised 1/19/12, Ord. 110170

1.2.2 The City shall serve as a resource center for grant applicants, providing reference materials and technical assistance to organizations and individuals.

1.2.3 The City shall maintain a web presence to promote its services and programs.

1.2.4 The City shall create an annual forum to recognize the contribution of the arts and cultural agencies to the community.

1.2.5 The City shall utilize the Gainesville/Alachua County Cultural Affairs Board and the Local Arts Agency as advisors on all cultural issues.

GOAL 2 **THE CITY SHALL FOSTER THE GROWTH OF A COMMUNITY WHERE THE ARTS ARE INCORPORATED AS A PART OF DAILY LIFE.**

Objective 2.1 **The City shall maximize access to the arts.**

Policies

2.1.1 The City shall provide access to the arts and cultural programs for all of its citizens and promote a regional audience which is familiar with a range of cultural expressions to include eco-heritage, ethnic, media, folk arts, and fine arts.

2.1.2 The City shall sponsor cultural events in the downtown central city core and other redevelopment areas in order to foster reinvestment in these communities.

2.1.3 Every five years, the City shall continue to review the physical conditions and accessibility of existing City facilities for their potential to meet community cultural needs.

2.1.4 The City shall identify resources for cultural programs serving youth, elderly and other disadvantaged groups.

2.1.5 The City shall work with appropriate planners and officials to take advantage of opportunities to create arts and cultural spaces.

2.1.6 The City shall review ways to maximize access to the arts and cultural resources by age.

2.1.7 The City shall promote public celebration of cultural diversity through public festivals and public events.

Established 8/22/94, Ord. 4011
Revised 7/24/00, Ord. 990215
Revised 1/19/12, Ord. 110170

The City shall encourage public and private display of art. — **Objective 2.2**

Policies

2.2.1 The City shall support public art projects through its Art in Public Places ordinance, that dedicates at least 1 percent of the cost of new, renovated and/or expanded public buildings to art.

2.2.2 The City shall fund public art and sculpture along its important thoroughfares and public spaces, identify appropriate locations for its placement, and sponsor design competitions to ensure public input into the process.

2.2.3 The City shall maintain the Thomas Center Galleries as an important contribution to the public display of art.

The City shall enhance and support opportunities for artistic training and preparation across all creative and performing art forms and at all levels. — **Objective 2.3**

Policies

2.3.1 The City shall cooperate with the School Board of Alachua County to enhance arts education through advocacy of the arts and support of extracurricular arts.

2.3.2 The City shall continue to support programs which stimulate artistic creativity and/or develop creative artists.

Established 8/22/94, Ord. 4011
Revised 7/24/00, Ord. 990215
Revised 1/19/12, Ord. 110170

CULTURAL AFFAIRS ELEMENT

Data and Analysis Report

INTRODUCTION

The cultural "industry" plays a critical role in the economic and social development of our country, the State of Florida and Gainesville/Alachua County. According to Arts and Economic Prosperity III, a national survey conducted in 2006 by the prestigious Americans for the Arts, between 2000 and 2005 the non-profit arts and cultural industry in our country grew 24% from $134 billion to $166.2 billion. Spending by their audiences grew 28%. This industry employed 2.6 million full-time equivalent jobs nationwide. Further information about this report can be found at <AmericansForTheArts.org>.

Here in Alachua County the survey results (with only 18 agencies responding) showed a total of $40,975,003 in industry expenditures and 1,145 full-time equivalent jobs. These 18 agencies also generated $3.22 million dollars in state and local government revenues. A copy of this report can be found on the City of Gainesville Parks, Recreation and Cultural Affairs Department, Division of Cultural Affair's website, <gvlculturalaffairs.org>.

US House of Representatives member Louise Slaughter is quoted as saying, "Across America, cities that once struggled economically are reinventing themselves by investing in art and culture - a proven catalyst for growth and economic prosperity. By creating cultural hubs, non-profit arts businesses help cities define themselves, draw tourists, and attract investment. Federal support for America's non-profit cultural organizations must go on if we hope to continue enjoying the substantial benefits they bring."

Support for the local non-profit cultural industry is vital to the economic prosperity of Gainesville/ Alachua County. Cultural resources are essential to the community's efforts to attract and retain high quality businesses and recruit professionals for government positions as well as for UF and Shands. Cultural activities enliven our neighborhoods and strengthen the sense of community which binds us together. They invigorate the downtown area and surround our civic buildings with an expression of the vitality of our cultural life. Participation in the arts improves the quality of education in our schools and brings fulfillment and inspiration to all. The scope of "cultural" is defined to include ethnic and historic resources, media and folk arts, as well as the fine and popular arts.

The Cultural Affairs Element is supplemented by the Cultural Plan for Alachua County, a document produced under the aegis of the Gainesville/Alachua County Cultural Affairs Board and the City of Gainesville Parks, Recreation and Cultural Affairs Department, Division of Cultural Affairs and approved by both the City and County Commissions. The planning process itself, with its exchange of information and ideas among arts leaders, academic leaders, community planners, business leaders, community representatives and interested individuals, contributes greatly to the mutual understanding and consensus-building which will ultimately drive future successful efforts. The Cultural Plan recognizes that the arts are vital to the economic prosperity of Gainesville and Alachua County, that our community has many valuable cultural arts resources, and that the community, its institutions of higher education, businesses and the local arts and arts organizations share a common interest in fostering the arts locally.

THE VISION

Successful implementation of this Cultural Affairs Element and the Cultural Plan will create a unique environment in which the arts and cultural resources attract regional and national attention and enhance the cultural and economic life of the community. The vision includes:

- A community where the definition of "arts and culture" encompasses historic, ethnic, electronic, and folk arts as well as the traditional fine arts;
- A community where local and regional arts and culture, social, sports, civic, educational and fraternal organizations complement one another, sharing resources, information, and coordinating events;
- A community where local and regional governments and the business community become more aware of the economic impact of arts and culture and support it as a growing industry;
- A community where cultural participation is an integral and appreciated part of everyday life;
- A community where the cultural amenities attract visitors, bringing new revenue to the industry and local governments;
- A community that celebrates its arts and cultural resources and individual artists;
- A community where arts and cultural education and audience development are an on-going commitment involving all parts of the community; and
- A community where all citizens have access to the arts and cultural resources regardless of income, age, proximity, cultural heritage, social environment or ability.

THE ROLE OF THE CITY OF GAINESVILLE PARKS, RECREATION AND CULTURAL AFFAIRS DEPARTMENT, DIVISION OF CULTURAL AFFAIRS

The mission of the City of Gainesville Parks, Recreation and Cultural Affairs Department, Division of Cultural Affairs (PRCADCA) as the designated Local Arts Agency (LAA) for Alachua County has been to promote cultural activity in Alachua County and develop mechanisms that support and encourage community-based cultural resources. The PRCADCA works cooperatively with the Alachua County Visitor and Convention Bureau, the Community Redevelopment Agency, the University of Florida, the School Board of Alachua County, the Gainesville Downtown Owners and Tenants Association, the Chamber of Commerce, and the Alachua County Library District, among others, to provide programs in response to identified needs. PRCADCA advocates for the arts at the local and state levels, and studies the impact of arts on the local economy.

The PRCADCA administers grant programs to local arts organizations for both the City and the County, provides professional workshops, technical assistance and artist referral services for the arts community, maintains an 11,000-name data base, provides low cost rental space for artists and arts organizations, and co-sponsors over one hundred programs or events each year. The PRCADCA also administers a percent for art program; markets the area attractions to tourists; establishes the popular cell phone tours of areas of interest; and produces a variety of free or low cost cultural festivals and public performances which attract tourists and are accessible to underserved constituencies.

INVENTORY AND ANALYSIS

Inventory of Cultural Events

City-produced Events

To showcase local talent, educate youth and provide entertainment, the City of Gainesville Parks, Recreation and Cultural Affairs Department, Division of Cultural Affairs (PRCADCA) produces a variety of annual events (see Appendix A). Several of these events have become major regional festivals. The Hoggetowne Medieval Faire has been held yearly since 1986 and attracts crowds of nearly 50,000, over half from outside of Alachua County. The extensive educational program attracts 10,000-13,000 school children from Alachua County and 13 - 18 surrounding counties who come on school trips. The Faire has gained a growing reputation with the Renaissance Faire professionals as a good selling show. This is an essential ingredient if the show is to be successful year after year. In order to allow families and low-income persons to attend, the PRCADCA keeps the admission fee at a minimum needed to pay for the event.

The two-day Downtown Festival and Art Show has been nationally recognized as one of the top two hundred arts festivals in the nation. This annual event has been held since 1981, and now has an attendance of over 100,000. The event, featuring over two-hundred and fifty fine artists and crafts persons as well as continuous performances on three stages, grew quickly once it became a City program in 1992 largely due to year-round staffing.

Since 1997, the PRCADCA has planned events for the Downtown Community Plaza, now renamed the BoDiddley Community Plaza to honor the nationally famous musician who resided in our area. This resulted in the enormously successful "Let's Go Downtown" series of Free Friday night concerts which runs from May through October and attracts weekly audiences of four to eight hundred people. Since 1997, the New Year's Eve "Downtown Countdown", a free musical welcome to the New Year, has attracted several thousand attendees.

A new cultural event in its third year is the Heart of Asian Festival coordinated by the PRCADCA focusing on art, dance, music, cuisine, and more. The festival showcases the rich cultures of the Asian continent. In addition to a broad and diverse entertainment lineup, festival goers can dine on a variety of Asian foods and visit the numerous booths that feature Asian arts, crafts and information about Asian cultural organizations and student groups.

The City has focused attention on its older neighborhoods and downtown by co-sponsoring several events in redevelopment areas. Examples include the NW 5th Avenue Festival, Santa Fe Community College's Spring Arts Festival and the Downtown Jazz and Blues Festival. Many other City activities, including the Tench Artist Studios, are directed toward establishing and supporting a concentration of artistic activities and businesses in the downtown.

The Community Redevelopment Agency has taken some responsibility for the Bo Diddley Plaza development and the Parks, Recreation and Cultural Affairs Department continues its maintenance, as well as the "Free Fridays" concert series from May through October.

Other Events

In addition to the annual events, the Division also co-sponsors over 150 cultural events in the Thomas Center per year. This program allows local poets, musicians and actors to perform at the Thomas Center at a minimal cost and to retain the gate receipts as their fee. It is estimated that this program provides a minimum source of income of $40,000 for the local arts community. Many events are produced by other organizations in the city. The forty-year old Santa Fe Community College Spring Arts Festival attracts attendees from all over the north Florida area. The 5th Avenue Arts Festival, produced for thirty years by the private non-profit Cultural Arts Coalition, is the largest African-American Festival in Florida north of Orlando. (See Appendix A for summary of annual events in Gainesville).

Inventory of Cultural Facilities

City Facilities

Cultural Affairs manages the 17,000-square foot historic Thomas Center. The Thomas Center, listed on the National Register of Historic Places, serves as an historic resource for the entire community and as a point of interest for visitors to Alachua County. Permanent informational displays and brochures furnish the casual visitor with an historical overview. Cell phones tours, brochures and pre-arranged docent tours provide visitors with a more personal history of the building and its original residents. In coordination with the School Board, all third-graders in the county are taken on a docent-led tour of the Thomas Center, the surrounding Northeast Historic District and the Art in Public Places sites through a program funded by the Thomas Center Associates, a not-for-profit support organization. PRCADCA is working with the Thomas Center Associates to gain museum status for the Thomas Center.

The Thomas Center houses two galleries: the Main Gallery which has a growing state and regional reputation for originating exhibits which often tour the Southeast; and the Mezzanine Gallery which offers seven shows yearly of the best area artists, including four exhibitions by the School Board of Alachua County showcasing the work done by kindergarten through 12th grade students. Various guided tours, children's programs and seminars are also presented under the auspices of the Thomas Center Galleries.

The City-owned Tench Building, which dates from 1887, has been made available, both as studio space for six artists and as non-profit print cooperative. The Tench Building generates rental revenues to help offset the Parks, Recreation and Cultural Affairs Department, Division of Cultural Affairs budget. As individual artists are able to develop a market for their works, it is not uncommon that they relocate their studios into the general economy.

The Department manages the Wilhelmina Johnson Resource Center, located in a designated redevelopment area, which has traditionally served as a neighborhood cultural center. This historic building which began its life as Fire Station #2, houses the Cultural Arts Coalition, the only African American 501(c) 3 organization in the City, and provides free space for civic meetings and cultural events.

In 2007 the Jones family donated the home of a leading figure in local African American education, A. Quinn Jones. The residence was recently designated by the State as a Florida Heritage Site. This building's development as a cultural center/house museum is a joint project of the Department of Parks, Recreation and Cultural Affairs and the Community Redevelopment Agency. This structure is also now listed on the National Register of Historic Places.

Other Cultural Facilities

The University of Florida and Santa Fe Community College provide many of the major cultural facilities available to citizens and visitors. The Phillips Center for the Performing Arts brings national and internationally known performers to our area. The University's Samuel P. Harn Museum of Art has a well-deserved national reputation for originating high-quality exhibits. The Florida Museum of Natural History is one of the finest facilities of its kind in the state and the Lepidoptera Center with its Butterfly Rainforest exhibit has become a major tourist attraction. The private non-profit Hippodrome State Theater is the only professional theater in North Central Florida. In addition, Gainesville boasts two other long-running theaters: the Gainesville Community Playhouse and the Acrosstown Repertory Theater.

Appendix B provides an inventory of Performing and Visual Arts Spaces located in the Gainesville Urban Area. The inventory identifies the type, size and location of performing arts facilities, visual arts facilities and museums.

ECONOMIC IMPACT OF THE ARTS IN ALACHUA COUNTY

The cultural industry lies at the center of a circle of economic activities which together have an enormous effect on the community as a whole. The information collected for the 2006 Arts & Economic Prosperity III report provides compelling new evidence that nonprofit arts and culture organizations are a significant industry in Alachua County—one that generated $40.98 million in local economic activity in 2005. This spending–$22.2 million by nonprofit arts and culture organizations and an additional $18.78 million in event-related spending by their audiences—supports 1,145 full-time equivalent jobs, generates $21.01 million in household income to local residents, and delivers $3.22 million in local and state government revenue. This economic impact study sends a strong signal that when the arts are supported, it not only enhances quality of life, but also provides investment in the local economy.

Alachua County is one of 156 communities that participated in Arts & Economic Prosperity III, the most comprehensive study of its kind ever conducted. It documents the economic impact of the nonprofit arts and culture industry in 116 cities and counties, 35 multicounty regions, and five states—representing all 50 states and the District of Columbia. The diverse regions in this study range in population (4,000 to 3 million) and type (rural to urban). Researchers collected detailed expenditure and attendance data from 6,080 nonprofit arts and culture organizations and 94,478 of their attendees to measure total industry spending. Project economists customized input/output analysis models to calculate specific and reliable findings for each study region. This study focuses solely on the economic impact of nonprofit arts and culture organizations and event-related spending by their audiences. Not included in this study are spending by individual artists and the for-profit arts and culture sector (e.g., Broadway or the motion picture industry). The Department will be participating in this same study in 2011 as part of its effort to continue to

educate and inform the public and civic leaders on the value and benefits the arts bring to our region.

Arts-related businesses

Equally important are those parts of the arts industry that are less visible than the presenting organizations. Over 120 local businesses provide equipment and services to consumers for music, dance, theater and the visual arts. In addition to these businesses are the hundreds of individuals who produce and/or teach the arts as a primary or secondary occupation.

Promotion of Cultural Tourism

Under the current Tourist Product Development program, the City and County collaborate to develop and promote cultural tourism. The County earmarks 85% of one penny (just under $500,000 in 2008) in tourism tax revenues for development and promotion of tourism events and attractions. The funds are distributed through a grant process that is administered by the City of Gainesville Parks, Recreation and Cultural Affairs Department. In addition, the Department aggressively markets the cultural offerings in Alachua County through several marketing campaigns, using traditional media outlets and current electronic opportunities, such as, websites, Facebook, Twitter and cell phone tours.

Art in Public Places Ordinance

Cities such as Seattle, Cedar Rapids and Miami have integrated Public Art into community planning. Based on the idea that large public works projects are a frequent part of our daily experience but are usually dreary or even oppressive, these cities have developed master design plans that recognize artists as thoughtful contributors to the design of the environment. Artists can have a positive impact on the look and feel of a streetscape, park, roadway, wastewater treatment facility, city gateway, or bus stop. By thoughtful viewing of the city, understanding the relationships between parts and the whole and integrating the visual vernacular common to all art, artists make concrete contributions to the visual perspective of the environment. A specific long-range master design plan has been developed to integrate goals of the City of Gainesville's Departments of Community Development, Public Works and Parks, Recreation and Cultural Affairs.

Identified Needs from the Cultural Plan for Alachua County

The Cultural Affairs Element is based on several needs identified in the Cultural Plan. The Plan is the forerunner to this Element, but is somewhat more encompassing as it addresses Countywide arts activities. The Plan identifies local cultural organizations and establishes mechanisms for communication and cooperation among the variety of organizations and interest areas. It identifies steps by which to better integrate the arts with the community as a whole. Furthermore, it identifies several items to be addressed, such as audience development, agency support, and physical facilities.

Audience Development

The Cultural Plan for Alachua County identifies nine goals of which four deal directly with developing and increasing audiences for the arts through education, promotion and marketing, and generating tourism. Audience development is a very important role both for individual arts organizations and the City. Efforts to inform the public about the City's cultural resources and programs need to be ongoing. Reducing barriers of price, logistics, transportation and access will allow those who have felt excluded to participate. A coordinated, countywide effort to promote cultural tourism, ecotourism and historic tourism has the potential to markedly increase the number of visitors to this area and therefore increase audiences for the arts.

Agency Support

Another goal of the Cultural Plan is to enlarge the role of the Department of Parks, Recreation and Cultural Affairs. Since the establishment of the Office of Cultural Affairs in 1979, the City's role has evolved dramatically. Since 1985, the Division of Cultural Affairs has functioned as the State's designated Local Arts Agency (LAA) for Alachua County. This role continues as an integral part of the mission of the Department. The National Endowment for the Arts (NEA) and the Florida Department of State encourage the development of a network of designated LAAs. This designation impacts the Local Arts Agency's eligibility to qualify for grants and increases the success rate of local arts organizations to qualify for grants. Both the Florida Department of State and the National Endowment for the Arts require coordination of cultural activities at the local level.

These goals have been incorporated into the goals and objectives for the 2010-2020 Cultural Affairs Element in the City's Comprehensive Plan.

Appendix A
Annual Outdoor Events

Event	Date
Alachua Music Harvest	October
Heart of Asian Festival	October
Archer Cultural Arts Festival	Spring
Archer Yulee Day	June
Art in Thornebrook Village	Fall
Downtown Festival & Art Show	November
Downtown Blues Festival	November
Fanfares & Fireworks	July
Fifth Avenue Arts Festival	Mid-May
Gainesville Spring Pilgrimage	Mid March
Gay Pride Festival	June
Hawthorne Annual Christmas Festival	December
High Springs Old Time Christmas	December
High Springs Pioneer Days	May
Hoggetowne Medieval Faire	February
Homecoming	Fall
Kanapaha Spring Garden Festival	March
Let's Go Downtown Free Fridays	May-October
Martin Luther King, Jr. Celebration	January
Melrose Grape Festival	September
Micanopy Fall Harvest Festival	October/November
Morningside Farm & Forest Festival	April
Newberry Cultural Arts Superfest	May
Newberry Watermelon Festival	June
New Year's Celebration	December
Paynes Prairie Historic Walk Through Time	Spring
SFCC Spring Arts Festival	April
T. Gilbert Pearson Day – Archer	November
Waldo Antique & Craft Fair	Spring
Waldo Railroad Days	April
*March of Dimes WalkAmerica	March
Windsor Zucchini Festival	Spring
Winter Solstice Festival	December

* Not a cultural event, but received City Support Services

Appendix B

Inventory of Cultural Facilities

Facility	# of Seats	Stage size (feet)	Exhibit Space (running ft.)	# of Exhibit Spaces
PERFORMING FACILITIES				
Community Facilities:				
Acrosstown Repertory Theatre Baird Center 619 S Main Street Gainesville, FL 32601 375-1321	99	40 x 28		
Alachua County Library District Meeting Room (Rotunda) 401 East University Avenue Gainesville, FL 32601 334-3900				
Gainesville Community Playhouse 4039 NW 16th Blvd Gainesville, FL 32605	210	50 x 30		
Hippodrome State Theatre Second Stage 25 SE 2nd Place Gainesville, FL 32601 Mary Hausch 373-5968	86	40 x 18		
India Cultural & Educational Center 1115 SW 13th Street Gainesville, FL 32608 379-2911	900 Available For Rent	40 x 35	None	
Oak Hall School Theatre 8009 SW 14th Avenue Gainesville, FL 32608	400	40 x 30		1
Santa Fe Community College Auditorium 3000 NW 83rd Street PO Box 1530 Gainesville, FL 32602	350	50 x 75		
University of Florida:				
Constans Theatre J Wayne Reitz Union Room 330 University of Florida Gainesville, FL 32611	450	50 x 40		

Facility	# of Seats	Stage size (feet)	Exhibit Space (running ft.)	# of Exhibit Spaces
J Wayne Reitz Auditorium J Wayne Reitz Union 2nd floor University of Florida Gainesville, FL 32611 392-1645	350	12 x 30		
Medical Science Building Medical Center University of Florida Gainesville, FL 32611	528	20 x 20		
Reitz Union J Wayne Reitz Union Ballroom University of Florida Gainesville, FL 32611	750	Portable	250-300 ft	
Samuel P Harn Museum NW 34th Street and Hull Road University of Florida Gainesville, FL 32611	250	22 x 10	32,800 Square Feet	
Stephen O'Connell Center J Wayne Reitz Union Room 330 University of Florida	12,000	Portable		
University of Florida Center for the Performing Arts Gainesville, FL 32614	1800	50 x 50		
City of Gainesville				
Bivens Arm Amphitheatre 3650 S Main Street Gainesville, FL 32601 Steve Phillips 334-5067	50	20 x 20		
Downtown Plaza 200 East University Avenue Gainesville, FL 334-5064 Krystal Martin 393-7527		50 x 25		
Spanish Court - Thomas Center 302 NE 6th Avenue, PO Box 490 Gainesville, FL 32602 Erica Chatman 393-8539	150	12 x 12		

Facility	# of Seats	Stage size (feet)	Exhibit Space (running ft.)	# of Exhibit Spaces
Turtle Court - Thomas Center 302 NE 6th Avenue, PO Box 490 Gainesville, FL 32602 Erica Chatman 393-8539	80	12 x 12		
Children's Amphitheatre Thomas Center 302 NE 6th Avenue, PO Box 490 Gainesville, FL 32602 Erica Chatman 393-8539	80	20 x 20		
Martin Luther King, Jr. Multipurpose Center 1028 NE 14th Street Gainesville, FL 32601 Shannon Keleher, 393-8526	600	45 x 25		
Wilhelmina Johnson Resource Center 321 NW 10th Street Gainesville, FL 32601 Nkwanda Jah 372-0216	40	12 x 12		
Alachua County School Board:				
A Q Jones Center 1108 NW 7th Avenue Gainesville, FL 32601 336-2840	300 Available for Rent Must Contact Individual Schools	Stage		
Abraham Lincoln Middle School 1001 SE 12th Street Gainesville, FL 32601 Ginger Chiles, Principal 336-2711	750 Available for Rent Must Contact Individual Schools	Stage		
Buchholz High School 5510 NW 27th Avenue Gainesville, FL 32601 Mae Islaar, Principal 336-2702	708 Available for Rent Must Contact Individual Schools	Stage		
Eastside High School 1201 SE 45th Terrace Gainesville, FL 32601 Dr. Robert Schenck, Principal 336-2704	708 Available for Rent Must Contact Individual Schools	Stage		

Facility	# of Seats	Stage size (feet)	Exhibit Space (running ft.)	# of Exhibit Spaces
Gainesville High School 1900 NW 13th Street Gainesville, L 32601 Dr. Dan Boyd, Principal 336-2707	940 Available for Rent Must Contact Individual Schools	Stage		
Lanier Center 312 NW 16th Avenue Gainesville, FL 32601 336-2841	200+ Available for Rent Must Contact Individual Schools	Stage		
Marjorie K Rawlings Elementary School 3500 NE 15th Street Gainesville, FL 32601 Liz Parker, Principal 336-2715	200+ Available for Rent Must Contact Individual Schools	Stage		
Newberry Elementary School Newberry, FL 32669 Dr. Dianne Lagotic, Principal 472-2144	200+ Available for Rent Must Contact Individual Schools	Stage		
Newberry Jr/Sr High School Highway 26 Newberry, FL 32669 Harry Conner, Principal 472-2174	600 Available for Rent Must Contact Individual Schools	Stage		
Prairie View Elementary School 1801 SE 32nd Place Gainesville, FL 32601 Dr Lougene Hill, Principal 336-2714	200+ Available for Rent Must Contact Individual Schools	Stage		
Santa Fe High School Alachua, FL 32615 Jeff Jones, Principal 462-1125	500 Available for Rent Must Contact Individual Schools	Stage		
W A Metcalfe Elementary School 1905 NE 12th Street Gainesville, FL 32601 Dean Niederkohr, Principal 336-2713	200+ Available for Rent Must Contact Individual Schools	Stage		
Alachua Elementary School Alachua, Fl 32615 Pansy Post, Principal 462-1841	200+ Available for Rent Must Contact Individual Schools	Stage		

Facility	# of Seats	Stage size (feet)	Exhibit Space (running ft.)	# of Exhibit Spaces
Archer Elementary School SW Archer Road Archer, FL 32618 Jahala Sterling, Principal 495-2111	200+ Available for Rent Must Contact Individual Schools	Stage		
Charles W Duval Elementary School 2106 NE 8th Avenue Gainesville, FL 32601 Dewitt Lewis, Principal 336-2703	200+ Available for Rent Must Contact Individual Schools	Stage		
Chester Shell Elementary School PO Box Drawer 70 Hawthorne, FL 32640 481-2444	150-175 Available for Rent Must Contact Individual Schools	Cafeteria		
Fort Clarke Middle School 9301 NW 23rd Avenue Gainesville, FL 32606 Bill Cliett, Principal 332-8050	715 Available for Rent Must Contact Individual Schools	Stage		
Glen Springs Elementary School 2826 NW 31st Avenue Gainesville, FL 32605 Patsy Kinney, Principal 336-2708	200+ Available for Rent Must Contact Individual Schools	Stage		
Hawthorne Jr/Sr High School Hawthorne, FL 32640 Dr Lamar Simmons 481-2417	600 Available for Rent Must Contact Individual Schools	Stage		
Hidden Oak 9205 NW 23rd Avenue Gainesville, FL 32606 Dr Doris Richardson, Principal 332-6300	200+ Available for Rent Must Contact Individual Schools	Stage		
Howard W Bishop Middle School 1901 NE 9th Street Gainesville, FL 32609 336-2701	260 Available for Rent Must Contact Individual Schools	Teaching Auditorium Cafeteria		
Idylwild Elementary School 4601 SW 20th Terrace Gainesville, FL 32601 Dr Robert Craig, Principal 336-2709	200+ Available for Rent Must Contact Individual Schools	Stage		
J J Finley Elementary School 1912 NW 5th Avenue Gainesville, FL 32603 Dr Christine Hirsch, Principal 336-2705	454 Available for Rent Must Contact Individual Schools	Stage		

Facility	# of Seats	Stage size (feet)	Exhibit Space (running ft.)	# of Exhibit Spaces
Joseph Williams Elementary School 1245 SE 7th Avenue Gainesville, FL 32601 336-2719	200+ Available for Rent Must Contact Individual Schools	Stage		
Kimball Wiles Elementary School 4601 SW 75th Street Gainesville, FL 32608 372-7058	200+ Available for Rent Must Contact Individual Schools	Stage		
Kirby Smith Board Room 620 E University Avenue Gainesville, FL 32601 336-3553	126 Available for Rent Must Contact Individual Schools	Stage		
Lake Forest Elementary School 427 SE 43rd Street Gainesville, FL 32601 Marvin Nelson, Principal 336-2710	200+ Available for Rent Must Contact Individual Schools	Stage		
Littlewood Elementary School 812 NE 34tb Street Gainesville, FL 32601 Georgeann Mullally 336-2712	200+ Available for Rent Must Contact Individual Schools	Stage		
Myra Terwilliger Elementary School 301 NW 62nd Street Gainesville, FL 336-2736	200 + Available for Rent Must Contact Individual Schools			
Spring Hill Middle School PO Box 907 High Springs, FL 32643 454-2701	500 Available for Rent Must Contact Individual Schools	Cafe.		
Stephen Foster Elementary School 3800 NW 6th Street Gainesville, FL 32601 Debra Frank, Principal 336-2706	300 Available for Rent Must Contact Individual Schools	Stage		
Waldo Community School PO Box 190 Waldo, FL 32694 468-1451	230-240 Available for Rent Must Contact Individual Schools	Cafe.		

Facility	# of Seats	Stage size (feet)	Exhibit Space (running ft.)	# of Exhibit Spaces
Westwood Middle School 3215 NW 15th Avenue Gainesville, FL 336-2718	200 + Available for Rent Must Contact Individual Schools	Stage		
William S Talbot Elementary School 5001 NW 43rd Street Gainesville, FL 32606 336-2716	200-300 Available for Rent Must Contact Individual Schools	Cafeteria		
VISUAL ARTS FACILITIES:				
Community Facilities:				
Hippodrome Galleries 25 SE 2nd Place Gainesville, FL 32601 Shirley Lassiter 373-5968			900 sq ft	4-5
Oak Hall School Student Center 8009 SW 14th Avenue Gainesville, FL 32608 Mike Maher, Principal 332-3609			4500 sq ft $200/one time	1
Santa Fe Community College Art Gallery 3000 NW 83rd Street Gainesville, FL 32609			180 ft	2-3

Facility	# of Seats	Stage size (feet)	Exhibit Space (running ft.)	# of Exhibit Spaces
City of Gainesville Department of Parks, Recreation & Cultural Affairs				
Main Art Gallery – Thomas Center 302 NE 6th Avenue, PO Box 490 Gainesville, FL 32602 352-393-8539			100 ft	1

Facility	# of Seats	Stage size (feet)	Exhibit Space (running ft.)	# of Exhibit Spaces
Mezzanine Art Gallery Thomas Center 302 NE 6th Avenue, PO Box 490 Gainesville, FL 32602 Erin Friedberg 352-393-8539			100 ft	1
OTHER MUSEUMS:				
Matheson Historical Center 513 East University Avenue Gainesville, FL 32601 378-2280				

Appendix C – Arts Organizations of Alachua County

Gainesville is the cultural capital of north central Florida. Dance, music, theatre, visual arts, historical preservation, and folklore are an integral part of the community with exciting, dynamic arts and cultural events and festivals held year round. The University of Florida augments the local cultural scene through numerous student and faculty exhibits, performances, concerts, and recitals. Residents and visitors alike revel in the abundance of cultural riches, including: one of the largest and best-equipped university art museum facilities in the country; north central Florida's only professional theatre; a professional orchestra; a nationally-recognized dance company; the largest natural history museum in the Southeast; a performing arts center offering world-class entertainment; numerous art galleries; multiple community theatre groups; and a wealth of musicians and musical styles.

The historic communities of Alachua, High Springs, Micanopy, and Waldo beckon the visitor to leave the present far behind by wandering down their quiet streets lined with trees dripping Spanish moss. And four Historic Districts in Gainesville, all listed on the National Register of Historic Places, reveal Florida's architectural styles from 1880 through the 1920s.

In Alachua County, there is tremendous pride not only in the first-rate visual and performing arts facilities but also in the creative spirit that brings them to life. Visual and performing artists infuse the area with energy — creating, challenging, delighting, provoking, but always entertaining their audiences.

Dance

Agbedidi
Dance Alive National Ballet
Dance Gainesville
Dance Theatre of Santa Fe
Danscompany of Gainesville
Floridance
Gainesville Ballet Theatre
Gainesville Independent Winter Guard
Greenwood Morris Dancers and the Maypole
Lavern Porter Dance Company
Sahnobar Dance Ensemble

Visual Arts

Art on Exhibit
Cofrin Gallery at Oak Hall
Focus Gallery at UF
Gainesville Artisans' Guild Gallery
Grinter Gallery at UF
High Springs Gallery
Melrose Bay Art Gallery
"the gallery" at the Reitz Union
Samuel P. Harn Museum of Art
Santa Fe Galleries
The Thomas Center Galleries
University Gallery

Public Art

Art in the Alachua County Public Library
Keep Alachua County Beautiful
Civil War Memorial
GTEC wall sculpture
Martin Luther King Memorial Garden,
Gainesville City Hall
Outdoor sculpture/gazebo, Gainesville Regional Utilities
Outdoor sculptures, University of Florida campus
Scaled Solar System, NW 8th Ave.
Mural at Martin Luther King Center

Studios & Organizations

Artwalk
Artists Alliance of North Florida
Center of Modern Art
Gainesville Association for the Creative Arts
Gainesville Fine Arts Association
Gainesville Handweavers Guild
Greentree Southern Pottery
Harold's Fine Frames & Gallery
Landscapes Art Studio Gallery
McIntyre Stained Glass Studio
Plein Air Florida
Sweetwater Print Cooperative
Tench Building Artist Studios

Music

Academy of Music & Art
Alachua County Youth Orchestra
BarberGators
Gainesville Chamber Orchestra
Gainesville Civic Chorus
Gainesville Community Band
Gainesville Friends of Jazz & Blues
Gainesville Harmony Show Chorus
Gainesville Youth Chorus
N. Central Fl. Blues Society
SFCC Department of Music
Santa Fe Brass Ensemble
UF University Choir
UF Chamber Singers
UF Men's Glee Club
UF Women's Chorale
UF Gospel Choir
University Symphonic Band & Wind Ensemble

Theatre

Acrosstown Repertory Theatre
Gainesville Community Playhouse
High Springs Community Theatre
Hippodrome State Theatre
Performing Arts Center at P.K. Yonge
Theatre Santa Fe
UF Performing Arts
UF School of Theatre and Dance

Film Series:

Hippodrome Cinema
Reitz Union Cinema

Historic Preservation & Folklife

Museums
Archer Railroad Museum
Florida Museum of Natural History
Matheson Historical Center
Micanopy Historical Society Museum

Historic Neighborhoods and Communities
City of Alachua
City of Archer
City of Hawthorne
City of High Springs
City of Melrose
City of Newberry
City of Waldo
Historic Downtown Gainesville and Related Structures
Historic Gainesville Inc
Northeast Historic District – Gainesville
Pleasant Street Historic Society – Gainesville
Southeast Gainesville Historic District
University of Florida Historic Campus – Gainesville

Historic Sites/Folklife
Dudley Farm State Historic Site
Historic Haile Homestead
Kanapaha Botanical Gardens
Marjorie Kinnan Rawlings State Historic Site
Morningside Nature Center
Paynes Prairie State Preserve
The Thomas Center
Living History Farm at Morningside Nature Center **Cultural Resources:**
Alachua County Library District
National League of American Pen Women (NLAPW)
Civic Media Center
Cultural Arts Coalition
Micanopy Community Council for the Arts
Society for Creative Anachronism
The Junior League of Gainesville, FL Incorporated

Goals, Objectives & Policies

Future Land Use Element

GOAL **IMPROVE THE QUALITY OF LIFE AND ACHIEVE A SUPERIOR, SUSTAINABLE DEVELOPMENT PATTERN IN THE CITY BY CREATING AND MAINTAINING CHOICES IN HOUSING, OFFICES, RETAIL, AND WORKPLACES, AND ENSURING THAT A PERCENTAGE OF LAND USES ARE MIXED, AND WITHIN WALKING DISTANCE OF IMPORTANT DESTINATIONS.**

Objective 1.1 **Adopt urban design principles that adhere to timeless (proven successful), traditional principles.**

Policy 1.1.1 To the extent possible, all planning shall be in the form of complete and integrated communities containing housing, shops, workplaces, schools, parks and civic facilities essential to the daily life of the residents.

Policy 1.1.2 To the extent possible, neighborhoods should be sized so that housing, jobs, daily needs and other activities are within easy walking distance of each other.

Policy 1.1.3 Neighborhoods should contain a diversity of housing types to enable citizens from a wide range of economic levels and age groups to live within its boundaries.

Policy 1.1.4 The City and its neighborhoods, to the extent possible, shall have a center focus that combines commercial, civic, cultural, and recreational uses.

Policy 1.1.5 The City, to the extent possible, should contain an ample supply of squares, greens, and parks with frequent use encouraged through placement, definition and design.

Revision Dates and Ordinance Numbers
(See Page **A-55**)

Policy 1.1.6 The City shall encourage community-serving facilities, such as government offices, farmers markets, and convention centers to be centrally located, instead of in dispersed, remote, peripheral locations. Public, community-serving facilities should be developed primarily in the City's central core and, as appropriate, in neighborhood centers. Private, community-serving facilities should be discouraged from locating in peripheral locations.

Objective 1.2 Protect and promote viable transportation choices (including transit, walking and bicycling, and calmed car traffic).

Policy 1.2.1 The City may vacate street right-of-way only if it does not prevent reasonable connection for existing and future public transit, pedestrian, and non-motorized and motorized vehicle trips.

Policy 1.2.2 The City should use design standards in the Land Development Code to ensure that higher densities are livable.

Policy 1.2.3 The City should encourage mixed-use development, where appropriate.

Policy 1.2.4 The City should reduce or eliminate minimum parking requirements, where appropriate.

Policy 1.2.5 The City should encourage creation of short-cuts for pedestrians and bicyclists with additional connections and cross access in order to create walking and bicycling connections between neighborhoods and neighborhood (activity) centers.

Policy 1.2.6 The City should encourage or require buildings to put "eyes on the street" , with front facade windows and doors.

Policy 1.2.7 The City should strive, incrementally, and when the opportunity arises street by street to form an interconnected network of neighborhood streets and sidewalks supportive of car, bicycle, pedestrian, and transit routes within a neighborhood and between neighborhoods knitting neighborhoods together and not forming barriers between them. Dead ends and cul-de-sacs should be avoided or minimized. Multiple streets and sidewalks should connect into and out of a neighborhood.

Policy 1.2.8 Gated residential developments shall be prohibited to keep all parts of the community accessible by all citizens, and to promote transportation choice.

Policy 1.2.9 The City shall require, on long block faces (480 or more feet), the provision of intermediate connections in the pedestrian network. For example, direct walkway and bicycle routes to schools should be provided.

Policy 1.2.10 The City should amend the Land Development Code to require that multiple-family developments be designed to include orientation of the front door to a neighborhood sidewalk and street.

Policy 1.2.11 The City should allow home occupations in all residential areas provided they do not generate excessive traffic and parking. Home occupations should be regulated through the Land Development Code.

Objective 1.3 Adopt land development regulations that guide the transformation of conventional shopping centers into walkable, mixed-use neighborhood (activity) centers.

Policy 1.3.1 When feasible, neighborhood centers should be designed to include a gridded, interconnected street network lined with street-facing buildings and buildings at least 2 stories in height.

Policy 1.3.2 Centers should be pleasant, safe, and convenient for pedestrians and bicyclists and contain a strong connection to transit service.

Policy 1.3.3 Centers should, to the extent feasible, contain a range of mixed land use types preferably within a one-quarter mile area including such uses as neighborhood-scaled retail, office, recreation, civic, school, day care, places of assembly, and medical uses. The uses should be compact and vertically and horizontally mixed. Multiple connections to and from surrounding areas should be provided along the edges of a mixed-use area.

Policy 1.3.4 Centers should be designed so that densities and building heights cascade from higher densities at the core of mixed-use districts to lower densities at the edges.

Policy 1.3.5 Parking lots and garages should be subordinated and limited in size.

Objective 1.4 Adopt land development regulations that promote mixed-use development.

Policy 1.4.1 Office complexes at least 10 acres in size shall, when feasible, include retail, service, and residences. Any retail or service uses should primarily or exclusively serve those employed within the complex.

Policy 1.4.2 The City should require strategies such as traffic calming and transportation demand management to reduce traffic impacts experienced by residences in mixed-use areas.

Policy 1.4.3 Mixed-use developments should emphasize transit design and compatible scale, especially when facing each other on a street.

Policy 1.4.4 In mixed-use zoning districts, the City should prohibit or restrict land uses that discourage pedestrian activity and residential use, including car washes, motels (hotels are acceptable), storage facilities, auto dealerships, drive-throughs, warehouses, plasma centers, and street-level parking lots.

Policy 1.4.5 When considering the acquisition and establishment of public facilities such as parks, libraries, and neighborhood centers, the City should, to the extent appropriate, select a location and/or design the facility in such a way that collocation of the facility with a public school is either achieved with an existing school, or can be retrofitted for such a collocation.

Objective 1.5 Discourage the proliferation of urban sprawl.

Policy 1.5.1 The City shall continue robust code enforcement and law enforcement to discourage flight from the city due to excessive noise, excessive lighting, blight, illegal parking of cars, ill-kept properties, and illegal signage.

Policy 1.5.2 The City should collaborate with the School Board of Alachua County to enhance schools within city limits, particularly to make the schools more accessible to students without a car.

Policy 1.5.3 The City should create more well-defined squares and parks within walking distance of residences, offices and shops.

Policy 1.5.4 The City should prioritize core areas to receive the first enhancements when the City has planned citywide public improvements such as sidewalks, street re-paving, undergrounding utilities, street lights, and public parks.

Policy 1.5.5 The City recognizes Alachua County's use of the Urban Cluster, as adopted on their Future Land Use Map, as an urban growth boundary.

Policy 1.5.6 The City certifies that the entire area within current city limits meets the definition in Chapter 163, F.S., of an urban service area, as supported by the Data and Analysis Report.

Policy 1.5.7 The Future Land Use Map should designate appropriate areas for multi-family residential development in close proximity to neighborhood centers and important transit routes. When appropriate and in a way not detrimental to single-family neighborhoods, the City should encourage the establishment of residential, retail, office, and civic uses within 1/4 mile of the center of neighborhood centers as an effective way to reduce car trips and promote transit, walking, and bicycling.

GOAL 2 REDEVELOP AREAS WITHIN THE CITY, AS NEEDED, IN A MANNER THAT PROMOTES QUALITY OF LIFE,

TRANSPORTATION CHOICE, A HEALTHY ECONOMY, AND DISCOURAGES SPRAWL.

Objective 2.1 **Redevelopment should be encouraged to promote compact, vibrant urbanism, improve the condition of blighted areas, discourage urban sprawl, and foster compact development patterns that promote transportation choice.**

Policy 2.1.1 The City shall develop recommendations for areas designated as redevelopment areas, neighborhood centers and residential neighborhoods in need of neighborhood enhancement and stabilization.

a. The City should consider the unique function and image of the area through design standards and design review procedures as appropriate for each redevelopment area;

b. The City should include in its redevelopment plans recommendations regarding economic development strategies, urban design schemes, land use changes, traffic calming, and infrastructure improvements;

c. The City should identify potential infill and redevelopment n inventory of these sites; identify characteristics of each parcel, including land development regulations, infrastructure availability, major site limitations, and available public assistance; and develop a strategy for reuse of these sites;

d. The City should encourage retail and office development to be placed close to the streetside sidewalk.

Policy 2.1.2 The City's Future Land Use Map should strive to accommodate increases in student enrollment at the University of Florida and the location of students, faculty, and staff in areas designated for multi-family residential development and/or appropriate mixed-use development within 1/2 mile of the University of Florida campus and the Innovation Square area (rather than at the urban fringe), but outside of single-family neighborhoods.

Policy 2.1.3 The City should concentrate CDBG, HOME, and SHIP funding efforts primarily in a limited number of neighborhoods annually.

Policy 2.1.4 The City shall strive to implement certain land use-related elements of Plan East Gainesville, including but not limited to:

a. Establishing a three-tiered land use transect for east Gainesville to transition land development regulations from urban to suburban to rural; and

b. Coordinating with Alachua County in its strategy to develop the Alachua County fairgrounds as a mixed-use employment center.

Objective 2.2 **The City shall collaborate with community partners such as the University of Florida, Santa Fe College, the Gainesville Area Chamber of Commerce, Alachua County, and the School Board of Alachua County to develop the Innovation Economy within the nonresidential areas of the Gainesville Innovation Zone (The Innovation Zone Map is part of the Future Land Use Map Series). For purposes of this objective, Innovation Economy means those technology firms and/or entities that bring a new process or technique to the production process and that are often, but not exclusively, related in some manner to University of Florida-driven research, and are generally represented by sectors such as Agritechnology, Aviation and Aerospace, Information Technology, Life Sciences and Medical Technology.**

Policy 2.2.1 The City shall use the City's Strategic/Action Plan for Economic Development and shall collaborate with its community partners on the Economic Development University Community Committee (EDUCC) to encourage development of the Gainesville Innovation Zone.

Policy 2.2.2 The City shall review the Comprehensive Plan and the Land Development Code on a bi-annual basis with respect to the appropriate development of the Gainesville Innovation Zone. Should such review conclude that any amendments to the Comprehensive Plan or Land Development Code pertaining to the Gainesville Innovation Zone are needed; the City shall draft such amendments and present them to the City Plan Board.

Policy 2.2.3 The City shall work to ensure that adequate public infrastructure is in place for development of the Gainesville Innovation Zone.

Policy 2.2.4 The City shall work to ensure that pertinent local, state, and federal incentive programs are made available to those seeking Innovation Economy development opportunities.

Policy 2.2.5 The City shall work to ensure that negative impacts resulting from Innovation Economy development within the Gainesville Innovation Zone are minimized, particularly with respect to adjacent residential areas.

Objective 2.3 **The City shall collaborate with the Community Redevelopment Agency (CRA) to designate Community Redevelopment Areas that encourage reinvestment in the form of capital projects, infill redevelopment, and economic development programs designed to eradicate slum and blight and enhance urban form.**

Policy 2.3.1 The City shall assist with the implementation, as appropriate, of the Community Redevelopment Plan for the Downtown Community Redevelopment Area.

Policy 2.3.2 The City shall assist with the implementation, as appropriate, of the Community Redevelopment Plan for the Eastside Community Redevelopment Area.

Policy 2.3.3 The City shall assist with the implementation, as appropriate, of the Community Redevelopment Plan for the Fifth Avenue/Pleasant Street Community Redevelopment Area.

Policy 2.3.4 The City shall assist with the implementation, as appropriate, of the Community Redevelopment Plan for the College Park/University Heights Community Redevelopment Area.

GOAL 3 ACHIEVE THE HIGHEST LONG-TERM QUALITY OF LIFE FOR ALL GAINESVILLE RESIDENTS CONSISTENT WITH SOUND SOCIAL, ECONOMIC, AND ENVIRONMENTAL PRINCIPLES THROUGH LAND DEVELOPMENT PRACTICES THAT MINIMIZE DETRIMENTAL IMPACTS TO THE LAND, NATURAL RESOURCES, AND URBAN INFRASTRUCTURE.

Objective 3.1 The City shall protect environmentally sensitive land, conserve natural resources, and maintain open spaces identified in the Future Land Use Map Series through the Development Review Process and land acquisition programs.

Policy 3.1.1 Standards and guidelines established in Conservation, Open Space, and Groundwater Recharge Element Objective 1.1 and its Policies shall be used to protect identified environmentally sensitive resources.

Policy 3.1.2 The City shall regulate development in Floridan aquifer high recharge areas with requirements that, at a minimum, meet the standards and guidelines of the St. Johns River or Suwannee River Water Management Districts, as applicable, and Policies 2.3.6 and 2.3.7 of the Conservation, Open Space and Groundwater Recharge Element.

Policy 3.1.3 The City shall coordinate with the Florida Department of Environmental Protection and other agencies with regulatory authority over hazardous materials management in the review of any development proposal involving the use or generation of hazardous materials.

Policy 3.1.4 The City shall protect floodplain and flood channel areas consistent with Policy 2.4.9 of the Conservation, Open Space & Groundwater Recharge Element.

Policy 3.1.5 Floodplains and flood channels shall be delineated by the most recent Flood Insurance Rate Map (FIRM) of the Federal Emergency Management Agency (FEMA) or a localized study that uses FEMA-approved analyses and that is reviewed and approved by the City of Gainesville Public Works Department.

Objective 3.2 The City shall protect historic architectural and archaeological resources.

Policy 3.2.1 All development and redevelopment within designated Historic Preservation/Conservation Overlays shall be consistent with the goals, objectives, and policies of the Historic Preservation Element. The Historic Preservation/Conservation Overlays are mapped in the Future Land Use Map Series and in the Geographic Information System (GIS) Map Library located on the City's Planning and Development Services Department website.

Policy 3.2.2 The City shall identify, designate, and protect historical resources through land development regulations consistent with the Historic Preservation Element.

Policy 3.2.3 The City shall include in its geographic information system the location of archaeological and historic sites that are on file with the Florida Master Site File Office.

Policy 3.2.4 The City shall include protection of archaeological resources in its land development regulations.

Objective 3.3 Provide adequate land for utility facilities.

Policy 3.3.1 The City shall coordinate with public and private utilities to ensure that adequate land is available for utility facilities.

Policy 3.3.2 The development review process shall include a review of the availability of on-site and off-site utilities and the availability of adequate land to site the utility facilities needed to serve new development.

Objective 3.4 The City shall ensure that services and facilities needed to meet and maintain the Level of Service (LOS) standards adopted in this Plan are provided.

Policy 3.4.1 The City shall determine and monitor whether facilities and services that will serve proposed development meet adopted LOS standards. The Concurrency Management System shall be used to maintain adopted LOS standards.

Transportation Mobility LOS is excluded from the Concurrency Management System.

Policy 3.4.2 A concurrency analysis shall be conducted prior to the approval of any application for a development order or permit, and no final development order or permit shall be issued unless: 1) existing facilities and services meet the City's adopted LOS standards as included in the Concurrency Management System, or 2) the final development order or permit is conditioned on such facilities and services being available at the time the impact of the development will occur. Concurrency requirements shall be met consistent with Objective 1.2 and associated policies in the Capital Improvements Element.

Policy 3.4.3 The City shall use the 5-Year Schedule of Capital Improvements to ensure the availability of adequate public facilities and services.

Policy 3.4.4 Notwithstanding the state law exemption from the state development-of-regional-impact (DRI) review process for dense urban land areas as provided in Section 380.06, F.S., large developments that trip the DRI threshold shall be required to address their regional impacts, consistent with the City's coordination policies in the Intergovernmental Coordination Element.

Policy 3.4.5 The City's Comprehensive Plan contained a Concurrency Management Element and Transportation Concurrency Exception Area (TCEA) that was first adopted in 1999. The City relied upon the provisions of the Concurrency Management Element and TCEA for the issuance of final development orders that include Planned Development ordinances that are still valid. The City recognizes that it is important, for both the development community and the City, to provide for a transition from the TCEA and Concurrency Management Element to a new Transportation Mobility Program (as adopted in the Transportation Mobility Element). Therefore, notwithstanding the repeal of the Concurrency Management Element and TCEA in 2013 as part of the Evaluation and Appraisal update of the Comprehensive Plan, the City recognizes that agreements and conditions related to the Concurrency Management Element and the TCEA shall remain valid for those active final development orders approved while the Concurrency Management Element was in effect. Copies of the last adopted version of the Concurrency Management Element shall remain on file with the City's Planning and Development Services Department for the limited purpose of administering those active final development orders as though the program were still in full effect. Amendments to final development orders previously approved under the Concurrency Management Element provisions shall be subject to the transportation mobility requirements in effect at the time of application if the amendment alters the development's trip generation calculations. Developers may choose to opt into the new Transportation Mobility Program subject to

meeting requirements for any new transportation studies necessary to evaluate the development.

Objective 3.5 **Ensure that the future plans of State government, the School Board of Alachua County, the University of Florida, and other applicable entities are consistent with this Comprehensive Plan to the extent permitted by law.**

Policy 3.5.1 The City shall coordinate with governmental entities to ensure that the placement of public facilities promotes compact development and is consistent with the adopted LOS standards.

Policy 3.5.2 The review of development plans of government entities shall be consistent with the policies of the Intergovernmental Coordination Element of this Comprehensive Plan.

Policy 3.5.3 The City shall encourage the location of schools proximate to urban residential areas consistent with Policy 3.1.1 of the Public Schools Facilities Element.

Policy 3.5.4 The City shall designate compatible land uses within the vicinity of the Gainesville Regional Airport consistent with Chapter 333, F.S., and Objective 9.2 of the Transportation Mobility Element.

Policy 3.5.5 The City shall coordinate with the University of Florida regarding the implementation of the University of Florida Campus Master Plan, as appropriate, to support future university growth while mitigating any impacts on public facilities and services such as roads, utilities, parks and recreation.

Policy 3.5.6 The City and the University of Florida shall monitor development both on and off campus and assess impacts on University and City resources, facilities and services. When it has been determined that proposed development within the designated context area would have an adverse impact on University and/or City facilities and resources, the City will participate and cooperate with University officials in the identification of appropriate strategies to mitigate the impacts.

Objective 3.6 **Land use designations shall be coordinated with soil conditions and topography.**

Policy 3.6.1 The City's land development regulations shall require submission of soils and topographic information with any application for developments that require site plan approval or a septic tank permit. The review of development applications shall ensure that the proposed development adequately addresses the particular site conditions.

Policy 3.6.2 Wherever possible, the natural terrain, drainage, and vegetation of the city should be preserved with superior examples contained within parks or greenbelts.

Policy 3.6.3 To the extent feasible, all development shall minimize alteration of the existing natural topography.

GOAL 4 THE FUTURE LAND USE ELEMENT SHALL FOSTER THE UNIQUE CHARACTER OF THE CITY BY DIRECTING GROWTH AND REDEVELOPMENT IN A MANNER THAT: USES NEIGHBORHOOD CENTERS TO PROVIDE GOODS AND SERVICES TO CITY RESIDENTS; PROTECTS NEIGHBORHOODS; DISTRIBUTES GROWTH AND ECONOMIC ACTIVITY THROUGHOUT THE CITY IN KEEPING WITH THE DIRECTION OF THIS ELEMENT; PRESERVES QUALITY OPEN SPACE; AND PRESERVES THE TREE CANOPY OF THE CITY. THE FUTURE LAND USE ELEMENT SHALL PROMOTE STATEWIDE GOALS FOR COMPACT DEVELOPMENT AND EFFICIENT USE OF INFRASTRUCTURE.

Objective 4.1 The City shall establish land use categories that allow sufficient acreage for residential, commercial, mixed-use, office, industrial, education, agricultural, recreation, conservation, public facility, and institutional uses at appropriate locations to meet the needs of the projected population and that allow flexibility for the City to consider unique, innovative, and carefully construed proposals that are in keeping with the surrounding character and environmental conditions of specific sites. Land use categories associated with transect zones are intended to encourage a more efficient and sustainable urban from by allowing a range of housing, employment, shopping and recreation choices and opportunities in a compact area of the City.

Policy 4.1.1 Land Use Categories on the Future Land Use Map shall be defined as follows:

Single-Family (SF): up to 12 units per acre

This land use category shall allow single-family detached dwellings at densities up to 12 dwelling units per acre. The Single-Family land use category identifies those areas within the City that, due to topography, soil conditions, surrounding land uses and development patterns, are appropriate for single-family development. Land development regulations shall determine the performance measures and gradations of density. Land development regulations shall specify criteria for the siting of low-intensity residential facilities to accommodate special need populations and appropriate community-level institutional facilities such as places of religious assembly, public and private schools other than institutions of higher learning, and libraries. Land development regulations shall allow home occupations in conjunction with single-family dwellings under certain limitations.

Residential Low-Density (RL): up to 15 units per acre

This land use category shall allow dwellings at densities up to 15 units per acre, with up to 50% density bonus available for developments that meet or exceed affordable housing or tree preservation requirements as may be established in the Land Development Code. The Residential Low-Density land use category identifies those areas within the City that, due to topography, soil conditions, surrounding land uses and development patterns, are appropriate for single- family development, particularly the conservation of existing traditional low density neighborhoods, single-family attached and zero-lot line development, and small-scale multi- family development. Land development regulations shall determine gradations of density, specific uses and performance measures. Land development regulations shall specify criteria for the siting of low-intensity residential facilities to accommodate special need populations and appropriate community level institutional facilities such as places of religious assembly, public and private schools other than institutions of higher learning, and libraries. Land development regulations shall allow home occupations; accessory units in conjunction with single-family dwellings; and bed-and-breakfast establishments within certain limitations.

Residential Medium-Density (RM): 8-30 units per acre

This land use category shall allow single-family and multi-family development at densities from 8 to 30 dwelling units per acre, with up to 50% density bonus available for developments that meet or exceed affordable housing or tree preservation requirements as may be established in the Land Development Code. Lots that existed on November 13, 1991 and that are less than or equal to 0.5 acres in size shall be exempt from minimum density requirements. The land shown as Residential Medium-Density on the Future Land Use Map identifies those areas within the City that, due to topography, soil conditions, surrounding land uses and development patterns, are appropriate for single-family, and medium-intensity multi-family development. Land development regulations shall determine gradations of density and specific uses. Land development regulations shall specify criteria for the siting of appropriate medium-intensity residential facilities to accommodate special need populations and appropriate community-level institutional facilities such as places of religious assembly, public and private schools other than institutions of higher learning, and libraries. Land development regulations shall allow home occupations within certain limitations.

Residential High-Density (RH): 8-100 units per acre

This land use category shall allow single-family and multi-family development at densities from 8 to 100 dwelling units per acre, with up to 50% density bonus available for developments that meet or exceed affordable housing or tree preservation requirements as may be established in the Land Development Code. Lots that existed on November 13, 1991 and that are less than or equal to 0.5 acres in size shall be exempt from minimum density requirements. The land shown as Residential High- Density on the Future Land Use Map identifies those areas within the City that, due to topography, soil conditions, surrounding land uses and development patterns, are appropriate for high-intensity multi-family development, and secondary retail and office uses scaled to serve the immediate neighborhood. The intensity of secondary retail and office use cannot exceed 25 percent of the residential floor area.

Land development regulations shall determine gradations of density, specific uses, percentage of floor area and maximum floor area appropriate for secondary uses. Land development regulations shall specify the criteria for the siting of high-intensity residential facilities to accommodate special need populations and appropriate community level institutional facilities such as places of religious assembly, public and private schools other than institutions of higher learning, and libraries. Land development regulations shall allow home occupations within certain limitations.

Mixed-Use Residential (MUR): up to 75 units per acre

This land use category provides for a mixture of residential and office uses. Office uses that are complementary to and secondary to the residential character of the district are allowed as home occupations. Additional office uses may be allowed through a Special Use Permit process established in the Land Development Code. An essential component of the district is orientation of structures to the street and the pedestrian character of the area. Office uses located within this district should be scaled to surrounding neighborhoods and institutions. Land development regulations shall set the appropriate densities (up to 75 dwelling units per acre); the allowable uses; appropriate height (up to a maximum of 4 stories); design criteria; and landscaping requirements, with up to 50% density bonus available for developments that meet or exceed affordable housing or tree preservation requirements as may be established in the Land Development Code. Land development regulations shall specify the criteria for the siting of public and private schools, places of religious assembly and community facilities within this category.

Mixed-Use Office/Residential (MOR): up to 20 units per acre

This land use category allows residential uses and, depending on the implementing zoning district, may allow office, professional, service, and ancillary uses either as stand-alone uses or combined in a mixed-use development format. Some non-office type uses, such as restaurants, may be allowed through a Special Use Permit process established in the Land Development Code. Structures in this category shall be oriented to the street and encourage multi-modal transportation through the development design. Developments located within this category shall be scaled to fit the character of the area. Residential density shall be limited to 20 units per acre, with up to 50% density bonus available for developments that meet or exceed affordable housing or tree preservation requirements as may be established in the Land Development Code. Maximum building height shall be limited to 3 stories. Land development regulations shall establish the appropriate uses; design criteria; landscaping and pedestrian/vehicular access for this category. Public and private schools, places of religious assembly and community facilities are appropriate within this category.

Mixed-Use Low-Intensity (MUL): 8-30 units per acre

This land use category allows a mixture of residential and non-residential uses such as standard lot single-family houses, small-lot single-family houses, duplex houses, townhouses (attached housing), accessory dwelling units, group homes, multi-family housing (if compatible in scale and character with other dwellings in the proposed neighborhood), offices scaled to serve the surrounding neighborhood, retail scaled to serve the surrounding neighborhood, public and private schools, places of religious assembly and other community civic uses. Light assembly, fabrication, and processing uses within fully enclosed structures may be allowed as specially regulated uses through a Special Use Permit process established in the Land Development Code. Residential development shall be limited to 8 to 30 units per acre, with up to 50% density bonus available for

developments that meet or exceed affordable housing or tree preservation requirements as may be established in the Land Development Code. Lots that existed on November 13, 1991 and that are less than or equal to 0.5 acres in size shall be exempt from minimum density requirements. Unified developments that include a residential and non-residential component (either horizontally or vertically mixed) shall not be required to meet the minimum density requirements. Intensity will be controlled, in part, by adopting land development regulations that establish height limits of 5 stories or less; however, height may be increased to a maximum of 8 stories by Special Use Permit. Land development regulations shall establish the thresholds for the percentage of mixed uses for new development or redevelopment of sites 10 acres or larger. At a minimum, the land development regulations shall encourage that: at least 10 percent of the floor area of new development or redevelopment of such sites be residential; or, that the surrounding area of equal or greater size than the development or redevelopment site, and within 1/4 mile of the site, have a residential density of at least 6 units per acre. Residential use shall not be a required development component for public and private schools, institutions of higher learning, places of religious assembly and other community civic uses. Buildings in this category shall face the street and have modest front setbacks.

This category shall not be used to extend strip commercial development along a street. Land development regulations shall ensure a compact, pedestrian-friendly environment for these areas, and provide guidelines or standards for the compatibility of permitted uses.

Mixed-Use Medium-Intensity (MUM): 12-30 units per acre

This land use category allows a mixture of residential, office, and business uses concentrated in mapped areas. When implemented by the Corporate Park zoning district, this category is appropriate for corporate office facilities and mixed-use office oriented development. Light assembly, fabrication, and processing uses within fully enclosed structures may be allowed as specially regulated uses through a Special Use Permit process established in the Land Development Code. Public and private schools, institutions of higher learning, places of religious assembly and community facilities shall be appropriate in this category. Such development shall function as a neighborhood center serving multiple neighborhoods or a community-serving retail and/or office center. It is not expected that these areas shall be expanded significantly during this planning period. Land development regulations shall ensure a compact, pedestrian environment for these areas, and provide guidelines for the compatibility of permitted uses. Residential development shall be limited to 12 to 30 units per acre, with up to 50% density bonus available for developments that meet or exceed affordable housing or tree preservation requirements as may be established in the Land Development Code. Lots that existed on November 13, 1991 and that are less than or equal to 0.5 acres in size shall be exempt from minimum density requirements. Unified developments that include a residential and non-residential component (either horizontally or vertically mixed) shall not be required to meet the minimum density requirements. Intensity will be controlled, in part, by adopting land development regulations that establish height limits of 5 stories or less; however, height may be increased to a maximum of 8 stories by Special Use Permit. Land development regulations shall establish the thresholds for the percentage of mixed uses for new development or redevelopment of sites 10 acres or larger. At a minimum, the land development regulations shall encourage that: at least 10 percent of the floor area of new development or redevelopment of such sites be residential; or, that the surrounding area of equal or greater size than the development or redevelopment site, and within 1/4 mile of the site, have a residential density of at least 6 units per acre. Residential use shall not be a required

development component for public and private schools, institutions of higher learning, places of religious assembly and community facilities. Buildings in this land use category shall face the street and have modest front setbacks.

Urban Mixed-Use (UMU): up to 60 units per acre

This land use category allows residential, office, retail and serve uses either as stand-alone uses or combined in a mixed-use development format. Light assembly, fabrication, and processing uses within fully enclosed structures shall be allowed in specified zoning districts as specially regulated by the Land Development Code. Structures in this category shall be oriented to the street and encouraged multi-modal transportation through the development design. Developments located within this category shall be scaled to fit the character of the area. Residential density shall be limited to 60 units per acre, with up to 50% density bonus available for developments that meet or exceed affordable housing or tree preservation requirements as may be established in the Land Development Code. Maximum building height shall range between 4 to 5 stories, depending upon the implementing zoning district, with provisions to add up to an additional 1 to 2 stories by a height bonus system as established in the Land Development Code. Land development regulations shall set the appropriate densities, the types of uses; design criteria; landscaping, and pedestrian/vehicular access. Public and private schools, places of religious assembly and community facilities are appropriate within this category.

Urban Mixed-Use High Intensity (UMUH): 10-100 units per acre

This land use category allows residential, office/research, retail, and service uses either as stand-alone uses or combined in a mixed-use development format. Light assembly, fabrication, and processing uses within fully enclosed structures shall be allowed as specially regulated by the Land Development Code. The Urban Mixed-Use High-Intensity category is distinguished from other mixed-use categories in that it is specifically established to support research and development in close proximity to the University of Florida main campus. An essential component of the category is orientation of structures to the street and the multi-modal character of the area. Developments located within this category shall be scaled to fit the character of the area. Residential density shall be limited to 10 to 100 units per acre, with up to 50% density bonus available for developments that meet or exceed affordable housing or tree preservation requirements as may be established in the Land Development Code. Lots that existed on November 13, 1991 and that are less than or equal to 0.5 acres in size shall be exempt from minimum density requirements. Unified developments that include a residential and non-residential component (either horizontally or vertically mixed) shall not be required to meet the minimum density requirements. Building height shall be limited to 6 stories and up to 8 stories by a height bonus system as established in the Land Development Code. Land development regulations shall set the appropriate zoning densities: the types of uses; design criteria; landscaping, and pedestrian/vehicular access. Public and private schools, places of religious assembly and community facilities are appropriate within this category.

Urban Core (UC); up to 150 units per acre

This land use category allows residential, office, and business uses concentrated in the urban core area. Light assembly, fabrication, and processing uses within fully enclosed structures shall be allowed as specially regulated by the Land Development Code. Development in this category shall function as a center serving the urban area. Development within the urban core shall ensure the compact, pedestrian character of this area. Residential densities up to 150 units per acre shall be permitted, with up to 50% density bonus available for developments that meet or exceed affordable housing or tree preservation requirements as may be established in the Land Development Code. Buildings in this category shall face the street and meet build-to lines established in the Land Development Code. Building height shall be limited to 12 stories, with up to 14 stories by a height bonus systems as established in the Land Development Code. Public and private schools, government offices, institutions of higher learning, places of religious assembly and community facilities are appropriate in this category.

Office (O)

The Office land use category identifies areas appropriate for office, residential, professional and service uses, hospital and medical uses, and appropriate ancillary uses. Office designations shall be applied to compact office development. Residential uses in office districts shall be designed as new in-town development, mixed-use, live-work, compound use or shall accommodate existing residential development within the Office zoning district. Some non-office type uses such as restaurants may be allowed in this land use category by a Special Use Permit process established in the Land Development Code. Densities shall not exceed 20 units per acre, with up to 50% density bonus available for developments that meet or exceed affordable housing or tree preservation requirements as may be established in the Land Development Code. Land development regulations shall determine the appropriate scale of uses; and the specific criteria for the siting of private schools and churches. Intensity will be controlled by adopting land development regulations that establish height limits of 5 stories or less, that require buildings to face the street, and modest build-to lines, instead of a maximum floor area ratio; however, height may be increased to a maximum of 8 stories by Special Use Permit. For hospitals and large-scale medical office facilities that are located in a Medical Services zoning district, the height may be increased to 14 stories by Special Use Permit.

Commercial (C)

The Commercial land use category identifies those areas most appropriate for large scale highway-oriented commercial uses. Land development regulations shall determine the appropriate scale of uses. This category is not appropriate for neighborhood centers. Intensity will be controlled by adopting height limits of 5 stories or less, requiring buildings to face the street, and modest build-to lines instead of a maximum floor area ratio; however, height may be increased to a maximum of 8 stories by Special Use Permit.

Business Industrial (BI)

This land use category is appropriate for those areas near the Gainesville Regional Airport for office, business, commercial and industrial uses. This category is distinguished from other industrial and commercial categories in that it is designed specifically to allow only uses that are

that establish height limits consistent with the Airport Hazard Zoning Regulations. When not located within an airport zone of influence, as mapped in the Land Development Code, this category is also appropriate to designate areas for office, business, commercial and industrial uses, with a maximum height of 5 stories, and a maximum floor area ratio of 4.0. Land development regulations shall specify the type and distribution of uses, design criteria, landscaping, pedestrian and vehicular access.

Industrial (IND)

The Industrial land use category identifies those areas appropriate for manufacturing, fabricating, distribution, extraction, wholesaling, warehousing, recycling, and other ancillary uses. Other uses may be allowed in this land use category as specified in an adopted ordinance rezoning property to Planned Development District (PD). Land development regulations shall determine the appropriate scale of uses and consider the externalities of such uses. Intensity will be controlled by adopting land development regulations that establish height limits of 5 stories or less.

Education (E)

This land use category identifies appropriate areas for public and private schools and institutions of higher learning. This category includes University of Florida (UF) properties designated in the UF Campus Master Plan as part of the main campus. Land development regulations shall address compatibility with surrounding uses and infrastructure needs.

Recreation (REC)

This land use category identifies appropriate areas for public and private leisure activities. Land development regulations shall address the scale, intensity and buffering of structures and outdoor improvements.

Conservation (CON)

This land use category identifies areas environmentally unsuited to urban development, permanent buffers between land uses, areas used for passive recreation and nature parks. Privately held properties within this category shall be allowed to develop at single-family densities of 1 unit per 5 acres. Land development regulations shall determine the appropriate scale of activities, structures and infrastructure that will be allowed.

Agriculture (AGR)

This land use category identifies existing lands which are expected to continue in agricultural production and ancillary uses. Land development regulations shall allow single-family densities of 1 unit per 5 acres. It is not expected that lands designated for urban uses will be converted to agricultural production.

This land use category identifies lands used for: administrative, operational, and utility governmental functions; private utilities; cemeteries; and public-private partnerships or

other legal arrangements where the land title is vested in a government and the use(s) serves a public purpose. Maximum lot coverage in this category shall not exceed 80 percent, except in areas where lot coverage is not limited by land development regulations.

Planned Use District (PUD)

This land use category is an overlay land use category that may be applied on any specific property in the City. The land use regulations pertaining to this overlay district shall be adopted by ordinance in conjunction with an amendment to the Future Land Use Map of this Comprehensive Plan. The category is created to allow the consideration of unique, innovative or narrowly construed land use proposals that because of the specificity of the land use regulations can be found to be compatible with the character of the surrounding land uses and environmental conditions of the subject land. This category allows a mix of residential and nonresidential uses and/or unique design features which might otherwise not be allowed in the underlying land use category. Each PUD overlay land use category adopted shall address: density and intensity; permitted uses; access by car, pedestrians, bicycle, and transit; trip generation, trip distribution, and trip capture; environmental features; and, when necessary, buffering of adjacent uses. Planned Development zoning shall be required to implement a PUD land use category.

Policy 4.1.2 Underlying densities and intensities of development within the future land use categories shall be consistent with the policies in the Conservation, Open Space and Groundwater Recharge, and Future Land Use Elements providing standards and criteria established for the protection of environmentally sensitive land and resources.

Policy 4.1.3 The City will review proposed changes to the Future Land Use Map by considering factors such as, but not limited to, the following:

1. Consistency with the Comprehensive Plan;
2. Compatibility and surrounding land uses;
3. Environmental impacts and constraints;
4. Support for urban infill and/or redevelopment;
5. Impacts on affordable housing;

6. Impacts on the transportation system;
7. An analysis of the availability of facilities and services;
8. Need for the additional acreage in the proposed future land use category;
9. Discouragement of urban sprawl as defined in Section 163.3164, F.S., and consistent with the requirements of Subsection 163.3177(6)(a)9., F.S.;

10. Need for job creation, capital investment, and economic development to strengthen and diversify the City's economy; and

11. Need to modify land use categories and development patterns within antiquated subdivisions as defined in Section 163.3164, F.S.

Policy 4.1.4 The City will consider amending land use designations in the City to discourage strip commercial uses and encourage a mix of residential and non-residential uses.

Objective 4.2 The City shall implement regulations that will protect low-intensity uses from the negative impacts of high-intensity uses and provide for the healthy coexistence and integration of various land uses.

Policy 4.2.1 The City shall adopt land development regulations that provide protection for adjacent residential areas and low intensity uses from the impacts of high intensity uses by separating intense uses from low-intensity uses by transitional uses and by performance measures. Performance measures shall address the buffering of adjacent uses by landscape, building type and site design. Regulation of building type shall insure compatibility of building scale, and overall building appearance in selected areas. Regulation of site design shall address orientation. Such regulation shall also include arrangement of functions within a site, such as parking, loading, waste disposal, access points, outdoor uses and mechanical equipment; and the preservation of site characteristics such as topography, natural features and tree canopy.

Policy 4.2.2 The City shall adopt land development regulations that encourage better access between residential neighborhoods and adjacent neighborhood centers through the use of street design and the use of pedestrian, bicycle and transit modifications.

Policy 4.2.3 The existence of non-residential uses on one or more corners of an intersection will not justify approval of the development of all corners with the same or similar use, nor does the existence of non-residential uses on a major arterial street dictate that all frontage must be similarly used.

Policy 4.2.4 The City shall continue to restrict auto sales and relatively intense auto service to North Main Street north of 16th Avenue.

Objective 4.3 The City shall establish protection and enhancement policies, as needed, for selected neighborhood (activity) and regional centers.

Policy 4.3.1 The Central City Town Center shall integrate the University of Florida, the Innovation Square area, and the Central City District into one dynamic core.

Policy 4.3.2 The Morningstar Area shall be regulated by the following:

a. Any development and/or subdivision of land within the Morningstar

Area shall be consistent with the City's land development regulations.

b. Livestock uses that existed prior to January 31, 1994, shall be deemed legally nonconforming uses. However, there shall be no new livestock uses introduced or expansions of existing uses without a city-issued livestock or fowl permit as provided in the Code of Ordinances.

c. A building permit may be issued for a single-family dwelling on an existing lot of record as of January 31, 1994, if all of the following provisions apply:

1. minimum lot size of 0.50 acres;

2. a perpetual easement improved by a road or drive that connects the lot to a dedicated public right-of-way that is capable of supporting police and fire emergency vehicles in the opinion of the City's Traffic Engineer; and
3. the lot will legally meet the requirement for provision of potable water and disposal of sewage.

Policy 4.3.3 The Orton Trust Planned Use District shall consist of a mix of residential and non-residential uses under the following conditions and restrictions:

a. A planned development zoning ordinance consistent with the planned use district must be adopted by the City Commission within one year of the effective date of the land use change. If the aforesaid zoning ordinance is not adopted within the one year period, then the overlay district shall be null and void and of no further force and effect and the Future Land Use Map shall be amended accordingly to the appropriate land use category upon proper notice. The planned development zoning ordinance shall specify allowable uses and design standards consistent with traditional neighborhood design principles.

b. The overall residential density must meet a minimum of 6 units per acre and a maximum of 8 units per acre, excluding wetlands. The residential density shall be no greater than 8 units per acre in single family detached residential dwellings along Northwest 31st Avenue.

c. No non-residential activity, with the exception of places of religious assembly or private schools, shall be allowed along Northwest 31st

Avenue or within 500 linear feet north of the frontage of Northwest 31st Avenue.

d. A maximum of 80,000 square feet of non-residential use, including retail/commercial, eating places, office, civic, schools, day care centers, and places of religious assembly shall be allowed. A

maximum of 600 feet of the Northwest 39th Avenue frontage shall be used for non-residential uses. The total allowable retail/commercial

uses shall not exceed 40,000 square feet. Retail/commercial uses shall be as defined by the 1987 Standard Industrial Classification Manual major groups 52 thru 57 inclusive, 59; and 70 thru 79 inclusive. All non-residential uses on the perimeter of the planned use district shall be adequately buffered from surrounding residential uses through the

use of greenspace, fences, or walls. The buffer widths shall be established in the planned development zoning ordinance.

e. A minimum of 40,000 square feet of residential use shall be required above the first or second story of non-residential uses, and may be placed above the first or second story of any part of the 80,000 square feet of non-residential use authorized by this planned use district.

f. The maximum allowable square footage for any one-story retail/commercial building where the entire building is in a single use is 15,000 square feet.

g. A maximum of 2 businesses shall be allowed to have drive-through facilities. The drive-through facilities may only be used for a pharmacy and a financial institution. A maximum of 4 drive-through lanes shall be allowed and no more than 3 lanes shall be allowed for any single use. The planned development zoning ordinances shall require that any drive-through facility shall be designed to maximize pedestrian safety and convenience and shall establish design standards that ensure that drive-through facilities do not adversely affect the quality of the public realm or urban character of the area. Drive-through facilities can only be located within 300 feet of the Northwest 39th Avenue frontage.

h. A minimum of 8 acres shall be provided in common open space for conservation and recreation.

i. The planned development zoning ordinance shall prescribe a phasing schedule in order to ensure a mixed-use project including residential and/or residential infrastructure from the first phase of construction.

j. The planned development zoning ordinance shall provide a uniform signage plan for the planned use district.

k. All wetland areas must be identified by the appropriate water management district before any final development orders will be issued. The removal, fill or disturbance of wetlands shall be in

accordance with the requirements of the St. Johns River Water

Management District and the City's Comprehensive Plan. All development on the site shall be consistent with Article VIII, Environmental Management, of the City's Land Development Code.

l. A master stormwater management plan shall be prepared and approved by the City's Public Works Department for the entire planned use district prior to the issuance of any final development orders.

m. A maximum of 2 access roadways shall be allowed onto Northwest 39th Avenue. A maximum of 2 access roadways shall be allowed onto Northwest 31st Avenue. No direct driveway access connections are allowed from either Northwest 39th Avenue or Northwest 31st Avenue.

n. The internal road network shall be designed using Traditional Neighborhood Development Street Design Guidelines as published by the Institute of Transportation Engineers, as updated from time to time. The developer shall construct vehicular connections to the adjacent Palm Grove Subdivision, Phases I and II on the west side of the proposed planned use district, so that the connections align with the connections shown on the Palm Grove Phase I and II subdivision plats.

o. Except as may be established and shown for good cause by the owner/developer and then provided in the planned development zoning ordinance, all sidewalks shall be 5-foot minimum in width. A pedestrian network consisting of sidewalks shall be provided on all internal streets. Sidewalk connections shall be made from the internal sidewalk system to the public sidewalk. All retail/commercial uses shall be interconnected by safe pedestrian/bicycle connections. Each use along the Northwest 39th Avenue frontage shall have a sidewalk connection to the public sidewalk.

p. The planned use district shall maximize cross-access vehicle and pedestrian/bicycle connections between uses and shall maximize pedestrian safety and comfort.

q. The owner/developer shall construct and transfer to the City of Gainesville a bus shelter located on the Northwest 39th Avenue frontage or an alternative location approved within the planned development zoning ordinance as part of the first phase of development.

r. The planned use district land use category does not vest the development for concurrency. The owner/developer is required to apply for and meet concurrency management certification requirements, including transportation mitigation if necessary, at the time of application for planned development rezoning.

Policy 4.3.4 The property governed by this policy shall be known as the Plum Creek Development Company (“Plum Creek") for land use purposes. Due to the unique infrastructure and environmental constraints of "Plum Creek" as depicted on the map labeled "Plum Creek SR 121 Overall Site" in the Future Land Use Map Series A, Plum Creek shall be governed by the following policies:

a. Within all land use areas of Plum Creek:

1. Maximum residential development of the entire 1,778 acres shall not exceed 1,890 residential units and 100,000 square feet of non-residential uses of which a maximum of 80,000 square feet shall be permitted as Commercial, and these densities and square footage may be less unless the developer establishes to the City at the time of rezoning by competent substantial evidence, that the development meets the criteria and standards of this Policy 4.3.4 and the Land Development Code.

2. Development shall be clustered to inhibit encroachment upon the environmentally significant features of Plum Creek; and

3. Wetlands shall not be impacted other than where necessary to achieve interconnectivity between upland properties; and

4. Wetlands shall be protected by wetland buffers that shall be a minimum of fifty (50) feet and an average of seventy-five (75) feet wide. The minimum and average buffer widths shall not apply to those portions of the wetlands that are impacted consistent with 4.3.4.a.3 above; and

5. Stormwater treatment facilities shall not be permitted within the wetland buffers established pursuant to Section 4.3.4.a.4. above, except that outfall structures shall be allowed within these buffers; and

6. Areas within the floodplain district, as defined in the City's Land Development Code, shall be protected so that at least ninety (90%) percent of existing floodplain areas shall not be altered by development, except that recreation and stormwater

management may occur within not more than twenty percent (20%) of the floodplain district, and the existing floodplain storage volume will be maintained; and

7. Stormwater best management practices and/or low impact

development (LID) practices shall be used to the maximum extent practicable to maintain or replicate the pre-development

hydrologic regime, as determined by the City, and consistent with state requirements; and

8. Existing functioning ecological systems within Plum Creek shall be retained to the maximum extent practicable while accommodating the uses and intensity of uses authorized by the land use policies governing Plum Creek, as determined by the City.

9. Maintain and enhance plant and animal species habitat and distribution by protecting significant plant and animal habitats, provide for habitat corridors, prevent habitat fragmentation by requiring a detailed survey of listed species, identify habitat needs for maintaining species diversity and sustainability; preserve wetlands and at least forty percent (40%) and up to fifty percent (50%) of the upland area, inclusive of the wetland buffers established pursuant to 4.3.4.a.4. above. Listed species are those species of plants and animals listed as endangered, threatened, rare, or species of special concern by the state and federal plant and wildlife agencies, or species ranked as S1, S2, or S3 the Florida Natural Areas Inventory (FNAI).

10. Wetlands, wetland buffers, floodplain and upland habitat areas that are to be protected shall be identified as Conservation Management Areas and protected by a perpetual conservation easement in favor of the City, or a tax exempt land trust doing business within Alachua County, Florida, as determined by the City. Activities within the Conservation Management Areas shall be as set forth in a Conservation Management Plan approved by the City.

11. Planned Developments adopted by zoning ordinances within Plum Creek shall impose standards that address minimum required setback from SR 121 and CR 231, retention of existing vegetation and supplemental vegetative plantings, fencing and other forms of screening. Except where access to the property is provided, a minimum 50 foot vegetative buffer shall be retained along both sides of SR 121 and CR 231 within Plum Creek.

12. A natural and/or planted buffer with a minimum average width of 100 feet that at no location is less than 25 feet wide, shall be retained along the entire western boundary property line beginning at SR 121 at the north and ending at US 441 at the south, but shall not include the southwesterly property line

abutting US 441.

13. A natural and/or planted buffer with a minimum average width of 200 feet that at no location is less than 50 feet wide, shall be retained along the southern boundary of Plum Creek, west of SR 121, between industrial and residential uses.

b. Conservation Land Use Areas

All areas designated Conservation land use shall receive a zoning district designation of Conservation and are not permitted to have any residential units. There shall be no transfer of density to other areas.

No development, other than minimum crossings necessary to achieve interconnectivity between upland properties, and passive recreational uses is allowed within the Conservation Areas, as determined by the City.

c. Single-Family, Residential Low-Density and Planned Use District Land Use Areas

1. All areas designated Single-Family, Residential Low-Density and Planned Use District land use shall be implemented by Planned Development (PD) zoning. The required rezoning to PD of the areas designated Single-Family and Residential Low-Density may occur in increments over time upon request of the property owner and approval by the City; however, rezoning of the Planned Use District (PUD) area to PD shall occur as provided in Paragraph F below entitled "Planned Use District Land Use Area". Until such rezonings to PD are effective, the zoning district designations shall remain Agriculture for all areas designated Single-Family, Residential Low-Density and Planned Use District land use; and

2. All areas that are rezoned to PD shall be designed to be traffic-calmed and pedestrian friendly; and

3. The PD rezonings for Plum Creek shall ensure that allowed uses are integrated within the existing site landscape in a way that reasonably assures the following:

a. Preservation of the ecological integrity of the ecosystems of Plum Creek by creating and maintaining connectivity between habitats, minimizing natural area fragmentation, and protecting wetlands, associated uplands, and floodplains as indicated in Policy 4.3.4.a.

above; and

b. Preservation or enhancement of existing wetlands with approved treated stormwater to wetlands, limiting impacts to such wetlands to crossings necessary to achieve interconnectivity between upland properties, and requiring that any such crossings be designed to minimize wetland impacts.

4. The PD rezonings for Plum Creek shall require that appropriate "low impact development" (LID) techniques for the site must be implemented. Prior to second and final reading of each ordinance that rezones property within the PUD to PD, the owner/developer shall provide legally enforceable documents to the City that establish that a responsible entity (e.g., community development district, developer and/or homeowner's association) will permanently provide for proper maintenance of the LID functional landscape. LID is a site design strategy for maintaining or replicating the pre- development hydrologic regime through the use of design techniques that create a functionally equivalent hydrologic landscape. Hydrologic functions of storage, infiltration, and ground water recharge, plus discharge volume and frequency shall be maintained by integrated and distributed micro-scale stormwater retention and detention areas, by the reduction of impervious surfaces, and by the lengthening of flow paths and runoff time. Other LID strategies include, but are not limited to, the preservation/protection of environmentally sensitive site features such as wetlands, wetland buffers and flood plains. Each rezoning to PD shall include conditions requiring appropriate LID practices, subject to the approval of the City. Such practices shall include, but are not limited to:

   a. Development that adheres to the principles of "New Urbanism" or "Traditional Neighborhood Development".

   b. Clustering of development.

   c. Bioretention areas or 'rain gardens.'

   d. Grass swales

   e. Permeable pavements

f. Redirecting rooftop runoff to functional landscape areas, rain barrels or cisterns.

g. Narrowing street widths to the minimum width required to support traffic, on-street parking where appropriate, and emergency vehicle access.

h. Elimination of curb and gutter where appropriate.

i. Minimization of impervious surfaces through use of shared driveways and parking lots.

j. Reduction in impervious driveways through reduced building setbacks.
frontages for lots.

l. Permanent educational programs to ensure that future owners and residents of the site have an opportunity to fully understand the purpose, function, and maintenance of each LID component.

m. Limitations on the amount of turf allowed within the site and standards for implementation of best management practices for such turf, including minimum fertilizer applications.

n. Reuse of stormwater.

o. Use of "Florida Friendly" plant species and preferably native species for landscaping.

p. Use of low-volume irrigation technologies and soil moisture sensors if potable water supply is used for irrigation.

5. Implementation of appropriate "firewise" community planning practices shall be identified during the rezoning process and required by the PD zoning ordinances.

6. A master storm water management plan for each geographic

area proposed for rezoning to PD must be prepared and submitted to the City for review and approval before final development orders can be approved.

~~d. Single-Family Land Use Areas~~

1. All areas designated Single-Family land use shall be rezoned to PD prior to undertaking any development for single-family use within the rezoned area; and

1.

2. All of the areas designated Single-Family land use within Plum Creek (Future Land Use Map, Series A) shall be limited to a total maximum gross residential density of 1 residential unit per 2.5 acres (0.4 residential units per acre) up to a maximum of 218 residential units; and

e. Residential Low-Density Land Use Areas

All areas designated Residential Low-Density land use shall be rezoned to PD prior to undertaking any development for multi-family or single-family use or any other housing type.

2. Development of a range of housing types, including, but not limited to single-family detached, single-family attached, townhomes and apartments is allowed. The mix of housing types shall be specifically provided in the PD zoning ordinances. Clustering of residential uses to allow for greater environmental sensitivity is allowed.

3. Development shall provide for pedestrian and bicyclist safety and comfort.

4. All of the areas designated Residential Low-Density land use within Plum Creek (Future Land Use Map, Series A) shall be limited to a total maximum gross residential density of 2.75 residential units per acre, up to a maximum of 1,004 residential units, or less, as transfers of density may occur as provided in Paragraph f.3.c. below.

f. Planned Use District Land Use Area

1. Development within the Planned Use District area shall maximize pedestrian/bicycle connections among all uses (residential and non-residential) and shall maximize pedestrian and bicyclist safety and comfort. A network of sidewalks and street trees shall be provided on all internal streets. Sidewalk connections shall be made from the internal sidewalk system to the public right-of-way adjoining the Planned Use District. To

minimize traffic impacts on SR 121, the implementing PDs shall maximize internal roadway connectivity between residential and areas with mixed uses.

2. The PDs associated with the Planned Use District shall provide

Revision Dates and Ordinance Numbers
(See Page **A-55**)

for transit access approved by the City's Regional Transit System (RTS), and the owner/developer shall be required to provide comfortable, multi-use transit stations when transit service is made available to Plum Creek. The owner/developer

shall be required to fund transit service (capital and operations) for the development with minimum 15-minute frequencies in the a.m. and p.m. peak hours for RTS. If the funding is for a new route to serve the development, the funding for transit shall be for a minimum period of 5 years. If the funding is for expansion of an existing route to serve the development, the funding for transit shall be for a minimum period of 3 years.

Transit service shall be phased at the development to maximize successful transit routes consistent with population and density standards set by RTS as Plum Creek develops. The transit phasing plan for the required transit service shall be provided in the associated PD ordinance and shall be subject to RTS approval.

3. The implementing PDs district zoning for the Planned Use District area shall be subject to the following standards:

   a. The Planned Use District area shall allow mixed uses such as residential, office, business retail, professional and financial services, schools, places of religious assembly and community facilities. The area shall be implemented by PD zoning which shall generally adhere to the requirements of the City's Traditional Neighborhood Development District standards.

   b. A minimum gross density of 4 residential units per acre (668 residential units) is required for the 166.89 acres of Planned Use District (PUD) land use. A transfer of density from the Residential Low-Density Land Use Areas or the Single-Family Residential Land Use Areas into the PUD area may be approved during PD rezonings. Any transfers of density from the Residential Low-Density Land Use Areas and the Single-Family Land Use Areas to PUD shall reduce the overall number of units for the Residential Low- Density Land Use Areas and Single-Family Residential Land Use Area, respectively, allowed by

   the number of residential units transferred.

   c. Residential uses that are located above non-residential uses are allowed and encouraged. Residential types allowed include townhouses, apartments, plus attached

Revision Dates and Ordinance Numbers
(See Page **A-55**)

and detached single-family homes.

d. A maximum of 100,000 square feet of non-residential use shall be allowed within the Planned Use District

land use, of which a maximum of 80,000 square feet shall be permitted as commercial use. Except as may be otherwise provided in the implementing PD zoning ordinance, each building within this zone shall be allowed to be mixed with residential located above non-residential uses. Each implementing PD shall

provide detailed and specific design standards governing all aspects of development within the PD.

e. Urban design standards that ensure compatibility among the various allowed uses shall be included as part of the PD ordinance. Additional standards may be required to address noise and lighting to further assure compatibility.

f. The PD zoning ordinance shall, through design and performance measures, assure the neighborhood, pedestrian quality of Plum Creek by regulating building type and scale, overall building appearance and orientation, placement and function of parking, loading, waste disposal, access points, outdoor uses and mechanical equipment, signage and landscaping.

g. Open space shall be provided, where appropriate, as common open space serving conservation, recreation and civic needs of the Planned Use District Area, subject to approval of the City.

g. Miscellaneous Provisions

1. The developer has signed a binding agreement acknowledging owner/developer responsibility for mitigation of transportation impacts associated with the maximum amount of development identified in the future land use amendment. Prior to the second reading of the first PD rezoning ordinance(s) for Plum Creek, the owner/developer shall sign an agreement associated with the transportation mobility program in effect at the time of PD rezoning submittal for the first phase of the development as shown in the PD ordinance. At a minimum, prior to adoption of the second reading of the ordinance for any PD rezoning for any portion of Plum Creek, the owner/developer shall make a payment to the City or sign a binding agreement for

construction of an acceptable project, which shall include bonding requirements or other assurance acceptable to the City Attorney for the required transportation mobility project (consistent with the transportation mobility program in effect at the time of PD rezoning) associated with the trip generation for the first phase as shown in the PD. Subsequent to the first agreement associated with the transportation mobility agreement program in effect at the time of PD rezoning, additional transportation mobility agreements shall be executed prior to the issuance of final site plan or subdivision final plat development orders for the relevant phases of the development.

2. At the time of filing an application for the first planned development rezoning, the developer shall submit to the City recommended transportation mobility modifications needed to address the full build-out of residential and nonresidential uses authorized by Policy 4.3.4.a.1. and identify funding of such modifications pursuant to the Agreement required for Policy

4.3.4.g.1. herein, subject to approval by the City. Such transportation modifications shall be consistent with the City's transportation mobility requirements in effect at that time.

All recreation facilities that are required to ensure that the City's Recreation LOS standards are maintained shall be specified in the PD rezoning application and ordinance. Many of the single-family areas along with portions of the PUD area

shall be built around pocket parks of various types, subject to approval by the City. At the development stage for each phase and section of the project, recreational acreage necessary to meet the demands of the residential units will be provided by the owner/developer as required by the Gainesville Comprehensive Plan Recreation Element. All recreational amenities will be provided at the cost of the owner/developer. Recreation facilities shall be provided on-site to ensure that the needs of the residents of Plum Creek are met on-site, provided that a portion of the recreation need may be met through the development of active recreation facilities on the adjacent property (tax parcel 07781-002-000) owned by the City of Gainesville, subject to approval by the City.

3. All proposed access points to CR 231 are subject to approval

by the Alachua County Public Works Department. All proposed access points onto SR 121 are subject to approval by the FDOT.

4. Due to the roadway operation and safety concerns of SR 121,

the owner/developer shall provide a traffic study acceptable to the City, Alachua County, and the Florida Department of Transportation prior to the application for each PD rezoning. The study shall analyze issues related to trip generation, trip

distribution, operational and safety concerns, and shall propose appropriate transportation mobility modifications, consistent with the transportation impacts of the development. The development shall be required to meet any transportation mobility requirements in effect at the time of application for development review. The developer shall provide any transportation modifications that are site related and required for operational or safety reasons, such as, but not limited to, new turn lanes into the development, driveway modifications, or new traffic signals, and such operational and safety modifications shall be unrelated to the Transportation Mobility Program requirements.

5. Land use changes for Plum Creek do not vest future development for concurrency. The owner/developer is required to apply for and meet concurrency management certification requirements, including public school facilities and recreation mitigation at the time of filing any PD rezoning application.

6. The Plum Creek development shall include in any Planned Development Report the requirement that five percent of the residential units shall be affordable to households earning between 80% and 120% of the median income for Alachua County for a family of four as established from time to time by the U.S. Department of Housing and Urban Development. Each implementing PD zoning ordinance shall provide all required methods for ensuring implementation of this requirement, including the requirement that the owner/developer enter into a binding agreement that specifies the number of affordable units that must be constructed on an approved time schedule.

7. No rezonings to PD within the area of the map labeled "Plum Creek SR 121 Overall Site" in the Future Land Use Map Series A shall be adopted on final reading of the ordinance for areas north of the line labeled "Phase Line" until all areas south of the same line have been rezoned to PD zoning, and at least 75 percent of the infrastructure (e.g., roads, sidewalks, stormwater

facilities, utilities) south of the "Phase Line" has been constructed and completed.

8. In accordance with Policy 1.1.5 of the Public School Facilities Element and School Concurrency–Alachua County, FL, Updated

Interlocal Agreement for Public School Facility Planning (December 23, 2008), the Alachua County School Board submitted a school facilities capacity report. The report

concludes that projected student demand resulting from Plum Creek Development at the elementary, middle and high school levels can reasonably be accommodated for the five, ten and twenty year planning periods and is consistent with the Public School Facilities Element based upon School District not constitute a school capacity availability determination or concurrency certification, it does not reserve school capacity for Plum Creek, and it does not vest Plum Creek for school concurrency. At the time of application for a development order for Plum Creek, the developer shall apply for and obtain concurrency certification in compliance with the City Comprehensive Plan, Code of Ordinances and state law. Prior to approval of any development order, the City shall coordinate with the School Board and determine availability of school capacity within the applicable School Concurrency Service Area. A Capacity Enhancement Agreement or other mitigation option as provided for in Policies 1.1.7 and 2.5.1 through 2.5.4 of the Public School Facilities Element may be required at that

time to ensure continued compliance with all applicable provisions of the City Comprehensive Plan, Code of Ordinances and state law. In the absence of a Capacity Enhancement Agreement or other mitigation option being approved fulfilling the concurrency requirement, the City will not issue a concurrency certification if capacity is unavailable, and such circumstance can result in a delay or denial of a development order for Plum Creek.

Policy 4.3.6 This policy shall regulate the Planned Use District (PUD) known as the "Butler Development." The Butler Development PUD, including its division into four (4) subareas, is depicted on the map titled "Butler Development PUD Future Land Use Overlay" in the Future Land Use Map Series located in this element. The properties within the Butler Development PUD have underlying future land use categories as shown on the map titled "Butler Development Underlying Future Land Use" in the Future Land Use Map Series located in this element.

Comprehensive Plan policies of general applicability shall apply to the Butler Development PUD. In the event of express conflict or inconsistency between

the general Comprehensive Plan policies and any specific policies as set forth below, the specific policies shall govern.

a. The following conditions shall apply to the entirety of the Butler Development PUD:

1. The properties within subareas 1, 2, 3, and 4 shall be designated PUD on the Future Land Use Map.

2. The allowable uses and maximum levels of intensity, which may be allocated to any of the four (4) subareas, shall be as follows:

Commercial uses:	2,500,408 square feet
Office uses:	250,000 square feet
Hotel / Motel uses:	500 rooms
Multi-Family Residential uses:	1,000 units

The specific allowable uses and development program shall be specified in the Planned Development (PD) zoning ordinance.

3. The maximum cumulative development program for Butler Development (including existing development, new development and redevelopment) shall be limited to a maximum trip generation not to exceed 37,591 average daily trips. There are 12,224 average daily trips associated with the existing development as documented in the traffic study.

4. Multi-family residential uses shall be permitted in any combination of vertical or horizontal mix or as a stand-alone use. 20% of the multi-family residential units constructed, whether rental or owner-occupied, shall be affordable housing units for workforce housing as defined in Section 380.0651(3)(h), F.S., or moderate-income, low-income or very low-income persons or households as those terms are defined in the City's Local Housing Assistance Program (LHAP). The affordability of such units shall be maintained for a period of 10 years following construction, shall run with the land, and shall be enforceable by the City through recorded covenants or restrictions.

5. Maximum building height shall be eight (8) stories.

6. Development and redevelopment within the Butler Development PUD shall require Low Impact Development

(LID) techniques. Prior to final development plan approval, the owner/developer shall provide legally enforceable documents establishing a responsible entity to permanently provide maintenance of the LID functional landscape. LID is a site design strategy for maintaining or replicating the pre-development hydrologic regime through the use of design techniques that create functionally equivalent hydrologic andscape. Reclaimed water shall be used for irrigation if and

when it becomes available.

7. Stormwater management facilities shall be aesthetically pleasing and shall meet the requirements of the City's Engineering Design and Construction Manual. The owner/developer shall, at no cost to the City, dedicate right-of-way or provide easements to the City for the shared stormwater facilities.

8. Prior to the first final development plan being approved in either Subarea 1 or Subarea 2, a master plan for stormwater management and open space for the entire Butler Development PUD shall be provided, subject to approval by the City. This master plan shall include the written consent of all property owners within the Butler Development PUD.

9. Design standards specified in the PD zoning ordinance shall address: building orientation, build-to lines, building articulation, glazing, parking, garden walls, landscaping, pedestrian and transit facilities, a gridded, interconnected street network and limitations on the maximum size of single-occupant, single-story buildings.

10. Development shall include sidewalks, pathways, crosswalks and pedestrian nodes that shall be integrated within the overall Butler Development PUD to provide for a defined, interconnected system.

11. Redevelopment shall be consistent with the Comprehensive Plan policies that encourage the conversion of conventional shopping centers into more traditional, walkable centers.

12. Properties located outside of the Butler Development PUD shall be buffered from loading docks and outdoor uses that are within the Butler Development PUD.

13. The PD zoning ordinance shall establish standards for automobile-oriented uses such as drive-through facilities and structured parking to create and maintain the multi-modal character of the Butler Development PUD.

14. Individual service bays for automobile-oriented uses, including but not limited to gasoline and alternative fuel service stations, shall be located to the rear and/or interior side of buildings. A single entrance to interior service bays may be located on the side of the building.

Revision Dates and Ordinance Numbers
(See Page **A-55**)

15. The PD zoning ordinance shall identify the subareas where gasoline and alternative fuel service stations are allowed and

the maximum allowed number of such service stations and associated fueling positions. New construction of gasoline and alternative fuel service stations that front public or private streets shall be designed to:

(a). Enhance safe pedestrian and bicycle circulation and access to any retail or restaurant facilities on site. Sidewalk connections or marked pedestrian crosswalks shall be shown on the development plan to ensure pedestrian safety and comfort;

(b). Provide a pedestrian entry from sidewalks on the property frontage;

(c). Minimize the number and width of driveways;

(d). Include cross access or joint driveway connections to adjacent developments;

(e). Locate off-street parking to the rear and/or interior side of buildings;

(f). Locate fueling positions to the rear of buildings. Individual service bay doors shall not face a public or private street and shall be located to the rear and/or side interior of buildings; and

(g). Include architectural and site design that enhances the site area and promotes the City's multi-modal and design goals. At the development plan review, the design shall be reviewed for details such as, but not limited to, facade treatment, colors, glazing at pedestrian level, lighting,

roof detail, signage, landscaping, building and gas canopy height, building location relative to the street, and location of access points.

16. Structured parking that fronts on public streets

shall be designed to include office or commercial uses on the first floor. Structured parking that is integrated with and connected to commercial, office, or multi-family residential buildings shall not be required to contain office or retail uses on the first floor.

Integrated/connected parking structures shall meet designstandards specified in the PD zoning ordinance to ensure that building facades have sufficient articulation, especially on the ground floor level.

23.

17. The PD zoning ordinance shall be consistent with the City's transportation mobility policies as adopted in the Comprehensive Plan.

18. Pedestrian/bicycle safety and comfort and pedestrian/bicycle connections among all uses, subareas, and external areas shall be maximized throughout the Butler Development PUD. Bicycle racks shall be located close to the main building entrances. Pedestrian facilities shall link streets, buildings, parking and open space areas within and among the subareas. A network of sidewalks and street trees shall be provided on all internal streets (public and private). Sidewalks and pathway connections shall be made from the internal pedestrian system to the public right-of-way adjoining the Butler Development PUD.

19. Bicycle lanes and/or routes shall be provided to all bus stops and buildings within the Butler Development PUD as well as to bus stops and development adjacent to the Butler Development PUD.

20. Parking requirements may be reduced below the required parking standards in the Land Development Code to encourage alternative modes of travel and to reduce the amount of surface

parking. Parking spaces provided in a parking structure shall not count against the maximum number of allowable parking spaces when the parking structure is replacing surface parking area.

21. The Butler Development PUD shall include internal transportation connections within the Butler Development PUD as well as external transportation connections to development adjacent to the Butler Development PUD.

22. All private streets shall be constructed and maintained at the cost and expense of the owner in accordance with City standards for public streets. Main streets in town centers and

maneuvering lanes shall not be required to be built to public street standards.

Maneuvering lanes shall be allowed in all subareas and shall ~~contribute to the internal grid-system framework. Maneuvering~~

lanes shall be defined as vehicle use areas that connect off-street parking areas and that provide sidewalks and street trees on at least one side. On the side of a maneuvering lane that includes sidewalks and street trees, perpendicular vehicular access to parking areas shall be separated by at least 180 feet as

measured from centerline to centerline in order to enhance pedestrian comfort and safety. If a sidewalk and street trees are provided on only one side of a maneuvering lane, parking shall be allowed along only one side. If a sidewalk and street trees are provided on both sides of a maneuvering lane, parking shall be allowed along both sides.

24. Transportation Mobility Provisions.

(a). S. Clark Butler Properties, LTD., and the City entered into a TCEA Zone M Agreement on January 3, 2012. An addendum to the agreement was executed on November 29, 2012.

(b). The City recognizes that the TCEA Agreement remains valid, and transportation mitigation shall be required consistent with such, as long as the Butler Development has an adopted and valid PD zoning ordinance. Any amendments to this Comprehensive Plan policy or the Butler Development PD zoning ordinance that alter the trip generation or transportation analysis provided in Attachment 1 to the TCEA Zone M Agreement entered into on January 3, 2012, ("Butler Plaza Planned Development (Petition # PB-09-84 PDV) Transportation Analysis Executive Summary") shall be subject to the transportation mobility requirements in effect at the time of amendment.

(c). S. Clark Butler Properties, LTD., and the City agree that the TCEA Zone M Agreement satisfies the transit requirements for Phase 1A of the development (defined as 134,784 square feet of development). In addition, the Agreement includes all of the non-transit requirements for Phase 1 and Buildout as specified in Attachment 1 ("Butler Plaza Planned Development (Petition # PB-09-84 PDV) Transportation Analysis Executive Summary").

S. Clark Butler Properties, LTD., and the City agree that those requirements must be met by the times specified in the "Development Schedule" portion of the PD zoning ordinance.

(d). S. Clark Butler Properties, LTD., and its successors and assigns, may choose to opt into the City's Transportation Mobility Program (TMP) subject to an updated transportation study and analysis that would allow the City to evaluate the development for compliance with the TMP.

(e). Streetscaping is an important component of the City's transportation mobility planning because it enhances pedestrian comfort and visual aesthetics. Consistent with the Transportation Mobility Program policies in the Transportation Mobility Element, new development on public or private streets shall meet the 65-gallon streettree requirement on building frontages as well as take into consideration the Local Governments Manual of Uniform Minimum Standards for Design, Construction, and Maintenance for Streets and Highways Standards, Subsection 334.044(10)(A), F.S., Section 336.045, F.S., the MTPO Urban Design Standards for Landscaping, and GRU utility line clearance separation standards. Redevelopment sites shall be required to meet this policy for 50 percent of the required street trees. The front build-to line may be modified if there are existing utility or right-of-way constraints.

25. The Butler Development PUD shall provide operational and safety modifications required due to impacts on transportation facilities. Modifications required for operational and safety impacts that are site related shall not count toward meeting the agreed upon transportation requirements in the TCEA Zone M Agreement executed on January 3, 2012 (as modified by the Addendum executed November 29, 2012).

26. The PD zoning ordinance shall define the construction timeframe, design details, and extent of the SW 62nd Boulevard extension through the Butler Development PUD consistent with the intent of the MTPO design elements (alternative 4B-3) dated March 2, 2009. The incremental cost of construction (i.e., the cost of construction that is above and beyond the cost that would be incurred to construct a private 3-lane access drive per City standards, including sidewalks and bike lanes) calculated based on the Florida Department of Transportation generic cost per mile shall count toward meeting the agreed upon transportation requirements in the TCEA Zone M Agreement executed on January 3, 2012 (as modified by the Addendum executed November 29, 2012). Upon completion of construction, the right-of-way shall be dedicated to the City subject to inspection and approval by the City. Within 90 days following the date of final adoption of the PD zoning

ordinance, S. Clark Butler Properties, LTD., and its successors and assigns, shall at its expense obtain an appraisal of the land and shall provide a copy of the appraisal to the City for its review and approval. If the appraisal is approved, the appraised value (less the appraised value for any right-of-way that the City vacates for this road extension project) shall count toward meeting the agreed upon transportation requirements in the TCEA Zone M Agreement executed on January 3, 2012 (as modified by the Addendum executed November 29, 2012). There shall be no direct access to the Southwest 62nd Boulevard extension for outparcels; all access shall be from an internal road network and/or shared driveways.

27. Vehicular cross-access connections within development areas shall be maximized throughout the Butler Development PUD.

28. The PD zoning ordinance shall allow the Gainesville Regional Transit System to review all development plans affecting transit routes for the potential addition of new transit stops or improvements to existing transit facilities. In addition, the PD zoning ordinance or a Transit Transfer Station Agreement shall specify the requirements (including design, size, cost, timing of completion and location) for S. Clark Butler Properties, LTD., and its successors and assigns, to construct, at its expense, a transit transfer station and a park and ride lot within the Butler Development PUD, as approved by the Gainesville Regional Transit System. The park and ride lot shall provide at least 50 park-and-ride spaces in one location for transit users. The transit transfer station shall include restroom facilities, bicycle storage, a route map kiosk, and bays for a minimum of six (6) buses. Upon completion, the park and ride lot and the transit transfer station improvements and associated land shall be conveyed to the City at no cost.

29. In accordance with the PD zoning ordinance, S. Clark Butler Properties, LTD., and its successors and assigns, shall coordinate with FDOT to address transportation impacts that affect FDOT facilities. Proof of satisfying any FDOT requirements shall be provided to the City in the form of a letter or other written documents issued by the FDOT.

30. Future connectivity between the Butler Development PUD and the area west of I-75 is in the MTPO adopted Long Range Transportation Plan. The PD zoning ordinance shall specify details regarding the timing, dedication of right-of-way to the City and roadway design and construction (including ~~sidewalks, bike lanes, or a multi-use path) for SW 30th Avenue~~

from SW 40th Boulevard to SW 42nd Street. The PD zoning connection of this road segment to the proposed SW 30th Avenue bridge street system east of I-75. S. Clark Butler Properties, LTD., and its successors and assigns, shall dedicate at least 90 feet and up to 100 feet of right-of-way to the City for SW 30th Avenue between SW 40th Boulevard and SW 42nd

Street along the Butler Development PUD's southern boundary, except where it is contiguous to the Transit Transfer Station parcel in which case it shall be along that parcel's northern boundary. S. Clark Butler Properties, LTD., and its successors and assigns, shall obtain an appraisal at its expense and shall provide a copy to the City for its review and approval within 90 days of the date of final adoption of the PD zoning ordinance. The dedication of right-of-way and construction costs for the SW 30th Avenue improvements between SW 40th Boulevard and SW 42nd Street shall count toward meeting the agreed upon transportation requirements specified in the TCEA Zone M Agreement executed on January 3, 2012 (as modified by the Addendum executed November 29, 2012).

b. Subarea 1. In addition to the conditions that apply to the entirety of the Butler Development PUD, the following additional conditions shall apply to Subarea 1:

1. Development in this subarea shall establish a connected grid of public streets, private streets, and maneuvering lanes with a maximum block size of 3,200 feet in perimeter. Property boundaries adjacent to the PUD may be used to establish one or more sides of a block. The block size requirement shall not apply to shared stormwater facilities or park areas (active or passive recreation/open space).

2. A minimum of 20% of Subarea 1 shall be designated as open space. This open space requirement shall be based on the entire subarea rather than specific parcel development. Open space may include, but is not limited to, stormwater management facilities when the perimeter includes public space or amenities such as parks, trails or paths, landscape or hardscape, plazas, squares, public commons, and/or open-air malls.

3. Large scale retail uses (defined for purposes of the Butler Development PUD as a retail use with a single-story building footprint that exceeds 100,000 square feet) in this subarea may have parking facilities located outside the front door of these retail uses.

c. *Subarea 2*. In addition to the conditions that apply to the entirety of the Butler Development PUD, the following additional conditions shall apply to Subarea 2:

1. Design standards specified in the PD zoning ordinance shall establish a development pattern that is compatible with and transitions appropriately to the nearby Urban Village.

2. This subarea shall contain a connected grid of public streets, private streets, and maneuvering lanes with a maximum block size of 2,000 feet in perimeter. Property boundaries adjacent to the PUD may be used to establish one or more sides of a block. The block size requirement shall not apply to shared stormwater facilities or park areas (active or passive recreation/open space).

3. A minimum of 20% of Subarea 2 shall be designated as open space. This open space requirement shall be based on the entire subarea rather than specific parcel development. Open space may include, but is not limited to, stormwater management facilities when the perimeter includes public space or amenities such as parks, trails or paths, landscape or hardscape, plazas, squares, public commons, and/or open-air malls.

4. Off-street parking shall not be located in front of buildings that front on SW 24th Avenue. The location of off-street parking on other streets shall be regulated by the PD zoning ordinance.

d. *Subarea 3.* In addition to the conditions that apply to the entirety of the Butler Development PUD, the following additional conditions shall apply to Subarea 3:

1. All new development and redevelopment of existing buildings within Subarea 3 shall meet the design standards established in the PD zoning ordinance. The PD zoning ordinance shall establish a threshold that limits new development building square

   footage in Subareas 1 and 2 until a minimum amount of new square footage consistent with the town center design standards is under construction in Subarea 3.

2. Development within Subarea 3 shall meet the following design standards, as may be more particularly described in the PD zoning

   ordinance:

   (a). Standards that ensure compatibility among allowable uses and that provide a quality pedestrian experience by regulating building type, scale, overall building appearance

Revision Dates and Ordinance Numbers
(See Page **A-55**)

outdoor uses and mechanical equipment, signage and landscaping, and location of parking.

(b). A connected grid of public streets, private streets, and maneuvering lanes with a maximum block size of 2,000 feet in perimeter. The block size requirement shall not apply to shared stormwater facilities or park areas (active or passive recreation/open space).

(c). A connected network of wide sidewalks that promotes safety, comfort, and convenience for pedestrians by linking streets, parking areas, buildings, and adjacent development.

(d). Compact design to encourage and accommodate walking.

(e). Building facades that are close to and facing the street, and generally aligned.

(f). Shade trees along all public and private streets in accordance with Comprehensive Plan policies.

(g). First floors of buildings shall incorporate levels of articulation and glazing to promote pedestrian interest.

(h). Terminated vistas.

(i). On-street parking where feasible and appropriate to building area and street type.

(j). Off-street parking located at the rear and/or side of buildings and away from pedestrian areas. Buildings fronting Archer Road may be allowed up to a double-loaded row of parking in front of a building front face.

(k). Design and architectural requirements for drive-through facilities that provide pedestrian safety and comfort, and establish a maximum number of drive-through lanes for any drive-through facility in the town center.

3. A minimum of 10% of Subarea 3 or town center areas shall be designated as open space. This open space requirement shall be based on the entire subarea rather than specific parcel

development. Open space may include, but is not limited to, stormwater management facilities when the perimeter includes public space or amenities such as parks, trails or paths, landscape or hardscape, plazas, squares, public commons, and/or open-air

malls.

e. *Subarea 4.* In addition to the conditions that apply to the entirety of the Butler Development PUD, the following additional conditions shall apply to Subarea 4:

1. Redevelopment shall include design features to transform drive aisles into a gridded, interconnected street network that may include maneuvering lanes. As drive aisles are transformed into public or private streets and/or maneuvering lanes, the parking areas shall include sidewalks, as deemed appropriate by the City during development plan review.

2. Redevelopment shall establish a connected grid of public streets, private streets, and maneuvering lanes to establish a pedestrian-scaled street network. Pedestrian scale blocks may vary in size but should be generally no larger than 1,600 feet in perimeter. The maximum block size shall be 2,000 feet in perimeter. The block size requirement shall not apply to shared stormwater facilities or park areas (active or passive recreation/open space). The PD zoning ordinance shall establish thresholds associated with redevelopment of this subarea that include requirements for a street layout plan to establish the new street grid system.

3. A minimum of 20% of Subarea 4 shall be designated as open space. This open space requirement shall be based on the entire subarea rather than specific parcel development. Open space may include, but is not limited to, stormwater management facilities when the perimeter includes public space or amenities such as parks, trails or paths, landscape or hardscape, plazas, squares, public commons, and/or open-air malls.

4. Redevelopment shall include pedestrian pathways from the street to the fronts of buildings and to adjacent development as necessary to provide safe, direct and convenient access to building entrances and off-street parking. The pedestrian routes shall be direct and shall minimize potential conflicts with vehicles. For pedestrian safety and comfort, where a pedestrian route must proceed alongside or cross a parking lot or driveway, a separate path shall be provided with buffer landscaping and other amenities. In lieu of a separate path, a highly visible crosswalk made of materials acceptable to the City and that provides a strong visual contrast between the pedestrian area and vehicular surface may be used.

5. A streetscape plan shall be required in conjunction with redevelopment plans for this subarea.

Redevelopment along the Archer Road corridor shall be required to meet Comprehensive Plan streetscaping standards, as well as take into consideration the Local Governments Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways Standards, Subsection 334.044(10) (A), F.S., and Section 336.045, F.S., the MTPO Urban Design Standards for Landscaping, and GRU utility line clearance separation standards.

6. The PD zoning ordinance shall specify the details and timeframe for the dedication of additional right-of-way along both sides of the SW 62nd Boulevard extension from Archer Road to Windmeadows Boulevard as redevelopment occurs within this subarea that is adjacent to the extension. The value of the right-of-way shall be established by an appraisal that is submitted for review concurrent with an application for development plan review for development that is adjacent to the extension. S. Clark Butler Properties, LTD., and its successors and assigns, shall obtain the appraisal, at its sole expense, and shall provide a copy to the City for review and approval. If the appraisal is approved by the City, the appraised value shall count toward meeting the transportation mobility program requirements in effect at the time of development plan approval of the redevelopment. The credit for transportation mitigation shall not be given until the dedication occurs.

Policy 4.3.7 The City establishes the Urban Village, as mapped in the Future Land Use Element Map Series, to support and implement a long-term vision for redevelopment and development in an area proximate to the University of Florida campus.

a. The long-term vision for redevelopment and development includes:

1. Promoting infill development and redevelopment that supports a safe, comfortable, and attractive pedestrian environment with convenient interconnections to transit and bicycle facilities;

2. Promoting street interconnectivity, a gridded street network, and connections among uses;

3. Providing a complementary mix of land uses with appropriate densities and intensities that support transit usage, future bus rapid transit opportunities, and other multimodal opportunities;

4. Over time, attaining a high quality level of service for sidewalks, bicycle facilities, and transit facilities;

5. Promoting the local innovation economy by providing locations for employment opportunities in close proximity to the University of Florida campus within a mixed-use setting;

6. Promoting quality urban design that requires articulated front facades and places buildings and front entrances close to the sidewalk; and

7. Promoting an attractive streetscape with appropriate street trees to provide shading and landscape interest and street furniture with a unified design appearance for the area.

b. In order to achieve the long-term vision, new development of vacant properties and redevelopment of existing developed properties within the Urban Village shall be evaluated (taking into account the scale, size, nature, density and intensity of the proposed development or redevelopment) to determine which of the following requirements shall apply:

1. New development and redevelopment shall be transit supportive, which includes, but is not limited to: development at appropriate densities and intensities to support transit use (including bus rapid transit); provision of bus shelters with adequate lighting and bicycle storage facilities in appropriate and safe locations; provision of land for bus turnout facilities in appropriate locations; provision of land for smart bus bays in appropriate locations; and sidewalk and bicycle connections to transit stops. The appraised value of land dedicated for: dedicated transit lanes; construction of bus turnout facilities; construction of smart bus bays and other significant transit supportive capital improvements shall count toward meeting the transportation mobility requirements in effect at the time of development review.

2. To establish transit-supportive densities, new development and redevelopment with a mix of residential and non-residential uses shall develop at a minimum residential density of 10 units per acre. To be considered mixed-use, a residential development shall include a minimum of 10,000 square feet of non-residential uses. To be considered mixed-use, a non-residential development shall contain a minimum of 3 residential units. New single-use, residential development shall

develop at a minimum density of 20 units per acre. New development that expands an existing single-use residential development on the existing site shall not be required to meet the 20 units per acre density requirement. The minimum density requirements do not apply to parcels smaller than 0.5 acre that existed prior to 12:01am on June 1, 2009 (the effective

date of Ordinance No.080137, that annexed the Urban Village into the City of Gainesville), as documented by the City's records of that date.

3. In order to serve the development/redevelopment and establish a gridded roadway system in the Urban Village, new development and redevelopment shall dedicate land for right-of-way or construct streets. The appraised value of such land dedication and/or street construction shall count toward meeting the transportation mobility requirements in effect at

the time of development review. Stub-outs shall be provided for future interconnectivity where connections cannot be implemented at the time of development, due to off-site constraints.

4. New development and redevelopment shall include pedestrian scaled blocks that establish a pedestrian scaled street network throughout the Urban Village so that the transportation system in this neighborhood functions well for automobile drivers, transit riders, bicyclists and pedestrians. Pedestrian scale blocks vary in size but are generally no larger than 1,600 feet in perimeter. Where a pedestrian scaled street network is not feasible, the City may allow block sizes up to 3,200 feet in perimeter and may allow sidewalk and bicycle connections or multi-use paths to form the block perimeter. Land development regulations shall specify circumstances in which these exemptions from the maximum perimeter block size are appropriate. These circumstances may include, but are not limited to, locations where: the size or shape of the planning parcel makes inclusion of some streets infeasible, public stormwater or park facilities create impediments; there are regulated natural or archeological resources or regulated wetlands that would be negatively impacted; access management rules prohibit connections; utility constraints

make the block size infeasible; there are contamination sites; and the proposed block is inconsistent with City plans for a future street network in the area.

5. New development and redevelopment shall incorporate quality urban form that includes, but is not limited to: build-to lines, façade articulation and glazing, minimum and maximum height, and building relationship to the street. Land development regulations shall specify further requirements for quality urban form.

6. New development and redevelopment shall use street types and

Revision Dates and Ordinance Numbers
(See Page **A-55**)

building form standards that are consistent with the transect zoning district requirements in the Land Development Code.

c. The following uses are prohibited in the Urban Village: Single-story, large-scale retail (defined as a single retail use with a ground floor footprint exceeding 100,000 square feet) and surface parking as a principal use.

d. Structured parking is encouraged in the Urban Village.

Policy 4.3.8 The property governed by this policy shall be known as the University Corners Planned Use District (PUD) for land use purposes. The PUD property, as depicted on the map labeled University Corners PUD and Underlying Future Land Use in the Future Land Use Map Series, shall be governed by the following conditions:

a. The uses permitted on the property shall be limited to commercial uses, general office and medical office uses, multi-family residential dwelling units (apartments or condominiums), a hotel, a place of religious assembly, and an above ground parking structure(s).

b. The maximum building square footage permitted for the commercial, office, hotel and residential buildings shall not exceed in the aggregate 950,000 square feet.

c. The maximum square footage permitted for the parking structure(s) shall not exceed in the aggregate 380,000 square feet.

d. The maximum number of residential dwelling units shall not exceed 500 units. The maximum number of hotel rooms shall not exceed 250 rooms.

e. Useable open space (open air plaza, open air arcades on the ground level, and open air pool/recreation areas on multiple building levels) shall be equal to or greater than 80,000 square feet.

f. The maximum building height of all buildings (except the parking structure) is limited to 110 feet measured from grade level to the top of

the building plate. The tower features, stairs, elevators, and elevator machine room may exceed the maximum height.

g. The maximum building height of the parking structure is limited to 110 feet measured from grade level to the top of the guard rail. The tower features, accessory recreational facilities, stairs, elevators, and elevator machine room may exceed the maximum height.

h. The maximum number of stories for all buildings (except the parking structure) is limited to ten (10) stories above grade level.

i. Vehicular access to the property shall be limited to ingress and egress from Northwest 14th Street, Northwest 3rd Avenue, and Northwest 13th Street (US 441). Pedestrian and bicycle access to the site shall be provided by sidewalks that surround the four sides of the property. There shall be a system of plazas, arcades and sidewalks that will provide access to all uses throughout the site.

j. The owner/developer shall construct bus shelter(s) that are architecturally compatible with the development at the development site on either West University Avenue or Northwest 13th Street (US 441), or both, at a location(s) coordinated with the City Manager through the Gainesville Regional Transit System (RTS) and the Gainesville Public Works Department.

k. This ordinance does not vest any development on the property described in Section 1 of this ordinance for concurrency as provided in the City's Comprehensive Plan. The owner/developer shall apply for and meet concurrency management standards at the time of application for development plan approval. An application for a Certificate of Final Concurrency must be submitted with the application for final development plan approval.

Objective 4.4 Newly annexed lands shall retain land uses as designated by Alachua County until the Future Land Use Element of this Plan is amended.

Policy 4.4.1 Land use amendments should be prepared for all annexed properties within one year of annexation.

Policy 4.4.2 Alachua County LOS standards shall apply until newly annexed lands are given land use designations in this Plan.

Objective 4.5 The City's land development regulations shall provide standards and guidelines that will regulate signage, subdivision of land, vehicle parking, and on-site traffic flow.

Policy 4.5.1 The City shall regulate signage in the City of Gainesville through land development regulations.

Policy 4.5.2 The City shall regulate the subdivision of land, vehicle parking, and on-site traffic flow through land development regulations.

Objective 4.6 **The City's Land Development Code shall provide a regulating mechanism to ensure consistency between the land use categories established in this Future Land Use Element and the zoning districts established in the Land Development Code.**

Policy 4.6.1 The City's Land Development Code shall implement the land use categories created by this Comprehensive Plan and shall regulate all development until superseded by new land development regulations as required by this Comprehensive Plan. The Land Development Code shall designate the zoning districts that implement the land use categories created by this Comprehensive Plan. Proposed developments that do not fall within the parameters of existing zoning districts may be permitted to develop as Planned Developments and shall meet all the requirements of that zoning classification and the Future Land Use Element.

Policy 4.6.2 Nothing in this Plan shall limit or modify the rights of any person to complete any development that has been issued a final development order prior of the adoption of this Plan, from which development has commenced and is continuing in good faith.

Objective 4.7 **A Special Area is established for the Idylwild/Serenola area that shall be subject to the policies and standards contained in this Section. Portions of the Idylwild/Serenola area that are not currently within city limits shall be subject to these policies and standards at such time as they may be annexed into the City.**

Policy 4.7.1 The intent of this Special Area is to establish specific guidelines for the area identified as Idylwild/Serenola, generally bounded by Archer Road to the north, SW 13th Street to the east, Paynes Prairie to the south and east, and SW 34th Street and Interstate 75 to the west. Only a small portion of this area is currently within city limits and subject to these standards. To help with identification of the area and specific areas described herein, an Idylwild/Serenola Special Area Map (Special Area Study: Idylwild/Serenola in the Future Land Use Element Map Series), is incorporated by reference. Except where modified by the policies herein, all policies of the Plan shall be applicable within the special area. Where the specific policies conflict with general policies in the remainder of the plan, it is the intent that the policies herein shall prevail.

Policy 4.7.2 To preserve and conserve significant natural resource areas, the following policies shall apply.

a. Preservation of significant natural communities, listed species habitat, geological features, and areas of strategic ecosystems shall be encouraged through public or private acquisition where possible, and other appropriate methods of preservation.

b. Appropriate conservation strategies shall be used to permit compatible

development when acquisition is not possible. These development regulations are contained in the regulated natural and archeological resources development portion of the Land Development Code.

Policy 4.7.3 To preserve, maintain, and restore where necessary, areas containing extensive trees canopies, policies (a) and (b) below shall apply. Tree canopy areas are major existing areas containing a significant population of trees of a size and condition to be considered a significant environmental resource.

a. The development regulations shall require a tree survey be submitted for all development proposed within designated "Tree Canopy Areas". The survey shall be submitted at the time of development application.

b. Development within Tree Canopy Areas shall utilize "cluster" design concepts where appropriate, concentrating development within given areas to minimize the impact of the proposed development. The development regulations shall provide for appropriate mitigation, if necessary.

Policy 4.7.4 To maintain developable or already developed lots in as much of a natural state as possible, the following policy shall apply in areas currently in residential use. The areas currently in residential use contain the densely tree- canopied, developed areas of the Idylwild, Serenola, and Malore Gardens neighborhoods.

a. Innovative lot designs shall be encouraged through flexibility in the development regulations to maintain the natural character of the individual lots currently in residential use.

Policy 4.7.5 To protect listed species through habitat maintenance and appropriate development regulations, the following policies shall apply.

a. The policies within the Conservation, Open Space and Groundwater Recharge Element of the Gainesville Comprehensive Plan shall apply as they relate to listed species.

b. "Listed species," meaning those species of plants and animals listed by federal or Florida law as endangered, threatened, or a species of special concern; and those species ranked by the FNAI as S1, S2 and S3 plants, and S1 animals, S2 animals and only S3 animals that are

breeding/nesting shall be afforded the legal protective status provided by law.

c. The encroachment of development upon areas of listed species shall be discouraged through regulations contained in the regulated natural and archeological resources portion of the Land Development Code.

Policy 4.7.6 Individual sites and areas of archeological significance shall be preserved,

protected, or acquired, and wherever possible, enhanced. Policies (a) through (b) below shall apply to archeologically significant areas.

a. The relocation of construction sites which coincide spatially with identified historical and archeological sites shall be encouraged.

b. The development regulations shall establish minimum buffer areas around known archeologically significant areas.

Policy 4.7.7 The City shall protect existing residential neighborhoods from encroachment of incompatible land uses in the Idylwild/Serenola Special Area; promote compatible land uses on adjacent properties; and encourage the type and intensity of land uses that are consistent with and compatible to the natural characteristics of the land.

Policy 4.7.8 The policies governing land use in the special area are as follows:

a. The 44 acres of the Idylwild/Serenola Special Area that were annexed by Ordinance No. 991231, if developed, shall be developed with no more than 88 residential units, each of which must be single-family and detached.

b. Residential properties located adjacent to single-family residential neighborhoods should be developed at not higher than a 2 du/a increase in density above the density permitted on any adjacent land within 150 feet. Adjacent properties shall mean abutting properties or properties which are separated only by a private or County right-of-way or easement, but properties that are separated by an arterial street shall not be considered adjacent. Further increases may be permitted only for development shown to be sufficiently similar in character and intensity to existing uses so that compatibility is maintained. Techniques such as step-up in residential density, buffers, setbacks, screening, modest surface parking, and low-intensity lighting between uses—based on performance standards to be defined in the development regulations—may be utilized to provide such compatibility. All density increases for any portion of the 44-acre property annexed by Ordinance No. 991231 shall comply with Policy 4.9.8 a., which limits the total number of units for the entire, 44-acre property to 88, each of which must be single-family and detached.

c. The natural constraints of the land shall be considered in light of any proposed development.

d. Provide protection for environmentally significant areas. Specific criteria, standards, and procedures should be identified for development requests including provisions such as appropriate setbacks, buffers, mitigation and restoration requirements and provision of natural open areas.

e. Provide for low density/intensity uses around environmentally significant areas such as Paynes Prairie.

f. Provide through the development regulations a manner to reevaluate proposed development which has not developed after a designated period of time.

Policy 4.7.9 Provide the necessary infrastructure to sustain and support growth which maintains and enhances the quality of life within the Idylwild/Serenola neighborhood.

Policy 4.7.10 To provide for public water and centralized sewer system of adequate size and capacity to protect the sensitive environmental structure of the area, policies (a) through (e) below shall apply.

a. Extend existing public water lines as appropriate to all approved new development within the Idylwild/Serenola neighborhood, appropriately looped to enhance flow. Such extensions shall be made in accordance with GRU extension policies.

b. Extend centralized sanitary sewer facilities as appropriate to all approved new development. Such extensions shall be made in accordance with GRU extension policies.

c. Coordinate the extension of water and sewer facilities with the expansion of the GRU treatment plant.

d. Require all new development to tie into the extended water and sewer lines when capacity is available. Such connections shall be made in accordance with GRU policies.

e. Prohibit new development within the neighborhood unless it is connected to a public water supply and a centralized sewer facility unless:

1. the development is single-family in nature; and
2. is being constructed on a lot of 3 acres or more; and
3. receives the appropriate permits for either well use, on-site treatment, or both.

Objective 4.8 Eliminate uses inconsistent with the adopted Future Land Use Map.

Policy 4.8.1 The City shall implement land development regulations that eliminate or control those uses that are found to be inconsistent with the Future Land Use Plan. Land development regulations shall address the continued existence of legal non-conforming uses, and amortization schedules for signs and street graphics.

Policy 4.8.2 No legal, nonconforming use at the time this plan is adopted or amended shall be rendered illegal by this plan, except as provided in the land development regulations.

GOAL 5 ENHANCE THE CITY'S URBAN FORM THROUGH THE IMPLEMENTATION OF DESIGN STANDARDS IN THE LAND DEVELOPMENT CODE AND THROUGH COORDINATION WITH THE UNIVERSITY OF FLORIDA.

Objective 5.1 Urban design standards established in the Land Development Code shall enhance the sense of place, improve the urban form, and provide for the safety and comfort of pedestrians, bicycles, transit, and other vehicles in the City. These standards shall reflect a commitment to improve and maintain the vitality of the City and its neighborhoods.

Policy 5.1.1 Urban design standards established in the Land Development Code shall foster predictable built results and a high-quality public realm with clear distinctions between urban, suburban, and natural areas.

Policy 5.1.2 Urban design standards established in the Land Development Code shall address the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks.

Objective 5.2 Guide large, corporate, national chain sales and service establishments toward a design that promotes the unique character and identity of Gainesville.

Policy 5.2.1 The City shall develop land development regulations that control facade articulation, building orientation, building location, automobile-oriented uses such as drive-throughs and gas stations, location and amount of parking, number of stories, outdoor lighting, compatibility with context, and quality of materials for large retail and service establishments in a manner that promotes civic pride, unique identity and land use objectives.

Objective 5.3 The City shall coordinate with the University of Florida design efforts as contained within the Campus Master Plan and future design plans for Innovation Square.

Policy 5.3.1 The City shall collaborate with the University to strengthen the image of the City and the University through better design along University Avenue and West 13th Street.

Policy 5.3.2 The City and the University shall collaborate to enhance the portions of SW 34th Street and Archer Road adjacent to the campus in order to promote more multi-modal, quality urbanism.

Policy 5.3.3 The City shall collaborate with the University to improve the design and function of the Gateway Roads identified in the Campus Master Plan (SW 16th Avenue, Archer Road, SW 13th Street, University Avenue, SW 2nd Avenue, and SW 34th Street) through University participation on the Metropolitan Transportation Planning Organization and its committees, the College Park/University Heights CRA Advisory Board, and any boards or committees as may be created to address such issues.

Objective 5.4 The City shall partner with neighborhoods to facilitate effective communication between the neighborhood residents and the City and develop specific actions to address neighborhood identified goals and improvements.

Policy 5.4.1 The City shall create heritage, conservation or other appropriate overlay districts as needed for neighborhood stabilization.

Revised 03/04/02, Ord. 000620 & 001149
Revised 04/26/04, Ord. 030466
Revised 08/22/05, Ord. 040373
Revised 11/14/05, Ord. 031253 & 041057
Revised 10/23/07, Ord. 060499
Revised 10/16/08, Ord. 070904 & 071154
Revised 12/18/08, Ord. 080343
Revised 01/26/09, Ord. 070447
Revised 12/17/09, Ord. 070210
Revised 10/21/10, Ord. 100189
Revised 11/03/11, Ord. 100697
Revised 01/05/12, Ord. 110290
Revised 05/17/12, Ord. 110599
Revised 02/21/13, Ord. 120209
Revised 06/20/13, Ord. 120616
Revised 08/15/13, Ord. 120370
Revised 11/21/13, Ord. 121107
Revised 07/17/14, Ord. 130435
Revised 09/03/15, Ord. 150113
Revised 04/07/16, Ord. 150441
Revised 07/20/17, Ord. 140817

Future Land Use Map Series

- 2013-2023 Generalized Future Land Use Map [Note: This map is on file at the Planning and Development Services Department.]
- Special Study Area - Idylwild/Serenola
- Plum Creek SR-121 PUD and Underlying Future Land Use
- Butler Development Underlying Future Land Use
- Butler Development PUD Future Land Use Overlay
- University Corners Underlying Future Land Use
- University Corners PUD Future Land Use Overlay
- Innovation Zone
- Urban Village
- Active Mine Sites

- *Environmentally Significant Land and Resources Map Series:*

    - 100-Year Floodplain
    - Wellfield Protection Zones
    - Floridan Aquifer High Recharge Area
    - Surface Waters & Wetlands
    - Strategic Ecosystems

- *Historic Preservation Map Series:*

    - Northeast Gainesville Residential Historic District
    - Pleasant Street Historic District
    - Southeast Gainesville Historic District
    - University Heights Historic District—North
    - University Heights Historic District—South
    - Designated Historically Significant Properties

Future Land Use Element

Data and Analysis

Introduction

The neighborhood is the fundamental building block to quality of life in Gainesville. The City is committed to establishing and retaining land uses, policies, and infrastructure that will protect the viability of neighborhoods. This can most effectively be achieved by establishing standards that are people-oriented and create an environment rich in housing and transportation choices, adequate public parks, and protected urban natural areas. Evidence of the need for the City to adopt a Future Land Use Element more effectively protecting and retaining quality neighborhoods is the trend in which the unincorporated urban population in Gainesville has been growing at a higher rate than within city limits.

The Future Land Use Element also is oriented toward continuing Gainesville's pattern of a strong central core, redevelopment and revitalization of older areas, and a continued focus on strong, neighborhood centers rich in transportation choice. The Future Land Use Element is intended to complement the Transportation Mobility Element by promoting land use patterns that support transportation choice.

In order to begin analysis of the Future Land Use Element, it is useful as a first step to assess what population could be accommodated under existing land use designations in the city.

Projected City Build-Out

The following estimates of build-out population within city limits, as described in Table 1 and summarized below, are based on development densities designated by existing land use designations for remaining vacant residential lands within the city. Also included is an estimate of additional non-residential square footage that could be built, and an analysis of existing building square footage and floor area ratio for three representative neighborhood (activity) centers.

Residential

Legally subdivided vacant parcels in single-family land use districts, and those parcels too small to accommodate multi-family developments in multi-family land use districts, were assigned one single-family dwelling unit per parcel. Other vacant parcels in all residential districts not restricted by environmental or other site constraints have been assigned the maximum density allowed by the Land Development Code for each zoning district. The exceptions are high-density residential zoning districts, in which densities have been assigned that are lower than the maximum allowed, to take into account the fact that typical multi-family projects in Gainesville are closer to the minimum density allowed rather than the maximum allowed.

Provisos

- Vacant lands designated as planned development are built at one single-family dwelling per lot.

- New single-family construction will occur at the maximum allowable density, while new multi-family construction will continue to occur at a density below the maximum allowed in most cases.

Table 1. Proposed Available Vacant Land Buildout Based Upon 3/15/2000 Data Calculations

Zoning District	Available Single Family DU Lots	Available Vacant Acreage	F.A.R.	DU/Acre	Total DU at Buildout	Proposed Build-out, Sq. Ft.	Proposed Population Increment at Build Out
BUS		49.28	0.20			429,327	
BA		93.80	0.14			572,030	
BT		3.47	0.20			30,231	
PD/Commercial		10.58	0.20			92,173	
SUBTOTAL		**157.13**				**1,123,761**	
OF		30.95	0.20			269,636	
OR		3.88	0.20			33,803	
PD/Office		5.89	0.20			51,314	
MD		6.14	0.20			53,492	
SUBTOTAL		**46.86**				**408,244**	
W		12.27	0.20			106,896	
I-1		288.00	0.20			2,509,056	
I-2		147.00	0.20			1,280,664	
SUBTOTAL		**447.27**				**3,896,616**	
MU-1		107.61	0.20			937,498	
MU-2		95.83	0.20			834,871	
CCD		6.59	0.50			143,530	
SUBTOTAL		**210.03**				**1,915,899**	
PS		323.09					
RSF-1	2261	211.10		3.5	3,000		7,062
RSF-2	308	16.29		4.6	383		901
RSF-3	312	76.40		5.8	755		1,778
RSF-4	149	21.69		8.0	323		759
RMF-5	113	94.59		8.0	870		2,047
RMF-6	13	193.63		10.0	1,949		4,589
RMF-7	14	30.88		14.0	446		1,051
RMF-8	8	4.37		20.0	95		225
RC	330				330		777
MH		5.00		12.0	60		141
RMU		0.76		20.0	15		36
RH-1	8	9.91		25.0	256		602
RH-2		1.54		30.0	46		109
PD/Residential	867				867		2,041
SUBTOTAL	**4,383**	**666**			**9,395**		**22,117**
CON		1,260.72					
ED		1.03					
Total Buildable Acreage		**3,112.29**					
Total DU Buildout Increment					**9,395**		
Total Buildable Sq. Ft.						**7,344,521**	
Population Increment from Buildout							**22,117**

1/25/01

Source: Gainesville Dept. of Community Development, 3/22/99

No significant redevelopment will occur which changes the total amount of non-residential square footage or the number of residential units on a parcel.

- Vacant lands designated for residential development will not be rezoned to allow more or less residential units than what are currently allowed.
- Additional annexation is not taken into account.
- An average of 2.354 persons will be living in each new residential unit, as reported by the UF Bureau of Economic and Business Research.
- Vacant land designated mixed use will not be built to include any residential.
- The A.D. Weiss property (formerly the Gainesville North Activity Center) will have an estimated residential density of 2 units per acre.

Given these provisos, Table 2, 3 and 4 show the determinations made:

Table 2. Projected Residential Build-Out Population Increase

	Existing Vacant SF Parcels	Other Vacant Acres	Added Dwelling Units	Added Population
Residential	400	666 ac	9,395	22,115

Table 3. Projected Non-Residential Build-Out Square Footage Increase

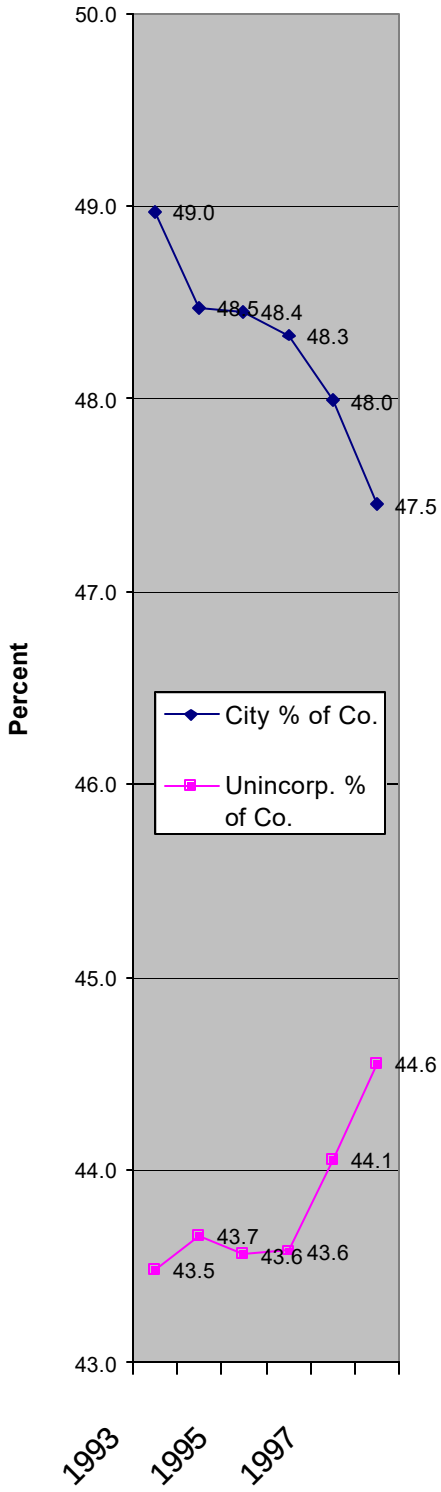
	Vacant Acres	Typical City FARs	Added Sq Ft
Office	47	0.20	408,244
Commercial	157	0.14-0.20	1,123,761
Industrial	447	0.20	3,896,616
Mixed-Use	210	0.20-0.50	1,915,899

A Sample of Neighborhood (Activity) **Centers**. Staff prepared an analysis of existing building square footage and floor area ratio (FAR) for a sample of three neighborhood centers, which can be considered representative of neighborhood centers throughout the city. As can be seen, the FAR for these three centers show that neighborhood centers do not come close to the FAR threshold needed to ensure viable transit. (The commonly recognized threshold is 1.00 to 1.25. The City allows an FAR up to 2.00 within most city neighborhood centers.) Instead, it is clear that neighborhood centers within the city have significant potential for intensification through development and redevelopment.

Table 4. Floor Area Ratios for Selected Neighborhood Centers

	Existing Square Feet	Total Land Area	Existing FAR
Gainesville Mall	864,228 sq ft	5,125,269 sq ft (118 ac)	0.168
Waldo Road AC	162,348 sq ft	1,300,266 sq ft (30 ac)	0.125
Westgate	210,920 sq ft	1,148,242 sq ft (26 ac)	0.184

Figure 1. Population Proportions ('93-'98)



Source: UF Bureau of Economic & Business Research. Florida Statistical Abstract.

A Final Caveat. Because there is no way to predict when or if or how vacant land will be developed for residential in the future, it is impossible to even roughly estimate a build-out year. The only reasonably accurate population projections for Gainesville are the Bureau of Economic and Business Research (BEBR at UF) estimates, in combination with City Department of Community Development estimates shown above. These projections are not at all related to remaining vacant land within the city. There is therefore no relationship whatsoever between the build-out scenarios shown above and the population projections shown above.

The information is useful in recognizing how low Gainesville's residential densities are in comparison to densities that support transit, and in recognizing the in-town development capacity in our existing neighborhood centers.

Density and Proportional Population Trends

For at least a decade, population growth in the unincorporated Gainesville Urban Area has been nearly double the rate of growth within the city. Population is growing at a rate of 4.6 percent each year in the unincorporated Gainesville Urban Area. This residential growth will double the population of this area in only 15 years and lead to a higher population within the remote unincorporated urban area west of the city than what is in the city itself. As a result, a growing proportion of the county population lives outside the City of Gainesville, and outside of other municipalities. (See Figure 1). This trend is a clear indicator of urban sprawl—the negative effects of which are described below.

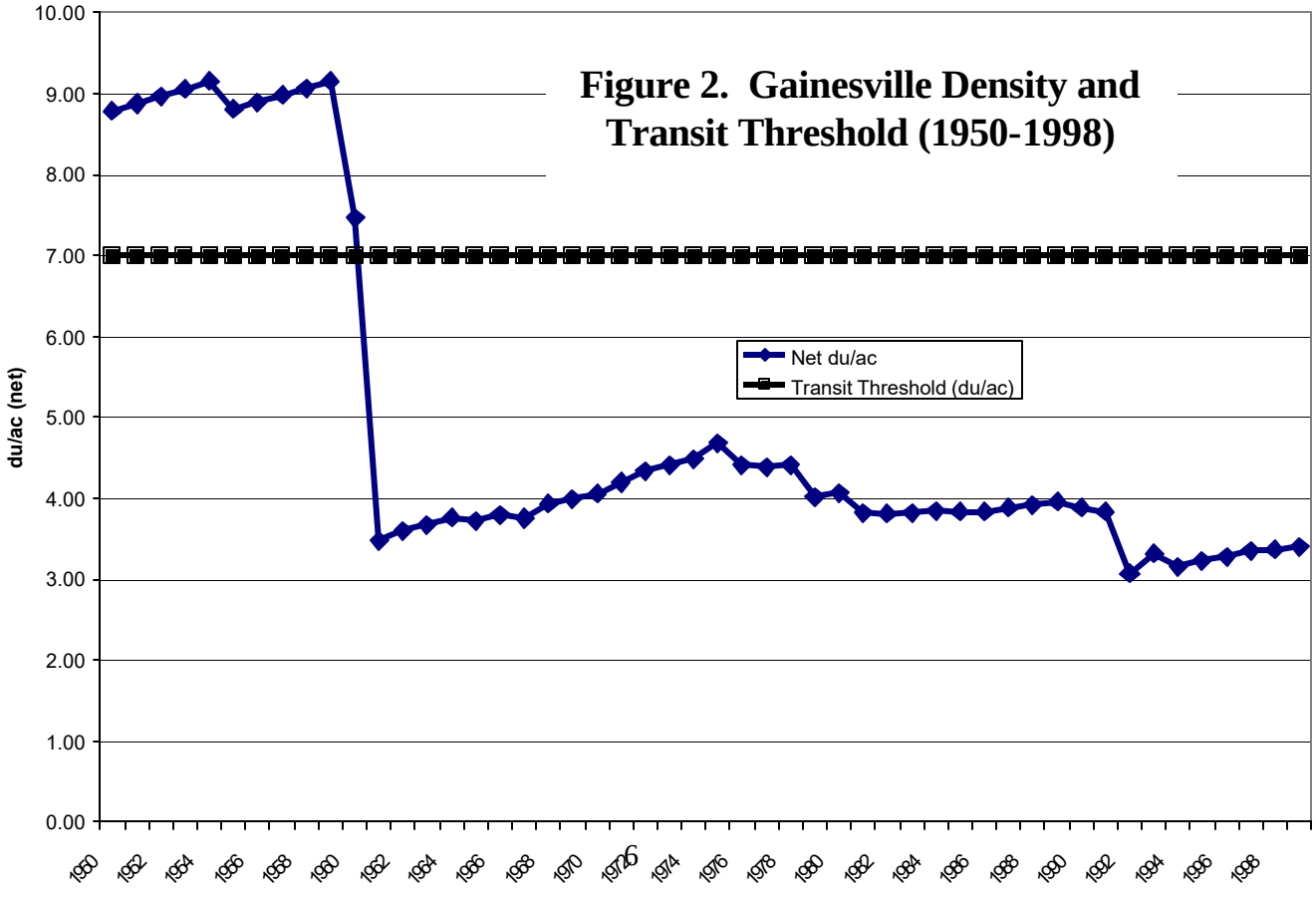
Over the past 40 years, the city has experienced a strong trend toward low-density, single-use land use patterns, characterized mostly by a western expansion of single-family residential development, interspersed with conventional, car-oriented shopping centers (historically called "activity centers") at major street intersections. Since approximately 1960, this low density has leveled off at between 3.0 and 4.5 dwelling units per acre (See Figure 2). This low density, predominantly single-use (residential only) land use character results in high levels of car dependence for nearly all trips. Transportation choice is nearly non-existent because it is too unsafe, inconvenient, and unpleasant to use the bus, walk, or bicycle.

The negative social, environmental, and economic consequences of this land use pattern are substantial and described below. Because of these consequences, key objectives of the City Comprehensive Plan are to promote livable residential densities, neighborhood centers, transportation choice, stabilization of existing city neighborhoods, and mixed use.

An emerging concept that incorporates each of these objectives is known as "Smart Growth."

Merits of Density

The Urban Design Element, in the "Sustainable, Livable Density" section, contains a discussion of the several merits of higher densities for the City. Anthony Downs[1] indicates several social, environmental and economic benefits of higher densities, and points out that it is much more important for a city to prevent new residential housing to be built at very low densities than it is to have such growth occur at high densities. Cervero and Bernick[2] concur by indicating that the most substantial transit benefits are realized when development goes "from very low to moderate densities, say from an average of 4 units per acre to 10 to 15 units per acre – that is, from a



Source: Gainesville Dept of Community Development

setting with quarter-acre estates to one with a mix of small-lot single-family homes and duplexes/triplexes." Going from moderate densities to "high-rise" density delivers comparably minor benefits. In Gainesville, for purposes of comparison, the Suburban Heights neighborhood has a density of approximately 1.5 units per acre, whereas the Duckpond neighborhood has 5-6 units per acre and College Park has approximately 8-9 units per acre.

Additional merits of higher residential densities include:

- Per capita impervious surface coverage is lowest in high-density suburban development.[3]
- Pedestrian-oriented cities devote less than 10 percent of their land to transportation, while car-oriented cities devote up to 30 percent for streets and another 20 percent for off-street parking.[4]
- Low-density development patterns impose higher public sector costs for utilities, streets, schools, and emergency services.[5] At 5 dwelling units per acre, city service capital costs are in the vicinity of $40,000 per unit. At 3 units per acre, costs are approximately $52,000 per unit, and at 1 unit per acre, costs are about $62,000 per unit.[6]

A similar study[7] shows, in Table 5, similar substantial savings to higher density land use patterns.

Table 5: Per Household Annual Municipal Costs based on Residential Density

	1 d.u./ 5 acres	**1 d.u./ acre**	**2.67 d.u./acre**	**4.5 d.u./acre**
Schools	$4,526	$4,478	$3,252	$3,204
Streets	$154	$77	$53	$36
Utilities	$992	$497	$364	$336
Total	**$5,672**	**$5,052**	**$3,669**	**$3,576**

- Including the external costs of car use (pollution, accidents, parking, street land values), a city land use form of several neighborhood (activity) centers, in comparison to a "spread" form, will save up to 17 percent in public capital and operation and maintenance costs, and the "one central downtown" (without centers) saves 29 percent in such public costs over the spread form.[8]
- "Rural residents traditionally accepted lower levels of public services…but sprawl encourages new residents with more demands to move to exurban areas, so municipal governments face pressure to provide urban services to low density sites despite high costs. Some communities use impact fees to internalize a portion of these costs, but in practice these seldom reflect full marginal costs."[9]
- According to the Portland OR police chief, "density – if it is done correctly – will result in better community policing, safer neighborhoods and less crime."[10]
- Car use increases as land use density declines.[11] Similarly, doubling urban densities results in a 25 to 30 percent reduction in vehicle miles traveled.[12]
- With higher densities, travel distances are shorter, transit is more viable, higher levels of bicycling and walking occur, walkable and neighborhood-based retail is more viable,[13] higher

vehicle occupancy results, gas consumption is reduced, and less car use occurs. (transit, bicycling and walking are nearly impossible below 8-9 d.u./acre)[14] According to a number of sources, a density of at least 7 dwelling units per acre is needed to make transit viable.[15] The Snohomish County source also indicates that densities should be at least 9 units per acre within ¼ mile of transit-oriented developments

- There is no correlation between increased density and increases in crime, poverty, depression, or interpersonal conflict.[16] The incremental risk from car crashes faced by suburban residents is higher than the incremental risk of violence faced by urban residents.[17]
- City size is much larger for a given population growth with housing built at low density compared to this same growth at higher density. Thus, a city built out at a population of 150,000 would require much more land at low densities, thereby removing much more farmland and environmental areas, than would this same city of 150,000 if built at higher densities. For example:

Downs[18] looks at a hypothetical a city of 1 million people containing 200 square miles (Gainesville contains 49.3), a radius of 8 miles, and a density of 6 residential units per acre (Gainesville is approximately 3 per acre). He then assumes approximately 280,000 new residents are added to the city over a 10-year period (2.5 percent annual growth rate). The **size** of the city after adding these new residents will be based significantly on the **density** of the new development. Therefore, the **greater the density** of the new development in Gainesville, the **smaller the build-out size** of the city will be. Of course, the ultimate size of the city has an important impact on the cost of utility "trunkline" expansion. In Table 6, Downs presents the following density scenarios and the impact on city size, based on the above assumptions:

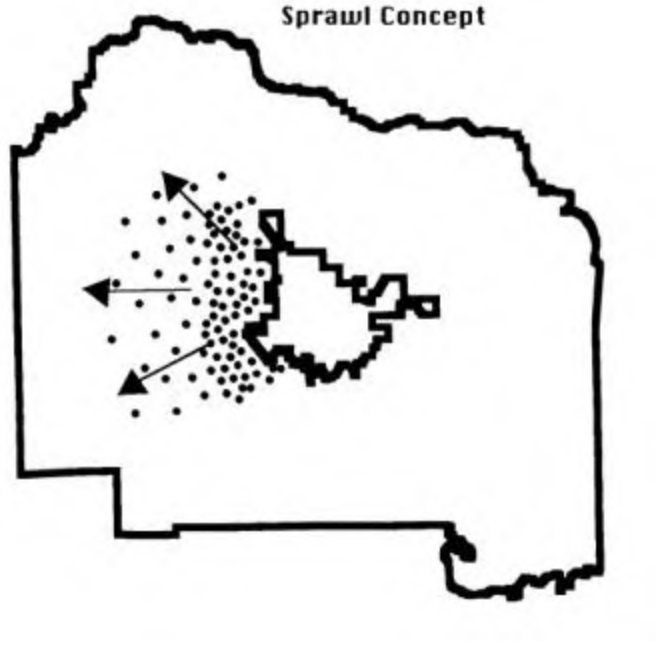
Table 6. Ultimate Hypothetical City Size at Various Densities

	280,000 New Residents at Various Densities		
Traits of New Area	2.21 d.u./ac	4.43 d.u./ac	8.85 d.u./ac
Square Miles Added to City	112	56	28
Percentage Added to Original City Area	56	28	14
Total Square Miles in City	312	256	228
New Radius of City (miles)	10	9	8.5
Percentage Radius Added to City	25	13	7

Land Development Code Strategies for Smart Growth and In-Town Development[19]

- Establish more modest building setbacks and more modest minimum lot sizes.
- Establish more modest street dimension requirements.
- Treat existing neighborhoods as urban assets to be protected and enhanced.
- Convert car parking minimums to maximums, allow on-street parking, and encourage shared parking.

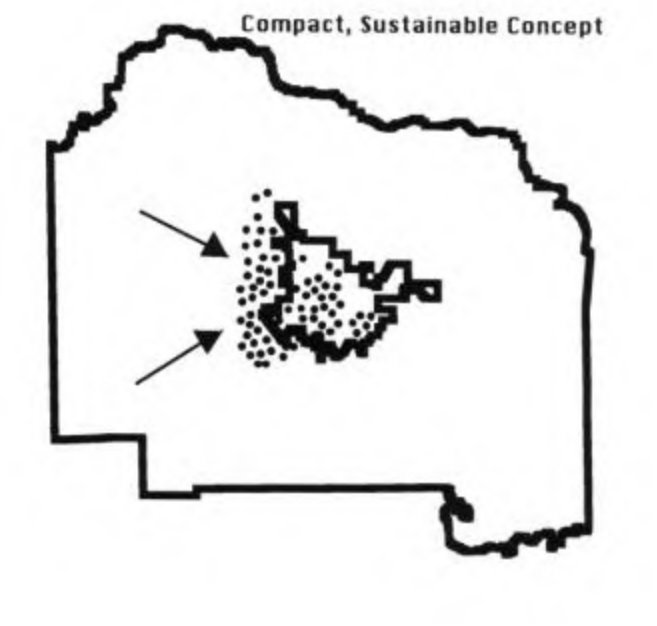
- Allow modest multi-family residential in commercial zoning districts, and modest retail in industrial zoning districts.
- Establish maximum lengths for cul-de-sacs and blocks, require cul-de-sacs to be connected with bicycle and sidewalk paths, require connectivity index minimums, require sidewalks on all streets.
- Require transit-oriented (walkable, higher-density, mixed use) development along important transit routes.
- Establish compatibility standards for new in-town development and mixed use projects.
- Require buildings to be oriented to the street, and parking for cars to be located at the rear or side of buildings.
- Allow staff approval for minor variations from the Code when the overall intent is met.



Negative effects of sprawl:

- Increased city costs for infrastructure and services;
- Increased per capita trips by car;
- Increased travel times;
- Increased household expenditures for transportation;
- Reduced transit cost-effectiveness and frequency;
- Increased social costs (increased air, water, noise pollution);
- Loss of farmland;
- Reduced farmland productivity and viability;
- Loss of sensitive natural areas and wildlife habitat, or fragmentation of such areas;
- Loss of regional, community-separating greenbelts and open spaces;
- Decreased urban attractiveness due to designing primarily for cars;
- Weakened sense of community, sense of place, and sense of civic pride;
- Increased stress;
- Increased energy consumption;
- Reduced historic preservation;
- Segregation by income, age group, and race;
- Separates low-skill, high unemployment areas from new jobs;
- Increased fiscal stress for the city;
- Increased rate of inner city decline.

Tools to Reverse Sprawl



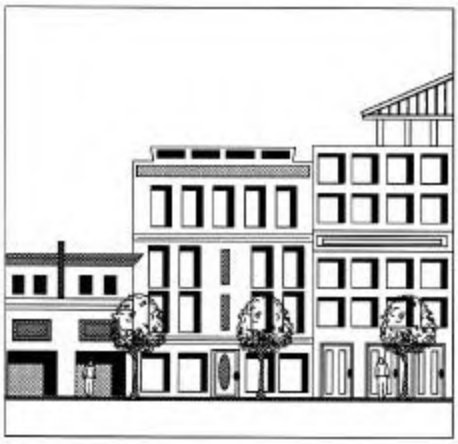
Because population growth has been more rapid in unincorporated urban Gainesville than within city limits for several years, the city is experiencing a declining share of the county population. This has serious negative effects for the city, as outlined in the "negative effects of sprawl" list above. For these reasons, the city is committed to maintaining the livability of its existing neighborhoods, in-town development at appropriate locations, redevelopment, and higher densities, at appropriate locations, within city limits.

There are a number of tools that can be used to reverse this sprawling, low-density dispersal of the urban population:

- A more livable, unique downtown and city neighborhood (activity) centers that are exemplified by residential and non-residential mixed uses, transportation choice, a pleasant ambiance, and civic pride.
- Enhanced code enforcement to discourage flight from the city due to excessive noise, blight, illegal parking of cars, ill-kept properties, and large, excessively visible signs.
- Walkable neighborhoods that feature a high quality of life, and mix of uses, and compatibility of scale and intensity.
- Better schools accessible to students without a car.
- Well-defined squares and parks within walking distance.
- Enhanced public improvements (sidewalks, street re-paving, undergrounding utilities, street lights, or public parks).

Mixed Use Principles

In the 1991 City Comprehensive Plan, the most substantial land use change was to designate a large amount of acreage within the city for mixed use development. However, since that time, very little residential development has been mixed with non-residential development in the mixed use land use districts.



A Mix of Uses:

- Keeps a neighborhood center active and safe on weekends and evenings.
- Buildings at least 2 stories create a pleasant "outdoor room" feeling.
- Creates places for work, residences, civic, and recreation within compact, walkable distances.
- Reduces the need for car travel.
- Mixes uses vertically and horizontally.
- Makes transit efficient and makes smaller retail more viable.

Mixed use remains a critically important objective of the City because, as noted above, mixed use significantly reduces the length of trips, which increases transportation choices. Mixed use also increases round-the-clock vibrancy, which increases public safety. Mixed use allows one form of land use to help financially support another land use. For example, an apartment above a retail store can have its property taxes paid for by the store. Mixed use creates more self-sufficiency in the neighborhood or area, which increases sustainability.

Adherence to the following principles will **promote additional mixed use** development within the city:

- Uses are similar in character and scale—especially when facing each other on a street (see "appropriate uses" list below as a selection of such uses in San Jose).
- A transit stop is incorporated.
- Well-defined, bounded squares and plazas provide areas for enjoyment, relaxation and socializing.
- The environment is pleasant, safe, and convenient for pedestrians and bicyclists. The maximum radius is a five-minute, quarter-mile walk.
- Uses are relatively quiet.
- Uses do not generate a relatively large number of motor vehicle trips.
- Buildings are at least two stories in height.
- Building setbacks are modest.
- Streets contain traffic calming features to create relatively low design speeds.
- Sidewalks are at least five feet wide and provide a comprehensive network of connections to land uses, streets and other sidewalks.
- Lighting and signage are at a pedestrian, rather than motor vehicle, scale.
- Densities are relatively high and lot sizes are relatively small.

- A range of land use types is provided—preferably within a one-quarter mile area—including neighborhood-scaled retail, office, recreation, civic, school, day care, places of assembly and medical.
- Densities and building heights cascade from higher densities at the core of mixed use districts to lower densities at the edges.
- Buildings are oriented toward the street and sidewalk.
- Parking lots and garages are subordinated, and limited in size.
- To be conducive to walking, a block face has a maximum length of 700 feet. Frequent cross-access is provided to keep walking distances conveniently short.
- Car-oriented uses are minimized. Drive-throughs, auto dealers/service, gas stations, motels, and storage are prohibited or substantially restricted.
- Multiple connections to and from surrounding areas should be provided along the edges of a mixed use area.
- Residences are encouraged above commercial uses. They are not allowed on the first floor of multi-story, mixed use buildings.
- Residences are within walking distance of transit.
- Uses that entertain, create street-level activity, and attract day and night activity are appropriate.
- Phasing should be allowed so that uses dependent on other uses are not required prematurely (or at a time before which they would be economically feasible).
- Sign size should be relatively small.
- There should be 23-56 square feet of neighborhood retail per housing unit.
- Office complexes should be required to be mixed use, with retail, personal service and bus service.

Appropriate uses for retail space in mixed use, in-town neighborhoods in San Jose CA

The following is an example of a list of neighborhood-oriented goods and services that San Jose believes can be compatible – in both scale and character – to nearby residential areas, thereby promoting a feasible form of mixed use. This list could be the basis for establishing an amended, refined list of permitted uses in the Gainesville mixed-use zoning districts.

Bakeries
Banks
Bookstores
camera stores
clothing stores
collectible shops
daycare
delis
restaurants/bars
schools (commercial)
shoe stores
toy stores
drugstores
dry cleaners
Florists
food/grocery stores
art and craft galleries
gift stores
hardware stores
health club/gyms
home furnishings
small appliance repair
small theatre
specialty foods
variety stores
ice cream stores
instruction studios
laundromats
office supplies
personal service shops
pet stores
post office
professional offices
public/government uses
sporting goods
stationary stores
tailor
radio/TV/video/music stores

Comparing the Suburban Model and the Traditional Model of Development

There are two forms of residential development in the U.S.: the suburban, car-dependent development, which has been the model since WWII, and the traditional neighborhood, which was the model from colonial times till WWII. The City seeks to protect and promote the choice to live in each of these development models within the city. The City encourages retention of this second, more traditional, approach by encouraging at least some of the new neighborhoods within the city to be constructed along traditional lines. Most of all, the City promotes housing **choice**—that neighborhoods of a variety of types should be available in the city.

The Suburban Model. Originally intended to provide more freedom and quality of life, this model leaves many citizens dependent on the car. With such designs, residents are often forced to use the car to rent a video, drive the kids to soccer practice, and sometimes find themselves stuck in traffic even during lunch hour. Land uses are often separated into single-use enclaves that are too far to reach except by car. Houses are grouped into homogenous, often walled subdivisions that segregate income and age groups. Stores often grow into large malls and Big Boxes to take advantage of the enormous regional catchment area of shoppers that the car allows.

The Traditional Model. What has begun to emerge across the country, in the face of mounting dissatisfaction with the suburban model, is the adoption of neighborhood design principles and land use practices that encourage mixed-use neighborhoods that are less dependent on car travel. Such neighborhoods often exhibit the following design conventions:

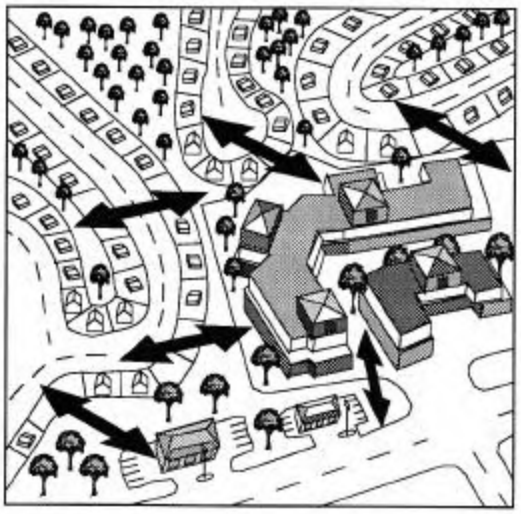
- Neighborhoods are **limited in size** and **oriented toward pedestrian activity**. In general, "limited in size" means that most every form of daily household need is within a five-minute walking radius (approximately one-quarter mile)(note that the expected walking distance varies based on climate, and Gainesville's hot climate indicates walking distances are perhaps shorter than other cities in the U.S. However, this is mitigated by the relatively young age of Gainesville's population. In addition, the City seeks to counterbalance the climate disadvantage by protecting and creating high-quality pedestrian environments which encourage longer walk trips);
- **Residences, shops, workplaces, squares and parks and civic buildings are interwoven** within the neighborhood and **in close proximity**, which creates a vibrant, livable neighborhood featuring transportation choice. This mixed use is primarily achieved by calling for compatibility of scale and intensity;
- **Streets are interconnected** (index of at least 1.4), relatively narrow, on-street parking is present, alleys are built, and the **blocks are small**. This street pattern, in combination with other design features of a traditional neighborhood development, strikes a balance between the needs of the car, the bus rider, the pedestrian and the bicyclist, thereby creating transportation choice;
- Garages are recessed, residences contain front porches, front yard setbacks are modest, and sidewalks are installed on both sides of the street;
- **Civic buildings are given prominent, high-visibility locations** that thereby act as landmarks, symbols and focal points for community identity. These buildings are therefore

assigned the proper level of community priority and serve as central places of assembly for the neighborhood;
- There is a **distinct edge**, or transition, between the developed area and outlying farmland and greenbelts;
- **Public spaces create a pleasant, safe public realm** and are formed and defined by the proper alignment of buildings, orienting buildings to the street (with commercial buildings putting their entrance at street corners), and formally aligned street trees;
- A **full range of housing types and densities** is provided, including small, narrow lots, which allows all age groups and income classes to be integrated, and provides housing choice.
- **Multi-family buildings** are encouraged to be designed to reflect, to the extent possible, the characteristics and amenities typically associated with single-family detached houses. These characteristics and amenities include orientation of the front door to a neighborhood sidewalk and street, modest parking and lighting, sufficient windows and articulation, dumpsters and mechanical equipment kept away from the front, individual identity, private outdoor space, privacy and security.

To achieve public objectives, the City should make a commitment that, at "decision points," the following actions will be taken:

- **Do not vacate street right-of-way** unless doing so would not reduce the feasibility of connections for existing and future transit, pedestrian and bicycle trips. Such vacations often significantly increase the distance that must be traveled by these forms of travel, which discourages these forms of travel due to inconvenience.

- **Approve higher densities** when developments in appropriate locations are proposed. Higher densities promote affordable housing, an increase in housing types, and transportation choices (Burden notes that at least 5 to 8 d.u./acre are needed to make transit and walking viable, and to promote public safety by putting "eyes on the street."). Higher densities also make smaller, locally-owned business more viable by maximizing retail health at a neighborhood scale, and make the community more vibrant. Higher density reduces the need to sprawl into remote areas that often contain farms and natural areas. Design standards are required to ensure higher densities are livable. Major employment, shopping, school, park, civic and cultural areas generally do not provide higher density residential housing within convenient bicycling or walking distance of such significant bicycle trip destinations. As a result, many bicyclists and pedestrians who would consider living within walking or bicycling distance of such areas are unable to do so due to the lack of housing near such areas. It is critical that the City Comprehensive Plan, particularly the Future Land Use Element, encourages relatively high residential densities near these major trip destinations.



Strong Non-Motorized Access:
- Pedestrian and bicycle paths connect out to adjoining, higher density neighborhoods.
- Network of streets and sidewalks creates safe, convenient places to walk.
- Good access creates transportation choice and reduces dependence on car travel

- **Approve mixed use** when well-designed mixed-use development in appropriate locations is proposed. Mixed use significantly reduces the length of trips, which increases transportation choices. Mixed use also increases round-the-clock vibrancy, which increases public safety. Mixed use allows one form of land use to help financially support another land use. For example, an apartment above a retail store can have its property taxes paid for by the store. Mixed use creates more self-sufficiency in the neighborhood or area, which increases sustainability.

- **Approve a reduction or elimination of minimum parking requirements** both at individual locations, when appropriate, and in the Land Development Code. Increase the cost of parking —especially for downtown employees.

- **Approve additional street capacity only as a last resort to protect public safety** and redesign streets to ensure slower traffic speeds. Continue to provide traffic calming in residential neighborhoods.

- **Approve proposed creation of short-cuts** for pedestrians and bicyclists with additional connections and cross access.

- **Encourage or require buildings to put "eyes on the street"** with front facade windows and doors.

Growth Management Framework

The State mandate to update local comprehensive plans places the responsibility on the City to develop a future land use element of its comprehensive plan that will guide development and accommodate expected growth trends without reducing service levels below adopted standards. To meet this challenge, the City must develop a growth management framework for the future which will become the foundation for the land use element.

Future Alternative Design Concepts and Visions

[For ease of reference, the three design concepts described here are duplicated from the Urban Design Element]

There are three broad categories of potential future alternative growth concepts and visions for Gainesville. This Element endorses Concept A as the alternative to be pursued by Gainesville. This concept is generally consistent with the Gainesville 2020 Transportation Plan entitled "Livable Community Reinvestment Plan (LCRP)" that was adopted on October 12, 2000. The vision statement adopted by the MTPO states that the LCRP would "make transportation investments that support livable community centers and neighborhoods by: (1) re-investing in the traditional core areas of Gainesville and the towns of Alachua County to develop walkable downtown

centers; (2) connecting a limited number of highly developed mixed use centers, and (3) providing a high level of premium transit service in a linear Archer Road corridor."

Concept A

Concept A features compact development, new in-town development and redevelopment, and higher densities in appropriate locations. Gradually, over time, conventional shopping centers are transformed into walkable neighborhood centers. Neighborhoods are strengthened and made more livable, vibrant, and safe. A diversity of neighborhoods is available, from conventional, low-density, single-family, to compact row house and other forms. Neighborhoods are kept stable, and are positive places in which to invest. Traffic is dispersed on interconnected streets. A trails network, connecting natural areas, neighborhoods, and neighborhood centers, form an interconnected "emerald necklace" throughout the urban area. People are less likely to flee from residences within the city core.

In Concept A, the city is designed so that people have transportation choices (they are therefore less dependent on their cars), have a stronger connection to urban natural areas, look out for the collective security of their neighborhood, and exhibit a great deal of civic pride. Higher densities and mixed uses allow for smaller, neighborhood-based corner stores and offices, and quality, frequent transit service. Retail, offices, small and neighborhood-based parks, and jobs are pleasant and convenient to walk to, bicycle to, or take transit to from nearby residences.

This concept includes sidewalks, neighborhood centers and street trees. Retail, office, and residential continue to be attracted back to the city core due to the high quality of life, safety, and pedestrian vibrancy.

The rate of development within city limits stabilizes so that growth is faster or as fast as within the city as outside the city within the urban area.

Concept B

Concept B features a single town center – downtown Gainesville. Efforts continue to strengthen the walkable town center features of downtown (through the Traditional City ordinance, and various redevelopment and public improvement efforts). Higher density residential is strongly promoted in the downtown, which transitions to lower density suburban residential outside of the downtown.

In Concept B, people have transportation choices downtown, but land use and transportation patterns remain the same as now in the suburbs outside of downtown.

This concept calls for improving the "public realm" outside downtown primarily by improving the aesthetics of buildings with sign controls and generous landscaping.

Concept C

Concept C is a "status quo" or declining alternative. Downtown Gainesville loses its currently growing vitality and does not compete well with outlying commercial areas. Commercial and government buildings disperse into suburban areas, and retail does not return to downtown at any significant pace. Residential densities remain too low to support transit, and few new residences are created downtown.

In Concept C, by virtue of the way the city is designed, people have few transportation choices. They remain dependent on their cars throughout the city. Primarily, those who cannot own or drive a car are forced to walk, bicycle or use transit, even though such forms of travel are unsafe, costly, inconvenient or otherwise unpleasant. In general, it is only those who do not have a choice that travel by foot, bicycle, or transit. It is inconvenient and unsafe to walk to, bicycle to, or take transit to large and region-serving parks, office parks, large-scale retail, and remote job centers.

Street corridors remain places to drive **through** rather than **to**, which leads to incremental conversion from single-family residential to office, retail, and rental residential. Residential flight from the city core is strong.

The rate of development is faster outside the city within the urban area than within the city.

Some Land Use Recommendations to Achieve Concept A

A portion of this framework will be the development of walkable neighborhoods and neighborhood centers. The goals of this strategy are to implement "smart growth" principles.

In general, this involves incorporating more mixed use, designing for transportation choice, increasing high-quality residential densities in appropriate locations, revitalizing the downtown as a community-serving destination, creating a sense of place and a pleasant ambiance, building civic pride based on a unique local flavor, improving public schools, creating a choice in housing type and price, and enhancing the compatibility of uses that have traditionally been considered incompatible.

Neighborhood (activity) centers and industrial areas are located throughout the city (see Figures 3 and 4). The goals of these centers and areas are to achieve the principles outlined above and prevent the diffusion of commercial activities into commercial strips.

To implement these concepts, this element calls for the development of traditional neighborhoods (TNDs), applying urban design overlay zones to create walkable neighborhoods and centers, designing streets for livability and shared use, and allowing more mixed use development. The element proposes to implement this system by:

- Using four mixed use land use districts: Mixed Use Low (MUL), Mixed Use Medium (MUM), Mixed Use Residential (MUR), and Mixed Use High (MUH). The MUL district will include low intensity neighborhood-serving neighborhood centers. This district will also be used to encourage redevelopment of existing strip commercial areas. The MUM district will be used to designate community-servicing neighborhood centers. This district should not be used to designate strip commercial areas.

- Allowing TNDs by right in a number of land use categories.

Figure 3

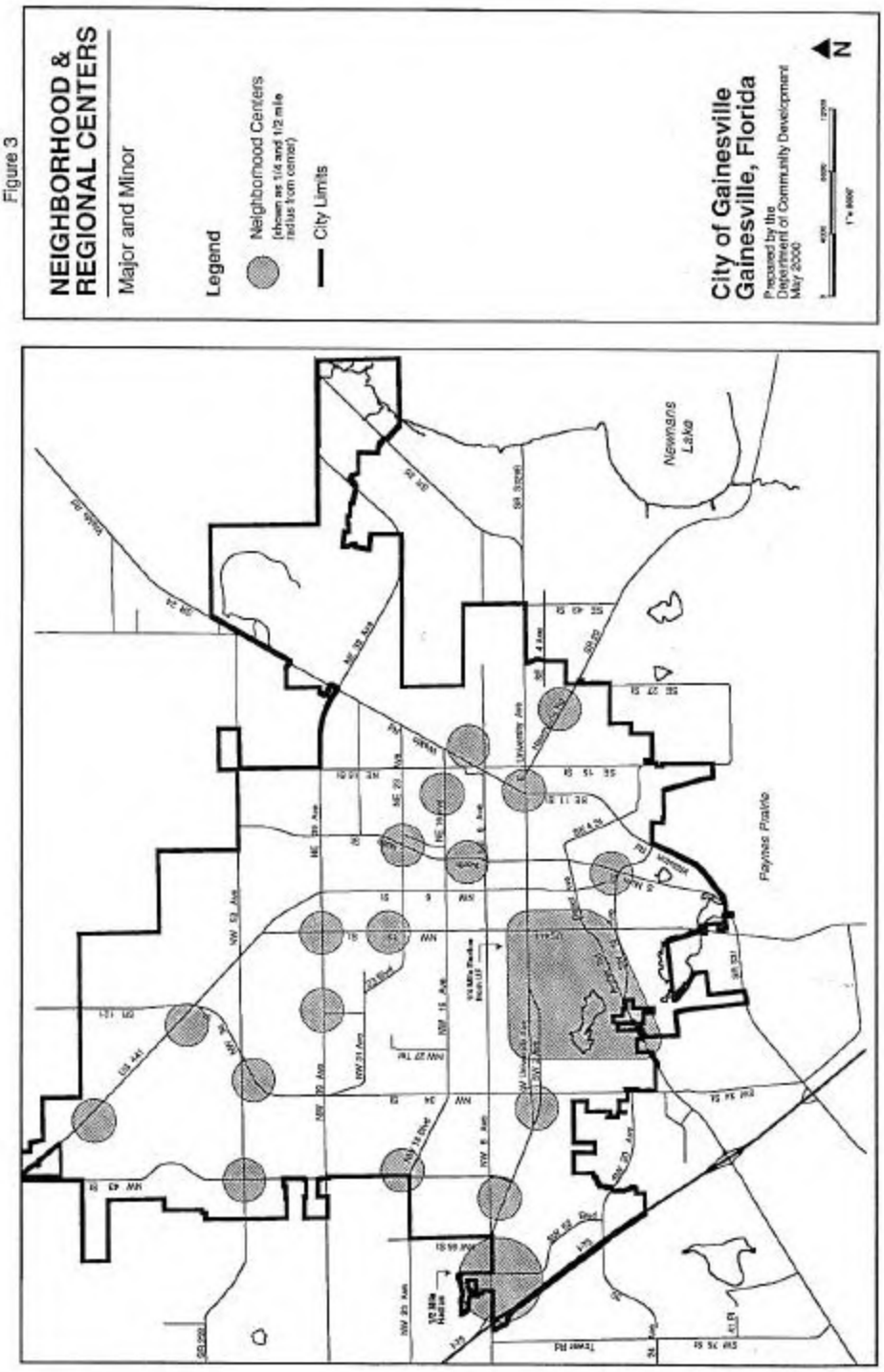
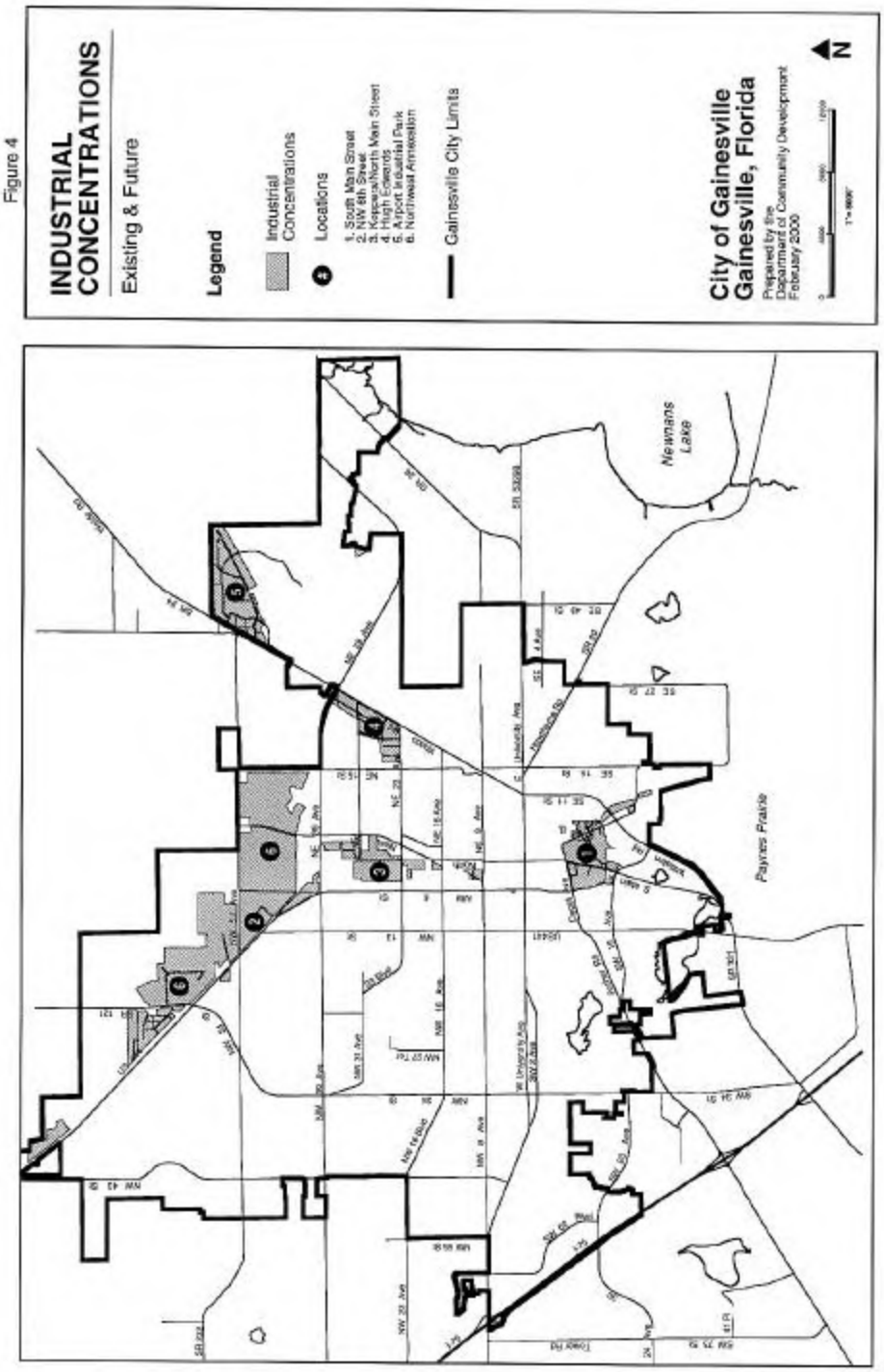

NEIGHBORHOOD & REGIONAL CENTERS
Major and Minor
Legend
Neighborhood Centers
(shown as 1/4 and 1/2 mile radius from center)
City Limits
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
May 2000
N
Newnans Lake
Paynes Prairie

Figure 4


INDUSTRIAL CONCENTRATIONS
Existing & Future
Legend
Industrial Concentrations
Locations
1. South Main Street
2. NW 6th Street
3. Kegerreis/North Main Street
4. High Edwards
5. Airport Industrial Park
6. Northwest Annexation
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
February 2000
N
Newnans Lake
Payners Prairie

- Designating existing shopping centers and other areas to be managed by an urban design overlay such as the Traditional City ordinance.

- Revising street specifications.

- The following land use categories will implement the growth management plan (see Table 7 for acreage distributions by Future Land Use category) :

Single Family (up to 8 units per acre).

Residential Low Density (up to 12 units per acre).

Residential Medium Density (8-30 units per acre).

Residential High Density (8-100 units per acre).

Mixed Use Residential (up to 75 units per acre).

Mixed-Use Low Intensity (10-30 units per acre).

Mixed-Use Medium Intensity (14-30 units per acre).

Mixed Use High Intensity (up to 150 units per acre).

Office.

Commercial.

Industrial.

Education.

Recreation.

Conservation.

Agriculture.

Public Facilities.

Planned Use District.

Table 7 showed acreages and percent of total city acreage for each land use category. Since 1991, due to annexation, there is now 9 times more agriculture land within city limits, and more than twice as much conservation land (only the single family, industrial, and public facilities land use categories have greater proportions of land within the city than conservation land). Industrial

land nearly tripled since 1991, office land nearly doubled, and the amount of planned unit development land is now 7 times greater than in 1991.

Land Use Analysis and Requirements

One purpose of this element is to determine the potential land development and redevelopment within the city. Another is to determine the amount of land needed by land use category to accommodate the projected population. The plan will make these determinations based on a projection of city build-out, the availability of street capacity, sanitary sewer, solid waste, drainage, and potable water facilities to serve existing vacant and developed land, and the natural conditions that may affect land development. Population projections are the main consideration for determining future land use needs.

Acreage and Density or Intensity of Use

Tables 7 and 8 contain acreage totals for each of the land uses shown on Figure 5 (appendix map not yet prepared), and each of the zoning districts. Residential uses were categorized according to density. Density was determined by the number of units per acre. Low density residential uses include single-family and low density multi-family dwelling units. The high density residential category is characterized by uses such as high density multi-family.

The non-residential use categories of Office, Commercial, and Industrial are designated as low, medium, and high in intensity of use respectively. These rankings are based on the types of uses permitted in each category as well as factors such as associated trip generating characteristics and parking requirements for uses within the categories.

The Office category permits almost no retail activity and includes uses such as professional offices and banking/financial services. Uses in the Commercial category are primarily characterized by retail activity of varying scales. The least intense commercial uses in this category are neighborhood stores and repair services for household needs. The highest level of intensity is found in shopping center uses in neighborhood centers (activity centers). The most intense level of use is found in the Industrial category which includes manufacturing, wholesaling, warehousing and outdoor storage uses.

Table 7. Existing Land Use Acreage

Land Use	Acreage	Improved	Unimproved*	% of Total
Single Family	7,923	6,419	1,503	29
Public Facilities	4,157	3,387	769	15
Industrial	2,484	1,069	1,415	9
Conservation	2,317	956	1,361	9
Education	2,257	2,190	67	8
Residential (Low)	1,597	1,077	520	6
Agriculture	1,486	554	931	5
Residential (Medium)	1,169	780	389	4
Planned Use District	982	136	846	4
Commercial	584	416	168	2
Mixed Use (Low)	536	376	160	2
Mixed Use (Medium)	427	319	108	2
Office	400	337	63	1
Recreation	369	194	175	1
Residential (High)	294	263	31	1
Mixed Use (High)	131	119	11	<1
Mixed Use Residential	36	35	1	<1
Total	**27,149**	**18,631**	**8,159**	

*Much of the remaining unimproved land within the city has limited development potential due to sensitive environmental features on such land.
Source: Department of Community Development, April 1999.
Note: Excludes 9/28/99 annexation (ord. #980467).

Table 8. Zoning Acreage

Zoning District	Description	Acreage	Improved	Unimproved	% of Total
RSF-1	Single Family, 3.5 du/ac	5,169	4,098	1,071	20
PS	Public Services & Operations	3,121	2,398	723	12
ED	Education	2,257	2,190	67	9
CON	Conservation	2,096	903	1,193	8
PD	Planned Use	1,617	852	766	6
I2	General Industrial	1,548	765	783	6
RSF-2	Single Family, 4.6 du/ac	1,516	1,443	73	6
AGR	Agricultural	1,486	554	931	6
AF	Airport Facility	1,370	1,153	217	5
RSF-3	Single Family, 5.8 du/ac	841	632	209	3
I-1	Limited Industrial	768	289	479	3
RMF-5	Single/Multi Family, 12.0 du/ac	552	427	125	2
RMF-6	Multi-Family, 10-15 du/ac	523	270	253	2
MU-1	Mixed Use Low, 10-30 du/ac	499	342	158	2
RMF-7	Multi-Family, 14-21 du/ac	405	265	140	2
MU-2	Mixed Use Medium, 14-30 du/ac	354	250	104	1
BA	Automotive-oriented Business	283	182	100	1
RSF-4	Single Family, 8.0 du/ac	212	129	83	1
BUS	General Business	209	172	36	1
OF	General Office	199	162	37	1
MH	Mobile Home, 12.0 du/ac	190	185	5	1
RC	Res. Conservation, 12.0 du/ac	149	104	44	1
RH-1	Res. High Density, 20-43 du/ac	146	117	29	1
RH-2	Res. High Density, 43-100 du/ac	136	134	2	1
CCD	Central City, to 150 du/ac	131	120	11	1
RMF-8	Multi-Family, 20-30 du/ac	87	78	9	0.3
MD	Medical	76	76	0	0
OR	Office Residential, 20 du/ac	64	58	7	0.2
CP	Corporate Park	52	48	4	0.2
BT	Tourist-oriented Business	47	43	4	0.2
RMU	Res. Mixed Use, to 75 du/ac	36	35	1	0.1
W	Warehousing & Wholesaling	19	18	1	0.1
Total		**26,159**	**18,493**	**7,666**	

Source: City of Gainesville, Department of Community Development, April 1999.
Notes: Unzoned parcels in 9/28/99 annexation (ord. #980467)areas and in some unimproved PDs have been excluded. Zoning and Land Use Acreage totals are different; zoning has not been assigned to all parcels.

Population Projections

Population projections for the City are shown in Table 9. For comparison and trend purposes, Alachua County projections and the city population as a share of the county population is also shown.

Table 9. Projections of City and County Population

Year	City Projection	County Projection	City Share of County
2000	101,319	220,100	46.0%
2001	102,369		
2002	103,429		
2003	104,501		
2004	105,583		
2005	106,677	237,100	44.9%
2006	107,966		
2007	109,272		
2008	110,593		
2009	111,930		
2010	113,279	253,600	44.6%

Source: For city projections, City of Gainesville Department of Community Development, 2/2/99. For county projections, UF Bureau of Economic and Business Research, Florida Population Studies, February 2000.

The expected increase in population within the city from 2000 to 2010 is 11,960.

Street Capacity

The Transportation Mobility Element addresses the car level of service (LOS) for streets that serve the Gainesville urbanized area. Most of these streets that fall within the City contain additional capacity to accommodate more car trips. However, several key segments contain little or no additional capacity (see Table 10), which has prompted the City to adopt Transportation Concurrency Exception Area (TCEA). The street segments with the least available additional capacity are occurring in the vicinity of University Avenue and West 13th Street (US 441). Table 10 projects additional lack of capacity to accommodate more car trips in the downtown core.

Table 10. Streets with "Deficient" Levels of Service

Street	From	To	Class	2000 LOS
SW 13th St	Archer Rd	Univ. Ave	A	F
NW 13th St	Univ. Ave	NW 29th Rd	A	F
W. University Ave	North/South Drive	W. 13th St	A	E
SW 2nd Ave	Newberry Rd	W. 34th St	A	E
W. 34th St	Univ. Ave	NW 16th St	A	F
N. 39th Ave	NW 43rd St	NW 13th St	A	F
NW 43rd St	Newberry Rd	NW 53rd Ave	A	E

Notes:
Outside of Transportation Concurrency Exception Areas, Level of Service standards are "C" for Florida Intrastate Highway System streets, "D" for State arterials and non-State streets which are County-maintained, and "E" for non-State streets which are City-maintained.
"Class" refers to "functional classification": Arterial = A, Collector = C.
Source: North Central Florida Regional Planning Council. (2000). Average Annual Daily Traffic Highway Level of Service Report. September 12. Gainesville Florida.

Early in the 1990s, a Central City Interim Special Transportation Area (STA) was approved in cooperation with the Florida Department of Transportation (FDOT) to help the City achieve important community development, land use, and transportation goals. The STA was replaced by the Transportation Concurrency Management Area (TCMA), and the TCMA was replaced in 2000 by the TCEA. (See the Transportation Mobility Element). The designation of the TCEA allows the City to pursue redevelopment in the Central City core areas. The TCEA promotes transportation choice and discourages low-density residential sprawl to improve the City transportation, land use, social, and fiscal environment instead of the traditional solution of widening streets, which reduces choice, and promotes sprawl. In the TCEA, land development regulations will be used to limit the number of driveway cuts, improve internal circulation, and place limits on uses which are car-intensive, such as drive-throughs, and encourage pedestrian- and transit-oriented design. The TCEA also goes hand-in-hand with the Urban Design Element to achieve these goals.

The Transportation Mobility Element provides an analysis of the relationship between transportation and land use.

Neighborhood Planning Program

Objectives

The objectives of the neighborhood planning program include building stronger community relationships, defining neighborhood goals and issues, and exploring alternatives for achieving desired neighborhood and city priorities. Additional benefits include tangible physical improvements in the neighborhoods, based on needs identified by both residents and City staff.

Because citizens know best the needs of their neighborhood, an objective of neighborhood-based planning is to encourage citizens to take an active role in solving neighborhood problems, and for the City to provide assistance to ensure successes. An integrated team-based approach to working with neighborhoods allows for this type of collaborative effort to take place. Further, this type of neighborhood planning process addresses issues and opportunities at a scale that is responsive to neighborhood needs.

One of the outcomes of neighborhood planning should be the identification of, and agreement upon, systematic approaches to revitalization that the residents and the City can follow. This is typically considered a "neighborhood action plan." Neighborhood action plans should be strategic and action-oriented, and should focus on, but not be limited to, physical improvements and programs that have the potential to be funded and implemented. It is difficult to sustain residential involvement without evidence that the involvement will result in change, therefore quick successes should be created. Although emphasis on physical improvements will not necessarily address human welfare and social issues that some neighborhoods face, such improvements can increase neighborhood pride, provide needed infrastructure and public safety upgrades, as well as raise awareness and stimulate action such as the creation of outside agency partnerships with the neighborhood to accomplish goals.

Program development

Two neighborhoods (Duval and Grove Street) were designated for participation in the FY98-99 Pilot Program. Those neighborhoods were chosen from among the 10 Target Area Revitalization Program (TARP) areas designated by the Community Development Block Grant Division and approved by the City Commission in 1994. Participating neighborhoods need not be located in TARP areas but should be located primarily in central, eastside, or other older neighborhoods. Because neighborhood interest and participation is very important to the success of a truly collaborative neighborhood planning effort, those neighborhoods with avid citizen interest should be given higher priority than a similar neighborhood with a lower level of citizen interest. Two more neighborhoods (Lincoln Estates and Hibiscus Park) were designated for FY 99-00. Lincoln Estates is an eastside neighborhood and Hibiscus Park is an older neighborhood near the University of Florida.

Once the planning process has been initiated, City staff work with each neighborhood to produce an action plan. The plan may be elaborate or simple, based on the needs of the neighborhood and the willingness of stakeholders to commit the time and effort necessary to complete the tasks. The outcome of the Neighborhood Action Plan includes a prioritized list of projects for development within the City right-of-way or on City-owned property. Some of these projects will be recommended for funding with proposed Neighborhood Planning Grant funds.

"Interdepartmental Neighborhood Action Teams" are assigned to each designated neighborhood at the initiation of the planning process. The purpose of the interdepartmental teams is to provide a coordinated approach and establish planning, revitalization and public service priorities tailored to neighborhood needs. The Neighborhood Action Teams assist neighborhoods with developing an action plan and members will generally serve as their departmental liaison to the designated neighborhood.

The neighborhood planning program was broadened in 2000 to involve all city neighborhoods by starting a neighborhood registration program. Participation in this program allows designated neighborhood contact persons to receive notices of meetings and other relevant information that can be provided at neighborhood meetings. A database of neighborhood organizations is being developed. A map of these neighborhoods has been prepared. Developers proposing large projects in or near registered neighborhoods will be encouraged to make contact with neighborhood organizations early in the development process. Development of a neighborhood web page for the City's web site is also anticipated.

Guidelines

Guidelines for the Neighborhood Planning program include the following:

1. Designate a minimum of one neighborhood for participation in the Neighborhood Planning program per year.

2. Establish a Neighborhood Action Team (NAT), comprising City staff, for each designated neighborhood at the initiation of the planning process.

3. Annually call for a preliminary evaluation of the Neighborhood Planning Program specific to each participating neighborhood, propose designated neighborhoods for the following fiscal year, request Neighborhood Grant Funding for the following year's designated neighborhood(s), and propose potential expansions of the neighborhood planning program.

4. Ensure continuation of a Team Coordinator liaison from the City's Planning Division to each participating neighborhood, which will coordinate continued Neighborhood Action Team involvement as needed.

In addition to the Neighborhood Planning program, since 1987, four other neighborhood plans of various types have been prepared or revised for areas within the redevelopment area: The College Park Special Area Plan, the University Heights Special Area Plan, the Depot area charrette, and the University Avenue corridor between 6th and 13th Streets. The overall goal of each of these plans has the same theme, providing a mechanism that will stimulate both the private and public sector to undertake redevelopment and revitalization activities in such as way as to promote urban vibrancy, compatibility of adjacent uses, transportation choice, retail health, livability, and civic pride.

Heritage Neighborhoods

Concerns about neighborhood stabilization and preservation have led City staff to begin developing recommendations for a program of heritage, conservation or other appropriate overlay districts as needed for neighborhood stabilization. Although concerns of residents about the stability of neighborhoods near the UF campus have been important in starting this process, it is unlikely that the recommended program will be limited to such neighborhoods.

Heritage or conservation districts are typically used to preserve neighborhood character, retain affordable housing, and protect an area from incompatible development. These districts can also be used to protect neighborhoods having considerable architectural or historic heritage that do not qualify for historic district status. The scope of these districts varies considerably nationwide, but the definition from another university city, Cambridge MA, is a particularly encompassing one, as follows:

> "The purpose of establishing a neighborhood conservation district is to conserve and protect the beauty and heritage of the City of Cambridge and to improve the quality of its environment through…conservation and maintenance of neighborhoods…which constitute or reflect distinctive features or the architectural, cultural, political, economic, or social history of the city; to resist and restrain environmental influences to this purpose; to foster appropriate use and wider public knowledge and appreciation of such neighborhoods; …and, by furthering these purposes, to promote the public welfare by making the city a more attractive and desirable place in which to live and work."

Development Suitability of Vacant and Undeveloped Land

An analysis of vacant lands and natural resources that may place constraints on development is discussed below. This analysis compares the location of vacant and undeveloped land to soil conditions, floodplains, wetland areas, creeks, wellfield management zone, groundwater recharge areas and areas with pollution problems. For this discussion, the city is divided into seven water basins: Little Hatchet Creek, Lake Forest, Calf Pond, Sweetwater, Tumblin Creek, Lake Alice and Hogtown Creek. Appendix C presents a graphic presentation of this analysis by each water basin. Figure 6 shows vacant lands at least 3 acres in size in relation to creeks, lakes, wetlands, and the city wellfield.

General Land Development Suitability. The analysis of vacant land indicates that the development potential of some of the unimproved land in the city is limited due to constraints of soil type (see Figures 7 and 19), flood plain, and wetlands. Land development regulations dealing with stormwater, creek and floodplain protection are used to determine development potential on a site-by-site basis. The implementation of an environmental performance overlay district or other revisions to the existing environmental regulations will further control development.

Redevelopment

The City of Gainesville is approximately 90 percent built-out. Much of the existing development within the city is low density and low intensity. Redevelopment and new in-town development is needed, using smart growth principles and compatible with the character of individual neighborhoods. Most of the areas shown for redevelopment are in proposed Zone A of the Transportation Concurrency Exception Area, which is expected to provide significant redevelopment stimulus. Figures 8 and 9 show the proposed redevelopment areas of the city and areas where housing rehabilitation activities will occur. The redevelopment areas included:

Downtown Gainesville, the Enterprise Zone, historic districts, housing rehabilitation areas and areas designated as a pocket of poverty.

Figure 6

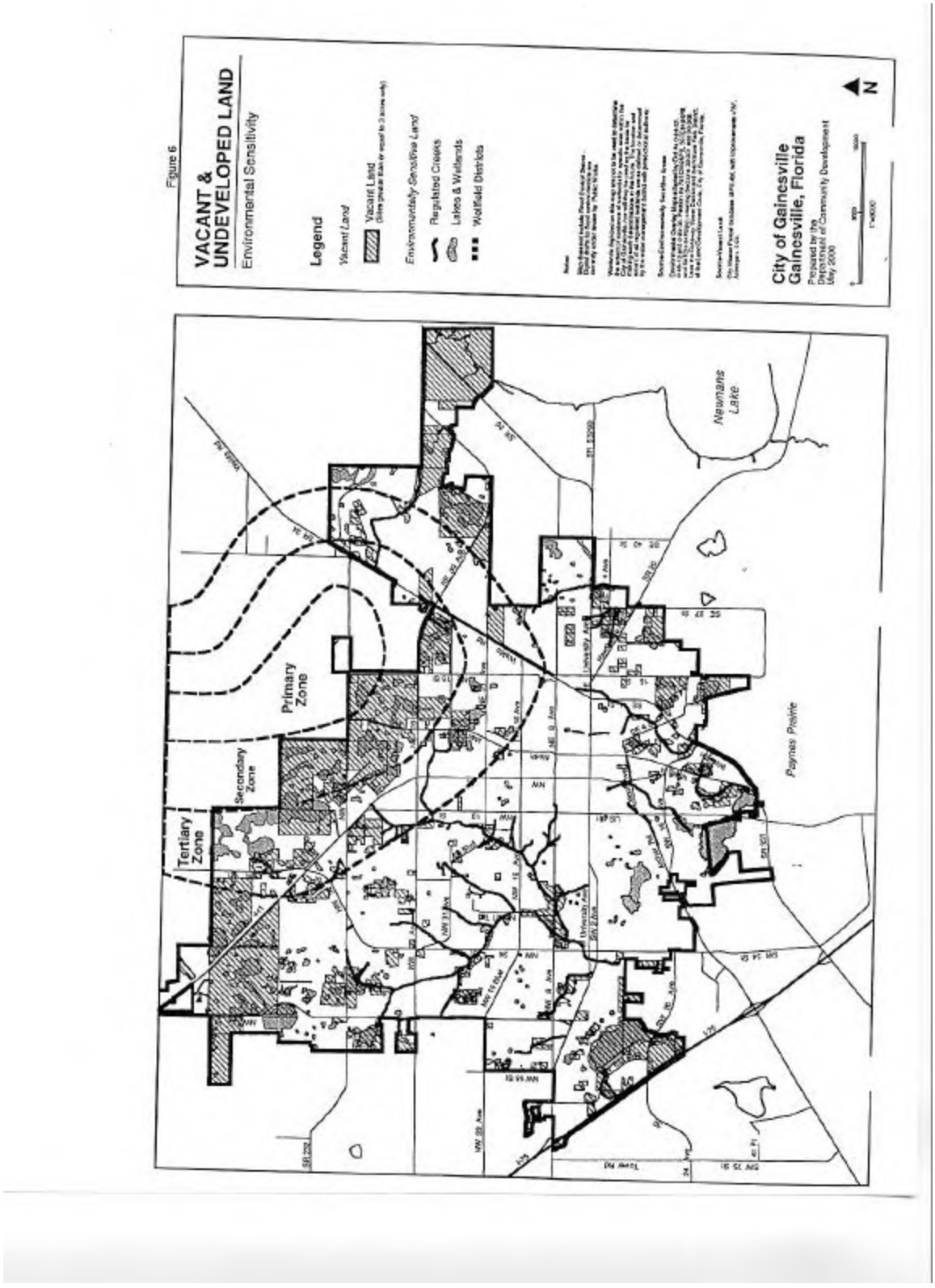

VACANT &
UNDEVELOPED LAND
Environmental Sensitivity
Legend
Vacant Land
Vacant Land
Environmentally Sensitive Land
Regulated Creeks
Lakes & Wetlands
Wellfield Districts
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
May 2000
N
Primary Zone
Secondary Zone
Tertiary Zone
Newnans Lake
Paynes Prairie

Figure 7

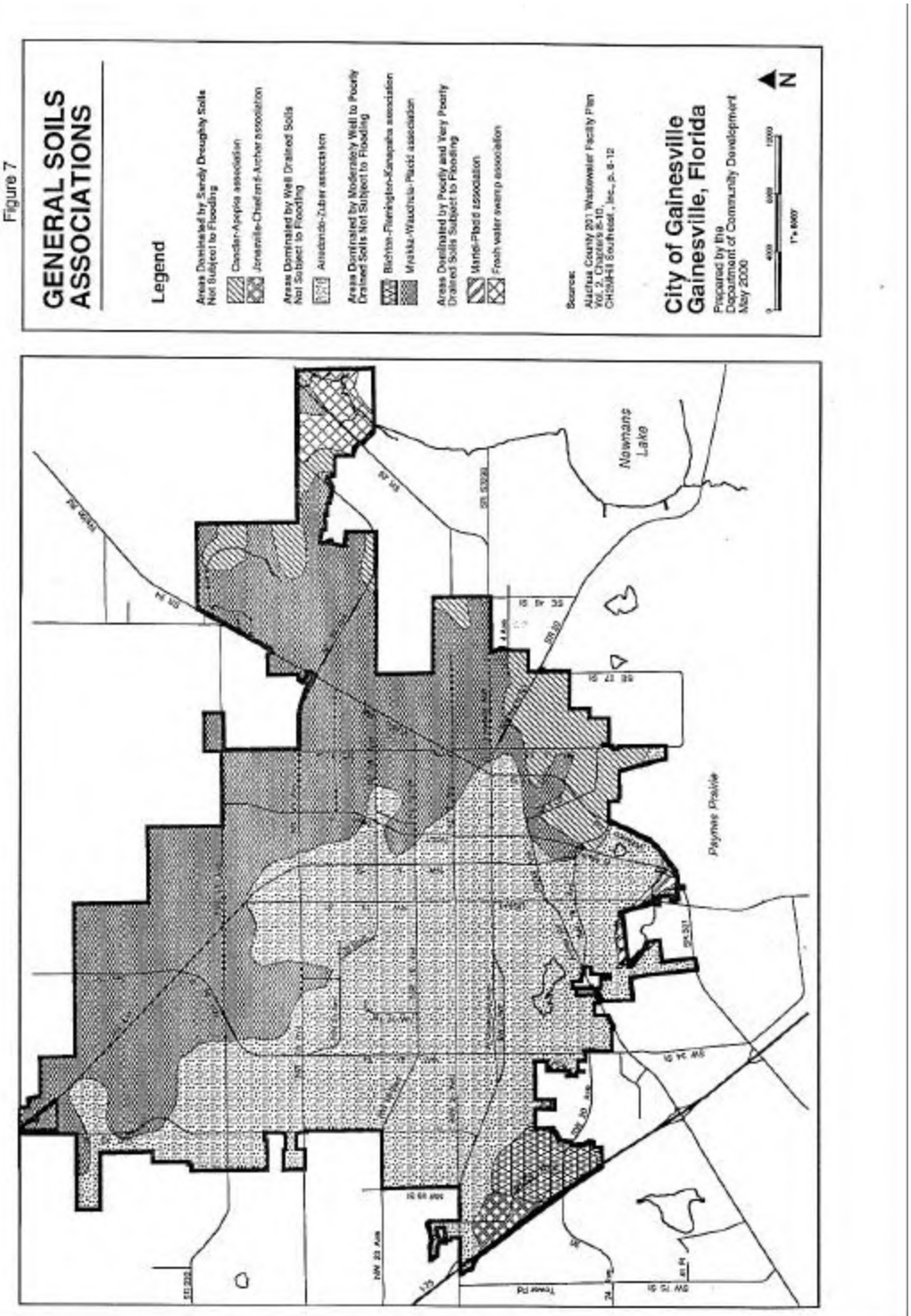

GENERAL SOILS ASSOCIATIONS
Legend
Areas Dominated by Sandy Droughty Soils Not Subject to Flooding
Candler-Apopka association
Jonesville-Chaires-Archer association
Areas Dominated by Well Drained Soils Not Subject to Flooding
Arredondo-Zuber association
Areas Dominated by Moderately Well to Poorly Drained Soils Not Subject to Flooding
Bivinton-Pierington-Kanapaha association
Mishka-Wauchula-Placid association
Areas Dominated by Poorly and Very Poorly Drained Soils Subject to Flooding
Mantid-Placid association
Fresh water swamp association
Sources:
Alachua County 201 Wastewater Facility Plan Vol. 2, Chapter 5-10, CH2MHill Southeast, Inc., p. 5-12
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development May 2000
N
Newnans Lake
Paynes Prairie

Figure 8

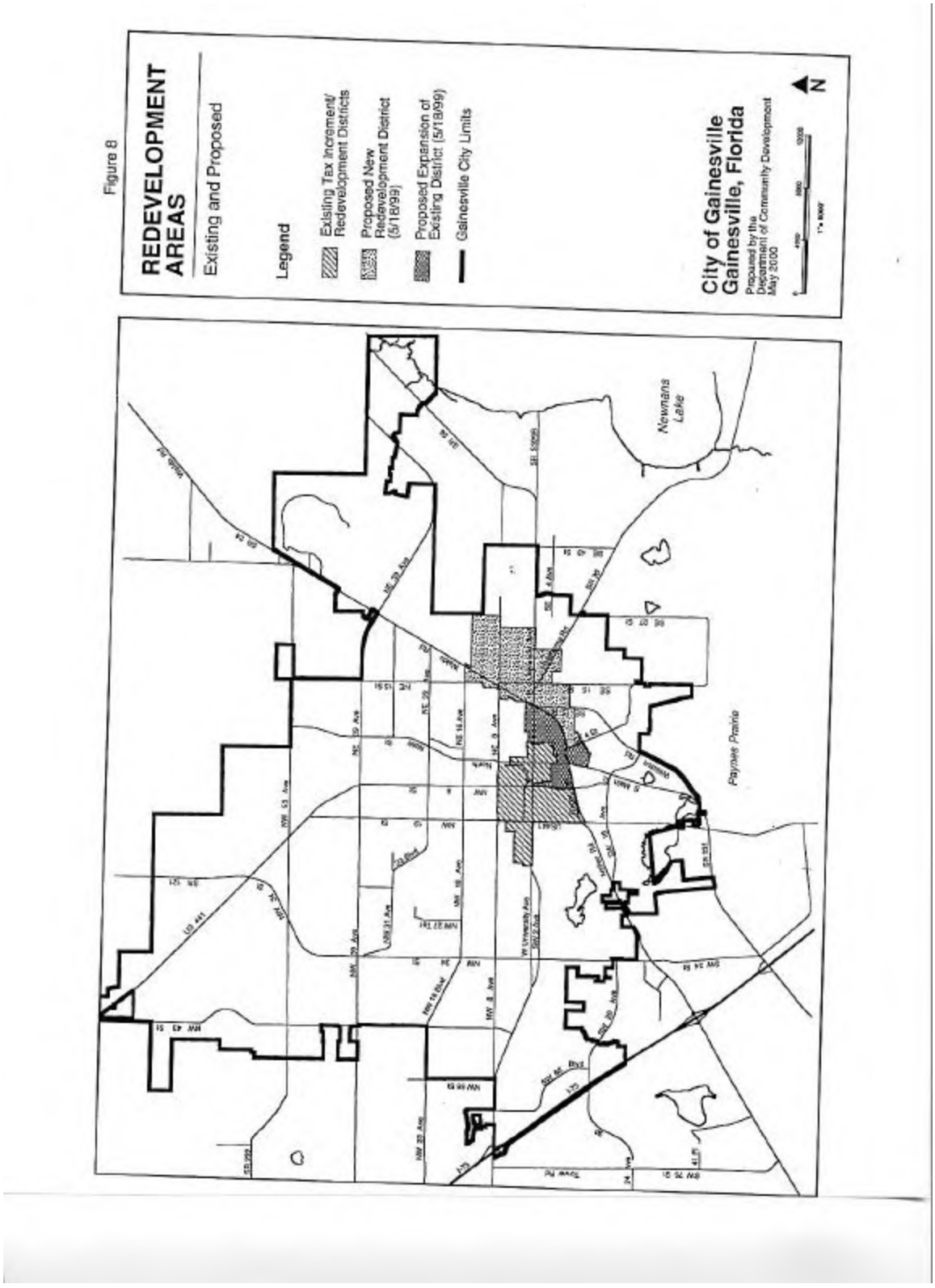
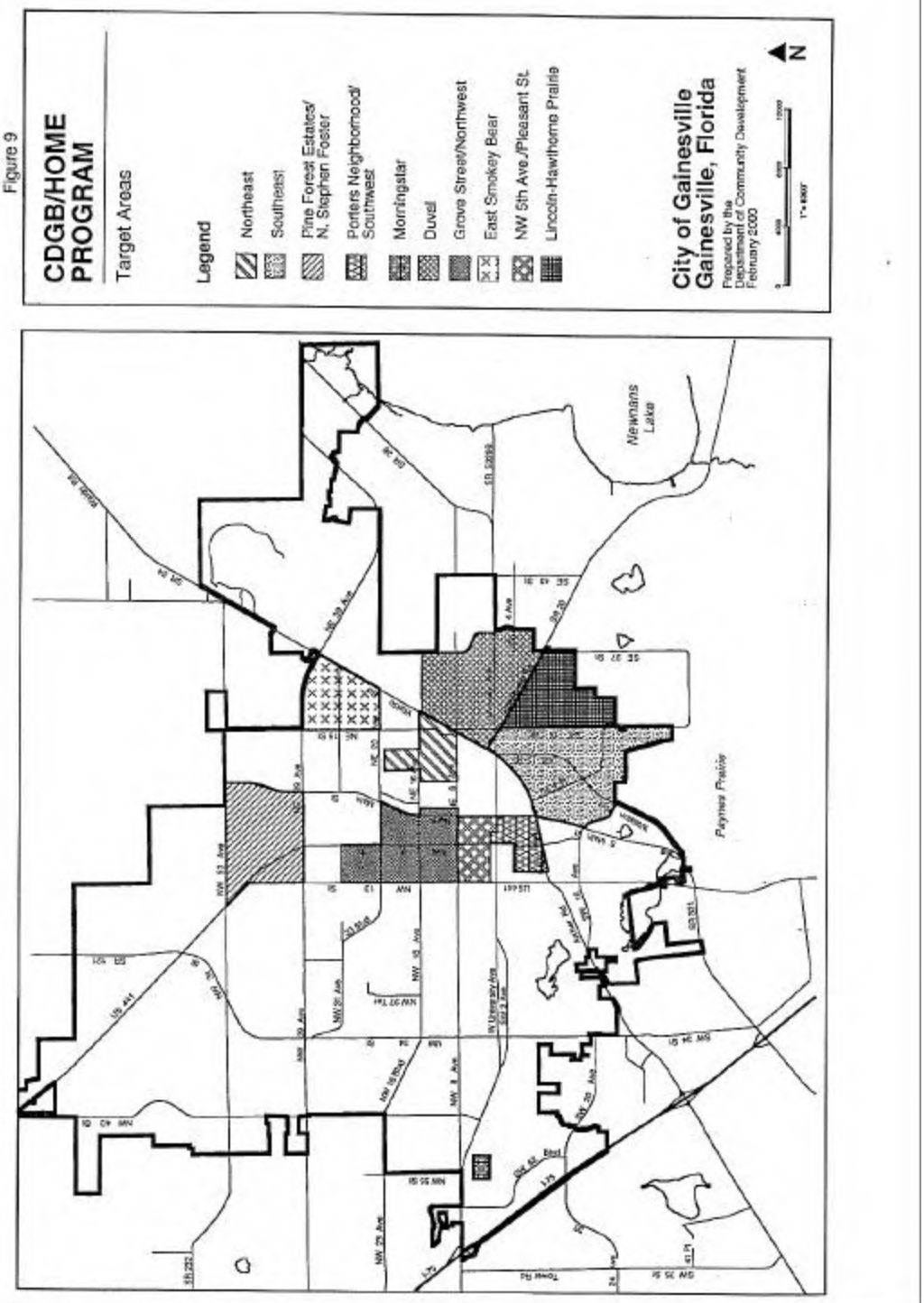

REDEVELOPMENT AREAS
Existing and Proposed
Legend
Existing Tax Increment/ Redevelopment Districts
Proposed New Redevelopment District (5/18/99)
Proposed Expansion of Existing District (5/18/99)
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development May 2000
N
Newnans Lake
Paynes Prairie

Figure 9


CDGB/HOME PROGRAM
Target Areas
Legend
Northeast
Southeast
Pine Forest Estates/ N. Stephen Foster
Porters Neighborhood/ Southwest
Morningstar
Duvel
Grove Street/Northwest
East Smokey Bear
NW 5th Ave./Pleasant St.
Lincoln-Hawthorne Prairie
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
February 2000
N
Newnans Lake
Paynes Prairie

Neighborhoods north, east and south of the University have a large percentage of student residents, but do not accommodate a large enough share of student housing. It is especially desirable to accommodate student housing close to the University to promote citywide transportation choice and several other City objectives. A larger residential population near the University would also be a prime catalyst in revitalizing the downtown. Older neighborhoods close to the downtown continue to include deteriorated dwellings and underutilized parcels, although new housing has been built in the Porters, Pleasant Street, College Park, and University Heights neighborhoods, as well as downtown. The City continues its efforts to attract employers to the downtown and nearby industrial areas which are centrally located and accessible by transit. Another primary target for redevelopment is the North 13th Street Neighborhood Center (N.W. 13th Street and N.W. 23rd Avenue). Recent investment in the area indicates that this neighborhood center is well located to serve community needs and that redevelopment of the area can satisfy community shopping needs generated by the large amount of residential development surrounding the neighborhood center.

The redevelopment areas contain a mix of land uses: commercial, office, residential and industrial. The Enterprise Zone encompasses most of the redevelopment areas. In order for an area to be designated as a State Enterprise Zone, it must exhibit the characteristics described in Section 290.0004(1)(a), F.S. Those characteristics include areas that show physical signs of deterioration and dilapidation which endanger life and property and the health and welfare of the community, among other things. The redevelopment areas also include areas containing valuable historical resources that must be preserved and maintained and areas where the sense of neighborhood is threatened by substandard housing conditions.

In order to encourage new in-town development and redevelopment consistent with the State policies to discourage urban sprawl, the existing Future Land Use Map designates areas near the university and near the downtown to carry densities up to 75 units per acre north of the university, 100 units east and south of the university and 150 units in the downtown. This Element proposes a number of development principles that will promote compatibility for mixed use and higher densities in the vicinity of lower density neighborhoods.

Infrastructure

An important consideration for new in-town development and redevelopment is infrastructure capacity. The projected design capacity of the Potable Water and Sanitary Sewer Element is sufficient to accommodate higher densities. As of February 2000, the Gainesville Transit System can accommodate 21,200,000 person trips at full capacity, and existing transit demand is approximately 4,413,198 person trips (See Transportation Mobility Element). The existing infrastructure can accommodate the increase in residential density which is needed to support the Transit System. As explained in the Transportation Element, an increase in density near traffic generators is expected to improve transportation choice. Development within the areas to be designated for higher densities is not expected to contribute to stormwater problems. As redevelopment occurs, existing problems will be eliminated because new development will have to meet the LOS Standards adopted in the Stormwater Element. Because many of these areas were

developed prior to any water quantity or quality standards, redevelopment can only improve on the present situation.

Nonconforming Uses

Uses identified as being inconsistent with the community's character are categorized as nonconforming uses. These are uses of buildings or lands not permitted in the zoning districts in which such buildings or lands are located. Such uses were typically legal when first established. Once a nonconforming use is discontinued for more than 9 consecutive months, it can only be re-established in conformance with the Land Development Code.

In early 2000, there were approximately 152 residential parcels with residential nonconforming uses (in 1990, there were approximately 185 such nonconformities). It is estimated that in early 2000, about 38 commercial, office or industrial parcels were located within residential districts, where they are nonconforming (in 1990, there were approximately 100 such nonconformities). Also in early 2000, there were approximately 123 commercial, office or industrial parcels containing nonconforming residential uses. Many of these nonconforming uses have existed for almost two decades (since the last city-wide rezoning). This indicates that these uses may actually be healthy and compatible with the surrounding area. Further study of nonconforming uses is needed to determine which uses are not appropriate and therefore should continue to stay nonconforming and whether uses which are thriving should be allowed to become a conforming use. The future land use plan, through its policies, should seek to eliminate incompatible land uses that pose a threat to public safety and welfare.

Car-Oriented Land Uses

The City has recognized that there is a compelling public interest in designating a discreet, contained area to allow auto-oriented uses, and not allow such uses to indiscriminately be established elsewhere. The City, for several years, has had an established policy that auto sales and service should only be allowed on Main Street north of 16th Avenue. The reasons for this policy are:

- Auto-oriented sales and service tends to be a lucrative business in cities such as Gainesville due to the high levels of per capita auto ownership.
- The lucrative nature creates strong pressure to establish such businesses in an enormous number of locations throughout the urban area – to the point of "oversupplying" such uses.
- An oversupply and dispersal of auto sales and services can have a blighting, strip commercial, "anywhere USA" impact on the Gainesville Urban Area.
- Auto sales and service can synergistically benefit when they are concentrated in a single location, as customers tend to be attracted to such consolidated areas, where it is easier to engage in "comparison shopping." Similarly, auto-oriented uses benefit when they are protected from encroachment by industrial and residential land uses.
- Auto sales and services tend to be hostile to nearby residential areas, as well as travel by walking or bicycling, because of the nature of such businesses, which tend to include relatively

loud machine and loudspeaker noise, glaring and highway-oriented lighting, heavy car traffic, large asphalt parking areas, loud and large signs, and excessive walking and bicycling distances.

Proposed Land Use Changes

This Element calls for a number of land use changes to update the Future Land Use Map (see Figure 10). These include:

1. SW 13th Street (from RH to MUM)

This parcel is on SW 13th Street (see Property 1 on Figure 10), and totals 5.5 acres in size. The parcel currently contains a multi-story apartment building and offices.

The City proposes to change the land use of the parcel from Residential-High (RH) to MUM (14-30 units per acre) in order to allow development of multi-family residential and mixed uses that promote transportation choice. MUM land use allows MU-2 zoning (14-30 units per acre). MU-2, which is a zoning district that implements Mixed Use Medium Intensity (MUM) land use, allows residential apartments as well as various commercial uses that are compact, walkable, and serve multiple neighborhoods.

Adjacent parcels within city limits are designated RH to the north, south and east. The adjacent parcel to the west is designated Education (E), and is a vacant property owned by the University of Florida.

2. NW 3rd Street at 500-block in Pleasant Street neighborhood (from RL to REC)

These parcels – 511 & 513 NW 3rd Street—are adjacent and west of a City-owned mini-park (see Property 2 on Figure 10). The park carries a Recreation (REC) land use designation. The subject parcels are vacant, and designated Residential Low (RL), as are the adjacent parcels to the north, west, and south. Changing the designation of the subject parcels to Recreation would allow for the expansion of the City park, and would promote redevelopment plans in the neighborhood.

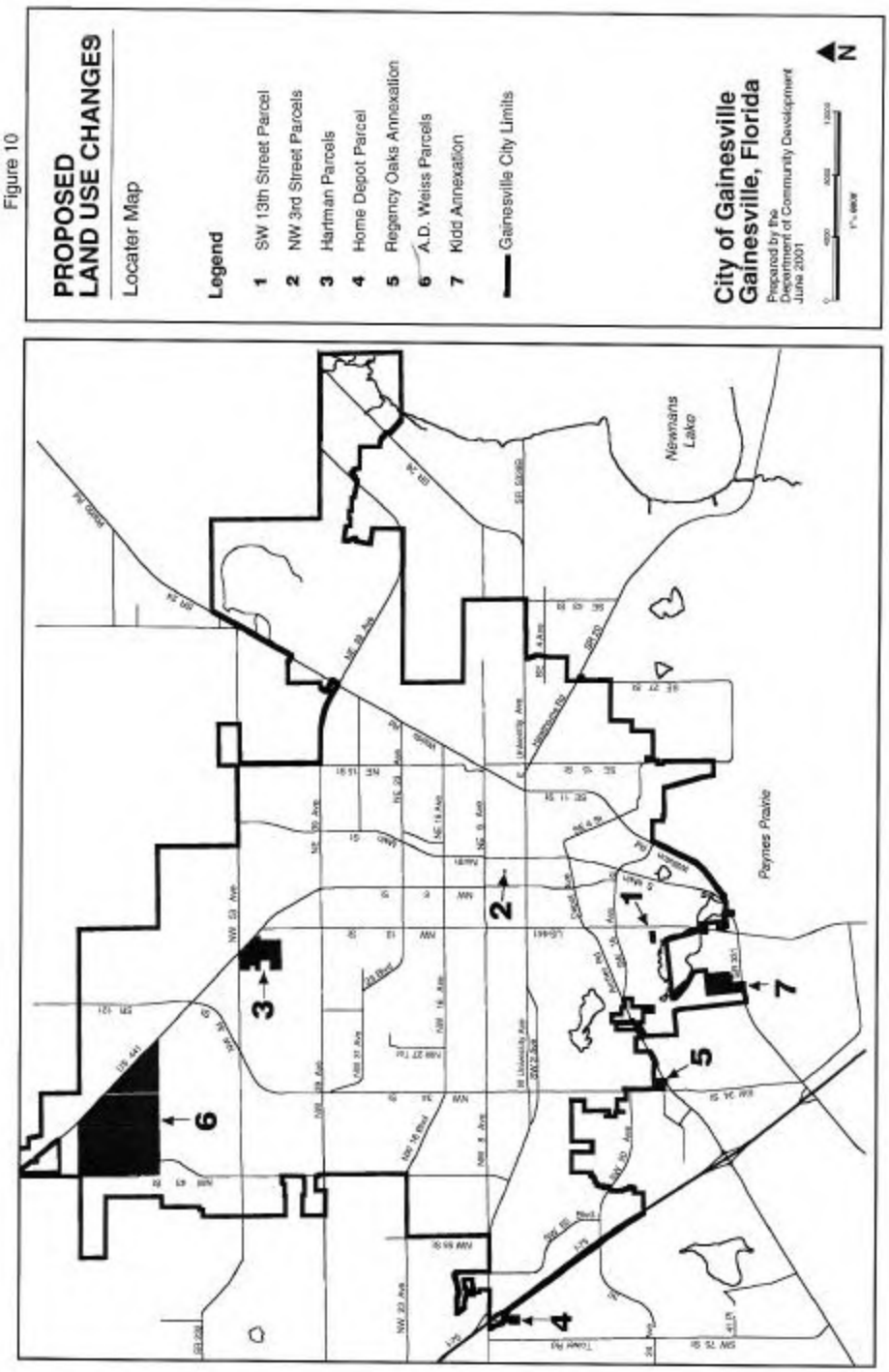
3. Hartman (from RM, RL, SF to SF, C, RM, RL and CON)

This property is approximately 99 acres (see Property 3 on Figure 10). The southwest corner of the Hartman property is proposed for change from Single Family to Conservation (CON), to match the underlying Conservation zoning.

Several other land use changes are needed because of non-existent land use for vacated right of way, and because of several areas with conflicting land use and zoning categories. The vacated right of way with no land use is proposed to be changed in order to be consistent with the underlying Business, RMF-6, and RMF-5 zoning. The respective proposed land use changes are to Commercial, Residential Medium Density, and Residential Low Density. The proposed changes to areas of conflicting land use and zoning are from: Residential Medium (conflicts with RSF-1 zoning) to Single Family; Residential Low (conflicts with RSF-1 zoning) to Single Family; Residential Low (conflicts with RMF-6 zoning) to Residential Medium; and Single Family (conflicts with BUS zoning) to Commercial.

Adjacent parcels are designated Residential Medium, Residential Low, Single Family, and Commercial.

Figure 10


PROPOSED
LAND USE CHANGES
Locater Map
Legend
1 SW 13th Street Parcel
2 NW 3rd Street Parcels
3 Hartman Parcels
4 Home Depot Parcel
5 Regency Oaks Annexation
6 A.D. Weiss Parcels
7 Kidd Annexation
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
June 2001
N
Newnans
Lake
Paynes Prairie

4. Home Depot (from Alachua County COMM to C)

The City of Gainesville annexed a 10-acre parcel on west of Oaks Mall and I-75 on April 10, 2000 (see Property 4 on Figure 10). Planning staff recommends that this parcel be given a Commercial (C) designation, which allows the present retail operation.

The parcel currently carries the COMM Alachua County land use designation, which allows various commercial land uses. Adjacent parcels are all outside of city limits and are designated COMM.

5. Regency Oaks (from Alachua County COMM to MUL)

The City of Gainesville annexed a 8-acre parcel on SW 34th Street on May 8, 2000 (see Property 5 on Figure 10). Planning staff recommends that this parcel be given a Mixed Use Low (MUL) designation, which makes the present residential operation conforming, as well as allowing retail and office operations. MU-L allows residential densities up to 30 units/acre. Regency Oaks is approximately 18 units per acre.

The parcel currently carries the COMM Alachua County land use designation, which allows various commercial land uses. Adjacent parcels are designated COMM outside of city limits and E (education) within city limits (to the north).

6. A.D. Weiss (from PUD to SF)

Northwest Gainesville contains an undeveloped 716-acre property that was designated as the Gainesville North Activity Center in the 1991-2001 Gainesville Comprehensive Plan, and carried PUD (Planned Use District) land use (see Property 6 on Figure 10). This property was part of the contemplated "Greenways of Gainesville" Development of Regional Impact. The Gainesville North Activity Center and the PUD land use were effectively eliminated by the November 2000 denial of a requested time extension for the required Planned Development zoning approval. This action resulted in reversion to the underlying Single-Family land use category.

Approximately 30 percent of the property consists of regulated, designated wetlands. Sec. 30-302 of the Gainesville Land Development Code prohibits development within 35 feet of the landward extent of a regulated wetland.

Planning staff recommends that this property retain its underlying Single-Family (up to 8 units per acre) Residential land use. This land use will allow the establishment of traditional neighborhood developments (TNDs) by right. With a TND design, per capita impervious surface will be lower than it would be for conventional residential development.[1] The compact, mixed use character will create relatively high internal trip capture and minimize car trips to and from the property. Trips to parks, squares, schools, civic uses, retail, and jobs will commonly be by foot or bicycle, thereby reducing air emission impacts, groundwater pollution, and noise pollution. In addition, visual blight due to excessive car-oriented street, sign, and building design will be minimized. Large, shading street and parking lot trees will provide not only more pleasant walking and bicycling conditions, but will also reduce "heat island" impacts.

7. Idlywild/Serenola ("Kidd Property") (adopt Special Area Plan)

Planning staff recommends that the Special Area Plan prepared and adopted by Alachua County for the recently annexed 44-acre Kidd property be adopted (see Property 7 on Figure 10). The City shall revise the Plan to make the Plan consistent with City regulations and objectives.

In 1989, Alachua County prepared a study and adopted a Special Area Plan (SAP) for the Idylwild/Serenola area. A 44-acre portion of this area (the "Kidd Property", herein called the "Property") was subsequently annexed into the City of Gainesville. The Plan seeks to protect neighborhood character, scenic roads, trees and tree canopy, uplands and wet areas, sensitive or protected species, Payne's Prairie and Biven's Arm, and archeological sites. The 44-acre Kidd Property is part of the Idywild/Serenola area affected by the SAP.

Neighborhood Character. The Plan seeks to protect neighborhood character. Proposed development on the Property must be the same character as the development in adjacent residential areas with regard to building height and housing type.

In part, consistency with neighborhood character, as well as environmental conservation, is to be achieved by designating the allowable density on the Property in such a way as to be transitional between the agricultural land adjacent to the west and the higher density development to the east.

County land use designations are shown on an attached map.

Scenic Roads. The Plan seeks to protect scenic roads, including 56th Avenue and 17th Terrace. Proposed development must be consistent with the Alachua County Scenic Roads ordinance.

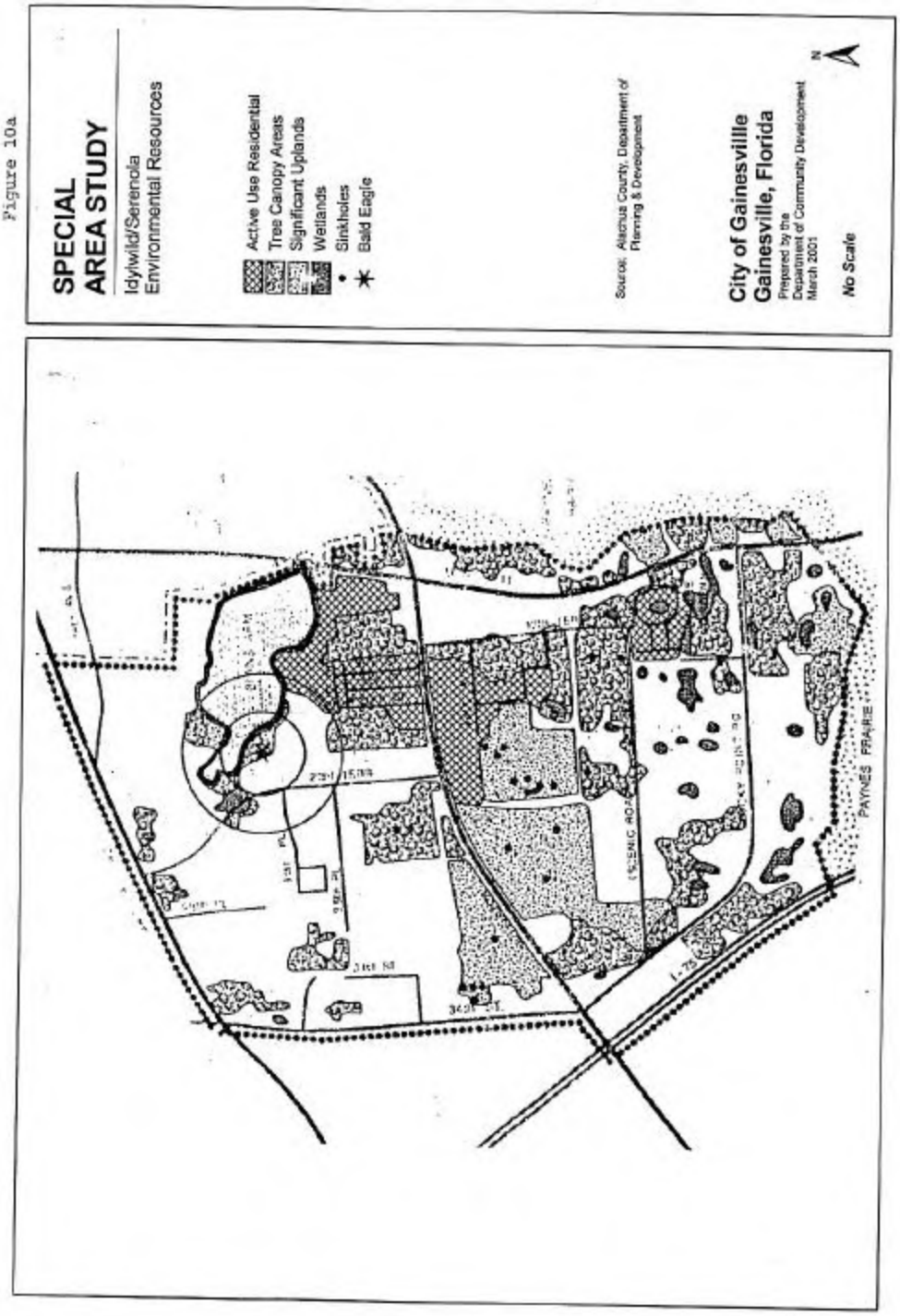
Trees and Tree Canopy. The Property resembles an Upland Mixed Forest natural community, is dominated by a closed canopy (a 90 percent canopy) of loblolly pine and laurel oak. Other canopy species include live oak, black cherry, flowering dogwood, sweetgum, and southern red oak. Several remnant longleaf pines are located in the northwest corner of the Property. Many of these trees are in need of protection, and are the key conservation component of the Property that will drive much of the design and layout of development of the Property. Canopy areas on the Property are generally shown on Figure 10a, Idlywild/Serenola Environmental Resources. A field

[1] A recent U.S. Department of Environmental Regulation study in Atlanta found that conventional residential development creates 0.28 acres of impervious surface per dwelling unit compared to 0.03 acres per dwelling unit in a traditionally designed development.

visit by Alachua County Environmental Protection staff confirmed the above observations on February 28, 2001.

In part, maximizing tree protection is to be achieved with clustering provisions.

Figure 10a


SPECIAL AREA STUDY
Idylwild/Serenola
Environmental Resources
Active Use Residential
Tree Canopy Areas
Significant Uplands
Wetlands
Sinkholes
Bald Eagle
Source: Alachua County, Department of Planning & Development
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
March 2001
No Scale
N
SW 23rd TER
SW 13th PL
SW 20th DR
SW 34th ST
SCENIC ROAD
PAYNES PRAIRIE
I-75

Uplands and Wet Areas. There are no known hydric soils, floodprone areas, wetlands, or significant uplands on the Property.

Threatened and Endangered Species. Sandhill cranes are known to use agricultural land adjacent and west of the Property. Sufficient buffering and other design features will be necessary to ensure against modifying this wintering behavior of the cranes. The property is not suitable habitat for the cranes.

Currently, there is not a bald eagle's nest on the Property, nor is the Property suitable habitat for bald eagles. However, there is a bald eagle's nest on the north shore of Biven's Arm north of the property.

Gopher tortoise could potentially be found on the Property depending on the density of the tree canopy.

Proximity to Paynes Prairie and Biven's Arm. The Property is within the ecological zone of influence for the environmentally significant Biven's Arm and Payne's Prairie.

Archeological Sites. There are 2 recorded archeological sites located north and east of the northeastern corner of the Property. It is unlikely that the Property will contain such sites.

Natural Resources

Natural resources are shown on Figures 11-14.

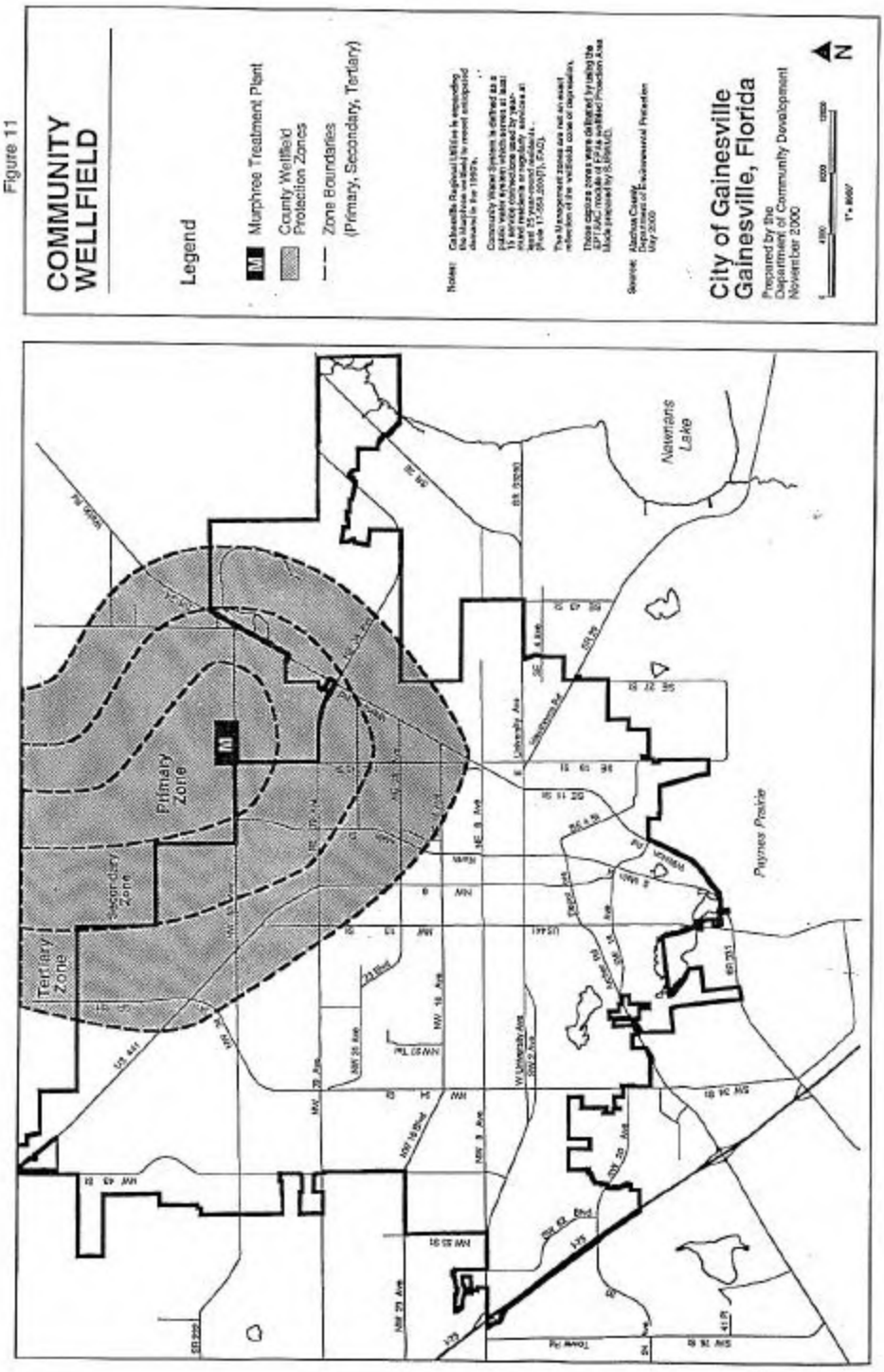
Existing and Planned Waterwells

Figure 11 illustrates existing and planned water wells and the best available data for cones of influence. The Murphree Water Treatment Plant, owned by Gainesville Regional Utilities (GRU), is the primary facility providing potable water for the City and the urban fringe. No "cones of influence" have been designated by the St. John's River Water Management District or other local agencies having qualified professional hydrologists for the Murphree wellfield.

In the absence of such information, Figure 11 includes an overlay of those parts of the Murphree Wellfield Protection Zones that fall within urban area boundaries.

Wellfield "management" zones were originally designated in conjunction with the county's adoption of a wellfield management code in 1988. The Murphree Wellfield Protection Code, including revised wellfield protection zones, was substantially revised and improved in 2000. The wellfield protection zones are a reasonable substitute for a "cone of influence" around the municipal wellfield. The protection zones are based on travel time and were established after substantial technical investigation, including hydrogeological modeling.

Figure 11


COMMUNITY WELLFIELD
Legend
M Murphree Treatment Plant
County Wellfield Protection Zones
Zone Boundaries (Primary, Secondary, Tertiary)
Notes:
Sources: Alachua County, Department of Environmental Protection, May 2000
City of Gainesville, Florida
Prepared by the Department of Community Development November 2000
N
Primary Zone
Secondary Zone
Tertiary Zone
Newnans Lake
Paynes Prairie

Murphree Wellfield Protection Code: Protection Zones

Primary Wellfield Protection Zone. The primary wellfield protection zone is the land area immediately surrounding the Murphree Wellfield, and the land area defined as the 2-year Floridan aquifer system travel time at a 60-mgd pumping rate. Requirements for this zone are the most restrictive of the three protection zones (the other two are the secondary and tertiary wellfield protection zones), and incorporate restrictions of both the tertiary and secondary zones.

In the primary zone, no new uses of land that involve the storage, use or manufacture of hazardous materials are allowed. No new domestic or industrial wastewater treatment plants are allowed, and (with limited exceptions), no new septic tank systems are allowed. Transportation of hazardous materials is strictly limited to local traffic serving facilities within the zone. The provisions of the secondary and tertiary wellfield protection zones apply.

The Secondary Wellfield Protection Zone. The secondary wellfield protection zone is the land area surrounding the primary wellfield protection zone, and the land area defined as the 10-year Floridan aquifer system travel time at a 60 mgd pumping rate. No new underground storage of hazardous materials is allowed, except vehicular fuel storage subject to Florida Statutes 376.317. Variance approval is required for the temporary storage (up to 180 days) of hazardous materials in containers or tanks beyond a certain volume for use in normal agricultural or silvicultural (forestry) operations and construction activities. A Hazardous Materials Storage License is required for all regulated storage facilities as set forth in section 355.11 of the County Code. The provisions of the tertiary wellfield protection zone apply to the secondary protection zone.

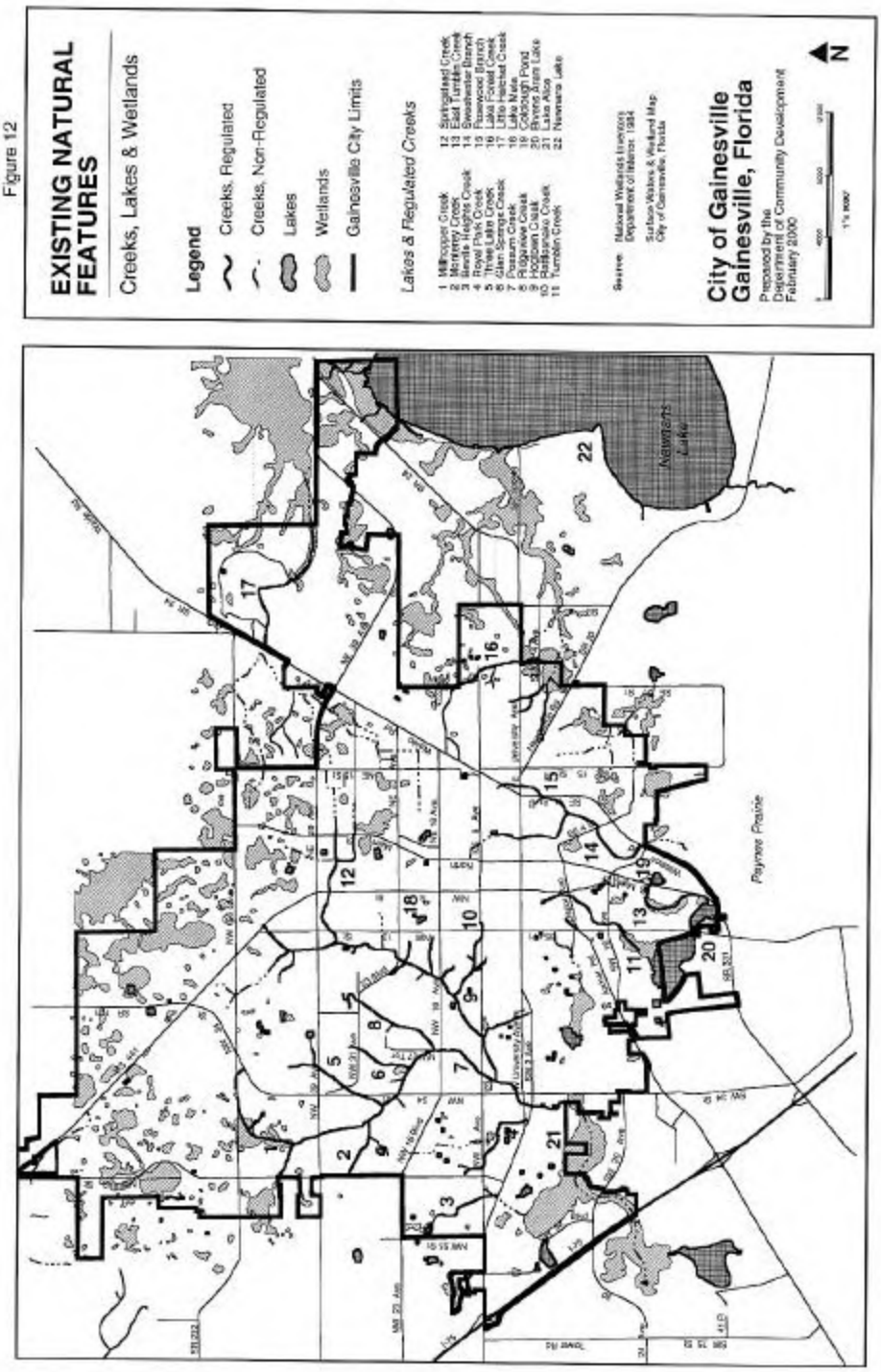
The Tertiary Wellfield Protection Zone. The tertiary wellfield protection zone is the land area surrounding the secondary wellfield protection zone, and the land area defined as the 25-year Floridan aquifer system travel time at a 60 mgd pumping rate. New landfills are prohibited, and new excavations and mining activities are generally prohibited. Filling of existing or newly developing sinkholes or other solution features requires approval from the Alachua County Environmental Protection Department. Agricultural and silvicultural operations must follow or exceed accepted best management practices. No new wells are allowed in any aquifer, except as set forth in s. 355.09(b), Alachua County Code. Existing wells posing a threat to groundwater quality shall be properly abandoned or repaired, and all new and existing wells shall be registered. A Hazardous Materials Storage License is required for regulated facilities (per section 355.11, Alachua County Code) with non-residential septic tanks or wells.

All Zones. All facilities regulated under the County's Hazardous Materials Management Code (except for Class AA facilities) require a Hazardous Materials Storage License.

Rivers, Lakes, and Wetlands

Figure 12 depicts creeks, lakes, and wetland areas in Gainesville.

Figure 12


EXISTING NATURAL FEATURES
Creeks, Lakes & Wetlands
Legend
Creeks, Regulated
Creeks, Non-Regulated
Lakes
Wetlands
Gainesville City Limits
Lakes & Regulated Creeks
1 Millhopper Creek
2 Monterey Cross
3 Beville Heights Creek
4 Royal Park Creek
5 Three Lake Creek
6 Glen Springs Creek
7 Bivens Arm Lake
8 Pidgeon Pond Creek
9 Hogtown Creek
10 Rattlesnake Creek
11 Tumblin Creek
12 Sweetwater Branch
13 East Tumblin Creek
14 Sweetwater Branch
15 Rosewood Branch
16 Lake Forest Creek
17 Little Hatchet Creek
18 Lake Kate
19 Cellon Creek Pond
20 Bivens Arm Lake
21 Lake Alice
22 Newnans Lake
Sources: National Wetlands Inventory, Department of Interior, 1984
Surface Waters & Wetland Map, City of Gainesville, Florida
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
February 2000
N
Newnans Lake
Paynes Prairie

Creek Basins

Little Hatchet Creek. Nearly all of the undeveloped land located within this basin is affected by features that may affect land development. The two main affected areas consist of the Airport Industrial Park and a large vacant tract of land adjacent to N.E. 39th Avenue designated for residential use (see Figure 6). Analyses of these areas indicate that the Airport Industrial Park is affected by soils with "severe" development constraints and wetland problems; is located within the Wellfield Protection Zones; and is in the vicinity of pollution sources. Restrictions in the Murphree Wellfield Protection Code may limit development of this area. Vacant land in the vicinity of the Airport Industrial Park is suitable for agricultural and industrial development insofar as the development can comply with wellfield protection and stormwater management regulations.

Vacant land adjacent to N.E. 39th Avenue is affected soils with "severe" development constraints, wetlands, floodplains, and the wellfield management zone. The wetlands and floodplains are significant constraints to the development of this property. These constraints will probably limit the use of this property to low density residential or open space.

Lake Forest. Vacant land located within the city limits in this basin has very few limitations to development. However, soils with "severe" development constraints prevail. Such soil conditions require special design features and raise the cost of development. A small portion of available land is within the 100-year floodplain (see Figure 13). Undeveloped land in this area could support residential and some commercial development. No pollution problems have been identified in this area.

Calf Pond and Sweetwater Branch. Most of the vacant land parcels in these basins are affected by surface water wetlands, 100-year floodplains and creeks. Soils with "severe" development constraints appear to coincide with unimproved lands. Such conditions require special design features and raise the cost of development. Due to the creek system, development of industrial property in the South Main Street area may be limited.

Tumblin Creek and Lake Alice. None of the undeveloped land within this basin is affected by poor soil conditions. The only significant parcel of undeveloped land (SW Williston Road near Bivens Arm) is affected by a wetland and the 100-year floodplain. Based on the environmental conditions in this area, the development of this site should be limited to low intensity uses. There are no pollution problems that will prevent or limit the development potential of undeveloped lands in this basin.

Hogtown Creek. Areas that will have the most problems being developed are those that are affected by the creek system, floodplains and surface water wetlands. Policies regarding development in the wellfield management zone will also affect the development of some areas in this basin. The Land Use Plan in the City's 1991-2001 Comprehensive Plan designates nearly all of the vacant land affected by natural areas as residential or conservation and park land. This basin also contains a significant pollution problem (the Cabot Carbon/Koppers Superfund Site) that affects soil, water and air conditions.

Floodplains

See Figure 13 for floodplains. The Master Flood Control Maps (1990) are on file in the Public Works Department. The figures and maps show the 100-year floodplain areas for Gainesville.

Floodprone Areas

Most of the floodplain areas in the city are not suitable for development. Floodplains in the city are usually associated with the creek system. City ordinances currently restrict development in flood channels, floodplains, and along regulated creeks. Figure 14 shows those areas of the city that where designated as Conservation on the land use map of the City's 1991-2001 Comprehensive Plan. The land which is designated conservation closely corresponds with areas designated as the 100-year floodplain (see Figure 13). The significance of floodplains to development in the city is discussed in the Stormwater Management Element.

Potable Water

The Murphree Water Treatment Plant, located in northeast Gainesville, serves the Gainesville urban area. The plant's 1999 estimated service area population was 157,441 people (see Figure 15). The average daily demand in 1999 was 25 million gallons per day (mgd). The 1999 total system average daily per capita consumption is 159 gallons. Currently the Murphree Water Plant has a design capacity of 40 mgd with a planned expansion due in 2001 to 51 mgd. At 40 mgd, the Plant can support the existing land uses. The planned expansion will accommodate the anticipated redevelopment and development of the urban area beyond the 2011 planning horizon of the city's comprehensive plan.

Deficiencies. Based on the overall capacity of the Murphree Water Treatment Plant facilities, services are available to support existing land uses. Gainesville Regional Utilities (GRU) water personnel identified low-pressure areas that occur in the City (See Figure 16):

Capital projects are budgeted to address low-pressure problems.

Natural Groundwater Aquifer Recharge

The primary water supply for Gainesville is the Floridan Aquifer. The Aquifer underlies all of the Gainesville urban area and falls within 3 zones: (1) confined; (2) semi-confined/perforated; and (3) unconfined. Figure 17 shows the degree of confinement (protection) of the Aquifer system in the Gainesville urban area. In the eastern and northeastern portions of the urban area, at least 10 feet of clays or clayey sands protect the Floridan. In the northwestern and central portions, the protecting layer is variable and perforated by sinkholes which operate as a significant source of recharge for the Floridan. In the southwestern portion of the urban area, the Floridan is relatively vulnerable (overlain with thin, sandy soil) and therefore under water table conditions. This is an

area of high recharge to the Floridan and especially vulnerable to contamination, because an overlying confining layer is lacking.

Figure 13

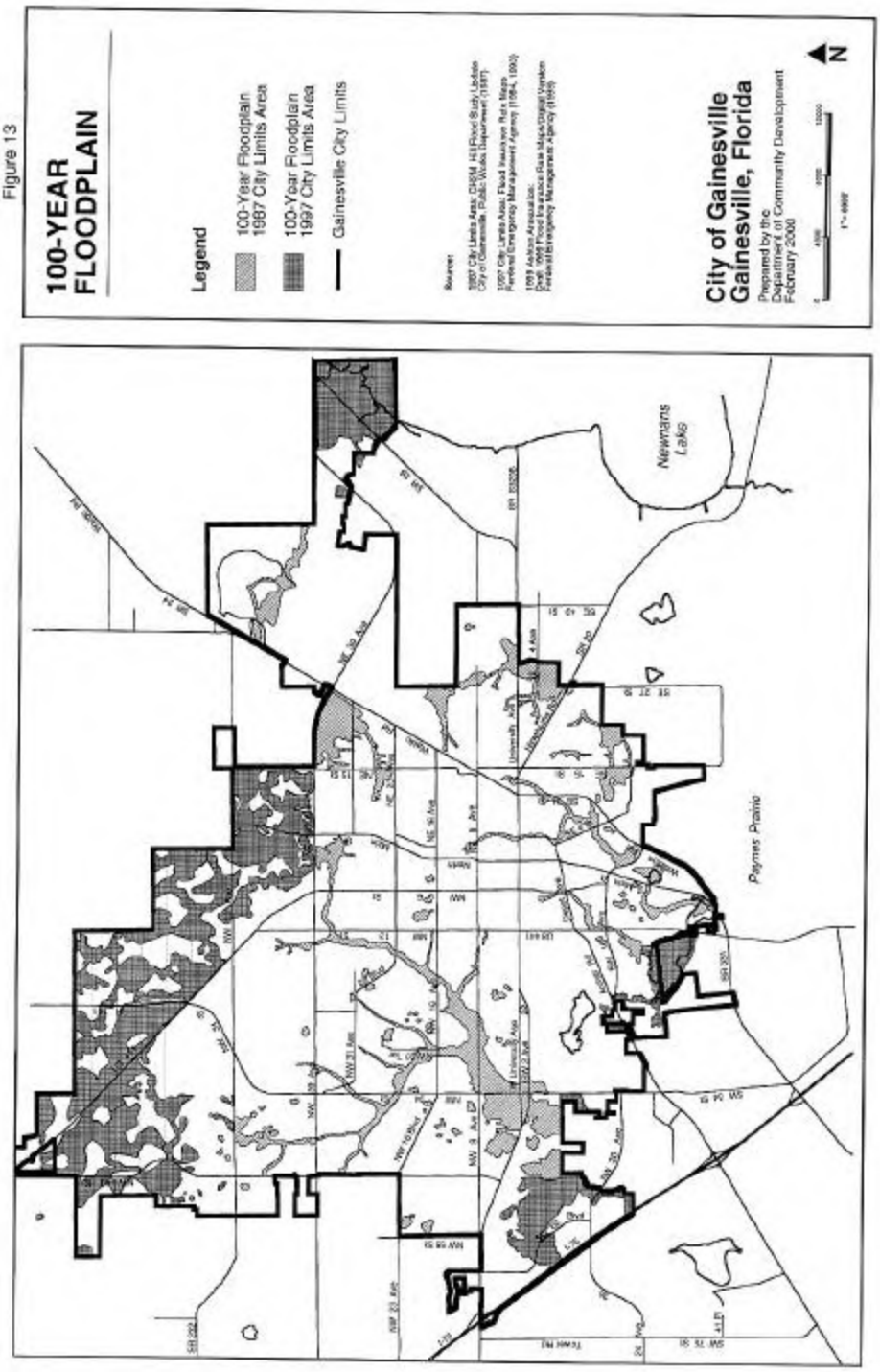

100-YEAR FLOODPLAIN
Legend
100-Year Floodplain 1987 City Limits Area
100-Year Floodplain 1997 City Limits Area
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development February 2000
N
Newnans Lake
Paynes Prairie

Figure 14

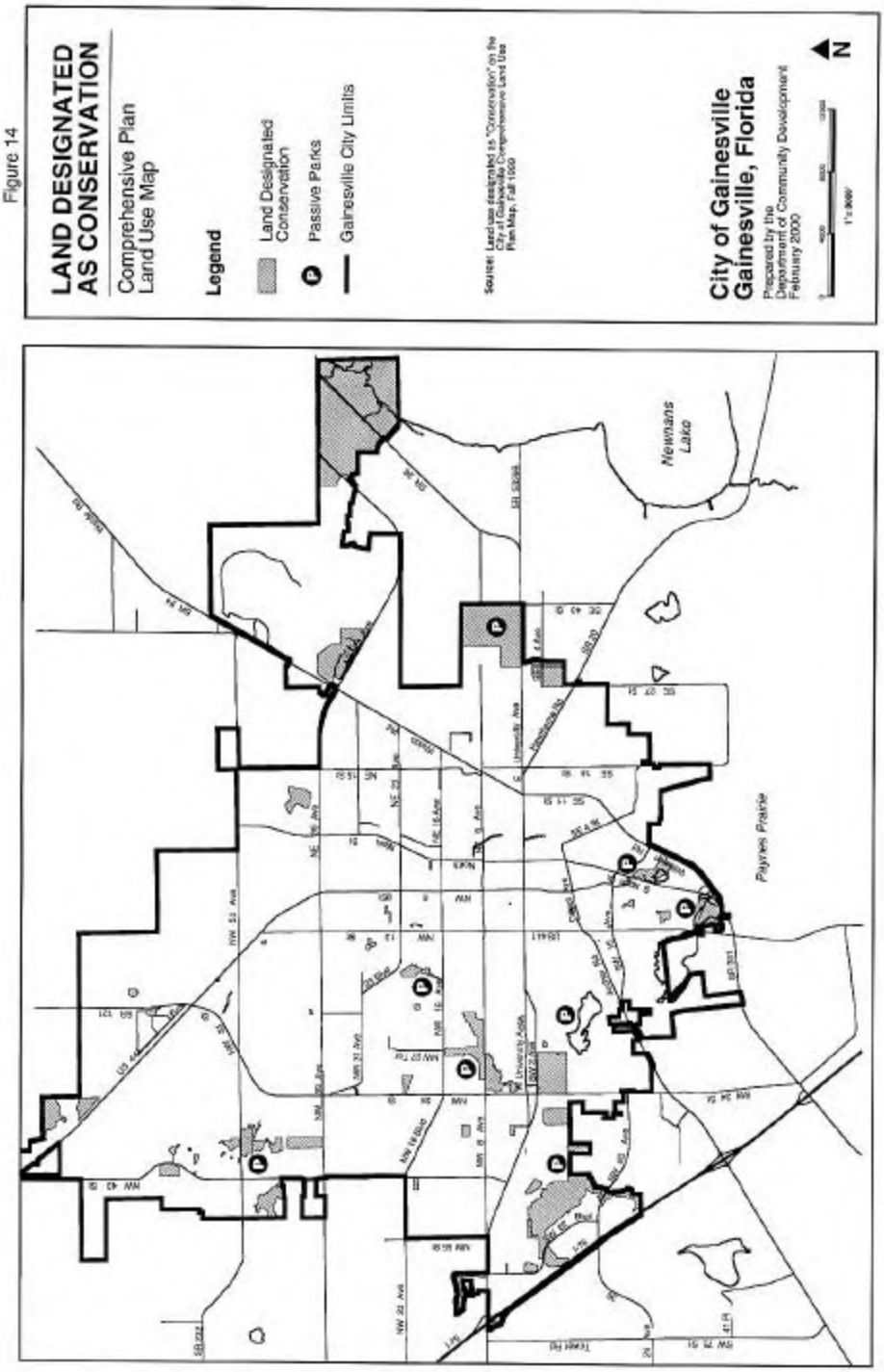

LAND DESIGNATED AS CONSERVATION
Comprehensive Plan Land Use Map
Legend
Land Designated Conservation
Passive Parks
Gainesville City Limits
Source: Land use designated as "Conservation" on the City of Gainesville Comprehensive Land Use Plan Map, Fall 1999
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development February 2000
N
Newnans Lake
Payne's Prairie

Figure 15

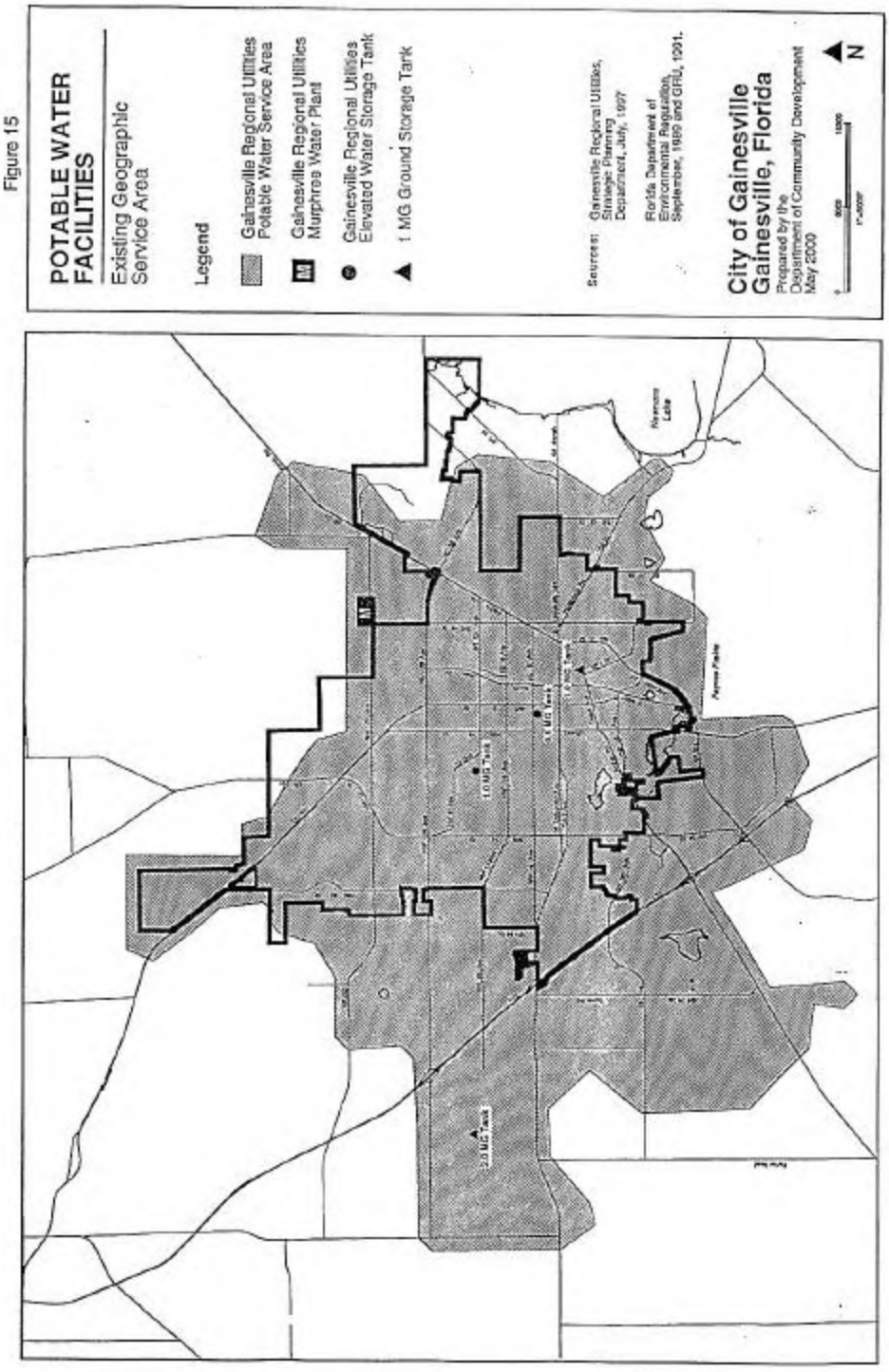

POTABLE WATER FACILITIES
Existing Geographic Service Area
Legend
Gainesville Regional Utilities Potable Water Service Area
Gainesville Regional Utilities Murphree Water Plant
Gainesville Regional Utilities Elevated Water Storage Tank
1 MG Ground Storage Tank
Sources: Gainesville Regional Utilities, Strategic Planning Department, July, 1997
Florida Department of Environmental Regulation, September, 1989 and GRU, 1991.
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
May 2000
N

Figure 16

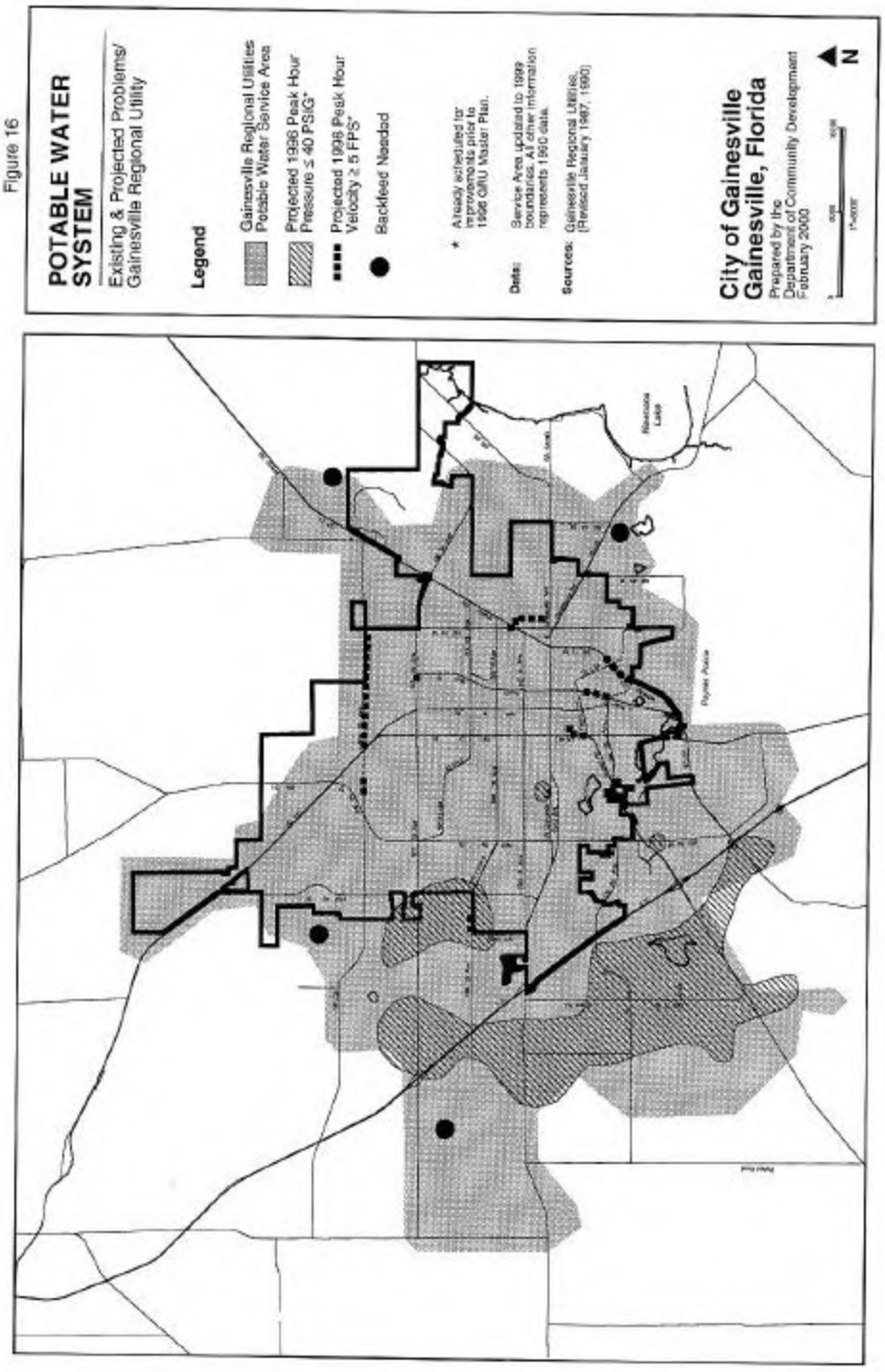
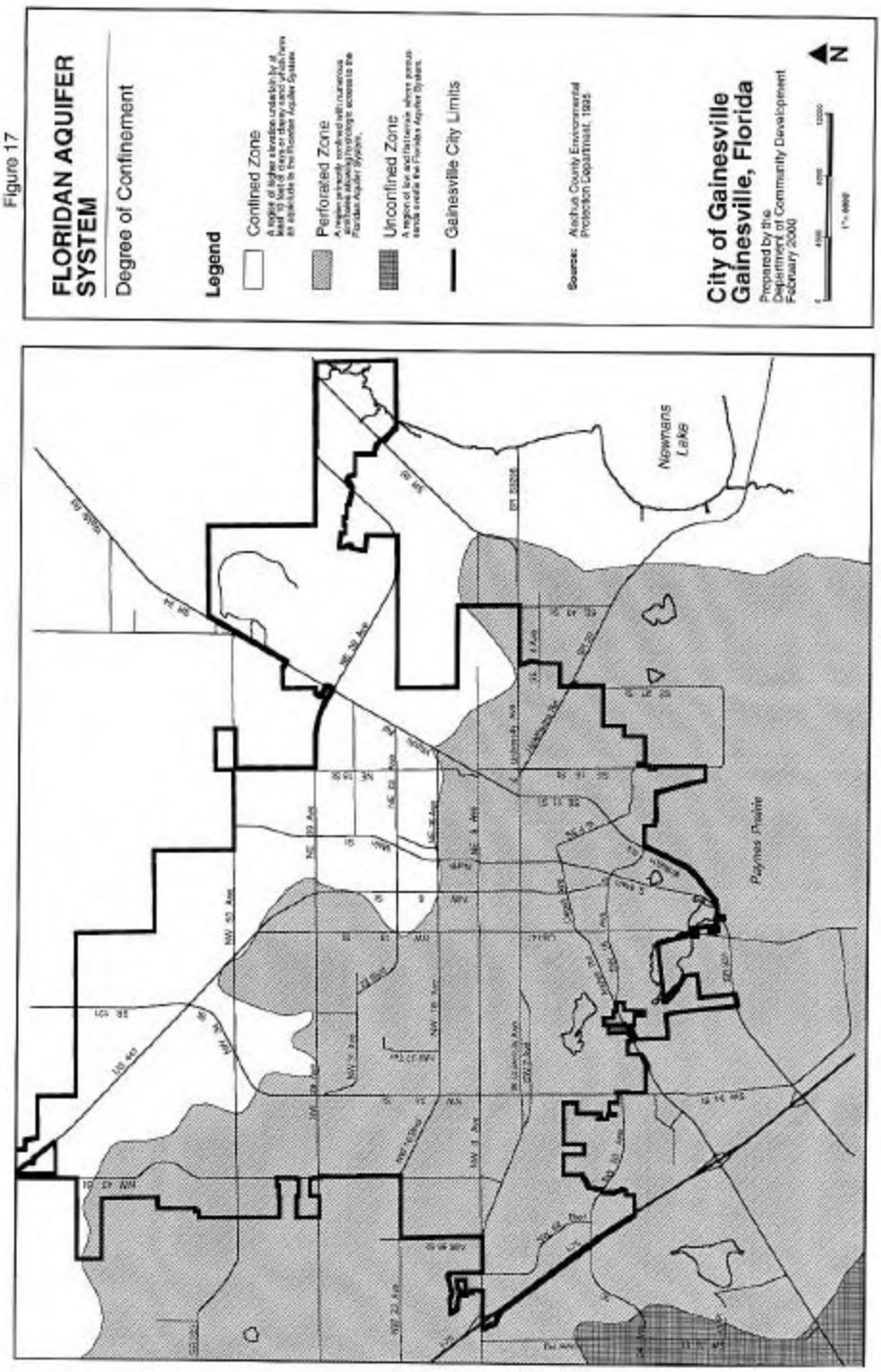

POTABLE WATER SYSTEM
Existing & Projected Problems/ Gainesville Regional Utility
Legend
Gainesville Regional Utilities Potable Water Service Area
Projected 1998 Peak Hour Pressure ≤ 40 PSIG*
Projected 1998 Peak Hour Velocity ≥ 5 FPS*
Backfeed Needed
* Already scheduled for improvements prior to 1998 GRU Master Plan.
Data: Service Area updated to 1999 boundaries. All other information represents 1990 data.
Sources: Gainesville Regional Utilities, (Revised January 1997, 1990)
City of Gainesville Gainesville, Florida
Prepared by the Department of Community Development February 2000
N

Figure 17


FLORIDAN AQUIFER SYSTEM
Degree of Confinement
Legend
Confined Zone
Perforated Zone
Unconfined Zone
Gainesville City Limits
Source: Alachua County Environmental Protection Department, 1995
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
February 2000
N
Newnans Lake
Paynes Prairie

Areas of high groundwater recharge that are for regional planning rather than site specific purposes have been mapped by the St. Johns River and the Suwannee River Water Management Districts. Subsets of these maps for Gainesville have been prepared by City staff. These maps are included in the Future Land Use Map Series.

Community Wellfield

In order to protect the community's water supply, the Murphree Wellfield must be protected. Since St. John's River Water Management District (or other local agencies responsible for the management of the aquifer) has not designated a "cone of influence" for the Murphree Wellfield, Alachua County has adopted a Murphree Wellfield Protection Code. The code established 3 protection zones around the wellfield: Primary, Secondary and, Tertiary zones (see Figure 11). The primary protection zone is the most restrictive, and includes all restrictions of the secondary and (least restrictive) tertiary zones.

Wellfield "management" zones were originally designated in conjunction with the county's adoption of a wellfield management code in 1988. The Murphree Wellfield Protection Code, including revised wellfield protection zones, was substantially revised and improved in 2000. The wellfield protection zones are a reasonable substitute for a "cone of influence" around the municipal wellfield. The protection zones are based on travel time and were established after substantial technical investigation, including hydrogeological modeling. The protective zones are further discussed in the section entitled "Murphree Wellfield Protection Code: Protection Zones".

Figure 11 shows the location of the wellfield protection zones. An overlay of this figure and the existing land use map indicate there are a number of industrial sites located within the secondary and tertiary zones. In order to protect the community's water supply the Future Land Use Plan must prevent land uses incompatible with Wellfield Protection Code restrictions.

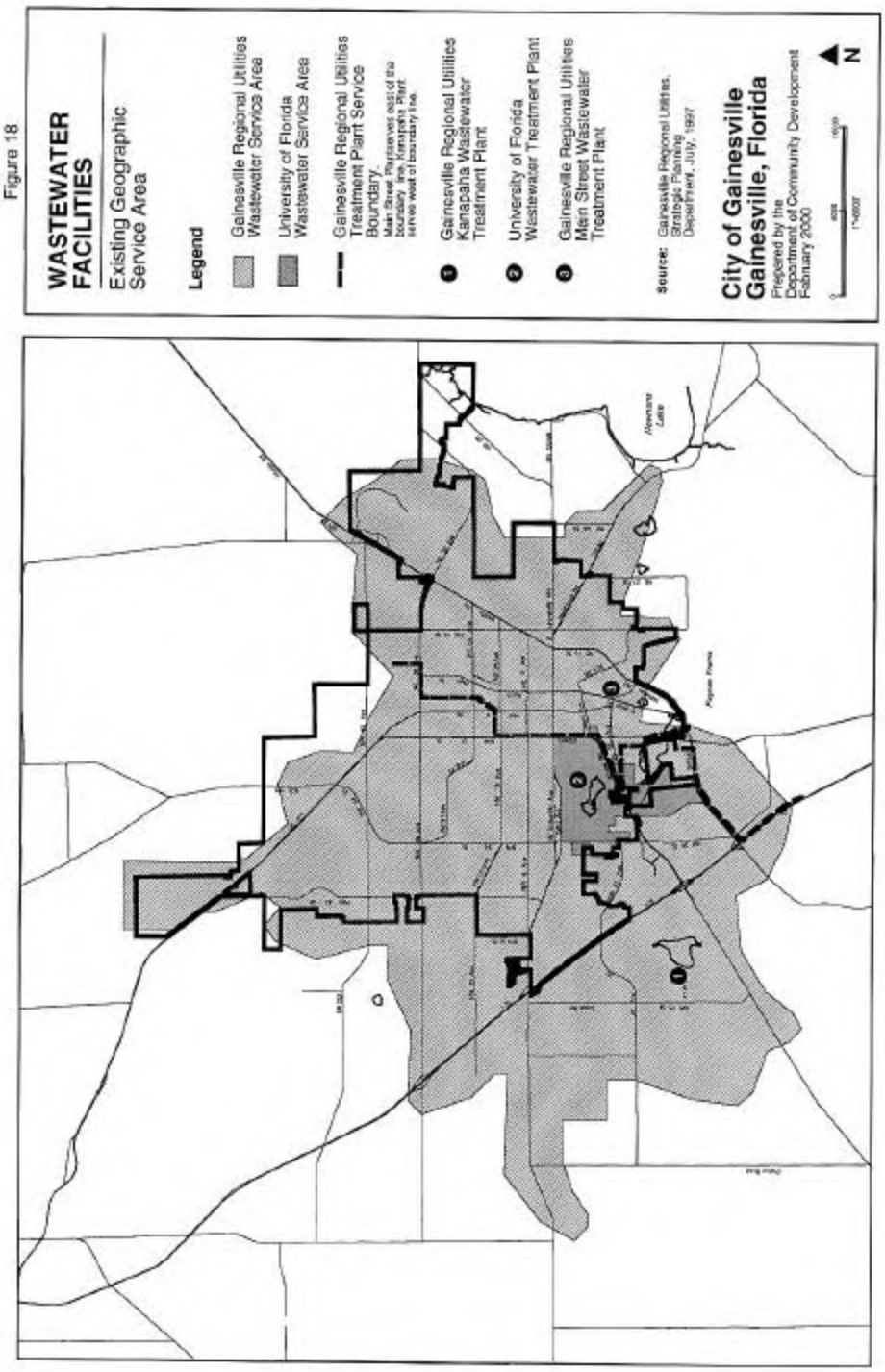
The City requires a wellfield protection special use permit (issued by the City Commission, rather than the Plan Board, unlike other special use permits) for all new development (with limited exceptions) within the primary, secondary and tertiary wellfield protection zones. Most expansions of existing development or changes at a site requiring any level of development plan review also require a wellfield protection special use permit.

Sanitary Sewers

The Gainesville urban area is served by 2 sewage treatment plants: Kanapaha and Main Street Plants, owned and operated by the City of Gainesville. The Kanapaha and the Main Street plant have design capacities of 10 million gallons per day (mgd) and 7.5 mgd of wastewater respectively (W/WW Data and Analysis Report 1991). In 1999 the average daily demand at the Kanapaha Plant was 8.3 mgd and 5.4 mgd at the Main Street Plant. These plants currently have a service area (See Figure 18) population of 142,581 persons. The University of Florida operates a

sewage treatment plant which has a design capacity of 3.1 mgd and an average daily demand of 1.8 mgd.

Figure 18


WASTEWATER FACILITIES
Existing Geographic Service Area
Legend
Gainesville Regional Utilities Wastewater Service Area
University of Florida Wastewater Service Area
Gainesville Regional Utilities Treatment Plant Service Boundary
Main Street Plant serves east of the boundary line. Kanapaha Plant serves west of boundary line.
1 Gainesville Regional Utilities Kanapaha Wastewater Treatment Plant
2 University of Florida Westewater Treatment Plant
3 Gainesville Regional Utilities Main Street Wastewater Treatment Plant
Source: Gainesville Regional Utilities, Strategic Planning Department, July, 1997
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development February 2000
N

The current average daily flow is projected to be 16.3 mgd in the year 2000 with a surplus based on average flow of 1.2 mgd. A planned 5.0 mgd expansion of the Kanapaha Plant to increase design capacity to 15 mgd will adequately serve future city and urban area residents.

Stormwater

The City's Public Works Department provides stormwater management. The Stormwater Management Utility is a dedicated revenue source for improvements, maintenance and personnel. The City can be divided into 10 creek basins, related to the creek system. Two of these basins flow ultimately into the St. John's River system. The remaining basins are stream-to-sink which discharge to an underground aquifer or depression basins. Virtually all of Gainesville is served by some form of drainage system. The replacement of aging and inadequate systems is a greater concern than the construction of new facilities. New development has provided stormwater facilities for water quantity since the mid-1970s and water quality since the early 1980s. The City's Flood Study update indicates that the soil information used to design stormwater management facilities in past years was inaccurate, resulting in higher floodzone elevations than expected.

The Public Works Department has conducted a preliminary survey of the City's stormwater management systems and has identified existing stormwater management deficiencies including both maintenance and capital needs. As a result, many of the maintenance needs can be addressed through the maintenance programs of the Stormwater Management Utility. Capital items have been prioritized. They include a Brownfield Project that would involve using a brownfield site for a master stormwater basin for the downtown area. This would allow further redevelopment and revitalization of the downtown area at higher densities and intensities. This will encourage compact development and allow a more urban-type development and design pattern. It would reduce redevelopment costs at individual sites, increase intensity of use on each parcel, and provide a possible recreational amenity in the area. The Hogtown Creek Sediment Project would construct sedimentation control facilities to reduce the amount of sediment that collects at this location. This will help to reduce the incidences of flooding in the area.

Stormwater level of service deficiencies are not expected to limit development because regulations will require new development to meet the adopted LOS standards. The Stormwater Management Utility will prioritize and budget improvements necessary to remedy existing deficiencies.

Solid and Hazardous Waste

Alachua County provides solid waste facilities for the City at the Leveda Brown Environmental Park/Transfer Station. The City is committed to deliver residentially and commercially collected solid waste collected by the City's franchised haulers to the transfer station for solid waste management.

A privately owned Class III landfill located in southeast Gainesville provides capacity for disposal of construction and demolition materials.

Currently, the City contracts with Boone/Waste Management to provide mandatory residential solid waste collection services within city limits. In addition to solid waste collection, the City began a citywide recycling program in 1989. Through this program, Boone/Waste Management is contracted to collect newspaper, glass, aluminum and metal cans, polyethylene terephthalate (PETE) and high-density polyethylene (HDPE) bottles from all single-family homes and multi-family dwelling units. The collection of polyvinyl chloride (plastic #3) became effective on October 1, 1999. The collection of such recyclables is at least once per week. The City's goal is to reduce its solid waste stream by 50 percent.

In 1999, Alachua County opened a Household Hazardous Waste (HHW) collection and processing center adjacent to the transfer station. An evaluation by County staff determined that the center would provide a higher level of service at a lower cost, compared to using a private firm to serve as the contractor for collection of hazardous waste.

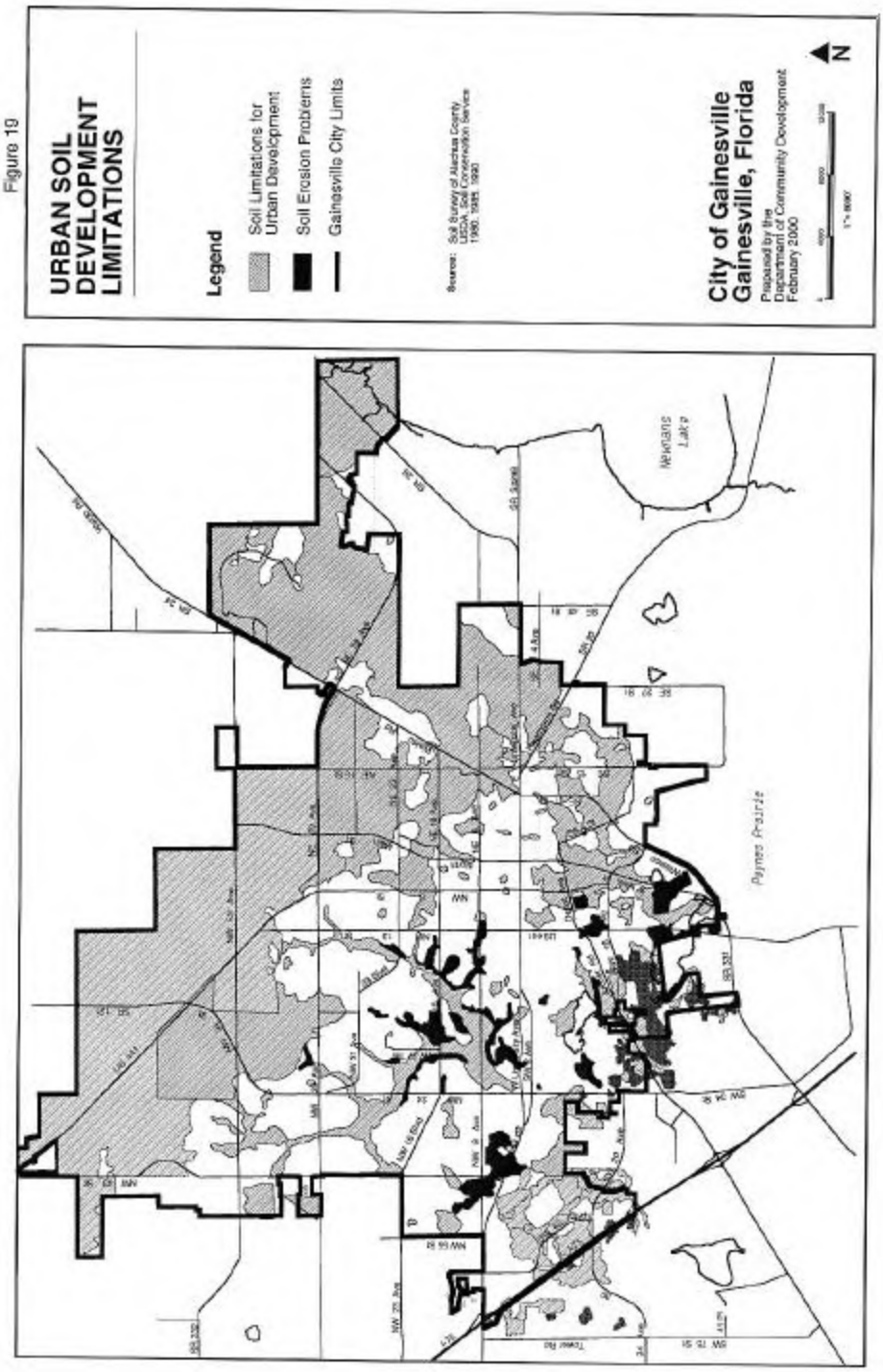
The HHW Collection Center accepts wastes considered hazardous including corrosive, toxic, ignitable and reactive materials. The intent is to minimize and divert HHW from landfills and improper disposal by means of reuse, recycling or hazardous waste disposal. The Collection Center features a reuse area where particular products that are accepted will be made available for use by the public.

Minerals and Soils

The following minerals are commonly found and have been mined in the Gainesville urban area: limestone, sand, and phosphate. Because these resources are so widely available it is unlikely they will be extensively excavated within the city limits, due to existing levels of urban development.

Figure 19 indicates soil limitations for this area. Soil types were classified into two categories (Moderate-Severe Problems and Erosion Problems) based on their impact on development. Information about these categories and the soils included within them is provided below.

Figure 19


URBAN SOIL DEVELOPMENT LIMITATIONS
Legend
Soil Limitations for Urban Development
Soil Erosion Problems
Gainesville City Limits
Source: Soil Survey of Alachua County, USDA, Soil Conservation Service, 1980, 1985, 1990
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
February 2000
N
Newnans Lake
Paynes Prairie

The "soil erosion problems" on Figure 19 refers to soil classifications from the Alachua County Soil Survey prepared by the USDA Soil Conservation Service (SCS). In that source, these areas are called Moderate-Severe Development Problem areas. SCS analyzed shrink-swell potential as a hazard to building foundations and streets, corrosivity problems of steel piping and concrete base forms, and flooding potential or cave-in hazards for shallow excavations. Dwellings with or without basements and small commercial buildings were included in the analysis of foundation problems. The SCS soil types with moderate-severe ratings for such problems are as follows:

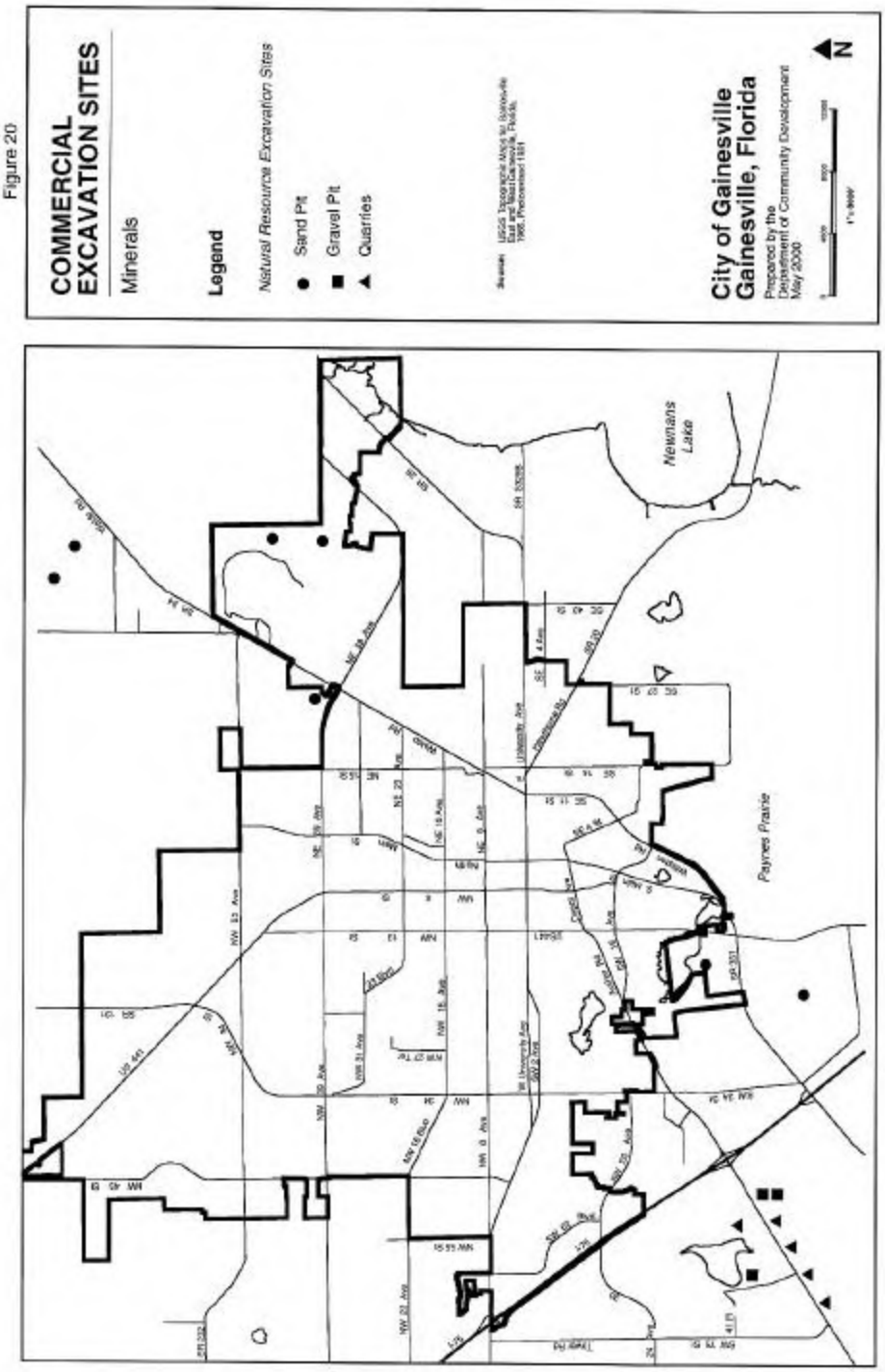
7B	Kanapaha fine sand, 0-5% slope
11	Riviera sand
13	Pelham sand
14	Pomona sand
15	Pompano sand
16	Surrency sand
17	Wauchula sand
18	Wauchula-Urban land complex
19	Monteocha loamy sand
20B	Tavares sand, 0-5% slope
21	Newnan sand
23	Mulet sand
25	Pomona sand, depressional
26	Samsula muck
29B	Lochloosa loamy sand, 2-5% slope
31B	Blichton fine sand, 2-5% slope
31C	Blichton fine sand, 5-8% slope
32C	Flemington loamy sand, 5-8% slope
33B	Norfolk loamy fine sand, 2-5% slope
34	Placid sand, depressional
37-8	Pits and dumps
44	Myakka sand
51	Plummer sand.

"Soil Erosion Problems" on Figure 19 refers to soil types where loss of vegetative cover on slopes of 2-8% would lead to topsoil loss via wind or rainfall. Those types are as follows.

29B	Lochloosa loamy sand, 2-5% slope
29C	Lochloosa loamy sand, 5-8% slope
30B	Kendrick loamy sand, 2-5% slope
31B	Blichton fine sand, 2-5% slope
32C	Flemington loamy sand, 5-8% sand
39B	Bonneau fine sand, 2-5% slope

The Gainesville urban area contains limestone, sand and phosphate as urban minerals. Figure 20 shows the location of sites where these resources have been commercially excavated within the

Figure 20


COMMERCIAL EXCAVATION SITES
Minerals
Legend
Natural Resource Excavation Sites
Sand Pit
Gravel Pit
Quarries
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
May 2000
N
Newnans Lake
Paynes Prairie

city. Currently, there is no existing commercial extraction of minerals within city limits. Future extraction of minerals in the city is unlikely.

Topography

The topography of Gainesville does not limit the development potential of most of the city. One main consideration is the slope of the City. Four slope categories have been identified within the city limits: 0-1 percent, 0-5 percent, 6-12 percent and greater than 12 percent. The least sensitive of the categories is the 0-5 percent category. The most sensitive are the 0-1 percent and greater than 12 percent categories. These are considered to be equivalent because they each have inherent drainage problems. Most of Gainesville is the within the 0-5 percent slope range. The most difficult areas for development are those located adjacent to creeks. The development of Gainesville is limited by several natural low lying systems: Gum Root Swamp in the northeast, Newnans Lake to the east, and Paynes Prairie to the southwest of the city.

Historic Resources

The city contains many valuable architectural (historic) resources that are being preserved through the efforts of the City and the Historic Preservation Board. Currently, the City has four National Register historic districts (See the Historic Preservation Element), including three Gainesville neighborhoods and portions of the University of Florida campus. There are also 24 structures listed individually on the National Register of Historic Places, including 10 on the UF campus. The City's historical resources are contained on approximately 443 acres. The Northeast, Southeast, Pleasant Street and UF Campus districts contain 166, 111, 77, and 70 acres respectively. Individually listed properties contain approximately 19 acres. Due to the importance of the city's historical resources, the Future Land Use Plan will protect the city's historic resources.

Urban Reserve Areas and Annexation

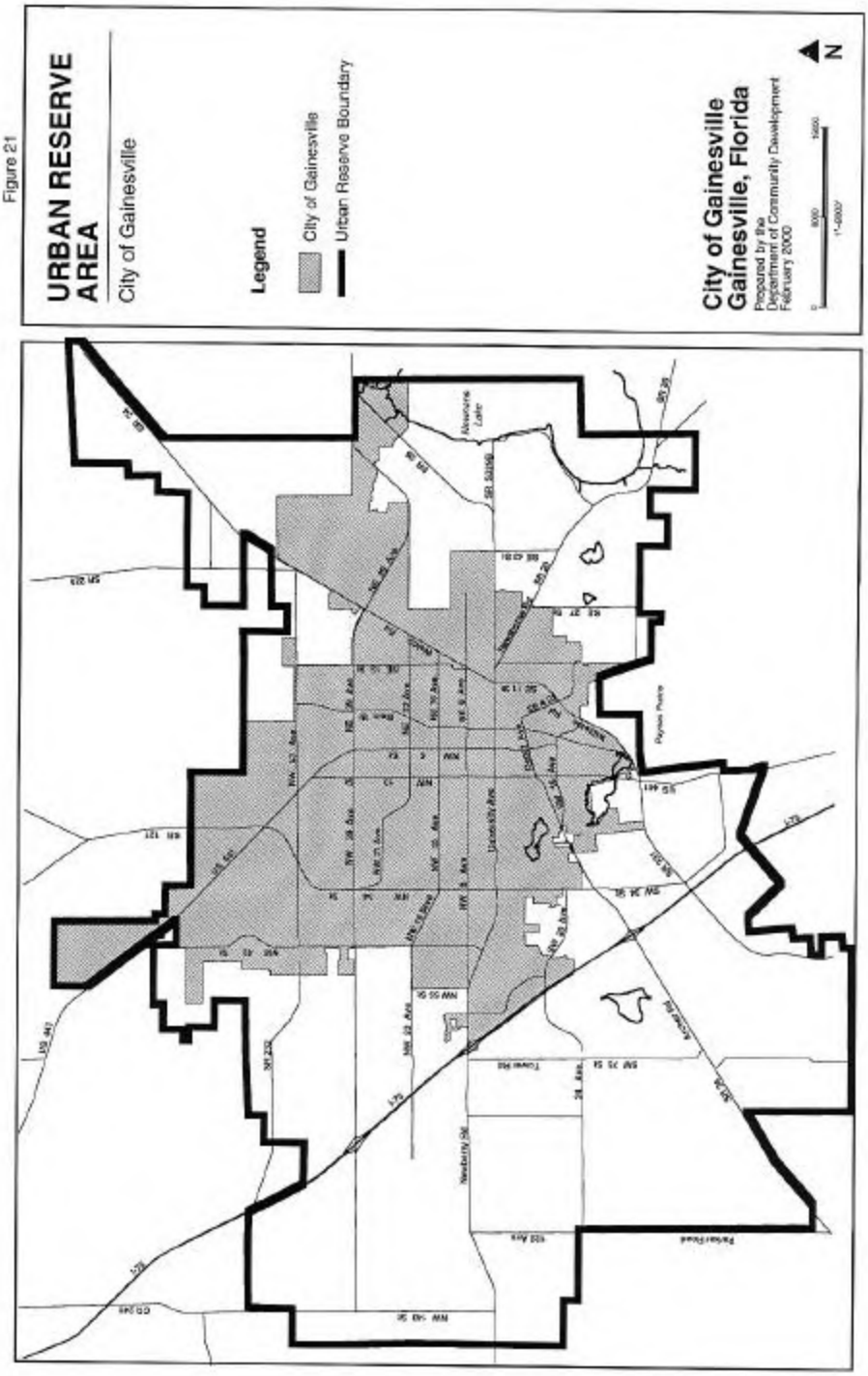
The procedure for the delineation of urban reserve and annexation areas is established by the 1990 Alachua County Boundary Adjustment Act.

The Act encourages intergovernmental coordination by requiring that the urban reserve area, which represents the maximum extent to which municipalities may annex, is adopted by the Alachua County Commission. Chapter 171, F.S. does not contain provisions for urban reserve area designations. In 1990, the Florida Legislature passed a special act which sets forth procedures for establishing municipal reserve areas, adjusting the boundaries of municipalities through annexation and contraction.

The Boundary Adjustment Act replaces former coordinating mechanisms by prescribing a schedule for the establishment of reserve areas and procedures for annexation that do not require joint action on the part of the City or County once the Reserve Area is established. The act also prevents annexation by general law. This method of coordination began in January 1991, when the County scheduled a public hearing on the designation of Reserve Areas. On October 15, 1991, the Alachua County Board of County Commissioners approved the Urban Reserve Area

for Gainesville (See Figure 21). When an area is proposed for annexation, a majority of registered voters in the area must vote for annexation. A separate vote of city residents is not required. The Comprehensive Plan will be amended when areas are annexed.

Figure 21


URBAN RESERVE AREA
City of Gainesville
Legend
City of Gainesville
Urban Reserve Boundary
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
February 2000
N

The Boundary Adjustment Act requires that urban reserve areas be reviewed every 5 years. On January 13, 1998, the County Commission designated the current Gainesville urban reserve area. This has the same boundaries as the area adopted in 1991. The Statements of Services provided by Gainesville and Alachua County in the urban reserve area were also updated.

Urban Infill and Redevelopment

To reduce urban sprawl and keep core urban areas fiscally strong, the Florida Legislature created the Urban Infill and Redevelopment Grant Program. The purpose of the program is to provide planning and implementation grants to local governments to revitalize and redevelop distressed urban areas. In order to qualify, local governments must amend their comprehensive land use plan delineating the boundaries of the urban infill and redevelopment area. The proposed Urban Infill and Redevelopment Area is shown in the Future Land Use Map Series.

The designated area must meet five threshold criteria, as follows:

Requirement #1: Existence of public services such as water and wastewater, transportation, schools and recreation are already available or are scheduled to be provided in an adopted Five-Year Schedule of Capital Improvements in the local government's Comprehensive Plan.

Public Services are provided in the proposed Urban Infill and Redevelopment Area. Policy 2.1.4 of the 1991 Future Land Use Element states that the City certifies that the entire area within the city limits meets the Chapter 163.3164(29) definition of an existing urban service area as supported by the Data and Analysis Report. Existing urban service areas are built-up areas where public facilities and services such as sewage treatment systems, roads, schools, and recreation areas are already in place.

Requirement #2: The area, or one or more neighborhoods within the area, suffers from pervasive poverty, unemployment and general distress as defined by s. 290.0058, F.S.

Poverty and Unemployment Data are shown in Table 11, based on 1990 Census Data. The Urban Infill and Redevelopment Area boundaries coincide with the City of Gainesville Enterprise Zone, adopted by resolution on February 27, 1995. A portion of the area has been proposed as a Community Redevelopment Area, and this area is shown in Figure 22. The Gainesville City Commission has adopted a resolution finding slum and blight in the area, pursuant to s. 163.360(6) F.S.

Requirement #3: The area exhibits a proportion of properties that are substandard, overcrowded, dilapidated, vacant or abandoned, or functionally obsolete, and which is higher than the average for the local government.

Data on vacant housing units are shown in Table 11, based on Census Data. A Housing Conditions Survey was conducted in 1994. The results indicate that approximately 8.4 percent of the housing units in the proposed area were considered dilapidated or substandard, compared to a

5 percent overall city percentage. Certain portions of the proposed area have higher percentages of dilapidated and substandard units than the overall average for the area.

Table 11

Designated Urban Infill and Redevelopment Area										
1990 Census of Population and Housing Summary File Tape 3A										
Census Tracts and Block Groups within the 1990 Gainesville Corporate Limits										
Tract Number	Block Group	Persons for whom poverty status is determined	Persons in Poverty	Poverty Rate	Persons in Labor Force	Unemployed persons	Unemployment rate	Total housing units	Vacant housing units	Vacant Housing Units Rate
(variable is from----)		*General Profiles*	*General Profiles*	*General Profiles*	*General Profiles*	*General Profiles*	*General Profiles*	*H001*	*H004*	
1.00	2	80	31	38.8%	61	13	21.3%	24	4	16.7%
1.00	3	50	27	54.0%	41	0	0.0%	22	0	0.0%
1.00	4	218	76	34.9%	92	0	0.0%	179	18	10.1%
2.00	1	358	196	55.1%	126	17	13.5%	281	75	26.7%
2.00	2	394	253	64.2%	181	42	23.2%	214	46	21.5%
2.00	3	556	179	32.2%	236	9	3.8%	230	29	12.6%
2.00	4	609	311	51.1%	419	47	11.2%	329	43	13.1%
2.00	5	742	556	74.9%	453	73	16.1%	488	24	4.9%
2.00	6	980	627	64.0%	669	78	11.7%	505	37	7.3%
2.00	7	340	123	36.2%	109	8	7.3%	156	41	26.3%
2.00	8	122	70	57.4%	70	0	0.0%	95	25	26.3%
5.00	6	391	200	51.2%	253	0	0.0%	233	19	8.2%
5.00	7	459	203	44.2%	255	37	14.5%	263	40	15.2%
5.00	8	951	280	29.4%	273	7	2.6%	491	30	6.1%
6.00	1	1,173	504	43.0%	365	16	4.4%	367	22	6.0%
6.00	2	209	106	50.7%	50	0	0.0%	118	32	27.1%
6.00	3	734	355	48.4%	255	42	16.5%	332	30	9.0%
6.00	4	1,188	521	43.9%	568	62	10.9%	424	43	10.1%
7.00	1	805	348	43.2%	223	0	0.0%	367	55	15.0%
7.00	2	606	184	30.4%	312	31	9.9%	282	32	11.3%
7.00	3	2,414	933	38.6%	1,122	221	19.7%	880	72	8.2%
7.00	6	862	578	67.0%	207	23	11.1%	230	18	7.8%
7.00	7	237	75	31.6%	101	4	4.0%	102	8	7.8%
8.00	1	3,421	1,753	51.2%	2,038	138	6.8%	1,892	180	9.5%
Proposed Infill Area Summary Statistics		**17,887**	**8,489**	**47.5%**	**8,479**	**868**	**10.2%**	**8,504**	**923**	**10.9%**
City of Gainesville Summary Statistics		**75,434**	**19,860**	**26.3%**	**41,474**	**2,744**	**6.6%**	**34,609**	**2,684**	**7.8%**

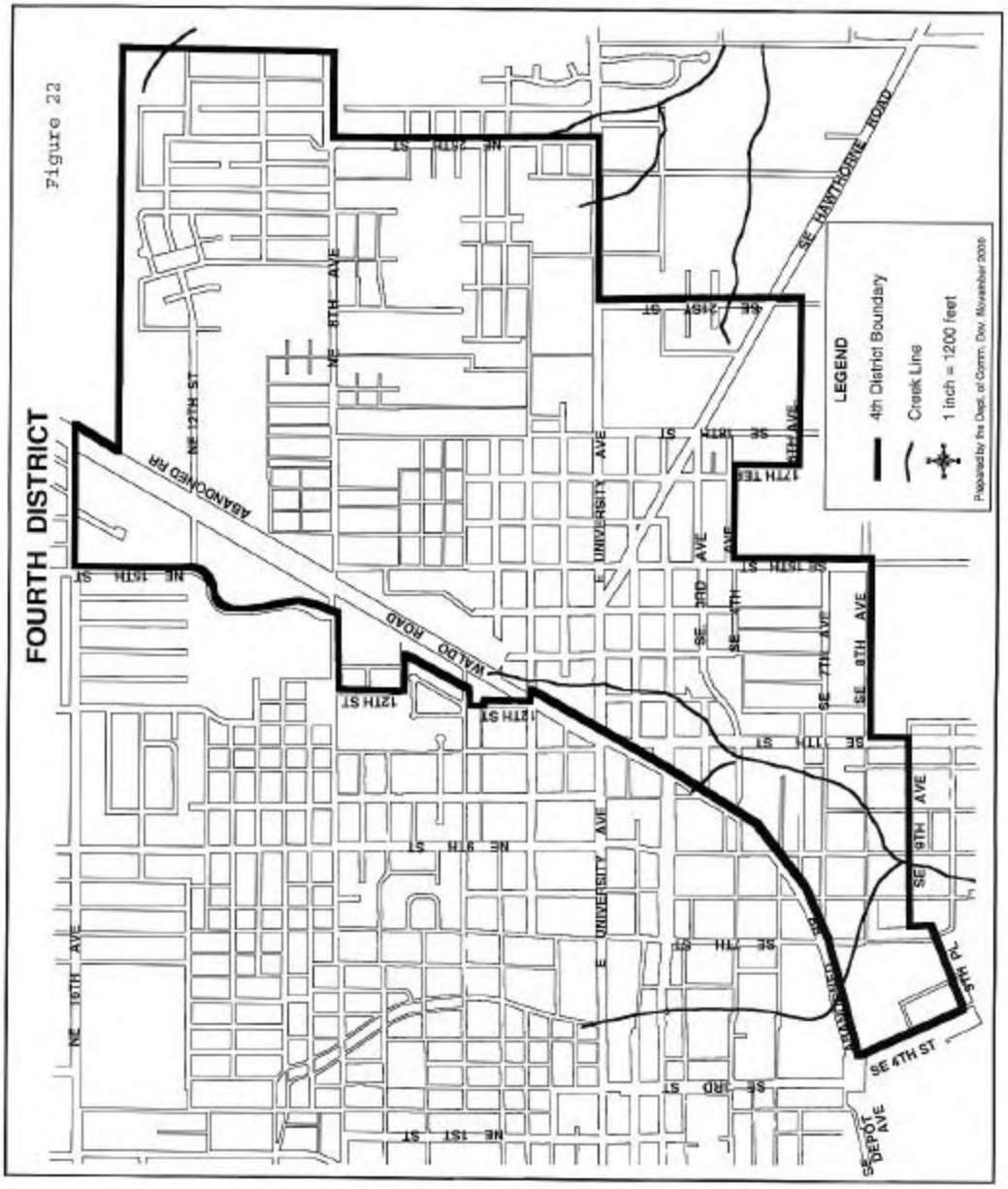


Figure 22
FOURTH DISTRICT
LEGEND
4th District Boundary
Creek Line
1 inch = 1200 feet
Prepared by the Dept. of Comm. Dev. November 2000
SE HAWTHORNE ROAD
ASANDONED RR
WALDO ROAD
E UNIVERSITY AVE
NE 8TH AVE
NE 12TH ST
NE 16TH AVE
SE 4TH ST
SE DEPOT AVE

Requirement #4: More than 50 percent of the area is within ¼ mile of a transit stop, or a sufficient number of such transit stops will be made available concurrent with the designation.

Figure 23 demonstrates that more than 50 percent of the area is located within ¼ mile of a transit stop.

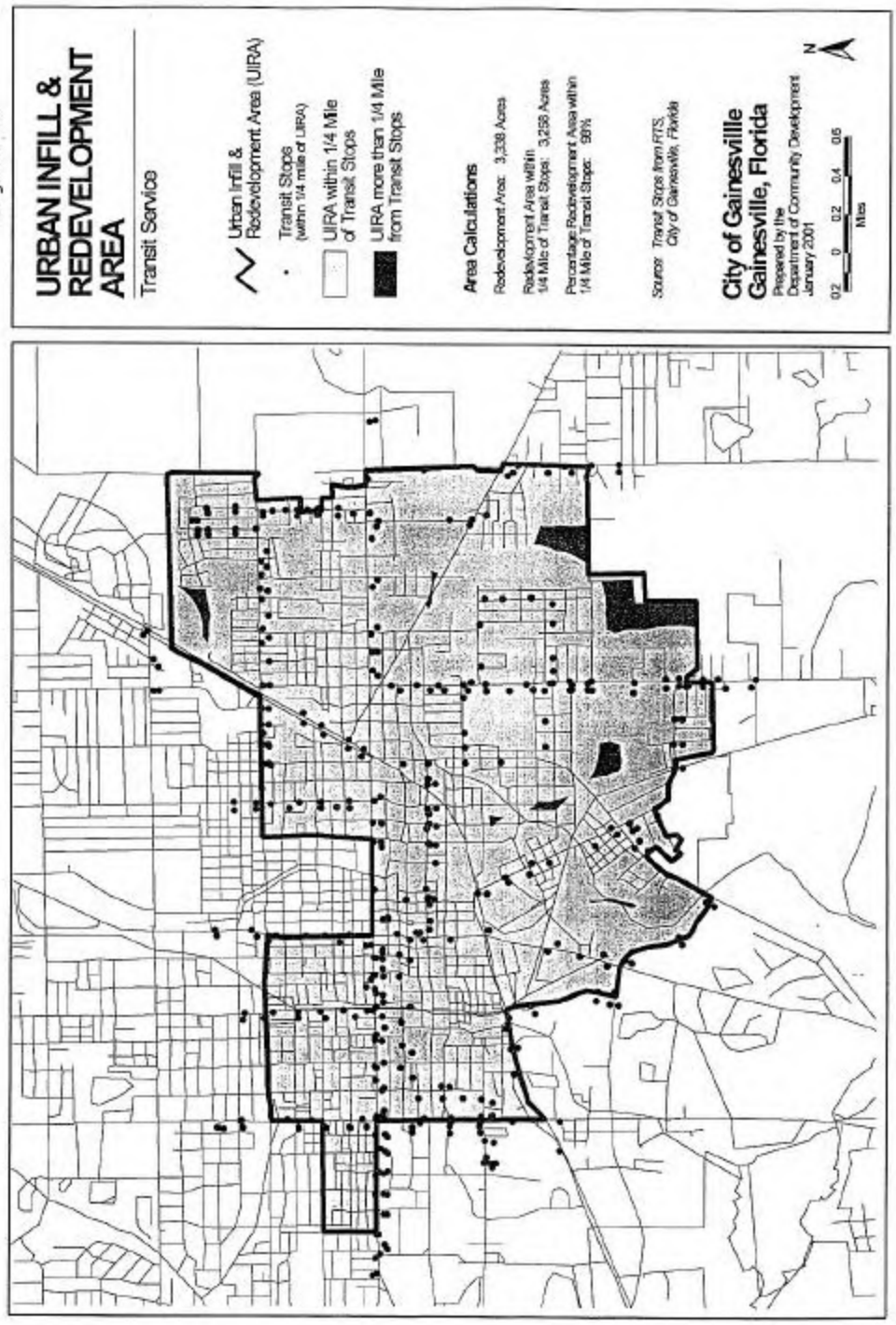
Requirement #5: The area includes or is adjacent to community redevelopment areas, enterprise zones, or Main Street Programs, or has been designated by the state or Federal Government as an urban redevelopment, revitalization, or infill area under an empowerment zone, enterprise community, or brownfield showcase community or similar programs.

A portion of the proposed Urban Infill and Redevelopment Area includes a proposed City of Gainesville 4th District Community Redevelopment Area and the boundaries coincide with an adopted State Enterprise Zone.

Evaluation and Appraisal Report—Major Issues

- Examine the Future Land Use Map for opportunities for **increased residential densities**—particularly near activity centers, transit routes and areas with low owner occupancy.
- Create **incentives for higher density infill**.
- Continue to **annex** areas with an urban character.
- Continue discussions with Alachua County regarding establishment of an **urban growth boundary**.
- Focus **redevelopment** toward the University Avenue corridor from downtown to the UF campus, east Gainesville, existing activity centers, College Park and University Heights, 5th Avenue/Pleasant Street, Enterprise Zone, and low-density residential areas that can be redesignated for higher density.
- Implementation of **minimum density requirements** is necessary. Low-density development patterns leads to traffic congestion, dependence on car travel, isolated neighborhoods, lack of quality public space, calls for street widenings and other public services, and urban sprawl.
- **Accessory units** as an allowable residential use with appropriate restrictions should be explored.
- **Traditional neighborhood design concepts** should be integrated into the Future Land Use Element.
- Explore alternate mitigation strategies to address the loss of **wetlands**.
- Revise percentages allowed for **ancillary office/retail use in high density, multi-family** development.
- Make Traditional Neighborhood Development (**TND**) an allowable use.
- Better define **activity centers**, and allow medium- and low-density multi-family development adjacent to activity centers.
- Consider **amending the mixed use land use** category to address the problem of applying mixed use to properties less than 3 acres.

Figure 23


URBAN INFILL & REDEVELOPMENT AREA
Transit Service
Urban Infill & Redevelopment Area (UIRA)
Transit Stops (within 1/4 mile of UIRA)
UIRA within 1/4 Mile of Transit Stops
UIRA more than 1/4 Mile from Transit Stops
Area Calculations
Redevelopment Area: 3,338 Acres
Redevelopment Area within 1/4 Mile of Transit Stops: 3,258 Acres
Percentage Redevelopment Area within 1/4 Mile of Transit Stops: 98%
Source: Transit Stops from RTS, City of Gainesville, Florida
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
January 2001
0 0.2 0.4 0.6
Miles
N

- Downtown

Downtown Gainesville, over the past few years, has seen a substantial increases in development, health, vibrancy, safety, and restoration. A number of new residential units have recently been built, a new Chamber of Commerce building is under construction (which will include condominiums behind it), a vertically mixed-use, and a five-story building has recently been completed containing residences, restaurants, retail, and offices. Plans are under way to restore an old, historic railroad depot building to contain retail, offices, and services, and to create a stormwater park which will promote more modest, walkable downtown dimensions as the regional approach to stormwater management will reduce the need for land-consuming on-site stormwater basins.

- Historic Districts

Gainesville currently has three designated historic districts on the Local Register: Pleasant Street (approved by the City in 1991), NE Residential (approved by the City in 1985), and SE Residential (approved by the City in 1985). The City applies guidelines for development in these districts that encourage "best practices" in these areas. A fourth district—University Heights Historic District—is currently being proposed.

- East Gainesville

- Neighborhood (Activity) Centers

Gainesville currently has 16 neighborhood centers and 3 regional centers. All of the neighborhood centers are conventional shopping centers with large surface parking lots and no residential mixed use.

- UF/SFCC Downtown

- Coordination w/ County

- What City has done w/ Trad, Central Corridors, TCEA

Gainesville adopted two pedestrian-oriented overlay ordinances in 1998. The Traditional City applies mostly to the downtown area, and the Central Corridors applies to major gateway streets leading into downtown. Traditional City requires modest front setbacks; no parking, HVAC or dumpsters in front; sidewalks; aligned street trees; modest street light height, prohibited auto-oriented uses; front building façade articulation; modest provision of parking; and buildings facing

the street. Central Corridors requires a smaller, transitional set of these standards for new development. The TCEA was adopted in 2000 and applies the Central Corridors standards throughout the city.

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[1] Downs, Anthony (1992). Stuck in Traffic, pg 85.
[2] Cervero, Robert and Michael Bernick. Transit Villages in the 21st Century, pg. 83.
[3] NEMO project website. See www.lib.uconn.edu/CANR/ces/nemo/nnps.html
[4] Dimitriou, Harry (1993). Urban Transport Planning. Routledge NY, pg. 136.
[5] Kelly, Eric D. (1994) "The Transportation-Land Use Link." J. of Planning Literature, Vol. 9, #2, pp. 128-145. November; Ewing, Reid (1997). "Is Los Angeles Style Sprawl Desirable?" JAPA, pp. 107-126. Winter.
[6] Frank, James (1989). "The Costs of Alternative Development Patterns." Urban Land Institute. Pg. 40.
[7] Smythe, Robert (1986). "Density-Related Public Costs." American Farmland Trust (Washington DC).
[8] Blais, Pamela (1995). "The Economics of Urban Form." Appendix E of "Greater Toronto". Greater Toronto Area Task Force. December.
[9] Litman, Todd (1999). "Land Use Impact Costs of Transportation." Victoria Transport Policy Institute.
[10] Quoted by Tony Hiss in "Transit's Greatest Gift: The Livable Community." Mass Transit. Sept/Oct 1996, pg 13.
[11] Frank, Lawrence (1994). "Relationships Between Land Use and Travel Behavior in the Puget Sound Region. Washington DOT. Report #WA-RD 351.1; Eric D. Kelly (1994). "The Transportation-Land Use Link." Journal of Planning Literature, vol. 9, no. 2, pp. 128-145. November.
[12] Ewing, Reid (1997). "Is Los Angeles-Style Sprawl Desirable?" JAPA, vol. 63, no. 1, Winter. Pg. 113.
[13] Litman, Todd (1999). "Parking Requirement Impacts on Housing Affordability." Vitoria Transport Policy Institute, pg. 7.
[14] Newman, Peter W.G. and Jeffery R. Kenworthy (1989). "Gasoline Consumption and Cities." APA Journal. Pg. 25. Winter. Downs, Anthony (1992). Stuck in Traffic, pg 79.
[15] "Creating Transit-Supportive Land Use Regulations," PAS # 468, 12/96, pg 41; Ewing, Reid (1996). "Pedestrian- and Transit-Friendly Design," pg. 6; Sno-Tran (1994). "Creating Transportation Choices Through Zoning." Snohomish County, WA. Pg 4; Downs, Anthony (1994). New Visions for Metropolitan America; Weissman, Steve & Judy Corbett (1992). Land Use Strategies for Livable Places. The Local Government Commission. Sacramento, CA, pg 12.
[16] Baum, Andrew and Yakof Epstein (1978). Human Response to Crowding. Hillsdale; Newman, Peter and Jeffrey Kenworthy (1989). Cities and Automobile Dependency. Grower, pp. 89-92.
[17] Durning, Alan Thein (1996). The Car and the City. Northwest Environment Watch.
[18] Downs, Anthony (1992). Stuck in Traffic, pg 83.
[19] Planners Advisory Service. (1999). The Principles of Smart Development. PAS # ???

Goals, Objectives & Policies

Historic Preservation Element

GOAL 1

PRESERVE, PROTECT, ENHANCE AND SUPPORT THE HISTORIC, ARCHAEOLOGICAL AND CULTURAL RESOURCES WITHIN THE CITY OF GAINESVILLE.

Objective 1.1

The City shall continue to update the historic, archaeological and cultural resource base survey.

Policies

1.1.1 The City shall continue to expand its inventory of historic properties by preparing new Florida Site Files for previously undocumented properties and updating existing site files for properties that have undergone alterations or demolitions.

1.1.2 The City shall seek funding to develop a city-wide archaeological sensitivity map to indicate the probability of archaeological sites. This map will be used to review the possible impact of both public and private projects upon archaeological resources.

Objective 1.2

The City shall increase the number of historic resources listed in the Local or National Register of Historic Places.

Policies

1.2.1 The City shall continue to study and re-evaluate the levels of significance of potential historic districts for listing in the Local or National Register of Historic Places.

1.2.2 The City shall continue to evaluate the eligibility of individual historic resources for listing in the Local or National Register of Historic Places.

1.2.3 The City shall continue to survey and nominate to the National Register of Historic Places Gainesville's "native stone" buildings.

Adopted by Ord. 000769, 3/4/02
Revised by Ord. 110168, 1/19/12

Objective 1.3

The City shall reduce the number of historic resources in need of stabilization and rehabilitation on an annual basis.

Policies

1.3.1 The City shall continue to study and, where necessary, amend its land development regulations to include incentives that encourage historic preservation.

1.3.2 The City shall study the use of other legal and financial tools, such as preservation easements, to protect historic and archaeological resources.

1.3.3 The City shall continue to review building, fire and housing codes to identify regulations that restrict the use and rehabilitation of historic structures. Where possible, the City shall amend codes to encourage: use and rehabilitation, relocation to another site for reuse, selective dismantling for reuse, and, only as a last resort, demolition of historic structures.

1.3.4 The City shall continue to ensure enforcement of the Historic Preservation/Conservation Ordinance which is adopted in the Land Development Code.

1.3.5 The City shall prepare a conservation district overlay ordinance and identify distinctive neighborhoods in Gainesville for inclusion. The conservation overlay shall seek to preserve those neighborhoods from significant alterations of architectural features through adoption and implementation of policies to be placed in the Land Development Regulations.

1.3.6 The City shall continue to inventory threatened historic structures in the Pleasant Street, Northeast, Southeast and University Heights Historic Districts.

1.3.7 The City shall target a portion of its Community Development Block Grants (CDBG) toward historic districts such as the Pleasant Street and NW Fifth Avenue neighborhoods to better leverage existing resources.

1.3.8 The City shall seek funding to promote the improvement of deteriorated structures in designated historic districts.

1.3.9 The City shall pursue alternatives that will lead to the preservation of City owned significant historic structures 45 years or older. Significance shall be defined by the National Park Service.

1.3.10 Any project sponsored by, or under authority of, the City, either financially or administratively, which involves rehabilitation or new construction within a designated historic district or on the Local or National Register of Historic Places shall adhere to appropriate historic preservation standards for such activity.

Objective 1.4

Ensure that the City's land use, housing, transportation, and economic development policies are consistent with and facilitate historic preservation.

Policies

1.4.1 The City shall identify commercial areas in Gainesville appropriate for designation as a "Florida Main Street" community.

1.4.2 The City shall encourage Santa Fe Community College to develop a master plan for its downtown campus to ensure that future development is sensitive to the historic character of the Pleasant Street Historic District.

1.4.3 The residential character of an historic district, as defined by the National Register jurisdictional line, shall be protected from encroachment of incompatible non-residential uses.

1.4.4 The character of an historic district shall be protected from encroachment of incompatible uses.

1.4.5 Street, sidewalk, utility and other improvements undertaken by the City in designated historic districts shall be consistent, where practical, with the historic character of those districts.

1.4.6 Within one year after the designation of each historic district, the City shall coordinate with the responsible agencies to evaluate traffic circulation patterns and plans in order to slow and limit traffic impacts in designated historic districts, as feasible.

1.4.7 The City shall continue to improve and develop parks in designated historic districts.

Objective 1.5

The City shall maintain a program that increases public and private involvement in the preservation, protection, enhancement and support of historic, archaeological and cultural resources.

Policies

1.5.1 The City shall coordinate with for-profit and not-for-profit organizations to help defray the cost of preserving historic and archaeological resources.

1.5.2 The City shall increase public awareness that parks, landscapes and gardens may constitute historic resources.

GOAL 2

SECURE PUBLIC SUPPORT AND AWARENESS FOR HISTORIC PRESERVATION/CONSERVATION EFFORTS.

Objective 2.1

The City shall provide education to citizens on awareness, value, use and protection of historic and archaeological resources.

Policies

2.1.1 The Historic Preservation Board shall coordinate with other historic preservation organizations to conduct annual informational workshops on historic preservation.

2.1.2 The City shall produce, and make accessible, educational materials on the preservation of historic and archaeological resources.

2.1.3 The City shall work with state and local governmental organizations, the University of Florida and other interested parties to promote historic preservation.

2.1.4 The City shall maintain a list of historic properties that are threatened by demolition by neglect.

Objective 2.2

The City shall develop a program that supports, enhances and encourages public awareness of historic tourism as an economic benefit to Gainesville.

Policies

2.2.1 The City shall work with the Gainesville Area Chamber of Commerce, the Alachua County Office of Tourist Development, Community Redevelopment Agency, other local governments, and other organizations to promote heritage tourism.

2.2.2 The City shall revise the Historic Preservation/Conservation Ordinance to include heritage tourism as a part of the City's historic preservation program.

HISTORIC PRESERVATION ELEMENT
DATA AND ANALYSIS

I. THE VISION

Gainesville is a place of long and rich history beginning as a railroad route stop halfway between Fernandina and Cedar Key and developing into a nationally recognized livable community. Historic preservation is recognized as a key component of the economy, character and appeal of the City and its neighborhoods. It has historically been integrated into the City's governance and builds upon its past historic preservation achievements by continuing to make conservation of the City's heritage an important priority.

Until recently, the historic preservation movement focused on saving individual sites and neighborhoods without concerning itself with the broader issues of regional development patterns, suburbanization of retail and urban sprawl in general. The specific focus on buildings and neighborhoods was an understandable response to staving off demolition of significant buildings or fighting insensitive policies that undermined neighborhoods.

As historic preservation efforts have thrived nationally and neighborhoods have revitalized, the focus has expanded. This includes a more holistic conception of concerns and issues that ~~interconnect~~ relate to downtown development, suburban sprawl, and environmental protection and sustainability. Historic preservation in a broader definition has become known by some as heritage conservation. This encompasses not just structures, sites, districts, neighborhoods and the prehistoric and historic archaeological sites but a more inclusive approach to history. Heritage conservation includes more intrinsic ideas like cultural landscapes and view sheds.

The United States recognizes the interrelationship and the interdependency between sustainable development and heritage conservation. The built environment is the most sustainable one, embodying the energy of each piece's creation.

Sustainability in preservation is retaining as much of the original historic fabric as possible, which maintains the cultural sustainability and character of the neighborhood. The tear down of one small building in a neighborhood not only results in loss of character but cancels the entire environmental benefit from the last 1,344,000 recycled aluminum cans. This is only the impact to the landfill and does not take into account the embodied energy involved in creating the materials, transporting of the materials and the constructing of the building.

Demolition of historic buildings results in many impacts to different parts of our culture. Our landfills are the recipients of thousands of dollars of embodied energy and the replacement products of new construction (plastic, steel, vinyl and aluminum) are more energy consumptive than the historic fabrics of brick, plaster, concrete and timber. According to the EPA, construction debris constitutes about one-third of all waste in the

U.S., and they estimate that 27% of our existing housing stock will be replaced between 2000 and 2030.

Newer does not necessarily equate to a longer building life and will probably not last as long as the historic counterpart's life of 100-200 years.[1] New construction is not environmentally conscious if historic existing housing is unused or demolished. Just as cans, paper and plastic are recycled in Gainesville, so should our housing stock and neighborhoods be recycled for the next generation of occupants. The most sustainable house is the one already built.

Heritage Tourism

Tourists worldwide are increasingly seeking destinations that offer a unique sense of place. Cultural, ecological and historical attractions are the most dynamic segments of the tourism industry. The National Trust for Historic Preservation defines cultural heritage tourism, "as traveling to experience the places, artifacts and activities that authentically represent the stories and people of the past and present. It includes cultural, historic and natural resources".

Heritage tourism contributes substantially to Florida's economy. In 2007, heritage tourism generated an estimated $4.13 billion[2] in expenditures by creating jobs, income, taxes, state gross products and in-state wealth. (Preservation in Gainesville ~~needs to~~ have to capitalize on this trend ~~.~~of six out of ten tourists vacationing in Florida participating in history-based activities.) Public use and enjoyment of historic places is a powerful basis for encouraging appreciation of heritage, and cultural diversity. Heritage tourism offers significant community benefits of stimulating the local economy and revenue to maintain historic buildings. Most importantly, historic preservation perpetuates a sense of place while it maintains a community's unique character and identity. Vacationers are interested in exploring places that possess those individual qualities.

The Benefits of Historic Preservation

Historic Preservation and Economic Impact and Development

The latest updated study, *Economic Impact of Historic Preservation of Florida* from the University of Florida, Levin College of Law, includes information on economic benefits of preservation related activities such as rehabilitation, heritage tourism, history museums, grants and the Florida Main Street program. It also includes the comparison in relation to maintaining property value of neighborhoods in recognized districts and property out of

[1] Donovan D. Rypkema, March 10, 2007, Sustainability, Smart Growth and Historic Preservation Presentation at Historic Districts Council Annual Conference in New York City.

[2] Center of Governmental Responsibility, University of Florida, Levin College of Law, August 2010 *Economic Impacts of Historic Preservation in Florida.*

historic districts. During 2001 to 2009, which has experienced financial recession and decline of property values, twelve of the eighteen case study areas appreciated greater than their non-district counterparts.

Dollar for dollar, historic preservation generates as many if not more jobs than other traditional concentrations of economic development policies. In Florida, every $1 million spent rehabilitating an older building creates 36.9 jobs – twenty in the construction industry and seventeen elsewhere in the economy, which are two more jobs than the same amount spent in new construction. Historic preservation is more labor intensive than new construction, with approximately 60 to 70 percent of the totals costs going to labor instead of half as in new construction.[3] Since construction workers such as electricians, plumbers, and carpenters are almost always hired locally, historic preservation is a boon to the local labor market. In turn, these individuals will spend their earnings locally.[4]

Historic preservation is an even more favorable job creator than other economic sectors. One million dollars in historic preservation creates nine more jobs than the same amount in manufacturing electronic equipment, 8 more jobs than a million dollars of wholesale activity or agricultural products.[5]

Nationally, as well as locally, planning departments have focused on New Urbanism principles, core redevelopment and creating density in cities. The investment of development in the University Heights Historic District, particularly the south historic district is a great example of neighborhood preservation, core redevelopment and partnering with developers to support the preservation effort in Gainesville. Seventeen large scale projects have been approved and are completed or in various stages of completion since the neighborhoods became historic districts.

[3] Donovan Rypkema, May 20, 1999, Presentation at Annual Conference of the Florida Trust for Historic Preservation.

[4] The job creating impetus of historic preservation surpasses that of traditional industries in other states as well: twelve more jobs per $1 million than the auto industry in Michigan; twenty more jobs than the West Virginia coal mines; twenty-nine more jobs than the oil industry in Oklahoma; twelve more jobs than Pennsylvania steel and five more jobs than the manufacture of electronic equipment in California. Rypkema, *The Economics of Historic Preservation: A Community Leaders Guide,* [National Trust for Historic Preservation: Washington, D.C., 1994]: 13).

[5] Deborah Ann Ford, "The Effect of Historic District Designation on Single-Family Home Prices," AREUEA Journal, 17(1989): 353-362; Dennis Gale, "The Impacts of Historic District Designation: Planning and its Policy Implications," *Journal of the American Planning Association* 57(Summer 1991): 325-339; Donovan Rypkema, "Virginia's Economy and Historic Preservation: The Impact of Preservation on Jobs, Business, and Community" in *Dollars and Sense of Historic Preservation* (National Trust for Historic Preservation: Washington, DC) Article 1; Donovan Rypkema, *The Economics of Historic Preservation: A Community Leader's Guide* (National Trust for Historic Preservation: Washington, D.C.): 65-72 and 87-96; and Government Finance Research Center, "The Economic Benefit of Preserving".

Neighborhood Preservation

~~In addition to providing real-life examples for new urbanism,~~ H~~h~~istoric preservation is at the forefront of neighborhood revitalization, as the architectural quality of the older neighborhoods and their proximity to downtown has spurred private reinvestment.

One of the commonly heard concerns of historic district listing is "Will being in this historic district adversely affect my property value?" Study after study throughout the United States has shown that historic district listing is increase to property values and by this measure provides important stability in neighborhoods adjoining older core areas threatened by disinvestment.[6] Homebuyers are willing to pay for the assurance that the neighborhood surrounding their houses will remain unchanged over time and inappropriate additions will not be part of the neighborhood. While many of these studies have looked at communities where historic resources are a fundamental part of a community's image and economy (Fredericksburg and Alexandria, Virginia, Galveston, Texas, Georgetown), a Georgia study of Rome, Tifton, and Athens provides more apt parallels with Gainesville. The study of these three towns found that property tax values for designated historic areas at least grew at the same level as non-designated neighborhoods (Tifton), but more frequently grew at higher *rates*.

Sustainable Development and Growth Management

Since the 1980s, planning has undergone a dramatic shift in emphasis towards the concept of "new urbanism," an approach that seeks to create viable communities through mixed uses and design techniques which ensure a diversity of incomes and housing types within neighborhoods. ~~Richard Moe, the President of the National Trust for Historic Preservation, elaborated on the crucial nexus between healthy cities and countryside preservation.~~ American planning has increasingly embraced the concept of "new urbanism," an approach that seeks to create sustainable communities through mixed uses and traditional town planning design principals. New urbanism, ~~as reflected in such nationally known developments as Kentlands and Seaside and local examples~~ such as Haile Plantation and the Town of Tioga, draws on pre-World War II development patterns and designs.

Strategies to curtail disinvestment from cities to sprawl development must include revitalizing existing communities and neighborhoods and ~~state-level land-use management,~~ use of ~~such as the~~ Smart Growth initiatives. ~~in Maryland~~. A key to this strategy is reinvesting in downtowns. ~~along the lines of the successes represented at the workshop:~~

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[6] Community Character: A Case Study from Galveston, Texas" in *Dollars and Sense of Historic Preservation* (Article 2 of National Trust for Historic Preservation Series).

~~Lowertown in St. Paul, Lower Downtown in Denver, downtown Portland, Ore., and Pittsburgh neighborhoods.~~

Large numbers of people prefer living in suburbs, regardless of the costly subsidies of suburban development. Thus, research and education are required so that people become informed of the true costs of development and can make informed choices as to public expenditures regarding development. Preservationists should be part of this research and education effort.

Gainesville is fortunate that many of its older neighborhoods reflect the desired designs of this new planning paradigm. The new urbanist plea for houses with porches and reduced front-yard setbacks, designed to spur interaction between neighbors and expand the public realm into the street, can find no better example than the Pleasant Street Historic District/N.W. Fifth Avenue neighborhood and the University Heights Historic Districts. In these nineteenth-century ~~predominately African-American~~ neighborhoods houses are relatively close to one another and to the streets that they help frame the cooridors.

Mixed housing types, another new urbanist tenet believed to diversify the income attributes of a neighborhood, ~~abound~~ are amply found in the Northeast Residential Historic District and in ~~some~~ the neighborhoods surrounding ~~adjacent to~~ the University of Florida. In the Northeast Residential Historic District, Victorian-era apartments are found next to duplexes and single-family houses while in the area around the campus contain single-family homes, garage apartments, duplexes, and two-story walk-up apartments. ~~The University Related Residential Thematic Area neighborhoods near the university campus include single-family homes, garage apartments, duplexes, and two-story walk-up apartments.~~ Finally, the older portions of the city such as the Southeast, Pleasant Street, and Northeast Residential Historic Districts illustrate better than others the new urbanist ~~concept~~ desire for commercial and employment uses near housing to limit reliance on the automobile. Alleyways, as found in the University Heights Historic District-South, are as much a part of the historic districts as they are of new urbanist design. New urbanism ideas on the development patterns in neighborhoods have lon been a part of historic neighborhoods that historic preservation has protected, historic preservation also depends on growth management and environmental protection.

Preservation of the Community's Unique Identity and Quality of Life

II. INTRODUCTION

The role of historic preservation in the comprehensive planning process is unique. Section 163 *et seq.* of the Florida Statutes requires the Future Land Use and Housing Elements to address historic resources. For the Housing Element, the statutes require that it consist of "standards, plans and principles to be followed in (the) provision for relocation housing and identification of historically significant and other housing for purposes of conservation, rehabilitation, or replacement." Chapter 163 F.S. requires that historic district boundaries and designated historically significant properties be shown in the

statues that it consist of principles, guidelines, standards, and strategies to be followed in (the) provision for relocation housing and identification of historically significant and other housing for the purposes of conservation, rehabilitation, or replacement.

Historic preservation is included as an additional optional element in the City's Comprehensive Plan. The Historic Preservation Element was first introduced in the City's 1991-2001 Comprehensive Plan and updated in the 2001-2011 Comprehensive Plan.

III. INVENTORY OF EXISTING CONDITIONS

Preservation of the Community's Unique Identity and Quality of Life

Archaeological Resources

An archaeological survey was prepared in the early 1980s by ERLA and The History Group and it summarizes patterns in previously identified sites within the City. The survey report and accompanying maps and documents were submitted to the City identifying 35 archaeological sites within the City of which seven were undisturbed based on a survey conducted in 1988 ~~(Map 1)~~. Additional ~~17~~ archaeological resources have been identified in the City since the first survey in the 1980s ~~1991~~. Additional archaeological sites have been annexed and are now under the stewardship of the City.

~~These sites are identified in Attachment 1 along with their cultural affiliation and site type. An archaeological study of the Hogtown Creek Greenway corridor was undertaken in 1997. Map 2 identifies areas of the corridor that were surveyed. The draft survey report indicates several new sites along the corridor.[7] The first site, located within Alfred A. Ring Park, was denominated as 8AL 3418 and indicated as possibly a "prehistoric lithic workshop or quarry site associated with karst outcrops in the vicinity of Glen Springs and Hogtown Creek (32)." The archaeologists recommended limited additional surveying if the site was to be impacted by the proposed trail.~~

~~A site near the Loblolly Nature Center (8AL 3419) appeared to the archaeologists to have had a "more intense occupation than the Ring Park site...and due to the artifact density and the presence of culturally diagnostic artifacts [this] site merits further testing prior to impact (35)." In Green Acres Park, the report identified a site (8AL 3420) appearing to be "lithic workshops associated with the presence of karst outcrops adjacent to Hogtown Prairie" and recommended additional testing if subsurface impacts are anticipated in this area (37).~~

~~A number of previously recorded sites were identified in the Hogtown Prairie survey segment including the Henderson Mound which is a Hickory Pond/Alachua-period burial mound (8AL 463). Within the test area, only one previous site (8AL 3406) was identified and considered to be a lithic quarry/workshop site (39). The survey report recommends~~

~~"that if the Greenway will have subsurface impacts on portions of the site to the north and south of SW 20th Avenue, additional testing should be completed to clarify site limits, cultural period and function (42)." The same recommendation was provided for a site also previously identified (8AL 387) lying south of SW 20th Avenue (41).~~

~~The Greenway survey report concluded that if trail development were to be limited to surface clearing activities, there will probably "be little or no impact to archaeological resources. However, if root-raking by heavy equipment or other ground disturbing vegetation is undertaken, or if the trail is graded for paving deeper than approximately 20 to 30 cm (8-12 inches), there could be negative impacts to the archaeological resources which would need to be addressed by further testing and possibly data recovery excavations (43)."~~

Currently, within the city limits of Gainesville, ~~66~~ 122 archaeological sites and 2,202 structures have been identified, evaluated and recorded with the Florida Master Site File Office ~~forms~~ at the Division of Historical Resources, Florida Department of State, the State of Florida. (In the urban reserve, 350 archaeological sites and 2,491 historic structures have been identified and recorded).

Previously, in the earlier update, 66 archaeological sites were identified. This is an increase of nearly double in recorded archaeological sites and confirms that not all sites in the City have been identified, evaluated and recorded. The potential for disturbing archaeological sites during a redevelopment project are great. Awareness of archaeological information was not as well understood and recognized when city cores and suburbs were developed. Consequently, sites were paved over only to be discovered at a later date. The most recent discovery in Florida is the Miami Circle and the sunken wooden boats that were used as landfill to expand Manhattan Island's land mass and are now the site of the Twin Towers Memorial.

Provisions for the protection/management of archaeological resources are included in the proposed Land Development Code amendments for Natural and Archaeological Resources Protection, which is currently being under consideration for adoption by the City Commission. These proposed regulations include provisions for required archaeological surveys associated with development proposals, where applicable and authorized by the state, and general prohibitions against activities involving ground disturbance on properties containing known or probable archaeological resources, and standards for protection, including the requirement for sequential avoidance, minimization, and mitigation. The City maintains and regularly updates a GIS archaeological and historic structures database that provides the Planning and Development Services department with resources information to administer the proposed code amendments.

The final step to identify, evaluate and record unknown archaeological sites is to seek funding to develop a city-wide archaeological sensitivity and probability map to indicate the probability of unidentified archaeological sites. This map could be used to review the possible impact of both public and private projects upon archaeological resources.

Architectural Resources

Properties Listed on the National Register of Historic Places

The following properties were listed on the National Register of Historic Places at the time of the adoption of the Historic Preservation Element in 1991. ~~The table~~ Table 2 includes properties located on the University of Florida campus, which are not under the planning jurisdiction of the City of Gainesville. The University of Florida Campus Historic District includes an expansion of the district in 2007 is shown on Map 6.

Table 1. Properties Listed on the National Register of Historic Places

Site	Address	Year Built/ Year Nominated	Florida Master Site File #
Bailey House	1121 N.W. 6th Street	1850/	8AL00470
Baird Hardware Company Warehouse	619 S. Main Street	1905/1985	8AL01309
Boulware Springs	3400 S.E. 15th Street		8AL02392
Epworth Hall	419 N.E. 1st Street	1884/1971	8AL00472
Hippodrome State Theatre	25 S.E. 2nd Place		8AL00485
Matheson House	528 S.E. 1st Avenue	1867/1971	8AL00467
American Legion Post 16 (Haisley Lynch Post) Matheson Museum	513 East University Avenue	1932/	
McKenzie House	617 East University Avenue	1895/1980	8AL00476
Segal Building	408 West University Avenue		8AL00543
Hotel Thomas/Sunkist Villa (Thomas Center)	306 N.E. 6th Avenue	1906/1973	8AL00456
Star Garage	119 S.E. 1st Avenue	1917/1985	8AL02271
Northeast Gainesville Residential Historic District	See Map 1	1985	8AL00543
Southeast Gainesville Historic District	See Map 2	1989	8AL02495
Pleasant Street Historic District	See Map 3	1991	8AL02557
Edwards Rheater/Baird Theater (Cox Furniture Store)	19 S.E. 1st Avenue	1887/1993	8AL00784
Cox Furniture Warehouse	602 S. Main Street	1914/1994	8AL01309
Masonic Temple Masonic Order Lodge #41	215 N. Main Street	1909/1998	8AL00488
Old Gainesville Depot	203 Depot Ave	1907/1996	8AL02042
Shady Grove Primitive Baptist Church	804 S.W. 5th Street	1935/2005	8AL04983

Table 2. The University of Florida's properties listed on the National Register of Historic Places (Map 6)

Site	Address	Year Built	Florida Master Site File #
Buckman Hall	Buckman Drive	1906	8AL00471

Thomas Hall	Fletcher Drive	1906	8AL00477
Flint Hall	Newell Road & W. University Avenue	1910	8AL00540
Newell Hall	Buckman Drive	1910	8AL00535
Anderson Hall	W. University Avenue	1912	8AL00534
Floyd Hall	Newell Road & Union Road	1912	8AL00539
Peabody Hall	Union Road	1912	8AL00537
Bryan Hall	S.W. 13th St. & W. University Avenue	1914	8AL00536
Women's Gymnasium	Fletcher Drive	1919	8AL00451
Library East	Plaza of the Americas	1925	8AL00538
Rolfs Hall	Buckman Drive	1927	8AL02393
University Auditorium	Newell Road & Union Road	1922-1925	
Leigh	Buckman Drive	1927	
Walker	Union Road	1927	
Sledd Hall	Fletcher Drive	1929-1930	
Infirmary	Fletcher Drive	1930-1931	
Dauer Hall	Fletcher Drive & Union Road	1935-1936	
Murphree Hall	Fletcher Drive & W. University Avenue	1939	
Fletcher Hall	Buckman Drive	1939	
The Florida Gymnasium	Stadium Road	1949	
Tigert Hall		1951	
Matherly Hall		1953	
Century Tower		1953-1956	
Carlton Auditorium		1954	
Plaza of the Americas		1906-1931	
Old WUFT Radio Station			8AL2554
P.K. Yonge			8AL2553

Properties Listed on the Local Register of Historic Places

Eight buildings and structures are listed on the Local Register of Historic Places, as are ~~three~~ five historic districts. Three of these buildings -- McKenzie House, Matheson House and Thomas Center -- are also located within the Southeast and Northeast Residential Historic Districts.

Table ~~2~~ 3. Individual Properties Listed on the Local Register of Historic Places

Site	Address	Year Nominated	Florida Master Site File # Ordinance Number
Hippodrome State Theatre	25 S.E. 2nd Place	1984	8AL00485 / 2971
McKenzie House	617 E. University Avenue	1984	8AL00476 / 2972
Bailey House	1121 N.W. 6th Street	1984	8AL00470 / 2973
Matheson House	528 S.E. 1st Avenue	1984	8AL00467 / 2974
Thomas Center	306 N.E. 6th Avenue	1984	8AL00456 / 2975
Northeast Gainesville Residential Historic District	See Map 1	1985	8AL00543 / 3141
Southeast Gainesville Historic District	See Map 2	1989	8AL02495 / 3522

Bethel Gas Station	104 S.E. 1st Avenue	1989	8AL02293 / 3523
	8 S.W. 10th Street	1990	8AL01180 / 3626
Seagle Building	408 W. University Avenue	1990	8AL01290 / 3643
Pleasant Street Historic District	See Map 3	1991	8AL02557 /
Northeast Gainesville Residential Historic District (Expansion)	See Map 1	1998	970564
University Height Historic District –North	See Map 4	2002	001026
University Height Historic District-South	See Map 5	2002	001027
Baldwin House (Rush-Glassman Office)	11 S.E. 2nd Avenue	2009	080757
A. Quinn Jones House	1013 or 1019 N.W. 7th Avenue	Pending	
Old Gainesville Depot	203 Depot Ave	Pending	/8AL002042

Districts listed on the Local Register of Historic Places

~~Three~~ Five historic districts are listed on the Local Register of Historic Places and three are on the National Register of Historic Places. The ordinance number, as well as the dates of adoption, is included in the summaries below.

Northeast Gainesville Residential Historic District

The Northeast Residential Historic District was approved as a "Historic Preservation/Conservation Overlay" by the City Commission on July 8, 1985 (241ZON-84PB and Ordinance #3141). The District was expanded in spring 1998 to encompass two areas totaling approximately 150 structures (Ordinance numbers 97-0563 and 97-0930). The district with the expanded areas is shown on Map 1.

Southeast Historic District

The Southeast Historic District (see Map 2) was approved as a "Historic Preservation/Conservation Overlay" by the City Commission on March 13, 1989 (157ZON-88PB and Ordinance #3522).

Pleasant Street Historic District

The Pleasant Street Historic District (see Map 3) was approved as a "Historic Preservation/Conservation Overlay" by the City Commission on February 18, 1991 (76ZON-90PB and Ordinance #3701).

University Heights Historic District-North

The University Heights Historic District - North (see Map 4) was approved as a "Historic Preservation/ Conservation Overlay" by the City Commission on January 14, 2002 (32ZON-01PB Ordinance # 001027).

University Heights Historic District-South

The University Heights Historic District - South (see Map 5) was approved as a "Historic Preservation/Conservation Overlay" by the City Commission on January 14, 2002 (33ZON-01PB Ordinance # 001027).

Architectural Resources Documented with Florida Site File

Between 1993 and 1997, staff prepared 194 Florida Master Site Files (FMSF) which were accepted by the Florida Division of Historic Resources. All these were prepared as finishing touches to several historic neighborhood resurveys. Forty-five forms were prepared for the N.W. Fifth Avenue neighborhood, 6 in Hibiscus Park, Palm Terrace and University Park, 10 in University Heights, 56 in College Park and 57 in the Northeast Residential Historic District including the 1998 expansion areas.

Chert structure, numbering 145 were surveyed and FMSF forms were prepared in the anticipation of a potential National Register and Local of Historic Places historic districts. The Fifth Avenue Neighborhood was surveyed in 2007 by Jennifer Nash and determined the neighborhood appears to have sufficient cultural resources (256) that would contribute to the creation of the NW 5th Avenue Historic District.

The Downtown buildings have been resurveyed and the Florida Master Site File forms have been updated from the 1980's forms and study by Bill Epps and Susan Tate with the anticipation of reevaluating the potential of individual structure listings or the area for eligibility as a Local Historic District.

Demolitions have taken their toll in Gainesville. Since 1982 when the ERLA survey was completed, over 230 buildings with Florida Site Files have been demolished. Within the historic districts 56 buildings have been demolished, although only one building in the Northeast Residential Historic District and none in the Southeast Historic District have been razed. However, since 1986 in the Pleasant Street Historic District, approximately 55 buildings have been demolished or are proposed for demolition, and two were moved within the district. Eleven buildings were demolished between 1986 and 1989, and 45 buildings, including three proposed demolitions, have been demolished since 1991 when the Pleasant Street was listed on the National Register of Historic Places. The significantly structurally deteriorated buildings have been the buildings that have been demolished.

In the last ten years, demolitions have decreased considerably; particularly in the Pleasant Street Historic District where four extremely deteriorate structures were demolished. The

four Sad Sisters on East University Avenue were deconstructed after a public outcry of visual blight. One contributing structure in the University Heights Historic District – North was demolished after a fire totally engulfed the building.

Potential Historic Districts

The Historic Preservation Element adopted in 1991 identified 9 areas as potential historic districts, based on findings from a survey of historic and cultural resources conducted by ERLA Associates and the History Group, Inc., during the summer of 1980. The Element did not determine the number of historic buildings which remained in these historic neighborhoods nor did it venture an estimate of their potential eligibility for listing on the National or Local Registers of Historic Places. Instead, it prescribed policies to reevaluate the neighborhoods' significance.

The Department of ~~Community Development~~ Planning and Development Services from the summer of 1993 to 1995 resurveyed the neighborhoods, which were most likely to be eligible for listing on the National or Local Registers of Historic Places An evaluation of each neighborhood accompanies the survey summaries along with updates within the last ten years.

Downtown

The Downtown historic area was evaluated for eligibility as a National Register district in 1982 as part of the ERLA Survey. The consultant's findings indicated that Downtown has only "average geographical coherence and suffers from many intrusions, vacant properties and demolition of older structures".[8] In the consultant's assessment, this "geographical incoherence" reduced the prospects for eligibility on not only the National, but also Local Register.

The Department of ~~Community Development~~ Planning and Development Services's 1994 resurvey of the Downtown indicated that these trends were continuing, particularly along the northern, western and eastern boundaries. Buildings demolished as a result of the Arlington Square and Gainesville Regional Utilities developments virtually eliminated any historic buildings south of S.E. 2nd Place and east of S.E. 2nd Street.

Since 1982, 36 of the 180 buildings in the Downtown with Florida Site Files have been demolished. In addition, four buildings were moved to the Southeast Historic District on East University Avenue. This number represents approximately 17% of the properties in the downtown survey area for which Florida Site Files were created. Approximately 25 have been razed (in addition to the four relocations-Sad Sisters) in the area now occupied by the Arlington Square Apartments and the Gainesville Regional Utilities' complex.

[8] City of Gainesville. Conservation and Preservation Plan. April 1982, page 28.

In the 1994 resurvey report, staff recommended modifying the original ERLA survey boundaries so as to remove the fringe areas which undermine the significance of the proposed district. In addition to reducing the boundaries on the east of the proposed district, the western and northern boundaries were also reduced, resulting in 18 contributing properties not included within the proposed district. Most of these properties were built in the 1930s and 1940s and represent the latter era of the Downtown's period of significance. Five of the contributing structures are historic with minor alterations and 13 retain their integrity. The remaining 48 noncontributing properties are characterized by 18 historic properties which have been severely altered.

The district was also redrawn along N.W. 1st Avenue, which, according to the 1941 Sanborn Maps was historically residential and a continuation of the Pleasant Street Historic District.

By removing these 84 properties in the fringe areas and reducing the proposed district boundaries, contributing properties would then account for approximately 60%. Historic but severely altered buildings would account for 14% while buildings built after 1945 account for 25% of the total. There have been approximately five buildings demolished or removed in the survey area since the 1994 survey date.

After the demolition of 24 S. Main Street in the Downtown, there was an interest in resurveying and reevaluating the potential of individual structure listings and this survey is currently underway.

University Related Residential Thematic Area

The University Related Thematic District was evaluated for eligibility as a National Register district in 1982 as part of the ERLA Survey. The consultant's findings indicated that the survey area was very large and not coterminous. Cohesion came through "architectural styles and landscapes rather than through contiguous streets".[9] The consultant found that the survey area might be eligible as a "thematic proposal or Multiple Resource nomination to include parts of University Avenue. Some suburban areas do not meet the 45-year rule and some areas meet the criteria of significance and geography but are architecturally poor".[10] Map 10 identifies the extent of the University Related Thematic Area.

The resurvey was completed in early 1995. It was based on considering all structures built in the 1950's as noncontributing. However, the Department of State has recently determined that it will allow buildings that are 45 years of age or older to be listed on the Florida Site File and, thus, be considered as contributing to a historic district. This policy determination by the State will probably have a beneficial impact on the historic district

[9] ibid, page 27.
[10] *ibid, page 27.*

status of all the surveyed neighborhoods but particularly Golfview Estates, Hibiscus Park and the neighborhoods immediately west of College Park.

In the University Related Thematic Area approximately 40 buildings with Florida Site Files have been demolished since 1982. The greatest number, 20, have been demolished in the University Heights and University Park neighborhood although the College Park area, presently with 19, is likely to be the focus of intensive redevelopment activity, and two historic buildings in Hibiscus Park, one located at 8 S.W. 26th Street (8AL 1975), the other -- the Cheeves House -- located on S.W. 25th Street have been demolished.

~~**University Heights/University Place**~~

~~The University Heights/University Place neighborhood (Map 11) retains its original geographical coherence with but one major intrusion (Shands AGH Hospital's 720 building), and possesses a large number of contributing properties within its boundaries.~~

~~While retaining its geographic coherence, this neighborhood is also blessed with a cross-section of representative architectural styles from before the Second World War. In addition to the Tudor and Colonial revivals and Craftsman-style architecture which abound, the neighborhood also possesses a significant number of fieldstone or chert buildings collected from the quarries west of Gainesville and which are significant in their concentration. Furthermore, numerous garage apartments, which have had a historic presence in the two subdivisions since platting, are scattered throughout the neighborhood and accessed by alleys.~~

~~The area which includes University Heights and University Place is currently threatened by both university and hospital expansions. Since all avenues are through streets for the University of Florida and Shands AGH Hospital complexes, there is heavy traffic through the area. Compounding circulation problems are the rows of parked cars along streets; as the number of tenants increases per dwelling so has the demand for parking spaces. In fact, some houses have been reclaimed to make room for parking lots. Although impacted by University and hospital expansions and jammed with traffic, this neighborhood retains much of its picturesque character and the sense that it is a very nice place to live.~~

~~Among all the surveyed neighborhoods, this is not only the most significant but also the most geographically coherent. Nominating this neighborhood to the National Register of Historic Places is a priority.~~

~~**Florida Court/University Terrace**~~

~~The Florida Court/University Terrace neighborhood possesses the highest percentage of contributing properties among the surveyed neighborhoods and the least amount of contributing buildings which were constructed after the Second World War (Map 12). However, it has the smallest number of total properties in the proposed district and, in fact, is only four blocks deep. While it is geographically proximate on the north to the~~

~~NW Fifth Avenue neighborhood that is a predominantly African-American neighborhood, it is architecturally, functionally and historically related to the University Heights/University Park and College Park neighborhoods. A swath of nonhistoric buildings and two arterial streets separates the two neighborhoods.~~

~~The Florida Court/University Terrace neighborhood does not have the geographic coherence or architectural significance to merit designation as a separate historic district. Its sharp geographic separation from other neighborhoods of similar architectural and social context in the University Related Thematic area suggests that it may be more appropriate to include this neighborhood with University Place and University Heights. Among the proposed historic districts in the University Related Thematic Area Resurvey conducted in Fall of 1994, the Florida Court/University Terrace neighborhood possesses the highest percentage of contributing properties and the least amount of contributing buildings which were constructed after the Second World War. However, it has the smallest number of total properties in the proposed district and is only four blocks deep and separated from neighborhoods with which it is architecturally, functionally and historically related by a swath of nonhistoric buildings and two arterial roads.~~

~~The proposed University Heights North and South Historic District has received a unanimous vote from the Historic Preservation Board and is expected to be presented to the Plan Board and the City Commission in 2001. (Map 13 and Map 14)~~

College Park, College Court and Hilldale

Single-unit, duplex, and multi-unit structures characterize the College Park survey area. Although contributing properties within the proposed College Park historic district constitute 56% of the total number of buildings, a full 20% are contributing buildings built after the Second World War. The inclusion of buildings constructed up to 1952 as eligible candidates for Florida Site File listing substantially improves the historic district potential of Forest Park, College Court and Hilldale. In fact, approximately one-third of the buildings in the latter two subdivisions would be potentially affected by including pre-1952 buildings.

<u>While the passage of time will improve the potential of including these post-World War buildings, the loss of structures that were part of the first neighborhood associated with the University of Florida change the period of significance of a potential historic district to a period of less importance.</u> A far more difficult issue to resolve is the numerous intrusions which undermine the geographic coherence of College Park. The large number of noncontributing commercial buildings along West University Avenue and NW 13th Street as well as the existence of several parking lots isolates the neighborhood from its commercial core. In addition, the presence of large numbers of 1960s and 1970s architecture and the ever-increasing development in the neighborhood further reduces the likelihood of the neighborhood achieving historic district status. A further problem with evaluating the neighborhood is its architectural significance. The architecture while varied is patternless and does not have the concentrations of recognized architectural styles found

in other neighborhoods. Because College Park contains so many intrusions, as well as deteriorated and insignificant architecture, a district proposal for this area is unsuitable.

Hibiscus Park, Palm Terrace, Annis Terrace and University Park

The neighborhoods west of College Court and Hilldale are architecturally heterogeneous ranging from concentrations of 1920s architecture to ranch designs built in the 1940s. Annis Terrace, which sits astride N.W. 25th Street, was included in the surveyed neighborhoods because it is completely comprised of houses constructed immediately after the end of World War II.

Of the remaining subdivisions, only Palm Terrace has contributing buildings that comprise more than 50% of the total number of buildings in each subdivision based on the survey completed in 1995. Collectively considered as a potential historic district, no more than 49% of the buildings in the Hibiscus Park, Palm Terrace, and University Park subdivisions are considered contributing. Even removing University Park with its 15 noncontributing structures from the proposed district does not alter the percentage of contributing and noncontributing buildings. Using ~~1952~~ 1961 as the cutoff construction date for a contributing structure, however, may involve revising the status of upwards of 70 structures that certainly would favorably alter the historic district eligibility of these neighborhoods.

Golfview Estates

The historic district status of Golfview Estates may also be altered based on insufficient number of contributing structures older than 50 years, as well as those built in the immediate post-World War Two era which comprise only 36% of the total number of buildings in the neighborhood. In addition, the eligibility of Golfview Estates for historic district listing is also unlikely because of the predominance among noncontributing properties with 1960s and 1970s building dates. Nevertheless, several buildings merit investigation of their potential for individual listing on the National Register of Historic Places, namely "The Castle" located at 727 SW 27th Street.

In the last ten years the above numbers have changed. Just looking at the ages of the structures in the Golfview neighborhood, a total of 84 parcels, 73 parcels are now over the built age of 1959. The Golfview neighborhood is protected geographically for intrusion but not non-compatible additions that can undermine the neighborhood's cohesion.

NW Fifth Avenue Neighborhood

Staff resurveyed the NW Fifth Avenue neighborhood in Spring 1995 and found a significant collection of approximately 300 dwellings, of which approximately 203 (or 60%) are contributing. Approximately 91 buildings with Florida Site Files have been demolished since 1982. This figure represents 23 percent of 387 buildings listed with site files that existed in 1982.

In 2007 the Community Redevelopment Agency contracted with Environmental Services, Inc., to resurvey the Fifth Avenue neighborhood. The investigator, Jennifer L. F. Nash concluded that significant buildings, four resource groups, and a potential historic district were determined to be worthy of listing on the Local Register of Historic Places. Ms Nash stated in her report, "Four resource groups were identified during the NW 5th Avenue historic survey. The resource groups include a section of railroad and its associated depot (AL05393), an African Methodist Episcopal (AME) church complex (AL05395), the historic Lincoln High School (AL05394), and a commerce center (AL05396). Nine individual structures are potentially eligible for listing in the NRHP (AL05320, AL05329, AL01036, AL05361, AL05375, AL05369, AL00989, AL00586, and AL00553). Additionally, the NW 5th Avenue neighborhood appears to have sufficient cultural resources (256) that would contribute to the creation of the NW 5th Avenue Historic District.[11]

Bailey's Estate

Bailey's Estate, a pre-Civil War plantation is bordered by N.W. 13th Street, N.W. 16th Avenue, N.W. 2nd Street and N.W. 8th Avenue. Within this rectangular area of grid-laid streets are found century-old oak alleys, the 1848 Major James B. Bailey estate, late nineteenth century and turn-of-the-century homes on N.W. 4th Street, N.W. 12th Avenue, and N.W. 16th Avenue. While containing many buildings of historic interest, Bailey's also has an abundance of ranch houses and concrete block structures.

Bailey's Estate has several 19th century dwellings including the Bailey House on N.W. 6th Street, plus a collection of dwellings built immediately after the Second World War. Additional work is necessary to determine the historic district status of the plantation and the Grove Street ~~this~~ neighborhood

Peelers Addition

Peelers Addition is located south of Downtown and does have a concentration of vernacular dwellings. However, a windshield survey of the neighborhood suggests a considerable amount of intrusions, as well as unsympathetic additions. The redevelopment of the area including the Depot Park will additionally add pressures to the remaining historic buildings. Consequently, staff recommends that no additional survey work is necessary.

Porters Quarters Neighborhood

The Porters Neighborhood has undergone substantial redevelopment involving demolition since the 1982 survey. Areas most affected include 600 block of SW 2nd Terrace, the 300-500 blocks of SW 7th Place and 300 block of SW 5th Avenue and approximately 25

[11]Jennifer F .L. Nash, August 2007, Northwest Fifth Avenue Historic Structures Survey and Assessment, Gainesville, Alachua County, Florida.

buildings along the 600 block of Depot Avenue. Staff is not planning a resurvey of the neighborhood because its historic district potential, limited in the 1980s, is probably nonexistent considering the extent of redevelopment and demolition. The neighborhood has expressed concerns of the loss of history and redevelopment pressures from being between the University of Florida and the proposed Depot Park.

Suncrest Subdivision

Suncrest is significant on two counts. It is located on one of the older sections of Gainesville north of the main downtown area, which developed somewhat independently of the main city in the nineteenth century; and, it is one of the earliest projects of the Parrish family development. Suncrest is located between NW 6th and 13th Streets and NW 30th and 33rd Avenues. It was developed as a lower-middle class, moderate subdivision characterized by low-style bungalows on piers. These small frame houses give the neighborhood an interesting, homogeneous plan, but there are many intrusions that interrupt the original neighborhood landscape with cinder block ranch houses. Additional work is necessary to determine the historic district status of this neighborhood.

Tacachale

Tacachale, formerly known as Sunland Training Center, was founded in 1919 as the "Florida Farm Colony for Epileptic and Feeble-Minded," and is located on the east side of Waldo Road between NW 16th and 23rd Avenues. The Training Center today exhibits winding roads and a variety of 1920s residences and administrative buildings. Some of the buildings which survive from the earliest days are the old Administration Building, the old Dining Hall, Cedar Wood Cottage, Ivy and Clover Cottage, Cherry Wood Cottage, the Garage and Auto Repair Shop, the Power Plant and Ash Wood Cottage. The cottages are client residences all designed from the same plan, a central dominating Palladian portico with long side wings. Columns and curving parapet walls are the decorative elements of the buildings. Cypress Cottage is one of the original Craftsman cottages that served to house a physician. The old Administration and Dining Hall both have Craftsman brackets and rooflines with Ionic pilasters and other classical details appearing in restrained fashion. Because Tacachale is state land outside the planning jurisdiction of the City of Gainesville, it is unlikely the City will undertake any survey.

Properties Potentially Eligible for Historic Register Listing

While Gainesville has several neighborhoods whose historic qualities are clearly evident, many more individual buildings also merit investigation. Table ~~3~~ 4 is a nonexhaustive list of buildings. ~~that should undergo a determination of historic significance.~~ Most of these buildings were surveyed or resurveyed during the study of the Downtown and Chert buildings and will undergo a determination of historic significance. ~~In addition, Gainesville's abundant fieldstone (chert rock) houses remain presently unstudied, yet the City could possibly have the greatest concentration of buildings with this material in Florida.~~

Table ~~3~~ 4. Properties Meriting Evaluation of Historic Register Potential

Site	Address	Year Built	Florida Master Site File #
Chesnuts	2 W. University Avenue	1887	8AL00484
Emiliano's Bakery	7 S.E. 1st Avenue	1888	8AL00782
Old Baird Building	19 S.E. 1st Street	1887	8AL00783
Baird Theatre	19 S.E. 1st Street	1887	8AL00784
New Baird Building	112-116 S.E. 1st Street	1912	8AL00785
Sovereign Restaurant	12 S.E. 2nd Avenue	1910	8AL00786
Fowler's Garage	10 S.E. 2nd Avenue	1913	8AL00787
Wayside Press	113 S. Main Street	1887	8AL00789
Old Commercial Hotel	120 S. Main Street	1886	8AL00793
Rice Hardware	15 S.W. 1st Avenue	1905	8AL00794
Western Auto	108 S. Main Street	1925	8AL00796
Chace Kitchens	110-114 S.W. 1st Avenue	1904-08	8AL00797
Legal Services Building	35 N. Main Street	1887	8AL00803
First National Bank	15-17 N. Main Street	1892	8AL00804
A. Quinn Jones School	1108 N.W. 7th Avenue		8AL01036
Firestone Building	304 W. University Avenue	1929	8AL01289
Malphurs House	3100 N.W. 6th Street		8AL01313
North Gainesville Hall	1628 N.W. 6th Street		8AL01321
The Castle	727 S.W. 27th Street	1939	8AL01956
Georgia Segal Hall	1002 W. University Avenue		
Primrose Inn	15 N. Main Street	1910	8AL01287
First Baptist Church	425 W. University Avenue	1929	8AL01291

IV. IMPLEMENTATION TECHNIQUES

Regulatory Programs

Federal Legislation

Federal involvement in historic preservation is primarily through three different laws – the National Historic Preservation Act (NHPA),[12] the National Environmental Policy Act[13] (NEPA), and Section 4(f) of the Department of Transportation Act of 1966.[14]

The NHPA establishes the National Register for Historic Places and authorizes the Secretary of Interior to designate properties as historic landmarks, and to set forth criteria for landmark determination. While listing on the NRHP is primarily honorific, the National Register plays an important role in the federal regulatory protection scheme and enables property owners to qualify for federal tax benefits. (Listing on the National Register in Gainesville also qualifies property owners for the local ad valorem tax exemption described below). Properties listed on the National Register enjoy procedural

[12] 16 U.S.C. SS 470-470w-6
[13] 42 U.S.C .SS 4321-4347
[14] 49 U.S.C. Sec. 36

safeguards. The NHPA requires any federal agency with direct or indirect control over federal, federally assisted or federally approved projects to consider the effects of the project on any National Register property through the Section 106-review process. In Gainesville, the process, known as Section 106 review, typically affects housing development in the Pleasant Street Historic District that are undertaken by the City of Gainesville or Neighborhood Housing and Development Corporation.[15]

Two other significant pieces of legislation that also are specifically related to historic preservation provide protection to historic resources.[16] The NEPA requires that an Environmental Impact Statement (EIS) be prepared for any major federal actions significantly affecting the quality of the human environment. NEPA requires that impacts on the natural environment as well as on the quality of the urban environment, historic and cultural resources, and urban design be considered in the EIS, along with recommended alternatives to avoid these impacts. The Department of Transportation Act, Section 4(f) applies to federal or federally-approved transportation projects and prevents such projects where they would impact any historic site, public park, recreation area or wildlife refuge unless no feasible alternative exists to the project and unless the project minimizes harm to historic and natural resources.

State Legislation

Florida has enacted a comprehensive historic preservation statutory framework, which complements that of the federal government. Over twenty Florida Statutes have provisions pertaining to the issue of historic preservation. The Florida Historical Resources Act (Chapter 267.of Florida Statues) is Florida's primary historic preservation legislation and the cornerstone of its historic preservation policy. In many respects, Chapter 267 parallels

[15] The Section 106 review process is the primary tool for the protection of historic resources under NHPA, requiring that all federal agencies take into account the impact that a federal undertaking might have on listed properties. Before any activity which may have an adverse effect on a listed property is carried out, a federal agency must provide the Advisory Council on Historic Preservation (an independent federal agency created under the NHPA) to comment on the undertaking. In most cases, a Memorandum of Agreement (MAO) is executed. This is a legally binding document that specifies that an agency will take specific steps to mitigate or to avoid harm to historic resources.

[16] Other applicable federal regulations include the Archaeological Resource Protection Act or ARPA (16 U.S.C. 470aa-470mm and the Native American Graves and Repatriation Act or NAGRA (25 U.S.C. 3001-3013). ARPA protects archaeological resources located on all federal and Indian lands, unless a permit is secured from the Department of the Interior, and prohibits the trafficking of archaeological artifacts. NAGRA establishes a process for protecting and distributing Native American cultural items found on federal or tribal lands either through "intentional excavation" or "inadvertent discovery." The Public Buildings Cooperative Use Act (40 U.S.C. S 601-616) encourages federal agencies to use historic buildings and requires a survey of available properties to determine the feasibility of occupancy and use of listed historic structures unless financially infeasible relative to other existing or planned buildings. Surface Mining Control and Reclamation Act (30 U.S.C. 1201 *et seq)* which provides protection for historic resources that would be adversely affected by mining operations and also requires the administering agency – the Office of Surface Mining and Enforcement to comply with Section 106 of the NHPA.

the provisions of the federal National Historic Preservation Act of 1966 (Public Law 89-665, as amended).

Local Legislation

The federal government and the State of Florida have important roles in historic preservation. The vast majority of projects, however, are not under the purview of federal or state legislation making the local arena the key area where historic preservation activities are carried out. The City has several ordinances that implement its historic preservation goals for Gainesville.

Historic Preservation/Conservation Overlay

Protection of historic resources is implemented through the City's "Historic Preservation/Conservation Zoning Overlay" (Section 30-112 of the Land Development Code). This code section provides procedures and criteria for identifying properties eligible for listing on the Local Register, specifies the type of work and projects requiring review, delineates standards by which the review takes place (typically the United State's Secretary of Interior's *Standards for Rehabilitation)*, and elaborates provisions for economic hardship by which the Historic Preservation Board (HPB) can evaluate the effect of their actions. The ordinance affects 8 individually listed buildings and three districts. These designated resources are locally significant historic properties and are subject to design review approval for most exterior work. Either City staff or the Historic Preservation Board can issue Certificates of Appropriateness (COA) for work complying with the historic preservation standards set forth in the Land Development Code and the *Historic Preservation Rehabilitation and Design Guidelines*.[17] ~~HPB's *Preservation and Conservation Manual*~~.

Demolition Delay Ordinance

Buildings proposed for demolition within the City are subject to Section 6-19 of the Code of Ordinances, which imposes delays on the issuance of demolition permits. If a building has a Florida Site File, is located in a district or is older than 45-years in age, the Historic Preservation Planner may impose a ninety-day delay on the demolition request. However, this action can be appealed to the Historic Preservation Board, which may waive the delay based upon adopted criteria. Generally, the applicant must demonstrate that the demolition delay will affect a development project timetable and result in an economic loss.

[17] University of Florida and the City of Gainesville, 2004, *Historic Preservation Rehabilitation and Design Guidelines,* Supplement to the Land Development Code Section 30-112,

Modified Setback, Parking and Other Requirements

The City of Gainesville has adopted a "variance" process that modifies existing zoning requirements, to facilitate new construction, redevelopment, rehabilitation, or relocation of buildings or structures in historic districts or individually listed on the local register. The City may determine dimensional requirements such as front, side and rear setbacks, building height, separation between buildings, floor area ratios, and maximum lot coverage for buildings and structures based on historic development patterns.

The petitioner shall base any change on competent demonstration of the following:

1. The proposed development will not affect the public safety, health, or welfare of abutting property owners or the district;
2. The proposed change is consistent with historic development, design patterns or themes in the historic district. Such patterns may include reduced front, rear and side yard setbacks, maximum lot coverage and large floor area ratios;
3. The proposal reflects a particular theme or design pattern that will advance the development pattern of the historic district; and
4. The proposed complies with utility, stormwater, access requirements and other requirements related to site design in the land development code.

Modified Building Standards for Historic Preservation Projects

The restoration of historic residential and commercial structures is often complicated by the application of modern building and fire and safety codes. ~~For instance, such codes often require at least two means of egress from the upper floors of a building, yet numerous pre-1950s building were only provided with one exit stair. Furthermore, these codes will often require that nonconforming structures undergoing additions be brought up to code for its non-conformities as a condition of approval of addition.~~

~~The BOCA, Standard, and Uniform Building Code each have specific sections to address historically significant buildings. These sections generally state that a building under consideration for alterations, restorations or repairs, need not conform to all code requirements provided that 1) the building has been officially designated as historic by appropriate authorities and 2) is judged safe by the Building Official. The city of Gainesville, while not having a specific ordinance enabling this flexible code enforcement approach, nevertheless has permitted alternative approaches in select cases.~~

The City has developed a Building and Fire Code Regulation for Historic Buildings (City of Gainesville, Code of Ordinances, Chapter 6 Buildings and Building Regulations, Appendix A), which provides for alternative building regulations for preserving, restoring or rehabilitating historic buildings. It's based on a numbering system with a generated overall performance number that needs to be achieved.

In the past, generally speaking, code enforcement issues arise primarily with commercial structures but can be remedied if alternatively effective strategies known as "equivalencies" are provided. For example, the proprietors of the Laurel Oak Bed & Breakfast were able to provide a fire suppression system rather than an exterior staircase, an "equivalency" which also allowed them to retain an open staircase which might otherwise had been enclosed. Although the cost of this system is expensive, requiring inflexible code adherence would have destroyed the historic fabric of the house.

A more important issue for some historic commercial properties, particularly along N.E. First Street, is that potential non-conformities may inhibit further expansion. Many of the offices along First Street were rehabilitated when ~~code enforcement~~ building codes ~~was~~ were more lax. ~~and if the owners, now seeking to expand a buildings. The owner would be required to bring the structures fully up to code.~~ The State Building and Fire Codes now include provisions for Historic Buildings. If the owner want to expand their building, the new section of the building affected would be required to meet the current addition of the codes. The existing portions of the building can remain without change unless a condition is created that makes the structure unsafe. ~~In this event, the City may wish to provide a variance procedure, which would enable historic structures to be expanded or altered without being required to resolve earlier code deficiencies. A possible solution to potentially inflexible building and safety codes is allowing the owner to change the proposal to a less "hazardous" but still economically viable use. Where the underlying zoning may not permit these uses, a special exception could be permitted.~~

Direct Incentives Programs

Tax Incentives

Local Ad Valorem Tax Exemption

In 1995, the City Commission approved the ad valorem tax exemption for historic properties which grants tax exemptions for historic properties defined as listed on the National Register of Historic Properties (NRHP), designated under the local historic preservation ordinance, or contributing to the significance of a National Register or locally-designated historic district. Exemptions are for 100% of the assessed value of improvements made after the exemption is granted and for a period of up to 10 years. The Historic Preservation Board must review and approve interior and exterior work before the City Commission can authorize the tax exemption. The Alachua County Board of County Commissioners approved a similar ordinance in 1996.

Federal Rehabilitation Tax Credits

Several tax incentive programs are directly available to historic properties. The first and most prominent is the *Federal Rehabilitation Tax Credit* in which an eligible property can receive a credit calculated as 20 percent of the qualified rehabilitation costs of the project. To qualify, a property must be certified as eligible for listing on the NRHP or a

contributing building within a NRHP district, as well as meet the rehabilitation requirements of the Secretary of Interior.

A lesser-known provision of the same act provides a 10 percent credit for substantial rehabilitation of non-historic structures constructed before 1936. The taxpayer qualifies for the tax credit only if the building is used for industrial or commercial (nonresidential) purposes subsequent to its rehabilitation. The 10 percent rehabilitation credit, which is not available for certified historic structures, does not require certification of these buildings. However, certain existing building elements must be retained to qualify for this credit. Specifically, 50 percent or more of the existing external walls must be retained as external walls, 75 percent or more of the existing external walls must be retained in place as internal or external walls and 75 percent or more of the existing internal structural framework must be retained in place.

A building within a registered historic district is not eligible for the 10 percent credit unless it is certified by the United States Department of Interior as not contributing to the historical significance of the district.

A review of zoning and historic district maps suggests that this provision could be utilized by two structures in the Pleasant Street District which have CCD zoning and are non-contributing to the historic quality of the district. However, in the Northeast and Southeast historic districts, several structures may qualify for the tax break but deed research would need to be conducted to determine their ages.

Federal Investment Tax Credit for Low Income Housing

Urban redevelopment incentives offered by both the federal and state government have a less direct affect on historic properties; nevertheless, provide a potentially significant incentive in the Pleasant Street Historic District. The *Investment Tax Credit for Low Income Housing* offers investment tax credits for acquisition, construction, and rehabilitation of qualifying units of low income housing. There is a 9% tax credit per year for 10 years for each unit of low income housing acquired, constructed or rehabilitated without other federal subsidies and a 4% tax credit per year for 10 years for units involving federal subsidies or tax exempt bonds. Qualifying rehabilitations under this provision must meet tests relating to cost per unit, number of units occupied by individuals with incomes below area median income, and a 15-year compliance period.

Preservation Easements

Property owners of historic property may be eligible for a charitable donation income tax deduction under Section 170 of the Internal Revenue Code S170(h); IRC SS 2055(f) and 2522, Reg S1.170A *et.seq*. The requirements of such an easement are that the owner relinquishes rights to demolish or alter the property, and the gift of such rights is given in perpetuity to a qualified historic preservation organization. Thereafter, the owner will not be able to destroy, demolish or alter the property without the express permission of that

organization. The value of the easement is determined by the difference between the fair market value of the property before the donation and the value after the donation. A qualified appraiser must appraise the value.

Conservation Easements

A conservation easement is a legal agreement between a property owner (grantor) and recipient organization (grantee) which restricts the type and amount of development that may take place on the property. The specific restriction of rights a property owner foregoes when granting conservation easement is spelled out in the easement document. The grantor and grantee identify the rights and restrictions on use that are necessary to protect the property. After the easement is granted, future property owners may give away, lease or sell any of those rights, subject to any legal agreements that previous owners may have made, to state laws and to local government regulations.

The advantage of an easement program is that it takes a middle approach for properties and areas an organization wishes to protect, falling between full ownership and governmental land-use controls. Placing easements on undeveloped properties can reduce development pressures while properties already developed can be protected against more intensive development. In addition, easements may be designed to protect particular features of individual properties such as landscaping or architectural features. Easements have the advantage of being guarded by organizations committed to maintaining them.

An easement may be perpetual in duration or may be established for a limited term of years; in either case, its covenants "run with the land" and legally bind subsequent landowners as well as the grantor. However, only a perpetual easement can qualify for federal tax incentives. Extinguishment of a perpetual easement can be provided for if unforeseeable and external events defeat its conservation purpose.

Income and Estate Tax Deductions

The *Tax Treatment Extension Act of 1980* also permits income and estate tax deductions for charitable contributions of partial interests in qualified historic properties. The deduction is equal to the value of the charitable contribution. This deduction also has ramifications with the local property tax bill by reducing the market value of the property. The Florida legislature has enabled reduced assessments of historically significant property when development rights have been conveyed or historic preservation restrictions have been covenanted (FPS 193.505). By conveying development rights to the government or entering into a covenant for not less than 10 years, a property's assessed fair market value and, subsequently, property tax can be reduced.

Community Contribution Tax Credit

The Florida Statutes also encourage corporations to donate money for historic preservation purposes through the *Community Contribution Tax Credit* (FPS 220.183).

This act allows any corporation paying Florida corporate income tax or an insurance premium tax to receive a tax credit equal to 50% of the donation to an approved community development or historic preservation project. Businesses are eligible to receive credits of up to $200,000 per year.

Other Related Tax Incentive Programs

Industrial Revenue Bonds

Another unconventional financing mechanism for historic preservation is *Industrial Revenue Bonds* (FPS 159.26). IRBs allow local agencies to issue revenue bonds for the purpose of providing funds to pay for preservation or rehabilitation of a certified historic structure or any "rehabilitation, restoration or renovation of any structure in a 'registered historic district'." All expenses of the issue are borne by the private body for which the bonds are issued. For repayment, an investor relies on profits generated by the project.

The principal incentive provided by such bonds is the tax-exempt status of interest paid to the bondholders; an exemption, which translates into below-market interest for money, used for historic preservation activities.

Enterprise Zones

~~Both NW Fifth Avenue and~~ The Southeast Gainesville Historic District, Pleasant Street Historic District, the University Heights Historic District and part of the Northeast Gainesville Residential Historic District are located within an enterprise zone which avails to property and business owners' reduction in permit fees, sales and property tax credits and a tax credit for job creation. The benefits of enterprise zones come from these tax credits and tax exemptions. Examples of tax credits include job creation, property tax, and sales tax and usually involve an eligibility stipulation concerning length of credit and number of workers employed who reside in the enterprise zone.

Tax exemptions are also available for use of business property, building materials, electrical energy use, municipal utility tax, and occupational license taxes.

Florida's enterprise zone package also presents possibilities for innovative financing of rehabilitation of historic buildings in the ~~Pleasant Street~~ ~~H~~historic ~~D~~districts. The enterprise zone basically provides businesses with three incentive programs: grants and loans tax credits and tax exemptions. The *Community Development Corporation Support and Assistance Program* (FS 290.0301-290.038) is the major source of direct funding for urban redevelopment areas and provides grants (maximum $100,000) and loans (maximum $500,000) to Community Development Corporations for the establishment of new businesses. The CDC must be controlled by residents of the area and must be a non-profit corporation or a local development company certified to be eligible to participate in *the Small Business Loan Program s.502 of the Small Business Investors Act of 1958*.

More commonly, the benefits of enterprise zones come from tax credits and tax exemptions. Examples of tax credits include job creation[18], property tax[19], and sales tax[20] and usually involve an eligibility stipulation concerning length of credit and number of workers employed who reside in the enterprise zone.

Tax exemptions are also available for use of business property[21], building materials,[22] electrical energy use,[23] municipal utility tax,[24] and occupational license taxes.[25]

Housing Rehabilitation Program

There are several public and non-profit housing providers within the redevelopment area; two focuses on new construction, one focuses on owner and rental rehabilitation, and one does both. The problem with existing programs is that the need far surpasses existing program allocations.

[18] *Enterprise Zone Job Creation Incentive Credits* (FPS 220.181) provides a credit against state income taxes to any business that creates a new job(s) and hires and employee(s) who is a resident of the enterprise zone. The tax is 15% of the actual monthly wages.

[19] *Enterprise Zone Property Tax Credit* (FPS 220.182) - allows a credit against ad valorem taxes for expansion of existing businesses or creation of new businesses, rebuilt or replaced property, or assessments on additional real or tangible property acquired to facilitate the expansions of an existing business. The term of the credit is ten years and the annual amount utilized shall not exceed $50,000. To be eligible, a business must show that no less than 20% of employees excluding temporary help are residents of the enterprise zone area.

[20] *Credit Against Sales Tax for Job Creation in Enterprise Zones* (FPS 212.096) - exempts for 24 months business equipment purchased for use and subsequently used by businesses located in the enterprise zone from the state sales tax if no less than 20% of the employees of the business are residents of the enterprise zone (excluding temporary employees). The credit shall be $100 per month of employment for each full-time employee or $50 per month of employment for each part time new employee.

[21] *Economic Development Ad Valorem Tax Exemption* (FPS 196.1995) allows jurisdiction to permit referendum granting economic development ad valorem tax exemptions up to 100% of all improvements to real property by new or existing businesses. The jurisdiction can limit the effect of referendum to only include an enterprise zone.

[22] *Sales Tax Exemptions for Building Materials Used in Rehabilitation of Real Property in Enterprise Zones* (FPS 212.08(5)(H)) - building materials used for the rehabilitation of real property located in enterprise zone are exempt from state sales tax if materials used increase the value of the property by 30% or more. See also *Sales Tax Exemptions for Business Property used in Enterprise Zone* (FPS 212.08(5) (h)).

[23] *Sales Tax Exemptions for Electrical Energy Used in Enterprise Zones* (FPS 212.08(15)) - exempts businesses located in an enterprise zone from sales tax on energy usage for five years.

[24] *Municipal Utility Tax Exemption* (FPS 166.231(8)) - exempts not less than 50% of tax imposed on utility usage in enterprise zones.

[25] *Occupational License Tax Exemptions* (FPS 205.054) - an exemption of 50% of the Occupational License Tax levied for the privilege of engaging in or managing a business, profession, or occupation when such privilege is exercised at a permanent business location or branch office in the enterprise zone.

City of Gainesville

The City Housing Division offers an o*wner-occupied rehabilitation program* for substantial repair of homes owned by residents whose income does not exceed 80% of metropolitan Gainesville-area family median income. This program focuses on repair of all Minimum Housing Code Violations and Building Code violations with work often involving major structural repairs as well as repair and replacement of plumbing, electrical, or heating systems. Funding comes from both the federal government - Community Development Block Grant funds (CDBG) and HOME - and the state - State Housing Initiatives Partnership - and can be combined with homeowner funds from savings or from lending institutions. ~~The maximum amount of assistance is $26,000 per house.~~ Assistance may be in the form of grants, deferred payment loans, or repayable loans.

Since 1978, the City of Gainesville has rehabilitated approximately 107 dwellings. The vast majority - 85 units - were rehabilitated in NW Fifth Avenue costing approximately $1.36 million, while 22 have been rehabilitated in the Pleasant Street Historic District at an estimated cost of $886,292. Most rehabilitations in Pleasant Street have occurred since 1990.

Other programs for owner-occupied dwellings administered by the City include house recycling, purchase rehabilitation, down payment assistance funded by the SHIP program (up to $4,000) and an emergency repair program for those on the rehabilitation waiting list. The City also works with the Gainesville Regional Utilities to convert homes to natural gas. This program may provide water heaters, natural gas central heating or cooking facilities. In conjunction with this program, insulation is installed to provide energy efficiency and fuel cost savings for the homeowner. Only low income, owner occupants may qualify for this program.

Investor/owners of rental property may apply to the City's *rental rehabilitation program* to receive financial and technical assistance to rehabilitate their rental units. The City provides matching grants of up to $8,500 per unit based on number of bedrooms per unit. The owner must commit to renting the units to low income renters for a period of 10 - 15 years. The City monitors this commitment for the entire compliance period. Funding sources are HOME, CDBG and private lenders. Thirty-six units in the redevelopment area totaling $563,936 have been rehabilitated under the program.

The *CD Float Program* is available at the behest of the City Commission for unusual, high cost or high impact, housing or economic development redevelopment projects that meet Gainesville's CDBG Program goals when private financing is not available. The program has been used to provide construction financing which is repaid at project completion by permanent financing.

The owner-occupied program began in the mid-1970 as a target neighborhood based program. In 1990, the program became a citywide program. The waiting list is

approximately 2 to 3 years long and rarely do more then 3-5 owner occupied units get rehabilitated per year in the redevelopment area. Even fewer rental units are rehabilitated. An ~~recent~~ affordable housing auction in which the City was a partner with Neighborhood Housing and Development Corporation led to $1.2 million in sales and $1 million in permanent mortgages and resulted in the rehabilitation of approximately 9 dwellings in the redevelopment area. To leverage existing funding which may continue to decline, similar innovative programs need to be developed.

Non-Profit Agencies

Habitat for Humanity, Neighborhood Housing and Development Corporation (NHDC) and the Gainesville Builders Association (GBA) have been active in building new houses in the redevelopment area. Habitat has built 9 dwellings in both neighborhoods while GBA has built three, all in Pleasant Street. NHDC has built 5 new dwellings in Pleasant Street and plans to construct at least three additional dwellings in the neighborhood.

In 1995, the NHDC with the Housing Division auctioned 30 boarded homes, approximately nine in the NW Fifth Avenue and Pleasant Street neighborhoods, to low income, first-time home buyers. The program was designed to make an immediate high impact on the neighborhoods. The auction homes have been rehabilitated using CDBG, SHIP and HOME dollars, as well as tax increment money and other federal funds. At closing, the purchasers receive mortgages from local financial institutions, NHDC, low interest rate loans, SHIP down payment assistance, and Federal Home Loan Bank grants. ~~NHDC has spent approximately $470,000 on rehabilitation and new construction in the redevelopment district although some of this total includes money contributed by the City.~~

The Central Florida Community Action Agency also does rehabilitation work in the redevelopment area and the United Gainesville Community Development Corporation provides financing for some projects.

Tax Increment Financing from CRA

Another innovative method of encouraging historic preservation and revitalization is *Tax Increment Financing* or TIF (Part III, Ch.163 FPS). TIF allows local government to use increased property taxes of a neighborhood starting from a base year to finance improvement within a TIF district. Tax increment dollars can be used to finance the front-end costs of major community revitalization and/or redevelopment projects so that immediate improvements can be made. The projected increase in property revenue can be pledged as collateral for the bonds.

Tax increment financing (TIF) is a popular method to redevelop urban areas through public improvements that promote private sector activity. In tax increment financing, property values in a certain defined area are capped at the assessed value for a particular base year. Thereafter, any tax revenues due to increases in value in excess of the base year are dedicated to the redevelopment area. The municipality and the county both continue

to receive property tax revenue based on the frozen value. This revenue is available for general governmental purposes. The TIF revenues can be used immediately, saved for particular projects, or can be bonded to maximize the funds available. Any funds received from a TIF, however, must be used for the redevelopment of the area and not for general government purposes. They must also be devoted to a particular use during the same fiscal year in which they were collected.

~~In November 1989, the Downtown Redevelopment Agency (DRA) -- which was formerly the community redevelopment agency for the NW Fifth Avenue/Pleasant Street Redevelopment Area -- prepared guidelines for administering the TIF fund. Sixty percent of the original fund balance was earmarked for improvements to residential projects while 40 percent was earmarked for commercial projects, which included non-owner occupied single family homes or apartment buildings. Only individuals or firms, which own or rent property or conduct business within the TIF district, were considered eligible for the assistance.~~

~~The base year at which tax revenues for NW Fifth Avenue were frozen was 1979. This base year was altered in 1988 to account for the inclusion of Pleasant Street in the redevelopment area. Based on December 1995 the total incremental value of the TIF is $3,180,690. The loss of over $277,000 in TIF monies in Pleasant Street occurred due to a revaluation by the Alachua County Property Appraisers Office in 1994. Table 11 indicates how the figures are broken down by neighborhood.~~

~~Table 4. Tax Increment Financing Assessment Rolls - 1995~~

~~Neighborhood~~	**~~NW Fifth Avenue~~**	**~~Pleasant Street~~**
~~NW Fifth Avenue~~		
~~1979/1988 Base Years - Assessment Rolls Taxable Value -- All Properties~~	~~$5,947,440~~	~~$5,372,720~~
~~1995 Assessment Roll Taxable Value -- All Properties~~	~~$9,405,206~~	~~$5,095,644~~
~~1995 Incremental Value Taxable Properties~~	~~$3,457,766~~	~~-$277,076~~
~~Total NW 5th Avenue/Pleasant Street 1995 Incremental Value~~	~~$3,180,690~~	

~~Based on the above assessments, the City of Gainesville is responsible for a total of $15,005.24 (@ 4.9659 mils) in the redevelopment area while Alachua County is responsible for $27,950.31. Thus, the total TIF amount generated for the NW Fifth Avenue/Pleasant Street Redevelopment Area in 1995 was $42,955.55. The total fund balance for the TIF was $62,142.~~

The ~~DRA has become the~~ Community Redevelopment Agency and is involved with the redevelopment of ~~Pleasant Street~~/NW Fifth Avenue, the Southeast, the Downtown, Eastside and the College Park/University Heights. Streetscaping and historic house

recycling is the focus of funds in the Pleasant Street/Fifth Avenue district. Historic Preservation is a redevelopment tool used in these areas.

Grant Programs

The National Trust for Historic Preservation has several sources of funding to assist localities in developing and implementing a preservation plan. The *Preservation Services Fund* are designed to encourage preservation at the local level by providing seed money for preservation projects. The grant range is $500 to $5,000 while most average $1,000 to $2,000 and the money is typically awarded to consultant services, preservation education, and co-sponsored conferences. The *National Preservation Loan Fund* (NPLF) provides loans of up to $150,000 at lower-than-market rates (usually at prime). These funds are generally awarded as below-market rate loans but loan guaranties lines of credit, interest subsidies and participation agreements with other lenders may also be available. NPLF awards can be used to acquire, stabilize, rehabilitate, or restore a historic property for use, lease, or resale; establish or expand a revolving fund either to acquire and resell properties or to make loans for acquisition and rehabilitation costs. Also available is the *Inner Cities Venture Fund,* which provides a combination of grants and loans to communities for the sole purpose of rehabilitating historic properties. These sources of funding are competitive but are not available every year.

State Historic Preservation Office

The following are funding sources from the Bureau of Historic Preservation that are available:

Special Category Grant
Planning Grant
Grant-in-Aid
Historical Museums Grant-In-Aid program

V. ANALYSIS OF ISSUES

Amendments based on the ~~1998~~ 2001-2010 Evaluation and Appraisal Report

The City has been very successful in surveying historic properties and neighborhoods since 1991 and assessing their historic significance. Since 1993, the City has surveyed and documented 7 neighborhoods or themed buildings for listing on the National or Local Register of Historic Places of which several are potentially eligible for listing on at least the Local Register of Historic Places (N.W. Fifth Avenue/Florida Court, Downtown, Golfview, the Chert structures, Hibiscus Park/Palm Terrace/Annis Terrace/University Park and the Northeast and Southeast Historic District Expansions).

The City has also made comprehensive plan-mandated changes to the Land Development Code to facilitate historic preservation. In 1995, the City adopted the *Ad Valorem Tax Exemption for Historic Properties* and Alachua County followed suit ~~soon~~ thereafter.

The City adopted amendments to the Land Development Code which allow for "modification of existing zoning requirements" where an applicant can demonstrate that the proposed modification is consistent with the historic development patterns of the neighborhood. The City adopted amending the Standard Building Code ~~this year~~ to allow flexible application in reviewing historic properties.

Since the 2001-2010 Historic Preservation Element, the district maps have been adopted with building footprints and the inclusion of structures that have become significant and the *Historic Preservation Rehabilitation and Design Guidelines* were adopted.

The City has not been as successful in implementing the plan in the areas of archaeological protection until this year. A survey of undisturbed archaeological sites has not been conducted to determine a probability archaeological map nor has the City amended its ordinance to include heritage tourism. ~~However, preliminary work is being done to identify aspects that can be amended into the ordinance.~~ In addition to disturbances due to development, several sites within the City have been looted A protection ordinance should be part of the plan to protect and recover those archaeological resources. The adoption of ~~an archaeological~~ a city-wide archaeological sensitivity map to indicate the probability of archaeological sites would assist the development community during the planning process. Working with the Florida Master Site File office, the city has developed a GIS list of all the sites within the city limits.

Although the City of Gainesville has substantially met the goals, objectives and policies of the Historic Preservation Element, it did not provide strategies for the following areas:

- The EAR found that the Pleasant Street neighborhood continues to have ~~had sustained significant~~ demolition activity that has undermined its integrity. The reasons for this are complex and are summarized below.

- Demolition is a viable alternative due to the high rehabilitation costs in the neighborhood and the low post-rehabilitation housing prices. The financial economic downturn has created further pressures of the lack of fund for routine maintenance. ~~A 1997 report by Community Development Department staff showed median housing rehabilitation costs to be approximately $43-$48 per square foot, with the most expensive rehabilitation costs to be approximately $56 per square foot. The median sales price for a rehabilitated historic home has been approximately $37 per square foot. Alternatively, new construction costs and sales have ranged between $40 and $42 per square foot.~~

- High rehabilitation costs in Pleasant Street result from "demolition by neglect" by the landowners. Failure to maintain the structure inevitably causes the building to fall into decline deferring the costs of maintenance on later parties. The magnitude of the problem in Pleasant Street is illustrated by the following. In a June 1993 survey of the Pleasant Street Historic District, 58 buildings were identified as boarded or vacant. A resurvey of the neighborhood in April 1997 showed that approximately 43 buildings

were boarded. Thirty-two buildings that were identified on the June 1993 survey remain boarded in April 1997. However, a net 11 additional buildings have been added to the list indicating that many of the dwellings presently inhabited are reaching the end of their economic life and will be boarded in the future. This trend, maybe not to this extent of previous years, but continues to shadow the neighborhood and the "demolition by neglect" is the reason for contributing structures to the district being demolished. This jeopardizes the Pleasant Street Historic District's standing as a historic district.

To address this problem, the EAR recommended that that the City continues to identify programs that accelerate rehabilitation in the Pleasant Street Historic District. A proactive Code Enforcement initiative is also needed in the neighborhood.

~~Another issue identified in the EAR concerned proposed development in neighborhoods surrounding the University of Florida. The City of Gainesville 1991-2001 Comprehensive Plan calls for high-density development in the University Heights/University Place, Florida Court and University Terrace neighborhoods. But these areas contain significant historic resources, are economically viable, and are an option to students and others who do not seek higher density, apartment living. The City has developed minimum design standards for these areas, which will help moderate, the impacts of density on these areas, while simultaneously preserving architecturally significant neighborhoods.~~

Residential Conservation Districts

Municipalities in several ways have developed "Conservation districts" areas. First, some communities have used them as a buffer zone against incompatible development in areas adjoining historic districts that are not regulated through historic preservation. Secondly, they have been used within historic districts to regulate work on noncontributing buildings that typically are unregulated under historic preservation regulations. Finally, communities have used conservation district status to protect neighborhoods from loss of further integrity, to preserve a unique neighborhood or area of the community, or so the area can reach historic district status intact.[26]

Frequently, conservation areas include but are not limited to those neighborhoods that are architecturally noteworthy. Other features that are considered worth preserving include topography, vegetation and space "that create an image of stability, comfort, local identity,

[26] Conservation district programs are widely varied in terms of their objectives. Some value the architectural and historical character of neighborhoods, which are not eligible for historic district listing, while others promote neighborhood revitalization. (The City of Gainesville has a "Residential Conservation zoning district" designed primarily to regulate small lots in older neighborhoods.) The degree to which historic preservation is emphasized in conservation districts typically depends on which department within the planning agency administers the program.

and livable atmosphere."[27] In some instances, use of conservation districts has no regulatory burden on the residents or owners of property in the neighborhood. Instead, the main burden of implementation falls upon the municipality in assessing impacts of public projects on the neighborhood. In most instances, however, some restrictions on demolition and some review of new construction is required focusing on building height, scale, placement and setback, and materials. Binding review of architectural alterations is typically not required.[28]

Gainesville has several neighborhoods that are architecturally distinctive and/or are threatened by loss of integrity. The Golfview Estates, Hibiscus Park, Palm Terrace, and Forest Park neighborhoods, for instance, are proximate to the University of Florida and have suffered decline because of student rentals yet these areas are also significant to the development and architectural history of the city. In particular, many houses in Golfview, Hibiscus Park, and Palm Terrace date back to the 1920s, while Forest Park (north of the College Park neighborhood) is a fine example of a subdivision that developed immediately after the Second World War.

The City should also consider the use of eminent domain to secure properties at risk and either rehabilitate for future sale or giving them away to persons willing to homestead the properties. The City could also use its condemnation powers to assemble land either vacant or occupied by less significant houses to lure larger projects into the neighborhood.

Demolition by Neglect/Affirmative <u>or Minimum</u> Maintenance Ordinance

The outright demolition of structures is the primary threat to cultural resources facing local review boards. However, because the boards have the regulatory power of refusing demolition permits, they exercise considerable control over the demolition process and can often prevent the destruction of historic properties. A more covert form of demolition is that of intentionally neglect whereby a property is allowed to fall into structural disrepair without technically violating historic preservation ordinances. This

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[27] Robert Stipe, "Conservation Areas: A New Approach to an Old Problem" in *Local Preservation*. Published by the National Park Service, July 1993.

[28] The City of Nashville has developed a "conservation district" model, which seeks to preserve the architectural character of a historic neighborhood while not imposing full historic district status. The program is designed to prevent the loss of architecturally or historically important buildings and prohibit new development that is not in character with the neighborhood. The guidelines for new construction recognize that "new buildings should not imitate past architectural styles...and construction in a historic district has usually taken place continuously…" As a result, "new buildings should continue this tradition while complementing and being compatible with other buildings in the area". To implement this direction, the city has developed a "contextualist" approach whereby new construction is guided by four principles: height, scale, setback and rhythm of spacing, and relationship of materials, texture, details and materials.

Preventing alterations that lessen the architectural importance of buildings moderates additions to existing buildings. Compatibility in scale, materials, and texture is emphasized and additions are encouraged in areas not visible from the public right of way.

neglect typically renders future rehabilitation efforts infeasible or financially prohibitive and accomplishes the same objective as direct demolition but with the more nefarious effect of driving down neighborhood property values while standing empty and derelict.

Many localities counteract this process through affirmative maintenance or demolition-by-neglect (DBN) ordinances. The design of these ordinances is to require landowners to maintain their property in a minimally acceptable manner through the application of existing structure standards.

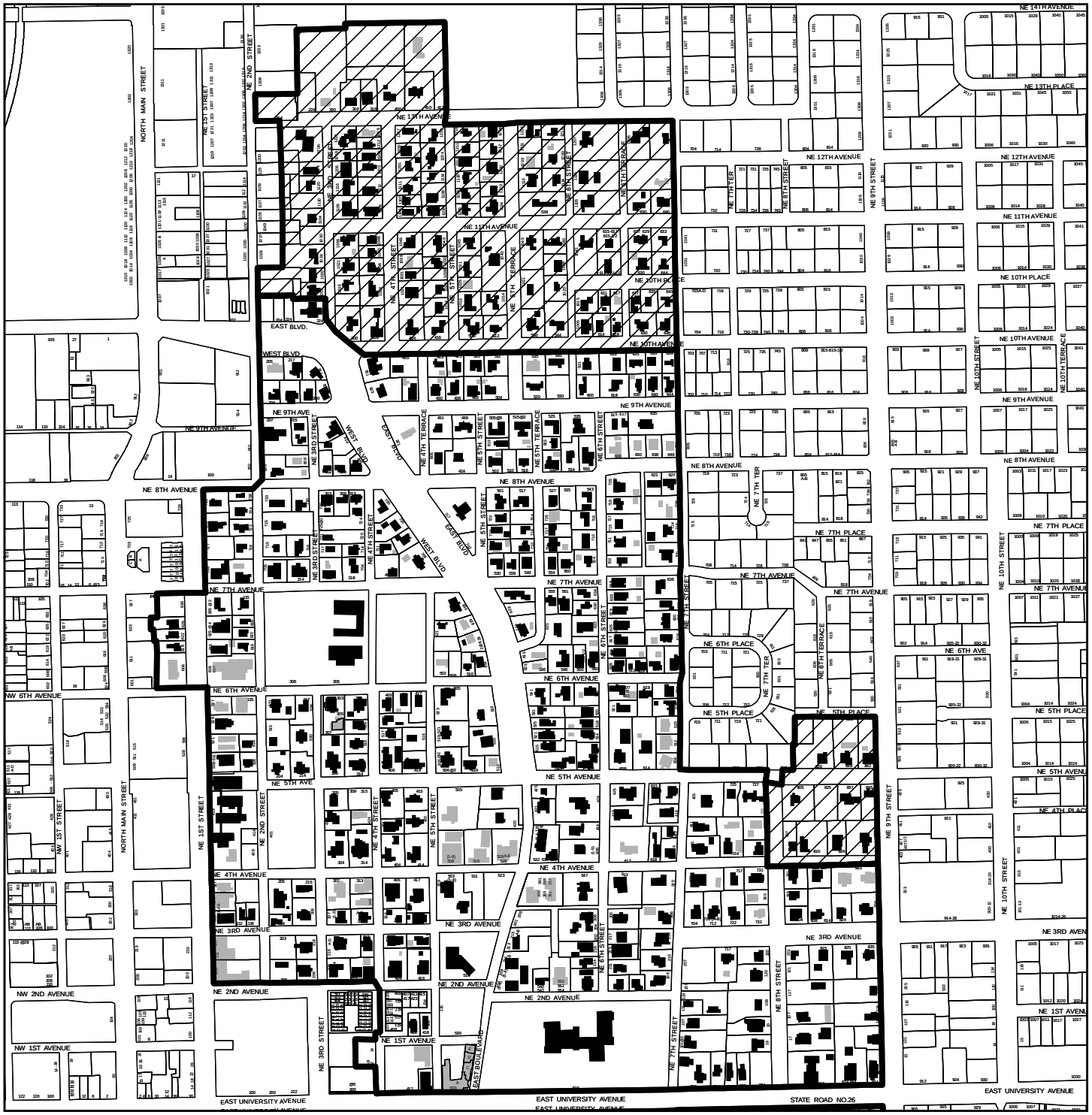
In partnership with the University of Florida's Levin College of Law, Conservation Clinic, the City has researched the effect of taking claims under Federal, Florida Law, and the Bert J. Harris, Jr. Private Property Rights Protection Act claims on demolition by neglect and minimum maintenance ordinances. Proposed amendment to the City of Gainesville's Historic Preservation Ordinance have been identified to be incorporated into the updating on Section 30-112.

Map 1

110168D

HISTORIC PRESERVATION ELEMENT

Northeast Gainesville
Residential Historic District



Legend

- Historic District Boundary
- Added in 1997

Historic Structures

Status

- Contributing
- Non-Contributing

City of Gainesvillle
Gainesville, Florida

Prepared by the
Planning Department
February 2011

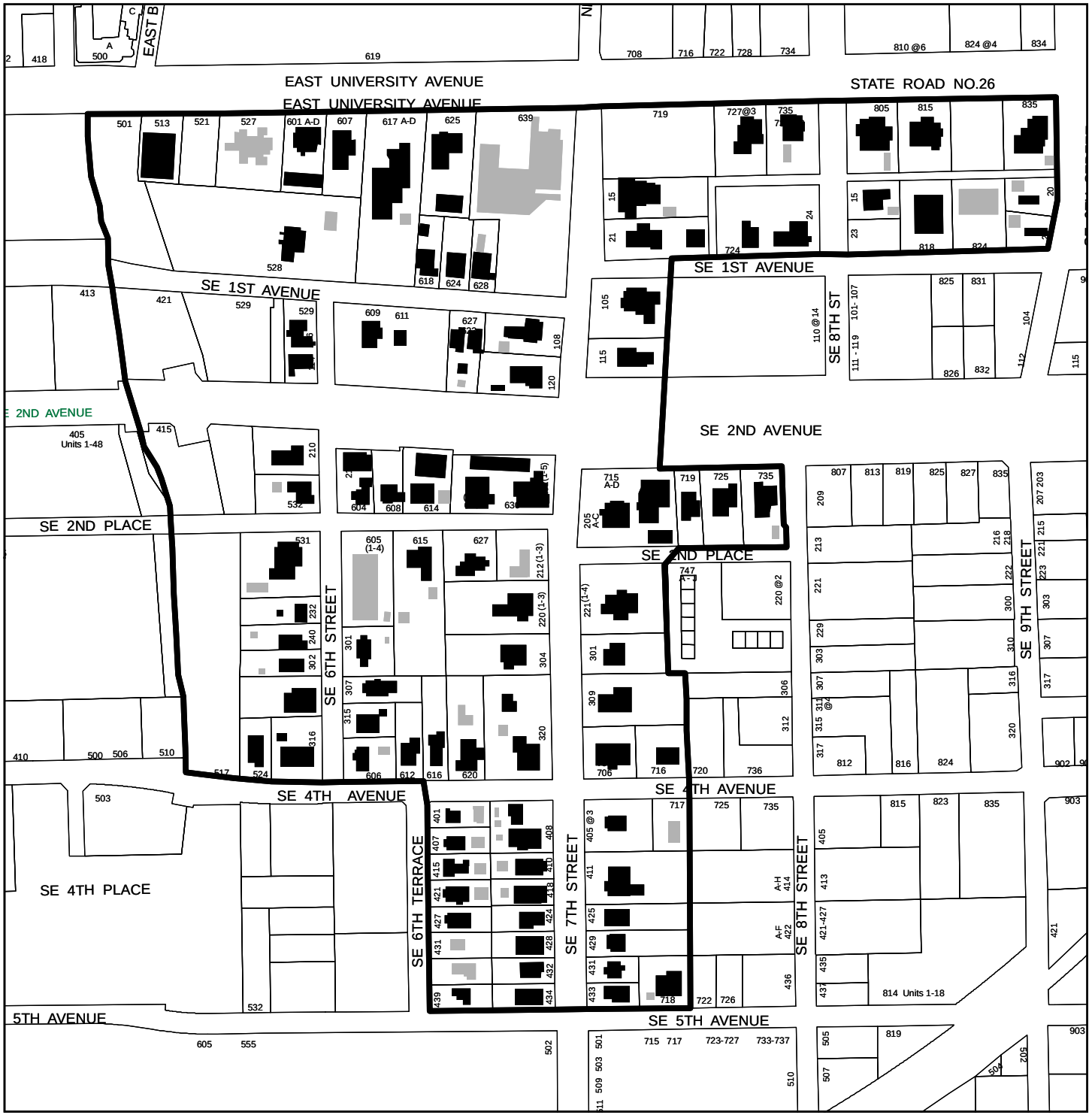
0 205 410 820 Feet

Map 2

HISTORIC PRESERVATION ELEMENT

110168D

Southeast Gainesville Historic District



Legend

- Historic District Boundary

Historic Structures

Status

- Contributing
- Non-Contributing

City of Gainesvillle
Gainesville, Florida

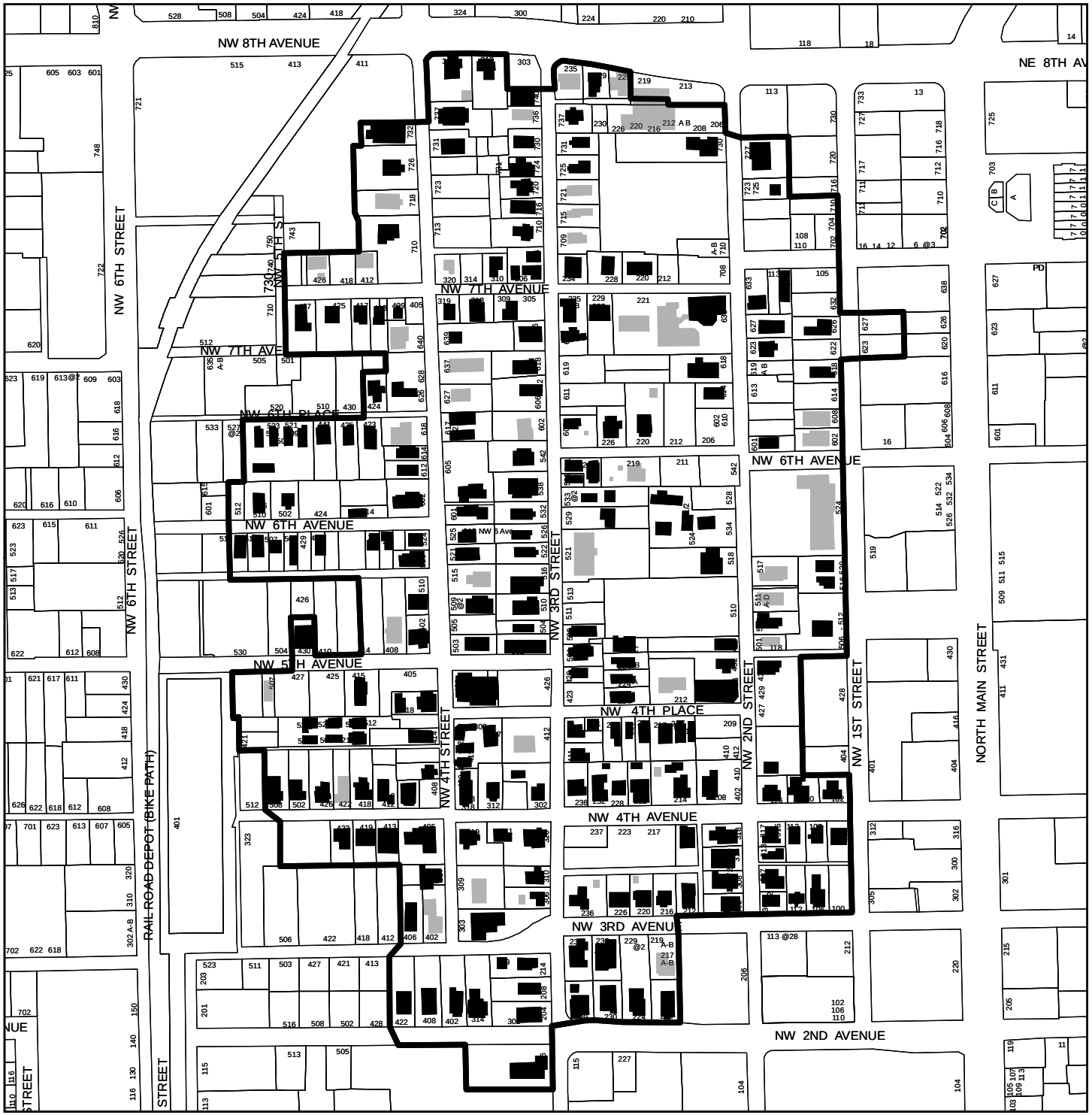
Prepared by the
Planning Department
February 2011

0 100 200 400 Feet

Map 3

HISTORIC PRESERVATION ELEMENT 110168D

Pleasant Street Historic District



Legend

- Historic District Boundary
- **Historic Structures**
- **Status**
  - Contributing
  - Non-Contributing

City of Gainesvillle
Gainesville, Florida

Prepared by the
Planning Department
February 2011

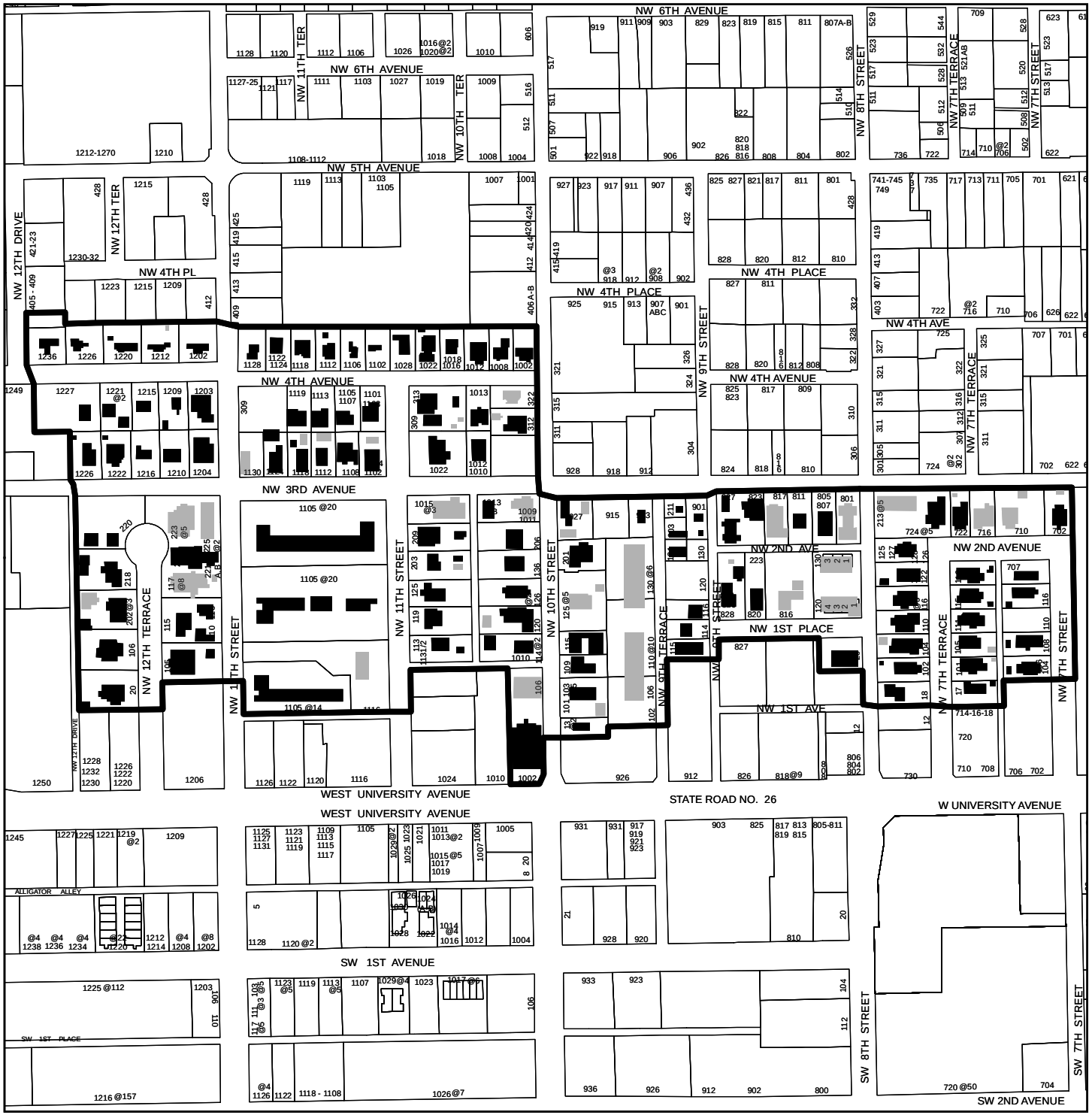
0 125 250 500 Feet

Map 4

110168D

HISTORIC PRESERVATION ELEMENT

University Heights Historic District - North



Legend

- Historic District Boundary

Historic Structures

Status

- Contributing
- Non-Contributing

City of Gainesvillle
Gainesville, Florida

Prepared by the
Planning Department
February 2011

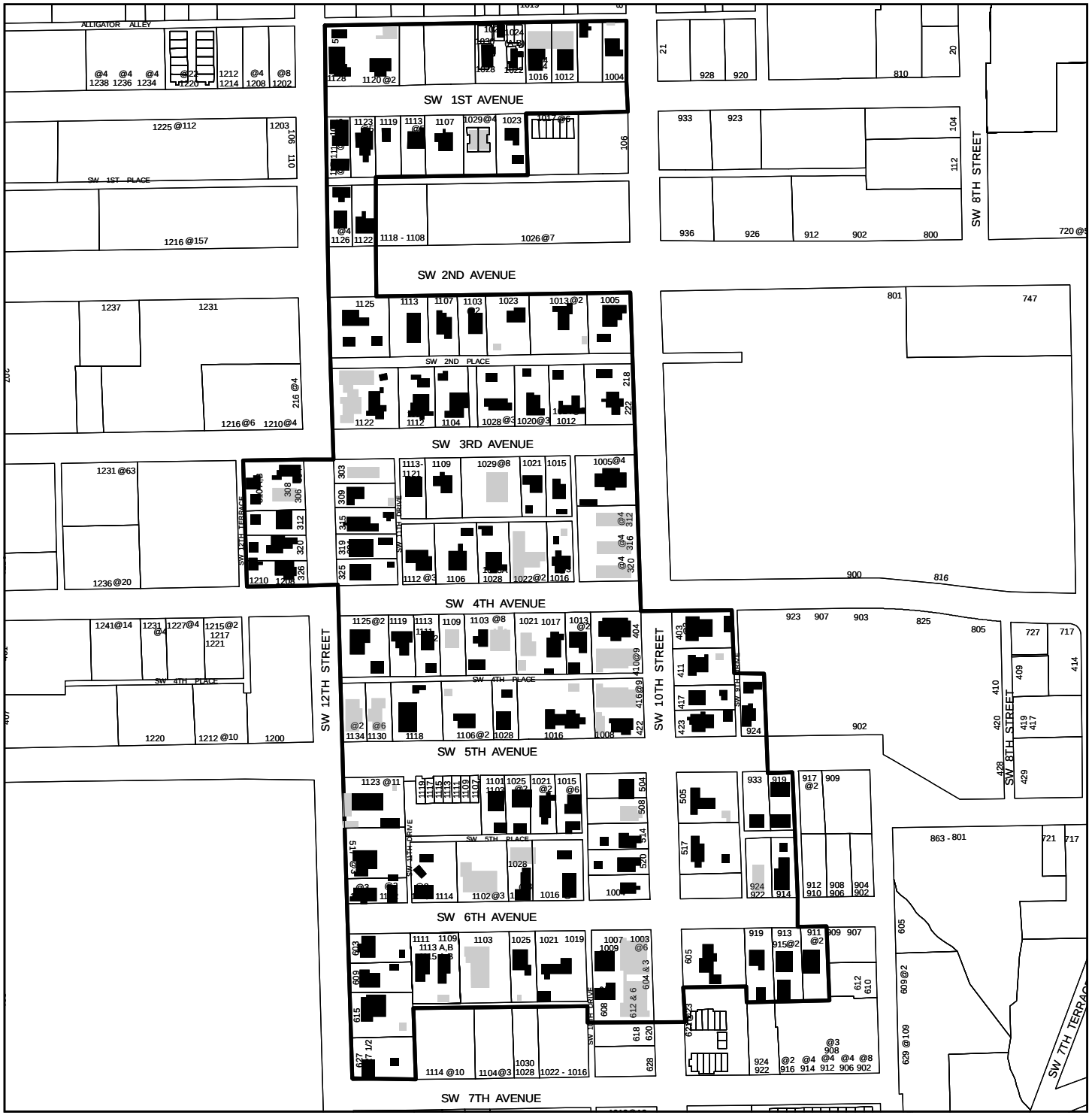
0 100 200 400 Feet

Map 5

110168D

HISTORIC PRESERVATION ELEMENT

University Heights Historic District - South



Legend

- Historic District Boundary

Historic Structures

Status

- Contributing
- Non-Contributing

City of Gainesvillle
Gainesville, Florida

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Planning Department
February 2011

0 100 200 400 Feet

110168D

HISTORIC PRESERVATION ELEMENT

University of Florida Historic District

Legend

- National Historic Register Buildings
- UF Historic District
- UF Historic Impact Area

Historic Buildings

1. Plaza of the Americas
2. University Auditorium
3. Walker Hall
4. Peabody Hall
5. Smathers Library
6. Bryan Hall
7. Anderson Hall
8. Flint Hall
9. Leigh Hall
10. Griffin-Floyd Hall
11. Rolfs Hall
12. Newell Hall
13. Ustler Hall
14. Buckman Hall
15. Sledd Hall
16. Thomas Hall
17. Infirmary
18. Reid Hall
19. Florida Gymnasium
20. Carleton Auditorium
21. Weil Hall
22. Tigert Hall
23. University Police
24. HUB
25. Yulee Hall
26. Mallory Hall
27. Norman Hall
28. Dauer Hall
29. Fletcher Hall
30. Murphree Hall
31. Matherly Hall
32. Century Tower

City of Gainesvillle
Gainesville, Florida

Prepared by the
Planning Department
February 2011

340 170 0 340 Feet

Goals, Objectives & Policies

Housing Element

OVERALL GOAL: ENCOURAGE A SUFFICIENT SUPPLY OF ADEQUATE, DECENT, SAFE, SANITARY, HEALTHY AND AFFORDABLE RENTAL AND OWNER-OCCUPIED HOUSING FOR ALL INCOME GROUPS.

GOAL 1

ASSIST THE PRIVATE AND NON-PROFIT HOUSING SECTOR IN PROVIDING HOUSING FOR LOW-INCOME, VERY LOW-INCOME, AND EXTREMELY LOW-INCOME HOUSEHOLDS.

Objective 1.1 **Provide technical assistance and information on available City-owned parcels for low-income, very low-income and extremely low-income housing developments to private or non-profit housing providers who request housing assistance.**

Policy 1.1.1 The City shall maintain a working relationship or partnership with the private sector by disseminating information in the form of brochures annually on new housing techniques involving innovative ways to save energy and water, utilize alternative building materials, better protect indoor air quality and encourage cost-effective construction techniques. Brochures on codes and grants available to facilitate the production of affordable housing for low-income, very low-income, and extremely low-income residents will also be made available.

Policy 1.1.2 The City shall provide available City-owned parcels to private and non-profit housing developers for the development of affordable housing for low-income, very low-income, and extremely low-income households.

Policy 1.1.3 The City shall develop City-owned scattered site lots with affordable single-family residential units.

Revised 03/04/02, Ord. 991268
Revised 08/15/13, Ord. 120370

Policy 1.1.4 The City shall review and evaluate zoning and other regulations that pertain to housing to insure that requirements continue to be reasonable and do not unduly limit opportunities for lower income groups to secure housing in desirable locations.

Policy 1.1.5 The University of Florida (UF) and the private sector shall be responsible for providing housing for college students.

Policy 1.1.6 Housing programs and projects, where feasible, shall be coordinated with Alachua County, the Housing Authorities and any other groups involved in providing affordable housing.

Policy 1.1.7 Lobby the State Legislature for broad based sources of recurring revenue to provide funds to pay for the construction of new housing units for low-income, very low-income, and extremely low-income households.

Policy 1.1.8 The City shall provide Fast Track permitting to streamline the review process for new residential, residential additions and residential interior remodeling applications.

Objective 1.2 Provide a variety of housing types and densities for moderate-income, low-income, very low-income, and extremely low-income people.

Policy 1.2.1 The Housing and Community Development Division and Planning and Development Services Department, through the First Step Program, shall assist private and non-profit housing developers in identifying sites for moderate-income, low-income, very low-income and extremely low-income housing.

Policy 1.2.2 The City shall allow mobile home parks in areas designated Residential-Low on the Future Land Use Map.

Policy 1.2.3 The City shall allow manufactured housing built to the Standard Building Code in residential areas as designated on the Future Land Use Map.

Policy 1.2.4 The City shall provide the opportunity for zero lot line and cluster subdivisions as incentives for low-income, very low-income, and extremely low-income housing.

Policy 1.2.5 The City shall support the dispersal of low-income, very low-income and extremely low-income housing units throughout the City by providing housing densities throughout the City that will allow low-income, very low-income and extremely low-income housing to be provided by the private sector. The City shall use Community Development Block Grant Funds and Section 8 Programs, the Home Investment Partnerships Grant (HOME) and

State Housing Initiative Program (S.H.I.P.), as well as not-for-profit organizations in the State, to support the dispersal of affordable housing units throughout the City.

Policy 1.2.6 The City shall coordinate with Alachua County on the development of a countywide "fair share" housing ordinance for the dispersal of affordable housing units.

Objective 1.3 The City shall allocate sufficient acreage in appropriate locations to meet the housing needs of the City's residents.

Policy 1.3.1 The Future Land Use Element shall designate land for residential use to meet housing needs through the year 2023, including workforce housing as defined in Section 380.0651(3)(h), F.S. as well as moderate-income, low-income, very low-income and extremely low-income housing, including mobile homes.

Objective 1.4 The City shall collaborate with private homeowners and landlords to rehabilitate substandard housing units and demolish dilapidated housing units to ensure that all housing units within the City meet the City's Minimum Housing Code.

Policy 1.4.1 The City shall enforce the Minimum Housing Code by working with private homeowners and landlords to rehabilitate substandard units and to deconstruct or demolish dilapidated units to ensure all housing units meet the code.

Policy 1.4.2 The City shall inspect dangerous buildings, regardless of location, to ensure that all housing units within the City meet the City's Minimum Housing Code.

Policy 1.4.3 The City shall spend Community Development Block Grant (CDBG) and HOME funds in accordance with an adopted multi-year plan (the Consolidated Plan).

Objective 1.5 The City shall collaborate with architects, designers and other housing professionals (providers) to encourage the innovative design of affordable housing.

Policy 1.5.1 The City shall seek innovative ways to encourage affordable housing, which could include use of alternative building materials, reduced lot size requirements, design competitions for affordable housing, and a design advisory committee to advise housing providers on the development of affordable housing designs.

GOAL 2

PROVIDE ALL RESIDENTS OF THE CITY OF GAINESVILLE WITH A FAIR HOUSING OPPORTUNITY.

Objective 2.1 **Provide fair housing opportunities for all residents of Gainesville, regardless of race, religion, sex, age, handicap, family status or national origin.**

Policy 2.1.1 The City shall promote an equal opportunity for people to attain the housing of their choice by implementing the provisions of the City of Gainesville Code of Ordinances, Chapter 8, Article V, Fair Housing.

Objective 2.2 **Provide sufficient opportunity for the siting of group homes, foster care facilities, shelters for the homeless and elderly housing.**

Policy 2.2.1 The City shall comply with the State Department of Children and Families regulations concerning the provision of information on requirements and procedures for siting group homes and foster care facilities.

Policy 2.2.2 The City shall allow foster family homes for children and adults, adult day care homes and family day care homes in all residential districts.

Policy 2.2.3 To guide group home facilities into appropriate sites in dispersed locations, the City shall provide siting guidelines and requirements that are consistent with the site selection provisions of Section 419.001, F.S., for units licensed by the Florida Department of Children and Families. Such guidelines ensure adequate dispersal throughout the community.

Policy 2.2.4 The City's Land Development Code shall designate areas throughout the City where housing for the homeless is allowed. Some criteria for such designations include proximity to public transportation routes, social service agencies, employment centers and medical services, and potential impact on existing and future neighborhoods and businesses.

Policy 2.2.5 The City shall examine methods to mitigate the special needs of the homeless, including living arrangements for homeless families with children, transitional housing for the employed homeless such as single-room occupancy (SRO) facilities, and low demand or "safe space" shelters (safe, alternative locations for the homeless that are separate from emergency shelter facilities and that provide weather protection, security, bathroom and shower facilities, lockers, telephones and locations that are within walking distance of social service facilities).

Policy 2.2.6 The City shall encourage the development of elderly housing near activity centers and bus routes by providing sufficient siting opportunities that allow congregate living facilities in multi-family areas near bus routes and activity centers.

GOAL 3

THE CITY, WITH THE ASSISTANCE OF PRIVATE AND NON-PROFIT ORGANIZATIONS, SHALL MAINTAIN SOUND VIABLE NEIGHBORHOODS AND REVITALIZE THOSE THAT HAVE SUFFERED DISREPAIR AND NEGLECT.

Objective 3.1 **The City shall develop housing programs to implement the goals, objectives and policies of the Housing Element.**

Policy 3.1.1 The City shall work with neighborhoods on housing issues.

Policy 3.1.2 The City shall maintain and rehabilitate publicly owned infrastructure and facilities in older neighborhoods in order to prevent neighborhood decline.

Policy 3.1.3 The Historic Preservation Program shall identify historically significant housing and promote the conservation and restoration of housing that has special historic, architectural or aesthetic values.

Policy 3.1.4 The City shall help neighborhoods develop plans that address neighborhood character, stability, housing, safety, infrastructure, and historic resources.

Policy 3.1.5 The City shall facilitate communication and dialogue with neighborhood groups regarding proposed developments in and around their neighborhoods.

Policy 3.1.6 Local non-profit agencies that work to preserve and rehabilitate neighborhood housing stock, such as the Neighborhood Housing and Development Corporation (NHDC), shall complement the City Housing and Community Development Division as the major entity in preventing the decline of low-income, very low-income, and extremely low-income neighborhoods.

Policy 3.1.7 The City shall coordinate with and fund the efforts of non-profit agencies, such as the Neighborhood Housing and Development Corporation and the Central Florida Community Action Agency (CFCAA), to provide assistance for housing conservation and rehabilitation in low-income, very low-income, and extremely low-income redevelopment areas of the City.

Policy 3.1.8 The City shall update the Data and Analysis section of the Housing Element for the City of Gainesville Comprehensive Plan no later than 18 months after publication of the 2010 census housing data.

Policy 3.1.9 Realizing the connection between economic stability and the preservation of affordable housing, the City, through technical assistance and loan programs for economic development, shall provide economic development assistance to low-income, very low-income, and extremely low-income areas in order to create and retain jobs and to enhance and preserve surrounding neighborhoods.

Revised 03/04/02, Ord. 991268
Revised 08/15/13, Ord. 120370

Policy 3.1.10 The City shall study the feasibility of an in-town housing program that would utilize pre-approved housing designs that are appropriate for specific locations where affordable housing should be encouraged. The approved plans and associated building permits would be fully processed and made available to interested builders to reduce costs and delays.

Policy 3.1.11 The City shall allow Heritage Overlay Districts, as needed, for neighborhood stabilization.

Objective 3.2 Assist low-income, very low-income and extremely low-income households each year with the maintenance and repairs of owner-occupied units.

Policy 3.2.1 The City shall make available to all residents, especially low-income, very low-income, and extremely low-income households, a do-it-yourself manual on routine home repairs, maintenance and yard care.

Policy 3.2.2 The City shall designate CDBG funds or other funds for homeowner rehabilitation grants to assist low-income, very low-income, and extremely low-income households.

Objective 3.3 Assist low-income, very low-income, extremely low-income, and moderate-income households each year in locating and affording low-cost rental and owner-occupied housing.

Policy 3.3.1 The City Housing and Community Development Division shall act as a housing information and referral service for first-time homebuyers and renters.

Policy 3.3.2 The City shall seek funds from both the State and Federal government in order to provide financial assistance to first time moderate-income, low-income, very low-income, and extremely low-income homebuyers.

Objective 3.4 The City shall assist all residents displaced by redevelopment activities involving Federal, State or local government funds.

Policy 3.4.1 The City shall assist all displaced persons by complying with regulations stated in the Uniform Relocation Act and the City of Gainesville Local Relocation Policy and Procedures, as applicable.

Objective 3.5 The City shall develop strategies to increase the level of owner-occupancy in the University Context Area.

Policy 3.5.1 The City shall develop recommendations on increasing the desirability of owner-occupancy in the University Context Area.

GOAL 4

ENSURE HOUSING DEVELOPMENT DOES NOT NEGATIVELY AFFECT THE GAINESVILLE ENVIRONMENT.

Objective 4.1 **The City's Land Development Code shall ensure that new housing developments preserve on-site environmental features and conserve environmental resources.**

Policy 4.1.1 The City shall encourage infill housing and cluster subdivisions in order to protect environmentally sensitive lands and to promote energy conservation.

Policy 4.1.2 The City's Land Development Code shall guide the siting, building orientation and landscaping of new housing developments to promote energy and water conservation, ensure compatibility with the surrounding area, minimize impacts on the environment, and enhance visual appeal.

Revised 03/04/02, Ord. 991268
Revised 08/15/13, Ord. 120370

Housing Data and Analysis Report

Introduction

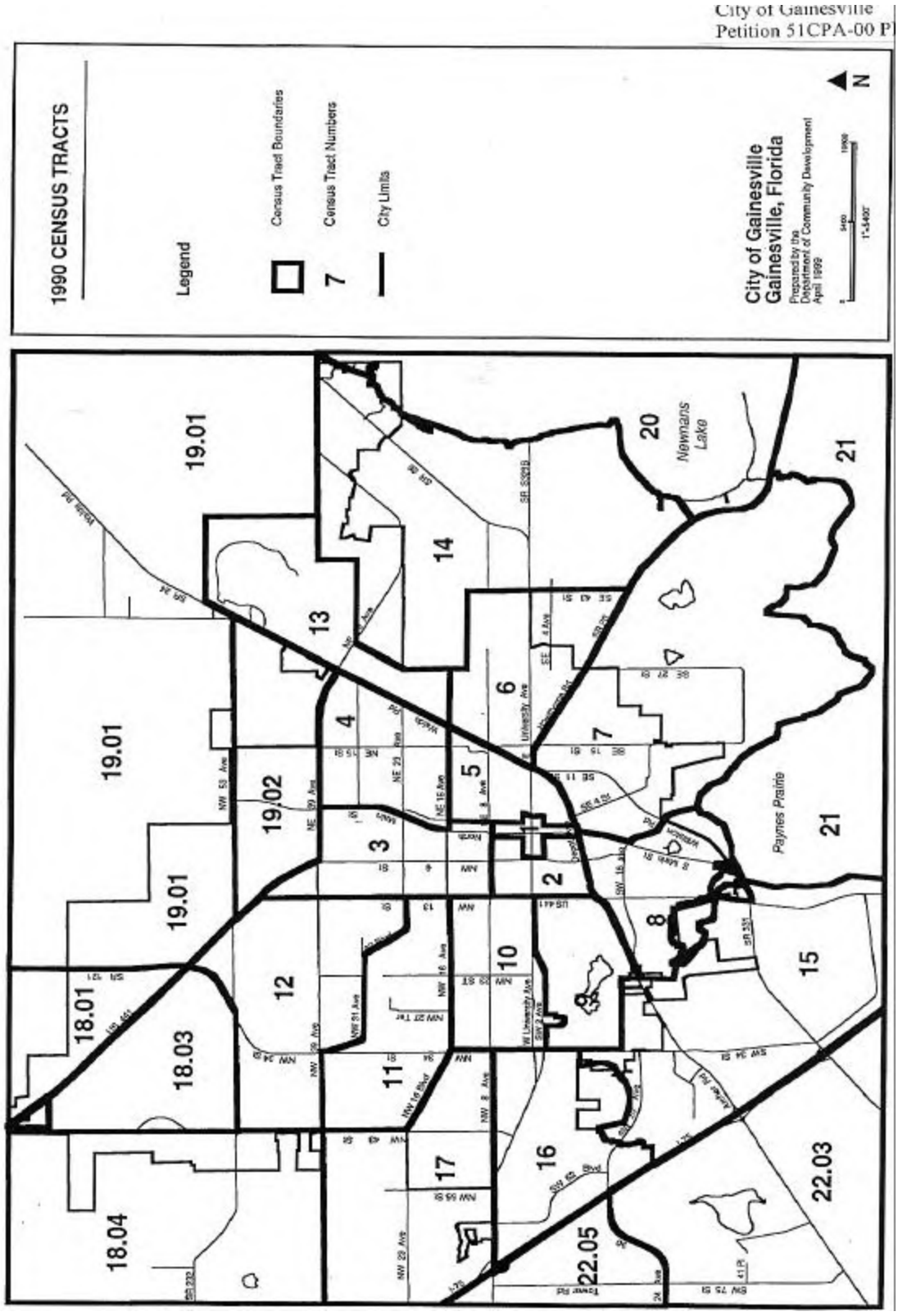
Housing, in addition to food and clothing, represents one of the three basic needs required for human survival. Housing does more than just shelter us from the elements, it provides us with a place of comfort and promotes our sense of well being. Unfortunately, many City residents are unable to obtain safe and adequate housing due to high housing costs, low incomes and special needs. In fact, housing cost usually represents the largest single expense for most households. Others must live in such substandard housing conditions that their shelter is considered uninhabitable by today's housing standards. For these reasons and others, the City of Gainesville must determine what kind of housing exists, who lives here, and whose housing needs are not being met. The City must not only consider the needs of its existing population but its future population as well. The City must ensure that residential land will be available to accommodate these new households and that existing households will be adequately housed.

The City of Gainesville's Housing Element will analyze these issues and recommend programs and strategies to address them. The purpose of this Housing Element is to identify existing and future housing needs of the City, include an affordable housing needs assessment (AHNA), and provide solutions through the goals, objectives and policies. The City's Housing Element is also designed to meet the requirements of Chapter 163 F.S. and Rule 9J-5.010, F.A.C., and address issues raised in the evaluation and appraisal report (EAR) of the existing comprehensive plan housing element. There was particular emphasis placed on major issues that were identified throughout the evaluative process that are related to the comprehensive plan and the achievement of goals. Some of the major issues raised in the EAR and addressed in the data and analysis and the goals, objectives and policies include the provision of and dispersion of affordable housing, housing for the homeless and the success of the Cedar Grove II affordable housing development.

One key issue affecting the data and the eventual analysis of this data is the University of Florida. This Element does not include the housing units in Census Tract 9, the University of Florida campus. (See Map 1.) These housing units were omitted in order to give an accurate account of the housing units, which are under the jurisdiction of the City of Gainesville. The University and the State of Florida are responsible for planning all aspects of the provision of on-campus housing. In all instances, the elimination of these housing units from the data is noted in the corresponding data tables. The affordable housing needs assessment that was prepared by the Shimberg Center for Affordable Housing at the University of Florida (UF) subtracts institutional populations from total population estimates before the AHNA projections of permanent population are made. The projections of institutional populations are made separately and these populations are added back to the permanent population projections to produce a final population total. Because a certain portion of the institutional population is considered a

household-forming population, the off-campus portion of the UF headcount is added back to the permanent population (by age) and the total is used to project households.

Map 1


City of Gainesville
Petition 51CPA-00 P
1990 CENSUS TRACTS
Legend
Census Tract Boundaries
Census Tract Numbers
City Limits
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
April 1999
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18.01
18.03
18.04
19.01
19.02
22.03
22.05
Newnans Lake
Paynes Prairie

HOUSING DATA

INVENTORY OF THE EXISTING HOUSING STOCK

Type of Dwelling Units

Based on the 1990 Census data, there were 33,245 (not including 1,363 University of Florida units) housing units in the City of Gainesville as of April 1990. By 1995, the housing unit figure was up to 36,929 (not including 1,470 University of Florida units). Much of the increase (3,483) can be attributed to annexations that occurred between 1990 and 1995.

The City's housing stock includes a mix of both single family detached units and multi-family units (Table 1). Based upon 1995 figures, of the city's housing stock 56.8% are single family units, including the category "Other" which includes living quarters such as houseboats or campers, while 39.4% are multi-family, and 3.8% are mobile homes. Since 1980, the composition of the housing stock has remained relatively stable. The increase in the percentage of mobile homes is due to the annexations that occurred between 1990 and 1995.

Table 1 Housing Type Analysis

Year	Single-family detached		Multi-family		Mobile Homes		Other	
	Number	%	Number	%	Number	%	Number	%
1980	16,474	57.1	11,791	40.9	593	2.1		
1990	17,936	54.0	13,990	42.1	1,035	3.1	284	0.8
1995	21,032*	56.8	14,604	39.4	1,400	3.8	-	
SOURCE: U.S. Bureau of the Census, Dept of Community Development, Shimberg Center for Affordable Housing.								
*Includes single-family plus 'Other'								
Analysis excludes Census Tract 9 (University of Florida)								

Residential Growth Trends

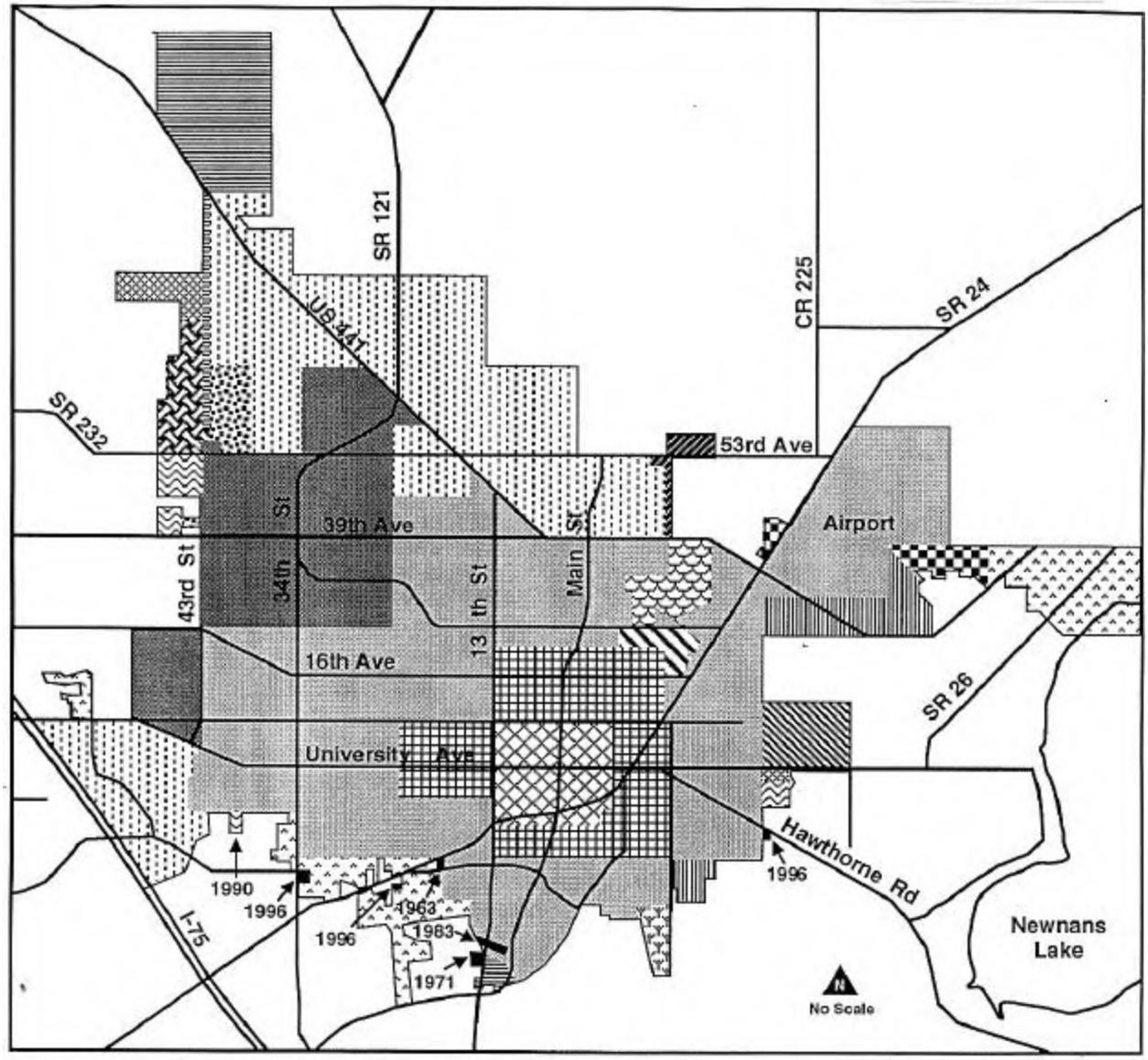
New housing growth has been concentrated in the northwest quadrant of the city, mainly in those areas annexed in 1979 and the areas west of N.W. 34th Street. (See Map 2.) Recently, development has intensified in areas west of the city limits. Map 3 (provided courtesy of Alachua County Planning) indicates the location of site-built residential development from October 1991 through June 1997. It is likely that this trend will continue since these areas have a substantial amount of desirable, vacant land and available infrastructure support.

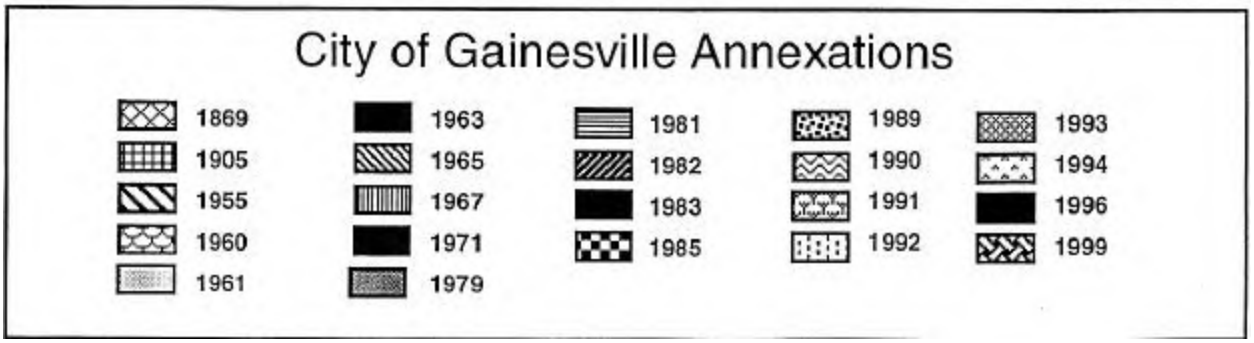
Between 1990 and 1995 the number of housing units has increased by 10.2% (Table 2). A review of the percentage growth in housing units indicates that the largest percentage growth occurred in those districts annexed in 1979. Dividing the city into quadrants reveals that the northeast and southeast quadrant of the city (areas east of Main Street) have not experienced much growth.

While vacant land within the city limits of Gainesville is becoming increasingly scarce in most quadrants of the city, housing development within the city will probably be characterized by more infill development, attached housing and clustered development. This type of development should account for an increasing percentage of new housing starts in Gainesville, except the southeast quadrant where there is a substantial amount of vacant land for residential development.

Map 2

City of Gainesville
Petition 51CPA-00 PB





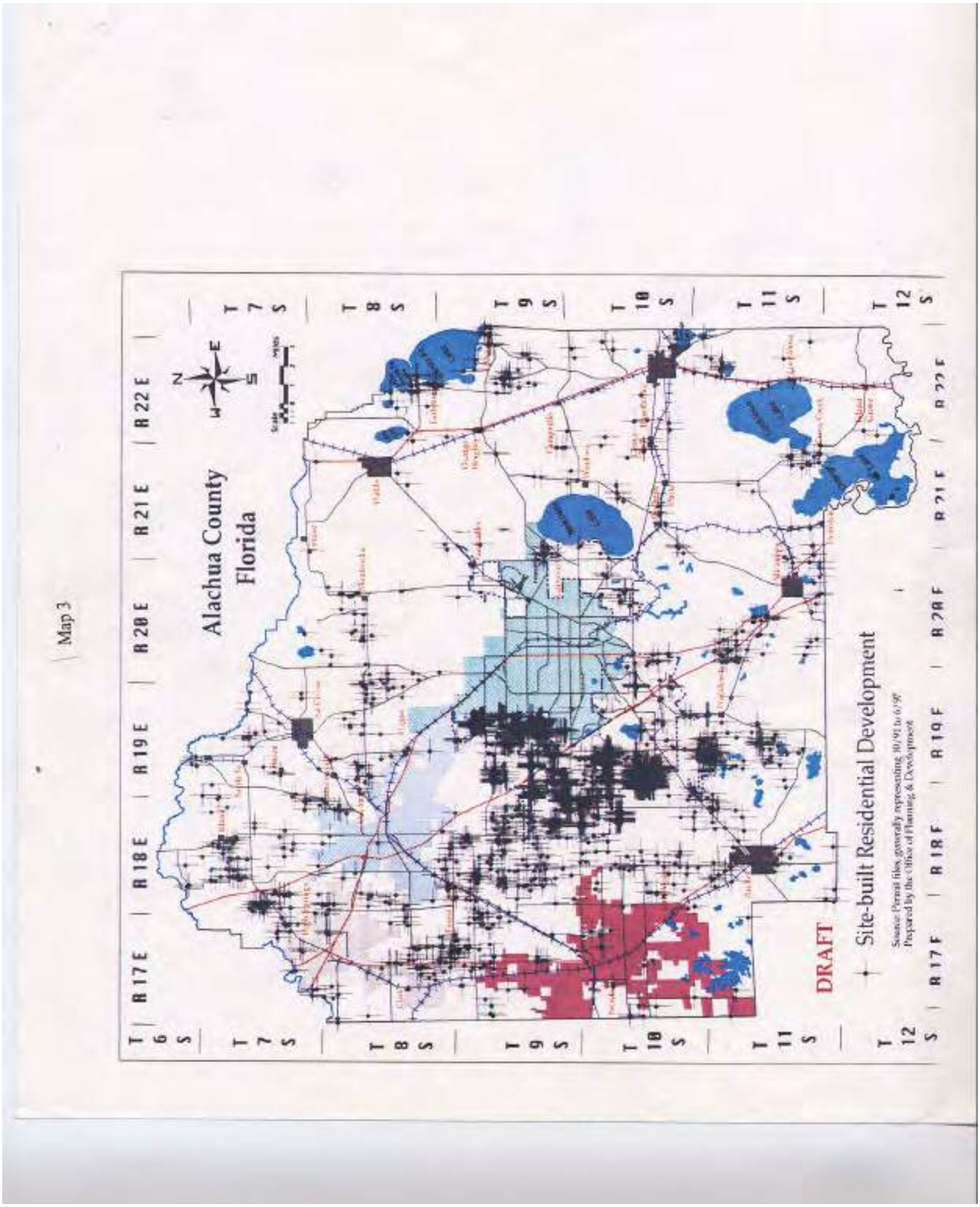

Map 3
Alachua County
Florida
R 17 E
R 18 E
R 19 E
R 20 E
R 21 E
R 22 E
T 6 S
T 7 S
T 8 S
T 9 S
T 10 S
T 11 S
T 12 S
DRAFT
Site-built Residential Development

Table 2 Growth in Housing Units by Building Type

	1980	1990	1995	Percent Growth 1980-1990	Percent Growth 1990-1995
Single-family	16,474	18,220*	21,032*	9.6%	13.4%
Multi-family	11,791	13,990	14,604	15.7%	4.2%
Mobile Home	593	1,035	1,400	42.7%	26.1%
Total	28,858	33,245	37,036	13.2%	10.2%
SOURCE: U.S. Bureau of the Census, Dept of Community Development, Shimberg Center for Affordable					
Housing, 1998.					
*Includes single-family plus 'Other'					
Analysis excludes Census Tract 9 (University of Florida)					

Owner and Renter Occupancy

In 1990, 49.2% of Gainesville's housing units were owner-occupied and 50.8% renter-occupied (Table 3). A comparison of Census tracts indicates that owner occupancy rates vary significantly in Gainesville. Owner occupancy rates are lowest in census tracts 1, 2, 8 and 13. These districts are located close to the University of Florida (Census tract 9) and downtown Gainesville (census tract 1) and have rental occupancy rates that range from 81.0% to 91.0% in student dominated Census tract 8. In contrast, over 70% of the units in the areas annexed by the City in 1979 were owner-occupied.

Age of the Housing Stock

Approximately 50% of the City's housing stock were built between 1960 and 1979. As shown in Table 4, 17,196 of the existing housing units were built during those two decades. Even though much of Gainesville's housing development occurred during the sixties and seventies, the City takes pride in the large number of historically significant houses, which still remain. Of the City's housing stock 13.3% is at least 45 years old. In Census tract 5, which includes the Northeast Historic District, 25.2% of the housing units were built before 1939. This district contains the largest number of units (564) built before 1939. Census tracts 2 and 5 represent areas with the largest share of units being built before 1939.

HOUSING AFFORDABILITY

Because housing satisfies the basic human need for shelter, its cost remains a matter of public concern. It is vital that Gainesville maintains an adequate supply of affordable housing. A housing unit is generally considered affordable if its associated monthly costs (gross rent or mortgage, taxes and insurance) do not exceed 30 to 35% of the household's gross income.

Renter-Occupied Units

In 1990, very low and extremely low-income households included those households whose annual income was less than $10,000 (approximately 50% of the City's median annual household income).

Table 3 Occupancy

Census Tract	Occupied Units	Owner Units	Percent Owned	Renter Units	Percent Rented
1	245	33	13.5%	212	86.5%
2	1978	376	19.0%	1602	81.0%
3	2918	1026	35.2%	1892	64.8%
4	2099	1363	65.0%	736	35.0%
5	2084	1028	49.3%	1056	50.7%
6	1349	711	553.0%	638	47.0%
7	1676	850	50.7%	826	49.3%
8	3688	334	9.0%	3354	91.0%
10	2631	1330	50.5%	1301	49.5%
11	2801	2159	77.1%	642	22.9%
12	3983	2550	64.0%	1433	36.0%
13	25	4	16.0%	21	84.0%
14	157	125	79.6%	32	20.4%
15	0	0	0	0	0
16	1545	591	38.3%	954	61.7%
17	1511	1250	82.7%	261	17.3%
19.01	0	0	0	0	0
18.01	218	211	96.8%	7	3.2
18.03	1581	1033	65.3%	548	34.7%
18.04	87	55	63.2%	32	36.8%
19.02	0	0	0	0	0
Total	30,576	15,029	49.2%	15,547	50.8%

SOURCE: 1990 U.S. Bureau of the Census

Census Tract 9 (University of Florida) was deleted from analysis

Table 4 Housing Units by Year Built

Census Tract	Total Year Round Housing Units	1989-March 1990	1985-1988	1980-1984	1970-1979	1960-1969	1950-1959	1940-1949	1939 or earlier	Percent built 1939 or earlier
1	294	0	11	13	93	18	10	24	109	37.0%
2	2282	44	38	102	150	509	368	570	517	22.6%
3	3289	5	161	262	714	738	676	452	281	8.5%
4	2244	0	98	117	343	1008	510	146	22	0.9%
5	2240	108	168	77	183	243	541	356	564	25.2%
6	1499	5	9	68	271	561	365	150	70	4.7%
7	1861	0	0	59	372	807	428	143	52	2.8%
8	4139	50	523	933	1240	1020	247	126	0	0%
10	2737	8	136	153	421	599	633	573	214	7.8%
11	2989	72	620	492	911	756	130	8	0	0%
12	4205	89	268	771	2149	696	201	20	14	.3%
13	27	0	0	4	0	0	0	21	0	0%
14	275	15	87	85	82	0	0	5	0	0%
15	0	0	0	0	0	0	0	0	0	0%
16	1621	3	10	69	704	501	326	0	8	.5%
17	1558	7	81	22	502	745	198	0	3	.2%
19.02	0	0	0	0	0	0	0	0	0	0%
18.01	229	40	38	138	13	0	0	0	0	0%
18.03	1669	55	295	499	784	36	0	0	0	0%
18.04	87	10	0	50	27	0	0	0	0	0%
19.01	0	0	0	0	0	0	0	0	0	0%
Total	33245	511	2543	3914	8959	8237	4633	2594	1854	
% of total	100.0%	1.5%	7.6%	11.8%	26.9%	24.8%	13.9%	7.8%	5.6%	

SOURCE: 1990 U.S. Bureau of the Census, and City of Gainesville, Department of Community Development, 1993. Note: Census Tract 9 (University of Florida) was deleted from the analysis

As Table 5 indicates, in 1990, 80.9% of those households whose annual income was below $10,000 had monthly rental costs, which consumed over 30% of their income.

Table 5 Rental Housing Costs as a Percentage of Income

Household Income	% of Households with Monthly Housing Costs at 30% or more of Income
Less than $10,000	80.9%
$10,000 - $19,999	60.9%
$20,000 or more	9.4%
Totals	53.3%
SOURCE: U.S. Bureau of the Census, 1990.	

Owner-Occupied Units

Of the homeowners (mortgaged and unmortgaged units) earning less than $10,000, 62.6% paid over 30% of their income for housing (Table 6).

Table 6 Owner-Occupied Housing Cost as a Percentage of Income

Household Income	% of Households with Monthly Housing Costs at 30% or more of income
Less than $10,000	62.6%
$10,000 - $19,999	38.7%
$20,000 or more	7.4%
SOURCE: U.S. Bureau of the Census, 1990.	

Monthly Gross Rent

According to the U.S. Census, the median monthly gross rent (rent plus separate utilities) for renter-occupied housing units in Gainesville was $277 in 1990 (Table 7). Of the 15,528 rental units 23.91% had monthly rents below $300, while an additional 25.07% (3,894 units) fell within the $300-$400 range. The remaining 48.54% of rent paying households spent over $400 a month on rent.

Table 7 Monthly Gross Rent of Renter-Occupied Units

	City of Gainesville	
Gross Rent	Number	Percentage
Less than $100	458	2.95%
$100 to $149	544	3.50%
$150 to $199	630	4.06%
$200 to $249	556	3.58%
$250 to $299	1525	9.82%
$300 to $349	2100	13.52%
$350 to $399	1794	11.55%
$400 to $499	3410	21.96%
$500 to $599	1633	10.52%
$600 to $699	1166	7.51%
$700 to $999	1125	7.24%
$1,000 or more	204	1.31%
No cash rent	383	2.47%
Median Monthly Rent	$277	
Total	15,528	100.00%
SOURCE: 1990 Census of Population and Housing		

Monthly Owner Costs

According to the 1990 Census (Table 8), the median monthly owner costs (including taxes, insurance, and utilities) of an unmortgaged unit in the City was $197, while mortgaged units had median costs of $589. The majority (54.7%) of owners of mortgaged units had monthly owner costs in the $300-$700 range. Seven percent of homeowners with a mortgage paid under $300 per month, and 38.3% had monthly costs over $700.

In 1990, 3,627 (27.4%) of the City's 13,231 owner-occupied housing units were not mortgaged. Of these 3,627 homeowners, 10.6% (383) paid less than $100 in monthly owner costs, while 62.8% (2,279) paid between $100 and $300, and 26.6% had monthly owner costs above $300.

Table 8 Mortgage Status and Selected Monthly Owner Cost

Mortgage Cost	**Number**	**Percentage**
With a Mortgage	9604	100%
Less than $200	128	1.3%
$200 - $299	547	5.7%
$300 - $399	923	9.6%
$400 - $499	1367	14.2%
$500 - $599	1605	16.7%
$600 - $699	1364	14.2%
$700 - $799	1132	11.8%
$800 - $899	765	8.0%
$900 - $999	502	5.2%
$1,000 - $1,249	566	5.9%
$1,250 - $1,499	286	3.0%
$1500 - $1,999	266	2.8%
$2,000 or more	153	1.6%
Median	$589	
Total Owner Occupied	9604	100.0%
Not Mortgaged	3689	
Less than $100	383	10.4%
$100 - $199	1541	41.8%
$200 - $299	1228	33.3%
$300 - $399	362	9.8%
$400 or more	175	4.7%
Median Cost	$197	
Total Owner Occupied Units	13,293	100.0%
SOURCE: 1990 Census of Population and Housing		

Value of Owner-Occupied Housing

In 1990, the median value of owner-occupied housing in Gainesville was $62,362. Approximately 37% of these housing units were valued between $35,000 and $59,000. An additional 37% fell within the $60,000 to $99,999 range. Table 9 illustrates the distribution of housing units by value.

Table 9 Value of Owner-Occupied Housing Units

	City of Gainesville	
Value (1)	Dwelling Units	Percentage
Less than $15,000	206	1.55%
$15,000 - $19,999	152	1.14%
$20,000 - $24,999	217	1.63%
$25,000 - $29,999	284	2.13%
$30,000 - $34,999	371	2.79%
$35,000 - $39,999	652	4.90%
$40,000 - $49,999	2024	15.23%
$50,000 - $59,999	2202	16.57%
$60,000 - $74,999	2595	19.52%
$75,000 - $99,999	2379	17.90%
$100,000 - $149,999	1500	11.28%
$150,000 - $199,999	428	3.22%
$200,000 - $299,999	203	1.53%
$300,000 or more	80	0.61%
Total	13,293	100.00%
Median	$62,362.5	
SOURCE: 1990 Census of Population and Housing		
Note: 1. The value of owner-occupied unit represents the respondent's estimate of how much the property (house and lot) or condominium unit would sell for, if it were for sale.		

HOUSING STOCK COMPARISONS: THE CITY OF GAINESVILLE AND ALACHUA COUNTY

The following section provides data on the significant housing characteristics of Gainesville and Alachua County. The Alachua County statistics do not include the housing stock of the City of Gainesville. The distribution of housing types reflects the fact that Gainesville is more densely settled than the rest of Alachua County. In 1990, 42.1% of the City's housing stock was composed of multi-family units. In comparison, multi-family units accounted for 36.9% of the County's dwelling units. In addition, this comparison reveals that mobile homes, which are a relatively insignificant source of housing in the City (3.1%), make up 21.7% of the County's housing stock (Table 10).

Table 10 Comparison of Housing Types - 1990

	City of Gainesville and Unincorporated Alachua County		
	Number & Percent	Number & Percent	Number & Percent
	Single-family Detached	Multi-Family	Mobile Homes
Gainesville	17,936 54%	13,990 42.1%	1,035 3.1%
Unincorporated Alachua County	15,637 40.5%	14,270 36.9%	8,373 21.7%
SOURCE: 1990 Census of Population and Housing			
City of Gainesville figures do not include Census Tract 9 (University of Florida)			

Gainesville has a higher percentage of housing units built before 1970 than does Alachua County. This reflects the fact that Gainesville has many older, established residential neighborhoods. In addition, the 1990 Census confirms the intensification of new housing development west of the city limits. Fully 20% of the County's housing stock in 1990 was built between January 1985 and March 1990 (Table 11).

Table 11 Housing Units by Year-Built

	City of Gainesville and Unincorporated Alachua County								
	Total Year Round Housing Units	1989-March 1990	1985-1988	1980-1984	1970-1979	1960-1969	1950-1959	1940-1949	1939 or earlier
Gainesville	33,245	511	2,543	3,914	8,959	8,237	4,633	2,594	1,854
	100.0%	1.5%	7.6%	11.8%	26.9%	24.8%	13.9%	7.8%	5.6%
Unincorporated Alachua County	38,648	1,562	6,885	9,859	13,516	3,682	1,676	763	705
	100.0%	4.0%	17.8%	25.5%	35.0%	9.5%	4.3%	2.0%	1.8%
SOURCE: 1990 Census of Population and Housing									
City of Gainesville figures do not include Census Tract 9 (University of Florida)									

While the City of Gainesville has a relatively equal number of owner and rental units, Alachua County's housing stock is almost 58% owner-occupied and 42.02% renter-occupied (see Table 43 in Appendix C).

According to the 1990 Census, Alachua County had a slightly larger share of relatively inexpensive owner-occupied housing than did the City of Gainesville. Approximately 20% of Alachua County's owner-occupied housing units were valued at under $40,000 versus only 14% of Gainesville's (see Table 44 in Appendix C). This difference can probably be largely attributed to the fact that mobile homes, which are usually less expensive than conventional housing, account for a greater percentage of the housing stock in the county than in the city.

A comparison of housing cost-to-income between the city and the county indicates that lower income residents (incomes less than $17,667) who live in the city pay more of their income for owner-occupied units than do county residents (see Table 45 in Appendix). The most significant point dealing with housing cost is the difference between the percentage of low income city residents (80.9%) compared to county residents (95.2%) that pay 30% or more of their income toward rental housing cost.

HOUSING CONDITIONS

Gainesville's Housing Conditions Survey, completed in 1992, is the most recent comprehensive assessment of the condition of housing in the City. The survey, which was conducted by the Code Enforcement Division of the then existing Community Improvement Department, evaluated the exterior condition of the housing units. Surveyors evaluated both the extent of deterioration and the number of major and-or minor code violations detected in each unit. Each unit was assigned to one of four categories; standard--good, standard--fair, substandard (needing major repairs), and dilapidated (to be demolished). The following briefly describes the City's adopted definition for substandard housing. The Housing Conditions Survey is located in Appendix C.

Standard Good--less than 3 minor violations.
Standard Fair--3 or more minor violations.
Substandard --has numerous minor violations or a combination of major and minor violations, or major violations valued at 50% or less of the unit's value.
Dilapidated--needs to be demolished, deterioration in excess of 50% of its value or numerous major violations.

The Housing Conditions Survey determined that 0.3% of the housing units in Gainesville were dilapidated, 5.0% were substandard, and 24% were substandard--fair (needing minor repairs). Housing units which have been classified as either "dilapidated" or "substandard" present the most pressing health and safety concerns. A unit classified as "dilapidated" is considered beyond repair, and should be demolished. A unit that is “substandard” requires substantial rehabilitation.

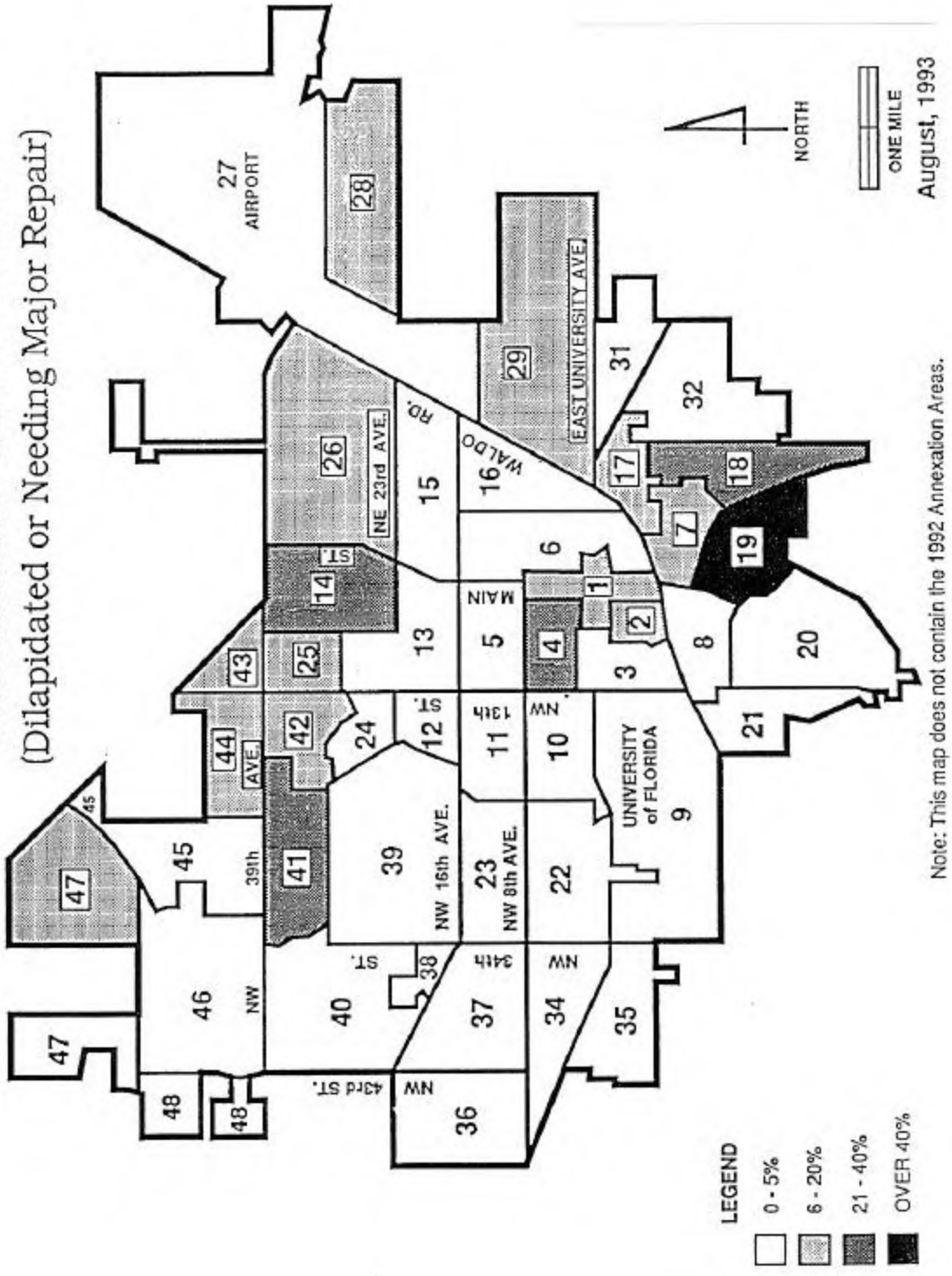
Map 4 illustrates the percentage of units which have been classified as either “dilapidated” or “needing major repair” by Neighborhood Planning Area (NPA). NPAs 4, 14, 18, 19 and 41 have the highest percentage of units falling into these two categories (see Map 4). In each of these districts at least 21% of the units are classified as either dilapidated or needing major repair. For example, over 82% of the housing in NPA 19 are either dilapidated or substandard. The City has recognized the gravity of the housing conditions in these areas; most of these NPAs contain-at least one Community Development Block Grant (CDBG) and HOME Investment Partnerships Grant (HOME) target area (see Map 5) and utilizes federal, state and local resources and housing programs to address housing rehabilitation needs.

Map 4

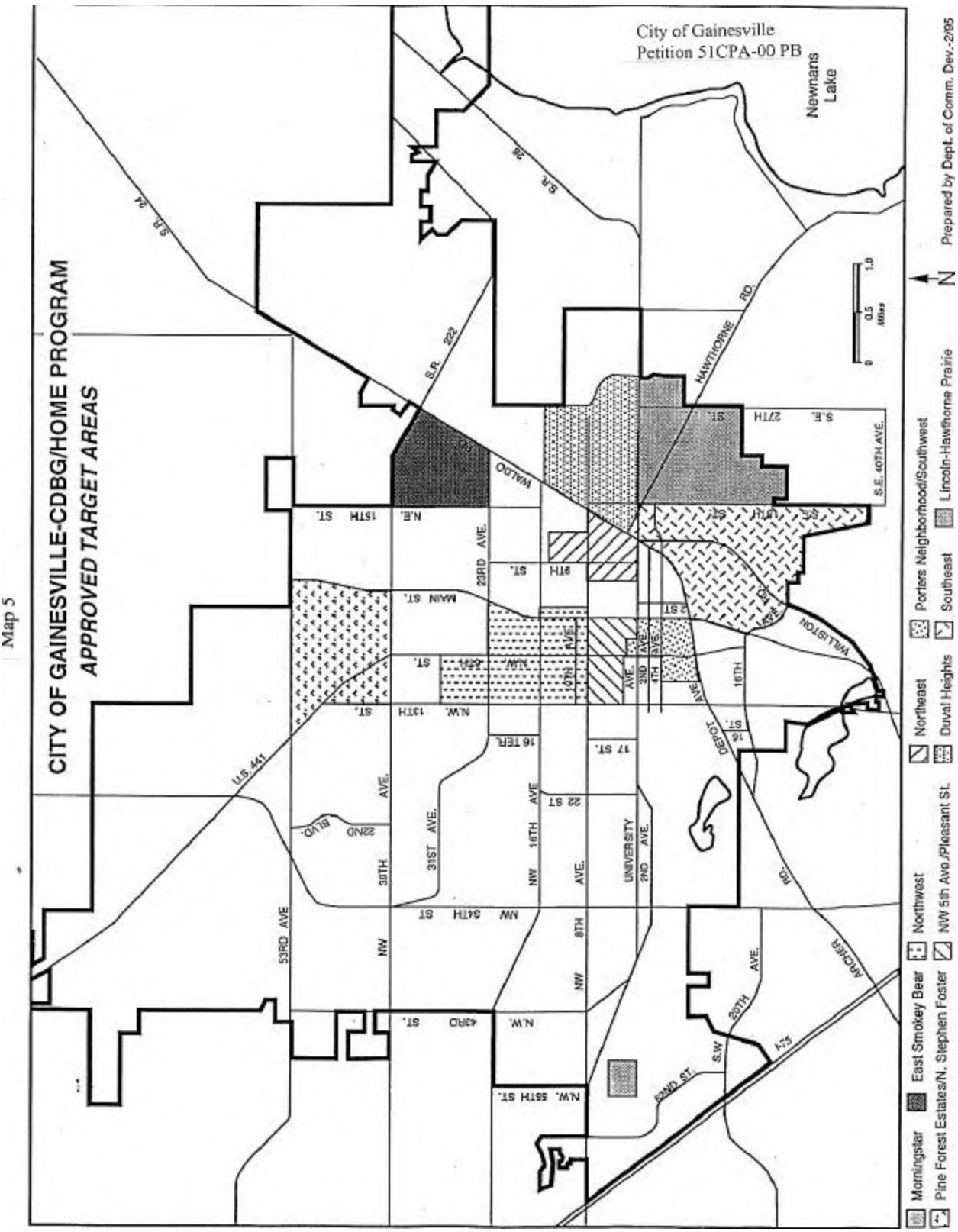
PERCENTAGE OF SUBSTANDARD HOUSING UNITS

(Dilapidated or Needing Major Repair)

City of Gainesville
Petition 51CPA-00 PB



Note: This map does not contain the 1992 Annexation Areas.


Map 5
CITY OF GAINESVILLE-CDBG/HOME PROGRAM
APPROVED TARGET AREAS
City of Gainesville
Petition 51CPA-00 PB
Newnans Lake
S.R. 24
S.R. 26
S.R. 222
HAWTHORNE RD.
WALDO
U.S. 441
53RD AVE
MAIN ST.
23RD AVE.
31ST AVE.
16TH AVE
UNIVERSITY
2ND AVE.
DEPOT
WILLISTON
ARCHER
S.E. 27TH ST.
S.E. 40TH AVE.
N.E. 15TH ST.
N.W. 13TH ST.
N.W. 43RD ST.
N.W. 55TH ST.
S.W. 62ND ST.
S.W. 20TH AVE.
I-75
Morningstar
East Smokey Bear
Northwest
Porters Neighborhood/Southwest
Pine Forest Estates/N. Stephen Foster
NW 5th Ave./Pleasant St.
Duval Heights
Southeast
Lincoln-Hawthorne Prairie
Prepared by Dept. of Comm. Dev.-2/95

The 1990 U.S. Census provides data on the interior condition of the City's housing units. The Census indicates the number of housing units lacking plumbing, lacking a complete kitchen, lacking central heat, and the number of overcrowded units. These findings are compiled by Census Tract in Table 47 in Appendix C. A comparison of these data with the housing conditions survey data shows that there is a relationship between interior and exterior housing conditions.

SUBSIDIZED HOUSING DEVELOPMENTS

Despite federal housing cutbacks, the U.S. Department of Housing and Urban Development (HUD) remains the primary source of subsidized housing in Gainesville. The traditional public housing program and the Section 8 existing units subsidy, both federally funded, provide 1798 subsidized units for renters. Both of these programs are administered through the Gainesville Housing Authority.

The Housing Authority currently operates 789 public housing units (see Map 6). This number includes 70 Section 23 leased housing units and 154 Section 8 new construction units in addition to the 565 traditional public housing units. Since 1975, Gainesville has participated in the Section 8 Existing Housing Program. This program provides rent supplements to low and moderate-income families who live in private housing. In order to receive the HUD funds, these families must be certified eligible for the program on the basis of annual family income. Renters pay a maximum of 30% of their household income for their unit. The balance of rent is paid by the Housing Authority.

Since 1975, the City has utilized Community Development Block Grant (CDBG), HOME and State Housing Initiative Program (SHIP) funds to rehabilitate housing. These funds were initially directed at designated target areas. Since 1992, the CDBG program has provided funds for the complete rehabilitation of 416 owner-occupied units, 131 renter-occupied units with 91 in progress, and the emergency repair of 80 units. In addition, the non-profit Neighborhood Housing and Development Corporation organization has rehabilitated another 30 units in the city and the Central Florida Community Action Agency, Inc., has used CDBG funds for the emergency home repair of an average of 18 units per year. Table 12 inventories the subsidized housing units in Gainesville. In addition to the public housing listed here, there are many privately owned subsidized housing units in the city.

Map 6

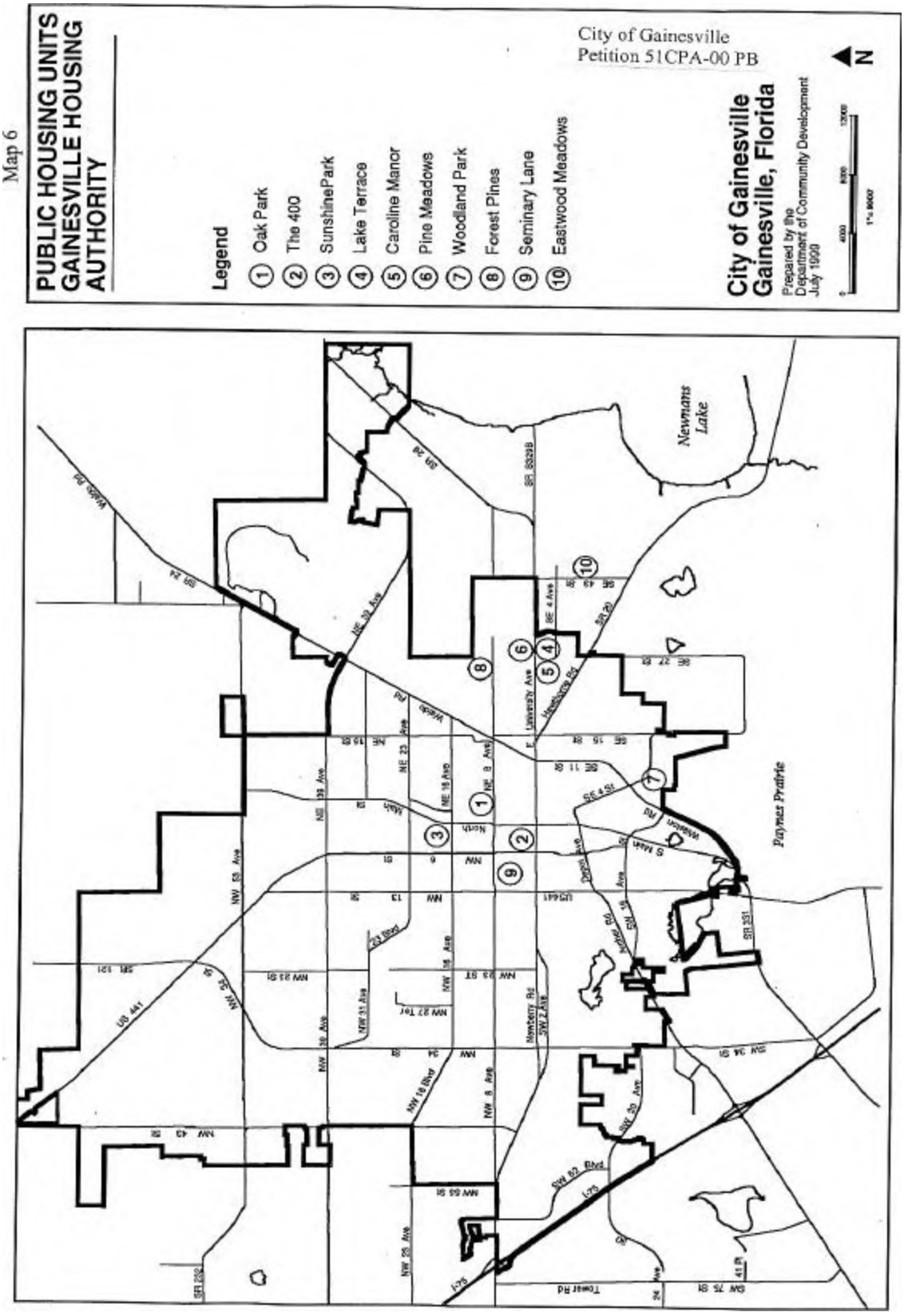

PUBLIC HOUSING UNITS
GAINESVILLE HOUSING AUTHORITY
Legend
1 Oak Park
2 The 400
3 SunshinePark
4 Lake Terrace
5 Caroline Manor
6 Pine Meadows
7 Woodland Park
8 Forest Pines
9 Seminary Lane
10 Eastwood Meadows
City of Gainesville
Petition 51CPA-00 PB
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
July 1999
N
Newnans Lake
Paynes Prairie

Table 12 Federally Subsidized Housing Units in the City of Gainesville as of April 1999

Name	Year Built	Number of Units	Type
Public Housing			
Oak Park	1970	101	Elderly
Lake Terrace	1968	100	Family
Caroline Manor	1970(acquired)	28	Family
Pine Meadows	1970	80	Family
Woodland Park	1970	170	Family
Forest Pines	1970(acquired)	36	Family
Eastwood Meadows	1981	50	Family
Total		565	
Section 23 Leased Housing			
Sunshine Park	1971	70	Elderly
Section 8 New Construction			
The 400	1979	101	Elderly
Seminary Lane	1979	53	Family (Townhouses)
Total		154	
Section 202 Elderly and Handicapped			
Pine Grove		97	
Section 8 Existing Housing			
Rental Assistance Program			
Scattered Locations		1009	
CDBG Rehabilitation (since 1992)			
Scattered Locations:			
Owner-Occupied Rehabilitation		416	
Renter-Occupied Rehabilitation		131, 91 in progress	
Emergency Repair		80	
NHDC		30	
Central Florida Community Action Agency, Inc.		Approximately 144	
Total		801, 91 in progress	

Total Subsidized Units		2696, 91 in progress	
SOURCE: City of Gainesville Community Development, Gainesville Housing Authority, 1999			

Group Homes

The Florida Department of Children and Families is responsible for licensing group homes and foster care facilities, statewide. These group homes serve adults and children, and are generally operated by private or non-profit sponsors. These programs are licensed by the Division of Children, Youth, and Families, the Division of Developmental Services, and Aging and Adult Services. These group homes are inventoried below.

Table 13: Group Homes

Type	Licensed Capacity	Name	City Category	Census Track
CRH	1	Leslie Therapeutic FH**a**	CRH 1-6	12
CRH	6	Elder Inn	CRH 1-6	12
PCGH	5	Johnson Group Home I	CRH 7-14	12
PCGH	5	Johnson Group Home II	CRH 7-14	12
PCGH	4	Johnson Group Home III	CRH 7-14	12
PCGH	6	Sunshine Assoc., Inc.	CRH 1-6	12
PCGH	13	(None listed)	CRH 7-14	3
ACLF	488	Atrium	Housing/Elderly	11
Child Care	16	Interface Youth Shelter	Social Service Home	12
PCGH	4	Green Group Home	CRH 1-6	4
ACLF	30	Bailey Suites	Housing/Elderly	3
PCGH	12	Allen's Place	CRH 7-14	3
ACLF	-	GVL VOA Elderly Housing	Housing/Elderly	4
ACLF	16	Sylkana Manor, Inc.	Housing/Elderly	17
ACLF	110	Bailey Village	Nursing Home	3
ACLF	16	Hannah's ACLF	CRH 7-14	5
ACLF	3	Sylvia Camps	CRH 1-6	6
PCGH	6	Ellis Group Home	CRH 1-6	5
PCGH	5	Alternative Care, Inc. GH I	CRH 7-14	6
PCGH	4	Alternative Care, Inc. GH II	CRH 7-14	6
-	30	St. Francis House	Residence/destitute	1
PCGH	6	Green Group Home II	CRH 1-6	5

PCGH	6	Allen's Group Home	CRH 1-6	6
PCGH	16	Satellite Apartments	CRH > 14	8
Total	808			
Source: Department of Children and Families, 1997.				

ACLF Adult Congregate Living Facility
CRH Community Residential Home
PCGH Personal Care Group Home

Mobile Homes

In the City of Gainesville, mobile homes are permitted by right only in the Mobile Home Residential District (MH zoning). There are currently 9 licensed mobile home parks in the city (see Map 7). These parks contain a total of 999 mobile home spaces. The city has no mobile home subdivisions. Mobile homes are more prevalent in Alachua County than in the City of Gainesville. According to the 1990 Census, mobile homes accounted for 3.0% of the City's housing stock, while they comprised 21.7% of Alachua County's unincorporated area housing stock. An inventory of the city's Mobile Home parks is included below.

Table 14: Licensed Mobile Home Parks
City of Gainesville, May 1999

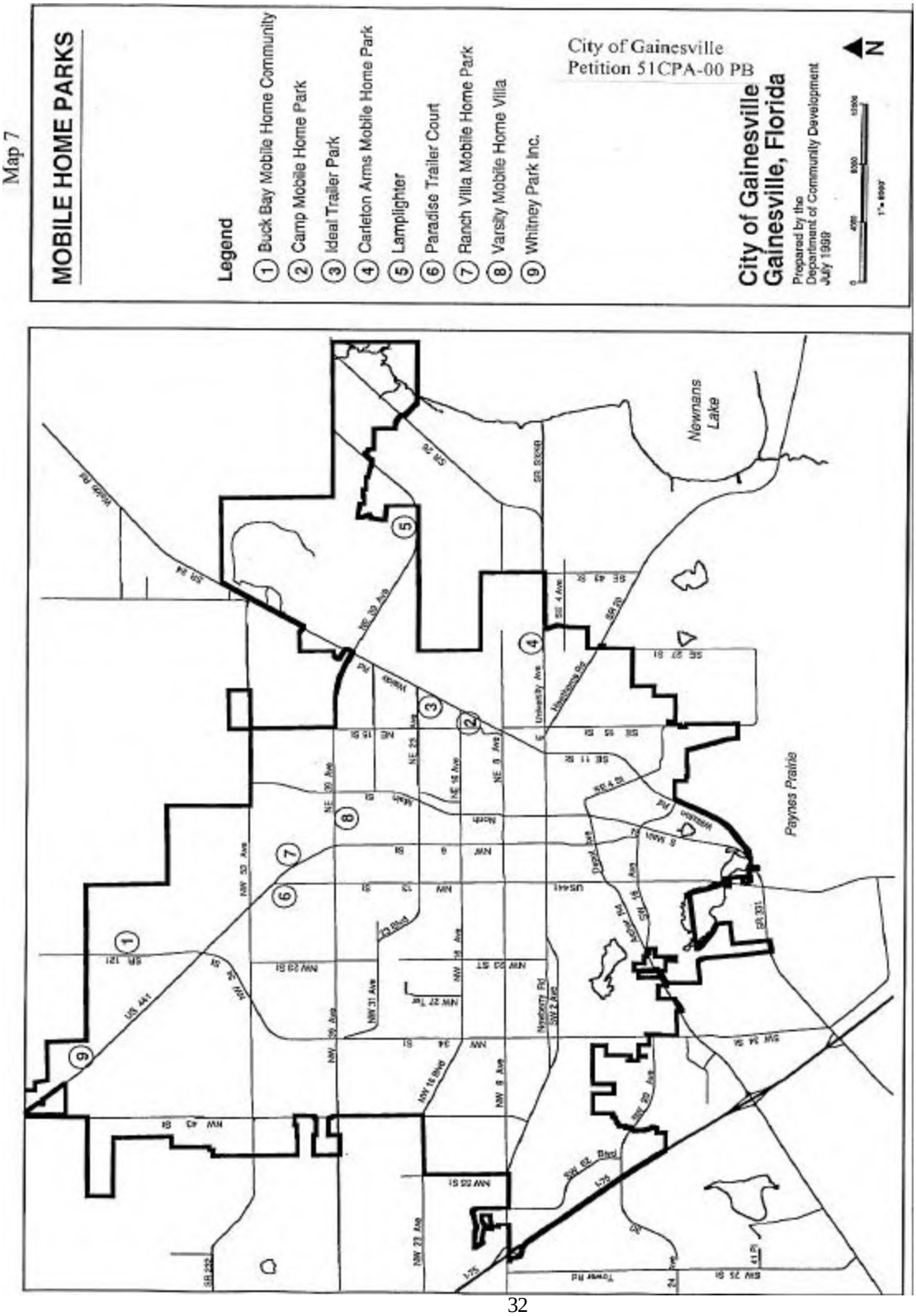
Name and Address	Mobile Home Spaces
Buck Bay Mobile Home Community 2149 NW 77th Avenue	144
Camp Mobile Home Park 1600 NE 13th Ave.	80
Ideal Trailer Park 2200 NW Waldo Rd.	42
Carleton Arms Mobile Home Park 2330 E. University Ave.	40
Lamplighter 5200 NE 39th Ave.	273

Paradise Trailer Court 4546 NW 13th St.	44

Ranch Villa Mobile Home Park 4611 NW 6th St.	14
Varsity Mobile Home Villa 39 NW 39th Ave.	156
Whitney Park Inc. 8401 NW 13th St.	206
Total Mobile Home spaces	999

SOURCE: Alachua County Health Department, City of Gainesville Department of Community Development, 1999.

Map 7


MOBILE HOME PARKS
Legend
1 Buck Bay Mobile Home Community
2 Camp Mobile Home Park
3 Ideal Trailer Park
4 Carleton Arms Mobile Home Park
5 Lamplighter
6 Paradise Trailer Court
7 Ranch Villa Mobile Home Park
8 Varsity Mobile Home Villa
9 Whitney Park Inc.
City of Gainesville
Petition 51CPA-00 PB
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
July 1998
N
Newnans Lake
Paynes Prairie

HOUSING ANALYSIS

Projecting the housing needs of the population that is expected to reside in the City involves determining the projected population, the number and size of households needed to accommodate the projected population and the income levels of the expected households. The remainder of this Element will determine the future housing needs of the City as well as meet the requirements of Chapter 163. F.S. and Rule 9J-5.010(2), FAC.

Projections

Population projections form an integral part of the Comprehensive Plan because future needs are largely based on the expected population to be served. The Comprehensive Plan provides annual population projections for the years 2000 through 2010 (See Appendix A: Methodology for Housing Projections). Three population forecasts were developed for the update of the Comprehensive Plan; high, medium and low for each year. For this housing analysis the medium range projections were utilized to calculate housing needs. Analysis of needs will be projected for two time periods: 2005 and 2010.

Projected Households and Average Household Size

One important aspect of assessing future housing needs is determining the number and size of future households. According to the UF Shimberg Center for Affordable Housing, while household size has declined significantly in the 1970's and continued to decline in the 1980's, the rate of decline slowed and household size has been relatively constant across the state of Florida between 1990 and 1995. Factors that lead to changes in household size do not exhibit a clear and convincing pointer to the direction of future change. The affordable housing needs assessment assumes that household formation rates and the distribution of household characteristics remain constant in their 1990 proportions. Age distribution changes in the population will likely lead to shifts in the number of households and average household size since different age groups have different propensities to form households. Thus, the number of households is estimated using age-specific headship rates to reflect the projected changing age structure.

Nationwide the average household size had declined since 1980 due to lower birth rates, increasing divorce rates, the tendency for more older persons to maintain their own home after families have disbanded and the large number of young adults forming one and two person households. It is assumed that these trends were exhibited in Gainesville. In 1980, the average household size for the city was 2.55, by the year 1997 the average household size was estimated by the Bureau of Economic and Business Research at the University of Florida to have decreased to 2.40 persons per household.

Table 15 shows the breakdown of the number of persons projected to reside in households based on past and expected future trends.

Table 15 Households by Size

YEAR	1980	1990	1995	2000	2005	2010
TOTAL HOUSEHOLDS	28307	31955	36447	38636	40617	43661
Size of Households						
One person	6713	9563	10969	11615	12248	13246
Two persons	9830	10744	12149	12874	13617	14773
Three persons	5324	5488	6247	6650	6983	7457
Four persons	3901	4017	4589	4858	5050	5329
Five Persons	1546	1354	1549	1641	1686	1768
Six or more persons	993	829	944	998	1033	1088

SOURCE: 1990 U.S. Census, UF Shimberg Center for Affordable Housing, Affordable Housing Needs Assessment, 1998.

Projected Households By Income

The rising cost of housing has generated considerable concern during the past several years about affordable housing. In order to determine future housing needs, it is necessary to determine the income range of projected households. The incomes of households influence the type of housing units that should be built or encouraged in order to meet the housing need. Tables 16A and 16B present-the anticipated number of households by income range. The most significant aspect of the data in this table is that approximately 26.6% of the households including students will be earning less than $10,000. These households will not be able to afford the cost of housing without some type of subsidy or an increase in income.

Table 16A Households by Income Range – Owner Occupied

Income Range	1990	1995	2000	2005	2010
$0 to $5,000	602	660	698	751	816
$5,000 - $10,000	871	944	989	1052	1155
$10,000 - $12,500	519	554	577	602	655
$12,500 - $15,000	592	632	658	696	771
$15,000 - $17,500	607	673	708	744	801
$17,500 - $20,000	584	634	656	685	741
$20,000 - $22,500	846	913	957	1006	1093
$22,500 - $25,000	548	598	627	661	718
$25,000 - $27,500	711	769	802	833	899
$27,500 - $30,000	512	560	586	609	659
$30,000 - $32,500	731	787	817	854	933
$32,500 - $35,000	496	537	563	606	669
$35,000 - $37,500	567	610	635	665	725
$37,500 - $40,000	538	581	608	649	710
$40,000 - $42,500	691	762	800	832	890
$42,500 - $45,000	401	451	470	486	514
$45,000 - $47,500	505	555	582	607	653
$47,500 – $50,000	337	390	415	438	466
$50,000 - $55,000	886	1027	1097	1164	1246
$55,000 - $60,000	591	654	686	719	770
$60,000 - $75,000	1354	1557	1653	1754	1882
$75,000 - $100,000	1131	1279	1354	1453	1578
$100,000 - $125,000	426	484	515	552	596
$125,000 - $150,000	203	235	253	278	304
$150,000 +	253	297	319	347	374
TOTAL	15502	17143	18025	19044	20618
SOURCE: The UF Shimberg Center for Affordable Housing, U.S. Census Bureau special tabulation,					
Department of Community Development, 1999.					

Table 16B Households by Income Range – Renter Occupied

Income Range	1990	1995	2000	2005	2010
$0 to $5,000	3400	4038	4338	4608	4944
$5,000 - $10,000	3337	3962	4229	4468	4794
$10,000 - $12,500	1574	1838	1968	2055	2194
$12,500 - $15,000	1037	1214	1294	1354	1446
$15,000 - $17,500	1322	1542	1633	1700	1821
$17,500 - $20,000	815	946	1009	1055	1126
$20,000 - $22,500	820	961	1023	1063	1130
$22,500 - $25,000	668	770	821	847	897
$25,000 - $27,500	527	614	654	671	705
$27,500 - $30,000	430	497	527	550	592
$30,000 - $32,500	455	521	554	567	596
$32,500 - $35,000	300	348	368	381	404
$35,000 - $37,500	306	359	385	400	423
$37,500 - $40,000	203	235	252	258	272
$40,000 - $42,500	188	216	228	237	255
$42,500 - $45,000	111	128	134	136	143
$45,000 - $47,500	92	106	110	112	117
$47,500 – $50,000	104	119	127	128	134
$50,000 - $55,000	170	197	212	216	229
$55,000 - $60,000	182	209	222	228	241
$60,000 - $75,000	279	331	352	364	385
$75,000 - $100,000	87	101	107	107	113
$100,000 - $125,000	39	51	54	61	66
$125,000 - $150,000	7	8	8	8	9
$150,000 +	0	0	0	0	0
TOTAL	16453	19311	20608	21573	23036
SOURCE: The UF Shimberg Center for Affordable Housing, U.S. Census Bureau special tabulation,					
Department of Community Development, 1999.					

Projected Households by Income Group

Table 17 defines various income groups by income limits for 1999. The limits were determined by using Housing and Urban Development (HUD) federal assistance income limits. HUD's income limits are based on projected household and family income adjusted for family size in the Gainesville Metropolitan Statistical Area (MSA). Applying the income limits in Table 17 to the data in Table 16A and 16B generates the number of households by income group (see Table 18 and Table 19).

Table 17 Income Limits of Various Income Groups

Income Group	Ratio to Median Income	1990	1999
Extremely Low	Less than 30%	$6625 and below	$12810 and below
Very Low Income	Between 30% to 50%	$6626 - $11042	$12811 - $21350
Low Income	Between 50% to 80%	$11043 -$17667	$21351 - $34160
Moderate Income	Between 80% to 120%	$17668 - $ 26500	$34161 - $51240
Middle and Upper	120% and higher	$26501 +	$51241 +
Median Income for Alachua County in 1990 = 22084			
SOURCE: 1990 U.S. Bureau of Census			
HUD Median Family Income for 1999=42700 for a family of four.			
SOURCE: HUD Income Limits for 1999			

Table 18 Projected Households by Income Group

Income Group	1990	1995	2000	2005	2010
Extremely Low Income	10303	11996	12798	13536	14558
Very Low Income	6623	7515	7938	8303	8929
Low Income	5378	6001	6319	6579	7072
Moderate Income	4043	4512	4746	4948	5302
Middle and Upper	5608	6430	6832	7251	7793
TOTAL	31955	36454	38633	40617	43654
SOURCE: UF Shimberg Center for Affordable Housing, U.S. Census Bureau special					

tabulation and Dept. of Community Development, 1999.		

Table 19 Increase in Households by Income Group

Income Group	**1995-2000**	**2000-2005**	**2005-2010**	**Total 1995-2010**
Extremely Low Income	802	738	1022	*2562
Very Low Income	423	365	626	*1414
Low Income	318	260	493	1071
Moderate Income	234	202	354	790
Middle and Upper	402	419	542	1363
TOTAL	2179	1984	3037	7200
*The City assumes that 50% or 1988 of the extremely low and very low income households				
will be student households.				
SOURCE: UF Shimberg Center for Affordable Housing, Dept. of Community Development, 1999.				

Based on these projections the City will have to provide 1103 extremely low and very low-income housing units by 2005 and additional 1648 units by 2010. The forecast of projected households by income group indicates that a growing share of households will be very low income. Extremely low-income households are projected to represent approximately 33.3% of the households between 2000-2010 unless economic conditions for the area change (Table 20). The results are not surprising considering the substantial student population that lives in the City, because students generally have very low incomes of their own. The City assumes that half of the extremely low and very low and households will consist of student households. This growth in the very low-income category may increase, however, if the number of students attending the University of Florida continues to increase.

Table 20 Percentage of Households by Income Group

Income Group	1990	2000-2005	2005-2010
Extremely Low Income	32.2%	33.2%	33.3%
Very Low Income	20.7%	20.5%	20.4%
Low Income	16.8%	16.3%	16.2%

Moderate Income	12.7%	12.2%	12.2%
Middle and Upper	17.5%	17.8%	17.8%
SOURCE: UF Shimberg Center for Affordable Housing, Dept. of Community Development, 1999.			

HOUSING NEEDS

The City's role in the housing process is to insure an adequate supply of decent, safe, sanitary and affordable housing for all income groups currently living or expected to live in the city. To satisfy this responsibility, the City must determine the housing need of the community and attract the public and private resources and skills to meet that need.

Number, Type and Tenure of Households

Based on the projected number of households in Table 21, between 1995 and 2000, the City must add 2191 housing units, 1997 units must be added between 2000 and 2005, and an additional 3038 housing units, by the year 2010 (see Table 21). The type of housing units that will be needed is based on housing development trends in the city. Based on these trends, between 2000 and 2005 the city will need 1229 single-family units and 876 multi-family units. By 2010 Gainesville will need to add an additional 1888 single-family units and 1345 multi-family units (see Table 22). Single-family units include all detached units, mobile homes and the "other" category, which includes houseboats, vans, railroad cars and campers; while multi-family includes all attached units.

Table 21 **HOUSING NEED BY TENURE**

Type	1995 Number	2000 Number	2005 Number	2010 Number
Owner	17142	18029	19039	20622
Renter	19306	20608	21578	23036
Total	36448	38637	40617	43658

Source: Affordable Housing Needs Assessment, UF Shimberg Center for Affordable Housing, 1999.

Table 22 **TOTAL HOUSING NEED BY NUMBER AND TYPE**

Type	1995 Number	2000 Number	2005 Number	2010 Number
Single-family	22432	24026	25257	27145
Multi-family	15967	17115	17991	19336
Total	38399	41141	43248	46481

Source: Dept. of Community Development, UF Shimberg Center for Affordable Housing, 1999.

The 1990 Census indicated that of all occupied housing units within the city, 47.1% were owner-occupied and 52.9% were renter-occupied. The higher percent of renter-occupied units is most likely due to the large number of students who seek rental apartments.

Size of Household

The projections for the size of households indicated that the majority of households needed will house one-person and two-person households (see Table 23). Projected one- and two-person households represent-approximately 64% of new household formations in 2010. This data is not surprising due to the number of students living in the city and other national trends. The U.S. Census conducted a special tabulation to determine the 1990 households by age of household head and size of household. The proportion of households in each age group of a given size is held constant and the proportion is applied to the projections of householders by age to determine the number of households in size ranges.

Table 23	**HOUSEHOLDS BY HOUSEHOLD SIZE**				
YEAR	**1990**	**1995**	**2000**	**2005**	**2010**
Size of Households					
One person	9563	10969	11615	12248	13246
Two persons	10744	12149	12874	13617	14773
Three persons	5448	6247	6650	6983	7457
Four persons	4017	4589	4858	5050	5329
Five persons	1354	1549	1641	1686	1768
Six persons	639	717	755	779	822
Seven persons	19	227	243	254	266
Total	31955	36447	38636	40617	43661
SOURCE: UF Shimberg Center for Affordable Housing, Dept. of Community Development, 1999.					

Housing Need By Income Group and Housing Cost

Table 24 identifies the projected housing need by income group (using 1999 dollars) and the maximum housing cost or rent that the various income groups can afford. The maximum housing cost is limited to 30% of household income. The 30% limit on housing cost is based on the State's definition of affordable housing, which states that not more than 30% of household income should be spent on housing cost. That cost includes mortgage or rental payments, taxes, insurance and utilities. However,

Section 420.9071, Florida Statutes also indicates that it is not the intent to limit an individual household's ability to devote more than 30% of its income for housing. A household that devotes more than 30% of its income for housing will be considered affordable if the first institutional mortgage lender is satisfied that the household can afford mortgage payments in excess of the 30% figure. This is an acknowledgement of the fact that different affordability varies for different households. For example, the income remaining to cover all other household expenses after spending 30% on housing is much higher for a household earning $80,000 a year than for one earning $10,000 a year.

Table 24: HOUSING NEED BY INCOME GROUP

Monthly Income Group	2005	2010	Maximum Housing Cost
Extremely Low Income	738	1022	less than $320
Very Low Income	365	626	$321-$534
Low Income	260	493	$535-$854
Moderate Income	202	354	$855-$1281
Middle and Upper Income	419	542	over $1281

Source: Dept. of Community Development, UF Shimberg Center for Affordable Housing, 1999.

Vacancy Rates

Based on 1990 Census information and the Shimberg Center, the calculated permanent vacancy rate for the City of Gainesville was 6.1%. The permanent housing stock is the sum of occupied housing units and vacant units for rent, sale, or rented or sold but not occupied. The total vacancy rate for Gainesville, which includes seasonal, occasional and migrant units among the vacant housing stock, was 8%. Because of the number of students who do not attend the University of Florida in the summer, vacancy rates tend to be higher during summer months (May to August). Vacancy rates over this period can run as high as 10 to 17 percent. If the summer semester is included, the average annual vacancy rate for the local area would indicate a range from a low of 6.7 percent to a high of 8.4 percent given current vacancy levels (Don Emerson Appraisal Company). The permanent vacancy rate is normally in the 5% to 10% range in most communities, which has been determined to provide households with an adequate number of housing choices. A vacancy rate lower than 5% indicates a "tight" housing market and over 10% indicates a surplus of housing. Based on this information, the City has determined that an 8% vacancy rate will be adequate to maintain a sufficient supply of housing.

Substandard Housing

The elimination of substandard housing is a major concern for the City (see Housing Conditions pg. 15). Housing conditions and the age of the city's housing stock are determining factors in analyzing the city's substandard housing. A 1992 housing condition survey indicated that the average housing condition had a rating of 3.6 on a 4 point scale (4 = Standard Condition). The survey also indicated that 29.2% of the housing units had either major or minor code violations (see Table 25).

Table 25	**HOUSING CONDITION**	
Housing Condition	**Number of Units**	**Percent**
Standard-Good	21927	70.7%
Substandard-Fair	7420	24.0%
Substandard	1529	5.0%
Dilapidated	95	.3%
(to be demolished)		
Note: Table based on the City's 1992 Housing Condition Survey.		

In 1992, 1624 (5.3%) units of the city's housing stock was either dilapidated or substandard (needing major repairs). Based on the average household size (2.34) and the number of substandard units (1624), approximately 4.5 percent (3800 persons) of the city's population lived in a deplorable housing situation.

Based on data from the 1990 U.S. Census and the City's Building Division approximately 88% of the city's housing stock was built within the last 48 years. Of major concern is the remaining 11.9% (4510 units) that were built in or before 1949 (see Table 26).

Table 26 Year Structure Built

	Apr. 1990-1998	1989-Mar. 1990	1985-1988	1980-1984	1970-1979	1960-1969	1950-1959	1940-1949	1939 or earlier	Total
Gainesville	*3473	511	2543	3971	9304	8831	4938	2620	1890	38,081

Unincor-porated (county minus place)	*10,241	1562	6885	9859	13516	3682	1676	763	705	48,889
* Data is based on number of building permits issued.										
Source: 1990 Census of Population and Housing; City of Gainesville Building Division, 1999, Florida Statistical Abstract, 1991 through 1999, Alachua County Codes Enforcement, 2000.										

Since 1992, 668 of the 1,529 substandard units have been rehabilitated and 80 of the 95 dilapidated units have been demolished (see Table 27). The City estimates that 861 units are currently substandard and 15 dilapidated units need to be demolished. The estimate does not include units that have since become substandard.

Table 27 HOUSING UNITS TO BE REHABILITATED OR DEMOLISHED

Housing Units Needing Rehabilitation (major repairs) Since 1992		1529
Housing Units Rehabilitated Since 1992		
City funded Owner-Occupied Rehab.	416	
City funded Renter-Occupied Rehab.	131, with 91 in progress	
Neighborhood Housing NHDC	30	
		668
Total Substandard Units Needing Rehabilitation		**861**
Dilapidated (from 1992 Housing Conditions Survey)	95	
Dilapidated Units Demolished Since 1992	80	
Total Housing Units to Be Demolished		**15**

Source: Department of Community Development, 2000.

SPECIAL NEED POPULATIONS

Certain populations in the City must often overcome specific social and economic problems, which hamper their efforts to attain decent, affordable housing. These populations have housing needs which

should be given special consideration. For the purpose of this housing analysis the following groups were assessed: elderly, handicapped, female-headed households, the homeless and students.

Elderly

In 1980 there were 5699 elderly persons living in Gainesville. Elderly persons are defined here as those persons 65 years of age or older. According to the 1980 Census, elderly persons represented approximately 7 percent (5699 persons) of the total city population. In 1990 there were 7,979 elderly persons in Gainesville, an increase of approximately 40 percent. The 7,979 total represented approximately 9.4 percent of the total city population. This represented approximately 5,233 households, with 3,955 (75.58%) owner-occupied. Financially, 13.00 percent of the elderly are living in poverty.

Based on population projections by the Shimberg Center AHNA, the City's elderly population will grow from 7% in 1980 to 8.6% (10,159 persons) of total population by 2010. It is anticipated that the elderly, as they live longer, will need special housing assistance to enable them to stay at home longer. The need for group home facilities may also increase.

Handicapped

Handicapped persons are another group with special housing needs. Handicapped persons are defined as those with a disability (mental or physical condition) which has lasted 6 or more months and which limits the kind or amount of work a person can do. According to the 1990 Census, there were 3,787 persons 16 to 64 years of age with a work-related disability.

The most significant factor facing the handicapped is the search for a barrier-free living environment that is affordable. Housing for the handicapped is more expensive due to modifications that are needed to make units accessible, however, income levels for the handicapped are no higher than those of other city residents. Thus, handicapped persons not only face accessibility problems but also affordable housing problems. The Fair Housing Act was amended to address handicapped discrimination. It requires increased handicapped accessibility for certain new multi-family dwelling units. This should alleviate some housing accessibility problems handicapped persons are facing today.

Female-Headed Household

According to the 1990 Census, female-headed households with no husband present represented 12.5 percent of total occupied households in Gainesville. Approximately 5.5 percent of these households have their own children under 18 years of age. Financially, female-headed households earn approximately 57 percent of median family income due to the absence of a second wage earner in the home. Of the 2,345 families in poverty, 61 percent of these households were headed by females with no husband present.

Due to the levels of out-of-wedlock births, divorce and separation rates, the number of one-parent households has continued to increase. When it comes to housing, the needs of this group are not much different than those of other families that have a limited income for housing. The provision of housing for all low-income households will insure the availability of housing for one-parent households.

Homeless Population

More Americans are homeless now than at any other time since the Great Depression, despite the growing awareness of this complex problem. In order to ease the plight of the homeless, most experts agree that what is needed most is decent housing--emergency, transitional, and special family centers as well as permanent, low-cost housing.

One major difficulty in providing shelters for the homeless is trying to project the size of the homeless population. The difficulty is that the homeless population changes constantly in response to the economy and unemployment. The 1998 Florida Department of Children and Families annual report to the governor and the legislature indicated that there were 795 persons estimated to be homeless in Alachua County. Of this number, 239 or 30% have been identified as families. Statewide, it is estimated that 35% of the state's homeless are families, with female-headed households being the most vulnerable and at risk group of becoming homeless. This is an indication that the homeless population is now vastly different from prior to the 1980's, when it mostly consisted of single males.

Currently there are 6 shelters serving the area. All of these facilities are temporary emergency help facilities. The following is a list of shelters that serve the homeless:

Shelter Providers	Capacity
1. The Salvation Army	12 beds for men, 4 for women, accommodates families if necessary.
2. St. Francis House	30 beds, 9 for individuals and 21 for persons in families.

3. Sexual and Physical Abuse Resource Center	30 beds for eligible women and their families
4. Interface Runaway Youth Shelter	16 beds for youth
5. Arbor House	6 beds house homeless pregnant women and mothers with newborns
6. Interfaith Hospitality Network	Consists of a network of churches and synagogues that provide shelter and meals for 4 to 5 families, not exceeding 14 persons.

The Gainesville/Alachua County "Continuum of Care" strategy was implemented within the past 10 years by several homeless service providers. The process has grown to include over 25 agencies including emergency shelter providers, a domestic violence shelter, food distribution agencies, law enforcement agencies, public housing authorities, affordable housing programs, medical and psychiatric providers, faith-based organizations, city and county government, other providers and homeless individuals. These groups have formed the Alachua County Coalition for the Homeless/Hungry, with a mission to reduce homelessness in Alachua County by developing and coordinating community-wide strategies to assist and empower homeless individuals and families.

These agencies provide emergency and transitional shelter and several supportive services including case management counseling, outreach and primary health care including substance abuse counseling and treatment. Through the Continuum of Care process, funding has been received for projects that help to fill the gaps for homeless needs in the community. Recent projects include transitional housing for mentally ill and substance abusing homeless individuals and families, transitional housing for homeless pregnant teens ages 13 to 18, transitional housing for homeless women and their children who are victims of domestic abuse and single-room occupancy (SRO) housing for homeless working men and women.

The Alachua County Coalition for the Homeless/Hungry is also in the process of studying the concept of a "safe space" shelter for the homeless. Because of the limited capacity of existing homeless shelters and programs, many homeless wind up with no place to go. Social service agencies have no place to send people if they are turned away. Sleeping in public parks is not allowed after 11:30 p.m. and sleeping on private property can be considered trespassing. There is no convenient access to

bathrooms, shower facilities and shelter from the weather or protection from criminals. This causes problems concerning abandoned personal items, loitering and litter.

A "safe space" could be a fenced in area with minimal structural facilities that could provide the homeless somewhere to go. The facility would be fenced for security reasons, provide protection from the weather, bathrooms, showers, lockers for personal belongings and waste management. Everyone would be welcome as long as there are no weapons, drugs, alcohol or violent behavior. A phone would be available and some of the homeless could be hired to work at the facility. This type of facility would add basic capacity to the social service system by providing a viable alternative location for homeless people to go. The police department could direct homeless loiterers to this facility, thus differentiating between homelessness and criminal behavior.

Rural and Farmworker

The City of Gainesville contains agricultural parcels consisting of timberland on the northern edge of the City and property owned by the University of Florida. According to 1990 U.S. Census estimates, there were 485 farmworkers and related individuals in Alachua County. Based on an average of 2.34 persons per household in Alachua County, there were 207 farmworker households residing in Alachua County. The Department of Agriculture, 1996, estimated no HRS permitted migrant labor camps and farm labor housing facilities for Alachua County, including no units for the City of Gainesville. The 1990 U.S. Census indicated 375 vacant seasonal and migratory housing units for Alachua County and 86 vacant seasonal and migratory housing units in the City of Gainesville. Based on the urban character of the City, the lack of agricultural food cropland in the City, the number of vacant seasonal and migratory housing in the County, and the above information, the City has determined there is no demand for farmworker housing.

University of Florida Students

The students at the University of Florida play a major role in the housing market in Gainesville. The University had an enrollment of approximately 42,053 students in 1997, up from 39,951 in 1995 and 40,372 in 1996. This increase in the number of students has increased the need for additional housing for students.

As of the fall of 1997, the University housed approximately 6,896 students in campus dorm rooms, 2,428 persons in 980 married student housing units and 1,620 students in Sorority and Fraternity housing. As of January 2000, the University is building an on-campus apartment complex that will house 532 students.

The increase in the number of students has caused an increase in the construction of multiple-family dwelling units, particularly in the unincorporated area of the County. It appears that the private sector has provided limited affordable housing for students due to the waiting list of students for university sponsored housing, although this long waiting list can also be associated with the fact that students prefer to live on campus. Until private industry can provide housing that students can afford, there will be a need for the University to build additional housing. The City will support joint ventures between the University and the private sector to provide housing for its student population. The City has increased allowable densities for residential land uses near the University to encourage the provision of more housing near campus. There is a need to stabilize the neighborhoods near the University in order to maintain them as attractive places to live and invest in for owner-occupants including faculty, other professionals, and other families and individuals who wish to live in stable, in-town neighborhoods.

Projected Housing Construction Needs

Table 28 specifies the number of new housing units that must be provided in the city to meet the needs of the projected population for the planning period. Between 2000 and 2005, new construction should average 421 units per year and 644 units per year between 2005 and 2010 to meet the needs of new households. Some of these new housing needs will be provided by existing approved developments in the city and urban area.

Furthermore, the City estimates that 861 units are currently substandard. The City will need to rehabilitate or demolish 86 substandard units each year in order to eliminate existing substandard conditions by the year 2010. To compound this problem, an average of 25 units are becoming substandard each year during this time frame.

Table 28 **HOUSING CONSTRUCTION NEEDS**

	2000-2005	annual	2005-2010	annual
New Household formations	1984	397	3037	607
Units to maintain				
A 6.1% Vacancy Rate	**121**	**24**	**185**	**37**
Total New Construction	**2105**	**421**	**3222**	**644**
Substandard Units to be Rehab.				
Units becoming Substandard				
Total Substandard Units to be Rehabilitated				
Dilapidated Units to be Demolished				

SOURCE: Dept. of Community Development, UF Shimberg Center for Affordable Housing.

LAND USE REQUIREMENTS

In order to meet future housing needs, the Comprehensive Plan must designate enough residential land to accommodate new housing construction. The following section will indicate that no additional land will be needed for the replacement and rehabilitation of existing substandard units.

Vacant Land Use Inventory

Based on a residential capacity inventory (Table 29) the city has approximately 993 acres of undeveloped vacant land designated for residential use. Of this land, 59.0% is designated for single family use, 40.9% for multi-family and.5% for mobile home. The projected future housing need of 7,200 dwelling units can be accommodated with the available vacant acreage, based upon the estimated capacity buildout of 9,515 dwelling units (see Table 29). These estimated units do not include possible residential development in mixed-use zones or the central city zoning district.

The vacant residential land use inventory indicates that expected growth can be accommodated within the existing Land Use Plan. However, the figure of 993 acres may be misleading because not all of this

land is easily developable. Although Table 29 is very conservative in the estimates of residential acreage available, and land obviously located in the 100-year floodplain or in wetlands was not included, there may still be some environmental or other constraints that limit the amount of development. Another important factor concerns the supply of land, which is controlled by private owners who may not wish to sell or develop their land. For these reasons, the City must designate more residential land than necessary to keep market prices competitive, encourage more infill development and less urban sprawl outside city limits, and encourage more investment in the city's older residential neighborhoods in order to make them more attractive places to live.

Table 29 Residential Capacity

Zoning District	Description	Available Single-Family DU Lots	Available Vacant Acreage	Dwelling Units Per Acre	Total Dwelling Units at Buildout	Proposed Population Increment at Buildout
RSF-1	Single Family, 3.5 du/ac	400	211.10	3.5	1,139	2,681
RSF-2	Single Family, 4.6 du/ac	308	16.29	4.6	383	901
RSF-3	Single Family, 5.8 du/ac	312	76.40	5.8	755	1,778
RSF-4	Single Family, 8.0 du/ac	149	21.69	8.0	323	759
RMF-5	Single /Multi-family, 12.0 du/ac	113	94.59	8.0	870	2,047
RMF-6	Multi-family, 10-15 du/ac	13	193.63	10.0	1,949	4,589
RMF-7	Multi-family, 14-21 du/ac	14	30.88	14.0	446	1,051
RMF-8	Multi-family, 20-30 du/ac	8	4.37	20.0	95	225
RC	Residential Conservation, 12.0 du/ac	330			330	777
MH	Mobile Home, 12.0 du/ac		5.00	12.0	60	141
RMU	Residential Mixed Use, to 75 du/ac		0.76	20.0	15	36
RH-1	Res. High Density, 20-43 du/a	8	9.91	25.0	256	602
RH-2	Res. High Density, 43-100 du/ac		1.54	30.0	46	109
PD/Resid.	Planned Development Residential	867			867	2,041
Sub total		**2,522**	**666.16**		**7,534**	**17,736**
Greenways of Gainesville D.R.I.						
	Single Family	1,177	261.40		1,177	2,770
	Multiple Family	804	65.90		804	1,892
Sub total		**1,981**	**327.30**		**1,981**	**4,662**

TOTAL		**4,503**	**993.46**		**9,515**	**22,398**
Source: City of Gainesville, Department of Community Development, March 2000.						
Note: Average household size used to calculate the population at buildout is 2.354 persons per household.						

Residential Capacity

With the amount of available single-family lots, the vacant acreage in each residential zoning district and the typical density achieved in each district, it is conservatively estimated that 9,515 units could be placed on the land (see Table 29). Based on the average household size of 2.354 in 2000, these units can accommodate approximately 22,398 people. Of this population, approximately 60% would reside in multiple-family districts and 40% would reside in single-family districts.

HOUSING: THE PRIVATE SECTOR

Existing Housing Market

Approximately 90 private homebuilders are affiliated with the Gainesville Builder's Association. Table 31 shows the number and dollar value of new homes that have received building permits since1991. A total of 3,343 residential building permits were issued for new housing between 1991 and 1998, an average of 418 permits a year, down from an average of 495 permits a year between 1980 and 1989. Single-family permits account for 47%, and multi-family 53%. Due to the fact that some construction projects take years to complete, even though the building permits were issued, the City uses Certificates of Occupancy (CO's) to determine the number of units that are actually being built per year. The CO's reflect a more accurate account of building construction activity. Between 1991 and 1998, 3,318 units were issued CO's, 1,433 for single-family units and 1,885 for multiple-family units, for a total average of 415 units per year.

The average cost of a basic 1,400 square foot single-family home increased from the $44,000 - $49,700 range in 1980 to the $56,700 - $63,700 range in 1987. According to the National Association of Homebuilders, in 1997 nationwide, the average size for a new single-family home was 2,150 square feet, with a median price of $145,500 and an average price of $175,700. In 1998, the average size for a single-family home was 2,190 square feet, while the median price was $151,600 and the average price was $181,300. These prices do not include land prices and site development costs of developers. Land costs as estimated by the City of Gainesville can add $15,000 to $50,000 and

upwards of $100,000 to the cost of housing depending on the location within the city or the urban area. According to the "Almanac '99, The fact book for North Central Florida", the average value of a new home in Alachua County in 1998 was $100,296, while the median price rose to $109,900 from the 1997 price of $102,100. Based on permit data from the City of Gainesville Building Division, in 1999, the average size of a new single-family home was 2,250 square feet.

TABLE 30: Housing Construction Activity 1991-1998

Year	Single-Family Units	Total Value	Value/Unit	Multi-Family Units	Total Value	Value/Unit	Total Units
1998	196	14,859,576	75,814	225	10,712,664	47,612	421
1997	160	13,389,552	83,685	197	8,836,452	44,855	357
1996	209	16,998,352	81,332	60	1,436,712	23,945	269
1995	215	17,375,824	80,818	327	8,780,310	26,851	542
1994	258	20,276,936	78,593	567	10,909,792	19,241	825
1993	285	21,179,840	74,315	324	10,332,234	31,890	609
1992	158	7,800,504	49,370	71	2,795,936	39,379	229
1991	88	4,443,754	50,497	42	667,876	15,902	130
TOTAL	1569	$116,324,338		1813	$54,471,976		3382
Value/Unit			$74,139			$30,045	

Source: City of Gainesville Building Division, 1999.

A comparison of the average cost of construction nationwide of approximately $61 per square foot according to the U.S. Census Bureau and the per unit value in Table 30 indicates that the City's valuation of construction is not consistent with the true cost of housing construction. The City's current valuation is based on a cost of $35 per square foot. The City's current valuation at first glance gives the impression that this city should not have an affordable housing problem.

A review of Tables 31 and 32 indicates that all of the price classes ranging from $40,000 to $49,999 to $200,000 to $249,999 had over 100 listings at the end of a given month. Based on these data it appears the private sector can provide housing at various price ranges, from new construction to the resale of existing houses.

Price of Housing

A review of the Year-To-Date Summary of Sales Activity of the Gainesville Multiple Listing Service for the years 1997 and 1998 (Table 31 and 32), found that the average selling price in the urban area for a

typical 3-bedroom single-family dwelling unit was $97,100 and $100,300 respectively. For a 2-bedroom home, the mean selling price in 1997 was $62,700 and $68,100 in 1998. Finally, 4-bedroom homes sold for an average of $164,900 in 1997 ad $179,600 in 1998. The data in Table 33 indicate that the average selling price of housing has increased approximately 8.6% for 2-bedroom homes, 3.3% for 3-bedroom homes and 8.9% for 4-bedroom homes.

Table 31 Real Estate Trend Indicator - 1997

	Report Period: Jan 1, 1997 through Dec 31, 1997					
	Single-Family Unit Sales Number of Bedrooms			Apartment, Condo/ Co-Op Unit Sales	Single-Family Listings End of Month	Apartment, Condo/Co-Op Listings End of Month
Price Class	2 or less	3	4 or more			
$29,999 or under	23	16	2	42	34	49
$30,000 - $39,999	24	19	3	62	73	73
$40,000 - $49,999	32	81	5	91	114	25
$50,000 - $59,999	27	84	7	53	132	12
$60,000 - $69,999	48	106	12	46	137	15
$70,000 - $79,999	17	149	10	56	130	19
$80,000 - $89,999	22	175	18	26	152	28
$90,000 - $99,999	15	148	24	8	172	15
$100,000 - $119,999	6	269	69	3	276	2
$120,000 - $139,999	6	121	119	3	200	20
$140,000 - $159,999	0	54	81	0	159	1
$160,000 - $179,999	1	41	54	0	101	0
$180,000 - $199,999	0	20	56	1	121	0
$200,000 - $249,999	0	17	57	1	107	0
$250,000 - $299,999	0	9	33	0	57	0
$300,000 - $399,999	1	2	24	0	55	0
$400,000 - $499,999	0	1	12	0	7	0
$500,000 and over	0	0	1	0	25	0
Totals	222	1312	587	392	2052	259
Median (thousands)	62.0	91.5	144.4	50.0	107.3	44.5
Mean (thousands)	62.7	97.1	164.9	55.1	134.8	57.7

Source: Gainesville-Alachua County Association of Realtors, 1998.						

Table 32 Real Estate Trend Indicator - 1998

	Report Period: Jan 1, 1998 through Dec 31, 1998					
	Single-Family Unit Sales Number of Bedrooms			Apartment, Condo/ Co-Op Unit Sales	Single-Family Listings End of Month	Apartment, Condo/Co-Op Listings End of Month
Price Class	2 or less	3	4 or more			
$29,999 or under	22	27	1	43	24	60
$30,000 - $39,999	21	20	1	42	49	36
$40,000 - $49,999	35	63	6	85	123	28
$50,000 - $59,999	20	82	23	57	162	29
$60,000 - $69,999	49	93	10	60	162	13
$70,000 - $79,999	31	131	17	66	186	22
$80,000 - $89,999	28	124	17	46	179	26
$90,000 - $99,999	19	175	20	16	115	15
$100,000 - $119,999	12	263	65	14	305	23
$120,000 - $139,999	5	158	102	4	226	4
$140,000 - $159,999	4	73	86	0	154	0
$160,000 - $179,999	1	48	63	0	103	0
$180,000 - $199,999	0	19	54	0	108	1
$200,000 - $249,999	0	22	80	0	131	2
$250,000 - $299,999	0	8	50	0	95	0
$300,000 - $399,999	0	0	39	0	56	0
$400,000 - $499,999	0	1	13	0	18	0
$500,000 and over	1	1	9	1	16	1
Totals	248	1308	656	434	2212	260
Median (thousands)	66.9	97.0	154.3	59.0	107.1	52.3
Mean (thousands)	68.1	100.3	179.6	61.3	132.2	63.8
Source: Gainesville-Alachua County Association of Realtors, 1999.						

The multiple listing service year-to-date summary report also indicated that approximately 82% of the residential listings sold leaving an estimated 350 to 400 units on the market.
The multiple listing service year-to-date summary reports also indicate that the number of apartment/condominium sales increased from 392 to 434 and the selling value increased from $55,100 to $61,300 between 1997 and 1998.

Tenure and Type

Based on the data about new housing construction and the real estate sales market (acceptable vacancy rates for all types of units) it appears that the private sector has provided an adequate amount of housing units to meet the need for both single-family and multi-family units. During the last 8 years 47% of the building permits issued has been for single-family units and 53% for multi-family units. It is assumed that all single-family units being built are for owner occupancy and the majority of multi-family units being built are for renter occupancy.

Income Group

It appears that the private sector can provide 100% of the housing needs of moderate, middle and upper income household and a portion of low-income household needs. The private sector has difficulty providing housing at a profit for extremely low-and very low-income and a large portion of the low-income group.

Extremely Low-Income

This income group has a maximum housing cost expenditure of approximately $320 a month for a family of 4. Based on the limited income of this group, housing construction costs, land and site development costs, the private sector cannot provide adequate housing at a price this group can afford without some type of subsidy. Based on a conventional fixed rate 30-year mortgage at 7.5%, the maximum mortgage that this group could afford, (within the affordable housing index) is $45,000. With average lot prices for single-family housing estimated at anywhere from $15,000 to $50,000 and upwards of $100,000 and the average cost of housing construction at $60-$70 per square foot, the private sector cannot provide housing for extremely low-income groups.

Very Low-Income

The very low-income group consists of a family of 4 that can only spend $321 to $534 a month on housing cost. Households which can only afford to spend $321-$400 can only afford housing that is in the $45,000 to $55,000 range. For very low-income households that can afford housing expenses above $400, the private sector housing market does offer some hope. Analysis of the real estate

market indicates that there is existing housing on the market that can meet the needs of this income group. The majority of housing for this group consists of housing in older neighborhoods, town houses and apartments. This housing has a cost between $60,000 and $80,000. The neighborhood filtering process plays a very important role in the housing framework for low-income households.

Low, Moderate, Middle and Upper Income Group

The low-income group consists of those families of four that can afford to pay between $535 and $854 a month on housing cost. The moderate, middle and upper-income group consists of those four person households that can afford to pay at least $855 a month for housing cost. The private sector, through the existing resale housing market and new construction, currently provides housing for these income groups in a variety of housing types.

HOUSING DELIVERY PROCESS

This section of this Element analyzes two administrative processes that influence the supply and affordability of housing: government regulation and mortgage financing.

Regulatory Framework

The production of housing involves the coordination of a group of individuals: land owners, homebuilders, building material suppliers, and financial institutions, as well as City government. In order to determine what regulatory issues are affecting the production of housing in Gainesville, the City surveyed homebuilders and asked them to rank or list issues in the order that have most significantly affected their ability to build housing in Gainesville. The following are the results of that survey:

ISSUE	RANKING
Zoning and Subdivision Approvals	1
Land Availability	2
Land Cost	3
Building Code Inspection	4
Environmental Constraints	5
Inadequate Infrastructure	6
Construction Financing	7

Source: City Mail Survey

The ranking lists zoning and subdivision approvals as the number 1 issue. However, the following discussion will show that this issue may be more of a perception problem than a real problem.

Zoning and Subdivision Approvals, and Environmental Regulations

Between 1994 and 1999, 18 requests for residential rezoning have been presented to the city (Table 33). Sixteen of the petitions were approved and 2 were denied. Of those 16 requests that were approved, 6 involved changes from a nonresidential use to a residential use, 5 of which were approved. Based on Planning Department files, most requests for residential rezonings have been approved, but there have been more requests to have residential land rezoned for non-residential uses. There have also been more requests for rezoning residential land to mixed-use zoning classifications that would allow commercial, office and residential uses together. This reflects the creation of the mixed-use zoning districts in 1992. Zoning and subdivision approvals are usually granted within 6 months of the submission date.

Due to the environmentally sensitive nature of some undeveloped land in the city, delays in approvals are caused by the need for additional studies and adjustments to plans in order to protect the environment and the community. These studies often cause unanticipated delays that may add to the costs and frustrations of the developer.

Table 33 RESIDENTIAL ZONING CHANGES 1994-1999

Results	Total Residential	%	To Residential	Within Residential (up)	Within Residential (down)
Approved	16	89	5	6	5
Denied	2	11	1	1	0
Total	**18**	**100**	**6**	**7**	**5**

Source: Dept. of Community Development Petition Files, January 2000.

Land Availability and Land Cost

Land availability and land cost were ranked second and third respectively by homebuilders as being problems for developing housing in the city. Land is one of the most critical resources in the housing delivery system. The supply and location of vacant land, in addition to its price, has a significant impact on the production and distribution of residential development. The supply of land that is available for residential development is almost always controlled by private land owners who may not wish to sell or develop their property, thereby, effectively reducing the supply of land. The other factor that affects the

supply of land is whether the land that is available can be used for development. If not, the supply is further reduced.

The Vacant Residential Land Use Inventory discussed earlier in this Element explained that the city has available land zoned for residential use to accommodate expected future growth through the year 2010. A major factor that will affect the availability of this land is that over 50% of the vacant residential land has environmental constraints that make housing development more difficult and expensive. This usually drives land prices up for available land.

Nationally, land costs now comprise one-fourth of the cost of a new single-family home compared to 10% 40 years ago (National Association of Homebuilders). If current trends continue, in another 30 years, lot costs will exceed those for materials and labor. Based on a survey of the Gainesville Homebuilders Association, land costs in Gainesville represent approximately 21% of housing cost.

Based on lot sale prices, lot prices in the city are higher than in the urban area outside of city limits for a comparable lot. Lot prices follow the basic economic laws of supply and demand. When demand is greater than the supply of land on the market, then land prices are higher. Land prices are usually in the most demand closer to amenities that the consumer feels are most important, near urban services, the work place, shopping, etc., which is usually in the city. Further away from urban services, land prices tend to be lower.

The City has taken the initiative to provide lower cost housing by marketing a tract of land it owns to be developed into affordable housing. The City currently owns 131 lots on 35 acres of land located in the Cedar Grove II Project area in Northeast Gainesville, east of Waldo Road and north of Duval Elementary School. At the time of this report, 23 homes are completed and 11 more are under construction. The City is acting as developer of this project, which at build out will include 131 affordable, custom built single-family homes for very low-, low- and moderate-income families. The target market of this development consists of families with incomes less than or equal to 120% of the area median income for Gainesville, adjusted for family size. The leveraging of various federal, state, local, foundation and private sector funds will enable the City to price the new homes at an affordable level. Subsidies available to qualified buyers include land grants (value of $13,500), down payment assistance and below-market second mortgages among other forms of assistance.

Financing

One of the major constraints for many families is securing the financing to purchase a home. However, according to the National Association of Homebuilders, innovations in mortgage finance in addition to a strong economy have helped to expand homeownership opportunities. Under pressure from regulators and the market to make homebuying more accessible to low-income households, financial institutions

have created more flexible lending standards with several new products that enable more low-income borrowers at the margin to qualify for mortgages. For example, now that mortgage interest rates and home price inflation are at modest levels, financial institutions are offering more adjustable-rate products with a variety of initial adjustment periods and interest rates.

The major drawback for many households seem to be saving for the down payment and closing costs associated with buying a home. Lower down payment requirements have helped to reduce the upfront cash burden for some potential buyers. The down payment requirement on some loans is as low as 5 percent. Also, many of the new mortgage products allow sellers to contribute to closing costs, and some waive the cash reserve requirement when a loan is closed. Some lenders are also raising the maximum mortgage payment a specific income can carry and are allowing borrowers the chance to establish credit by using the timely payment of rent and utilities. The time and cost of processing loans has also been reduced due to improvements in information technology. As a result, homebuyers now have more options in picking a mortgage product that best suits their particular income and risk tolerance. However, a broad downturn in the economy can still negatively affect housing markets, and rising interest rates can force marginal borrowers out of the homebuying market. In many cases, fluctuations in the interest rates prevent persons from qualifying for loans. Table 34 reveals the impact that an increase in interest rates has on the number of people that can afford a mortgage. The interest rates at the time of this writing range from 7.38 to 8.62%; on a $50,000 mortgage, payment for principal and interest will range from $324 to $387. An increase in interest rates up to 10 or 10.5% increases this payment from $439 to $476. This increase in interest rates would prevent more families from purchasing a home.

Table 34 Interest Rates/Monthly Payments

Loan Amount	**Interest Rates/Monthly Payments**								
	6.5%	7%	7.5%	8%	8.5%	9%	9.5%	10%	10.5%
$20,000	$126	$133	$140	$147	$154	$161	$168	$176	$183
$25,000	158	166	175	183	192	201	210	219	229
$30,000	190	200	210	220	231	241	252	263	274
$35,000	221	233	245	257	269	282	294	307	320
$40,000	253	266	280	294	308	322	336	351	366
$45,000	284	299	315	330	346	362	378	395	412
$50,000	316	333	350	367	384	402	420	439	457
$55,000	348	366	385	404	423	443	462	483	503
$60,000	380	399	420	440	461	483	505	527	549
$65,000	411	432	454	477	500	523	547	570	595

$70,000	442	466	489	514	538	563	589	614	640
$75,000	474	499	524	550	577	603	631	658	686
$80,000	506	532	559	587	615	644	673	702	732
$85,000	537	566	594	624	654	684	715	746	778
$90,000	569	599	629	660	692	724	757	790	823
$95,000	600	632	664	697	730	764	799	834	869
$100,000	632	665	699	734	769	805	841	878	915
Source: Fannie Mae Foundation, Opening The Door To A Home Of Your Own, 1996.									

The data suggests that an effective way to the increase number of persons who can afford to purchase a home would be for the City, with the cooperation of lending institutions to develop a down-payment loan program for young families, and a mortgage interest rate reduction fund program.

BARRIERS TO AFFORDABLE HOUSING

The City of Gainesville 1996-2000 Housing and Community Development Consolidated Plan states that as a requirement of the State Housing Initiatives Partnership (SHIP) Program, the City established the Affordable Housing Advisory Committee (AHAC), a group consisting of developers, housing professionals, advocates for low-income people and citizens interested in affordable housing. The committee reviewed public policies to identify those that may act as barriers to the provision of affordable housing in the City. Five policies were identified as having a direct effect on the provision of affordable housing in 1995. At the present time, the City has adequate infrastructure capacity to provide affordable housing and a transfer of development rights incentive was determined not to yet be a viable alternative.

Expedited Permitting

The total cost of a housing unit can rise significantly with the time and expense of obtaining the proper permits for construction or rehabilitation. The City's First Step Program is available for private and non-profit housing developers for assistance in finding suitable sites for low-income housing and providing preliminary information to help get projects started. The guidance concerning development procedures and requirements received at First Step is also a way for developers to avoid wasting time trying to find different pieces of information from different city departments.

Historic Preservation Review Process

Within the three historic districts of the City are opportunities for the development of affordable housing. The AHAC found that historic preservation is a desirable activity in the community but the Historic Preservation Board review process at times may inadvertently delay the development of affordable housing in these neighborhoods. The AHAC suggested that a set of pre-approved guidelines for affordable housing within the Historic Districts be drawn up and that housing plans that meet these guidelines should be automatically approved by the Historic Preservation Board staff. Although this has not yet happened, NHDC has a set of designs that have been approved for new housing in the Pleasant Street Historic District. More housing units with the same design have been reviewed and approved by the Historic Preservation Board with minimal delays, thus speeding up the provision of affordable housing in the district. Because each historic district has unique characteristics, pre-approved guidelines should be specific to each individual historic district and should meet applicable specific situations.

Zoning

Zoning regulations determine the type of land use activity and the intensity of use on a piece of property. Sometimes, zoning regulations can act as an impediment to affordable housing, either by prohibiting certain types of lower cost housing units or limiting densities so that more affordable, higher density housing activities such as apartments and townhouses are restricted. Minimum lot size can lead to higher cost units because of the higher price of the land. Individual setback requirements can increase costs by reducing the amount of buildable area on lots. The AHAC determined that the City Land Development Regulations allow for a wide range of housing at various densities and do not pose a serious barrier to the provision of affordable housing. The regulations include density bonus points as an incentive to develop higher density residential units.

HOUSING PROGRAMS

Provision and Siting of Extremely Low, Very-Low, and Low-Income Housing/ Infrastructure Availability

It is the City's objective to provide scattered housing sites for the development of low and moderate income housing throughout the city by developing and providing programs that can be used in all parts of the city. Approximately 22% of the city's public housing and 28% of the City's Section 8 rental assistance units are located in what was once referred to as Planning District 13. This Southeast Quadrant contains less than 10% of the city's population but a disproportionate percentage of the low-income housing. To enable low and moderate-income households the opportunity to live in other parts of the city and to limit the concentration of housing in the Southeast, existing and future programs must encourage housing throughout Gainesville. Infrastructure can be provided for residential development

throughout the City. Based on analysis from the City's Stormwater Management (Drainage), Water/Wastewater and Traffic Circulation Elements, it has been determined that infrastructure is available to meet the needs of existing and future low-income households.

Currently, the City continues to assist the Neighborhood Housing and Development Corporation (NHDC), Habitat for Humanity, the Gainesville Builder's Association Home Ownership Possibilities for Everyone (H.O.P.E.) program and other not-for-profit housing providers in their efforts to contract new affordable homes for low income families via land donations when available and technical assistance. The City also owns scattered sites within the city limits, sufficient to build approximately 180 housing units. The Gainesville Housing Authority Section 8 program provides certificates that can be used for housing throughout the city. These programs along with the owner and renter rehabilitation programs are capable of providing affordable housing throughout the city for low-income families.

The City should study an innovative method that may provide more affordable infill housing. This method would provide financial incentives and eliminate time delays in gathering permits. The City would provide several free building permits for specific locations where it has been determined that affordable housing should be encouraged. These permits would be "on the shelf," and available for housing contractors to pull.

Initially, affordable housing designs would be chosen in a design competition after being evaluated on energy efficiency, water conservation and other criteria. The best designs would be taken to neighborhood associations, affordable housing advisory groups and local government professionals. The neighborhood would either accept or reject each proposed design, as they deemed fit for their neighborhood. The final designs would then be fully processed and readily available to any entity that chooses to build in those locations.

Due to the fact that existing programs will not meet all the needs of extremely low, very-low and low-income households, other programs must be utilized. The City anticipates that participation by private industry and not-for-profit organizations in the State affordable housing programs such as the State Housing Initiative Program (S.H.I.P.) will help the City meet the needs of extremely low-, very-low and low-income families. The S.H.I.P. program provides funding for a wide variety of housing needs for current and future homeowners. The programs and services include purchase assistance for downpayments and closing costs, homebuyer training, housing rehabilitation, emergency repair, special needs housing for groups such as the homeless or teenage mothers, and mortgage foreclosure to help income-eligible households avoid foreclosure.

The William E. Sadowski Affordable Housing Act, enacted in 1992, allocates a portion of new and existing documentary stamp taxes on deeds and mortgages for the development and maintenance of

affordable housing. The money is distributed on a formula basis to cities and counties. This is the funding that makes up the S.H.I.P. program.

Elimination of Substandard Housing Conditions

The total number of substandard units was estimated at 1624 units by the Housing Conditions Survey of 1992, compared to 1844 units in the previous plan period. In order to eliminate these substandard conditions and prevent additional units from becoming substandard, the City has developed a Housing and Community Development Consolidated Plan. This is a comprehensive assessment, strategy and action plan for various community development activities within the City. The intent is to provide a unified vision for addressing the many needs of very-low, low and moderate-income residents, including housing needs. The housing plan utilizes the following programs to address the problems of substandard housing:

Housing Inspection Program - The Code Enforcement Division implements the City's Minimum Housing Code, inspecting housing units considered dangerous throughout the City.

Homeowner Rehabilitation Program - Funded through the CDBG and HOME programs, this program rehabilitates owner-occupied housing units in 10 target areas.

Rental Rehabilitation Program - Funded primarily through the HOME program, this program rehabilitates renter-occupied units throughout the City but primarily in the 10 designated target areas.

Housing Initiatives Program - This is a cooperative effort between the City and private agencies to provide housing opportunities for low-income households. The City Housing Division coordinates 6 S.H.I.P. committees to ensure community-wide input for more affordable housing. The program includes NHDC, the Gainesville Builders Association HOPE program, Habitat for Humanity and other not-for-profit housing providers in their efforts to provide affordable housing.

Allow Sites for Mobile Homes

The City of Gainesville 1991-2001 Comprehensive Plan allows the development of mobile home-parks in areas designated Residential-Low (up to 12 units per acre) on the Future Land Use Map. Manufactured homes meeting the Standard Building Code standards are permitted by right in all residential districts. There are currently 9 licensed mobile home parks in the city and 17 in the urban area outside of city limits (see Map 6). The mobile home parks in the city contain a total of 999 mobile home spaces. Currently there are 5 acres of vacant land zoned for the development of mobile homes in the city that could provide an additional 60 *(available acreage times 12)* mobile home spaces. Since 1982 only one request was made for rezoning into the RM district, which was approved.

Based on the data presented, it is clear that the County provides more opportunities for siting mobile homes in the urban area than the City does. In order for the City to provide adequate sites for mobile homes in the future, the City's Land Use Plan must designate land for mobile homes. Land Development Regulations allow mobile homes in mobile home parks under a low-density residential land use category. The City's zoning code does reflect the fact that manufactured housing is a residential use and is allowed in residential areas when built to the Standard Building Code. The existing zoning code requires that land for mobile homes be designated to MH (mobile home residential district).

Provisions for Group Homes and Foster Care Facilities

The City Code of Ordinances provides adequate sites in residential areas or areas of residential character for group homes and foster care facilities. The City defines and provides for the following types of residential care facilities: Community residential homes, Adult day care homes, Family day care homes, Residences for destitute people and Social service homes and halfway houses. Family day care homes and Community residential homes are allowed by right in all residential districts. Social Service Homes are allowed by special use permit in certain multi-family and mixed-use districts, and by right in the medical district. In regard to community residential homes, the City has amended its zoning code to comply with State law, which places limits on local government's ability to regulate them. Thus, Community residential homes with 1-6 residents are allowed in single-family districts, homes with 7-14 residents are allowed in multi-family districts, and homes with over 14 residents are permitted in multi-family districts with additional requirements. All Community residential homes must meet minimum distance requirements. See Appendix B for definitions of these facilities.

While the City provides sufficient opportunity for the siting of these facilities, it could facilitate their development by improving coordination with the State Department of Children and Families and by disseminating information on requirements and procedures for siting them.

Preservation and Conservation of Existing Housing Stock

The City of Gainesville possesses many valuable architectural (historic) resources that are being preserved though the efforts of the City and the Historic Preservation Board. There are 4 historic districts (3 in the City plus the UF Campus District), and 3 residential structures listed on the National Register of Historic Places in Gainesville. The City also funds an active Historic Preservation Program and promotes the nomination of neighborhoods to the Local Register of Historic Places. Due to the importance of the city's historical resources, the City has adopted the Historic Preservation Element of the Comprehensive Plan.

The preservation and conservation of non-historically significant housing is important to maintaining a sense of community and providing housing for those who cannot afford new housing. Since 1975, the City has used Community Development Block Grant (CDBG) and HOME funds to rehabilitate housing in designated target areas (see Map 5). The City has also supported non-profit organizations such as the Neighborhood Housing and Development Corporation and the Community Action Agency in their efforts to preserve housing and neighborhoods. The City will continue to use these programs as well as the assistance of other non-profit organizations to preserve and rehabilitate the housing in existing neighborhoods.

If a house cannot be rehabilitated and must be demolished, deconstruction is a way to preserve at least certain elements from the building during the demolition process. Deconstruction is the taking apart or removing of some building components for reuse before demolition. The process involves carefully taking apart portions of buildings or removing their contents with the main goal of reusing those elements. Deconstruction can help the environment by diverting items from landfills into productive uses. It can also create job opportunities for unskilled and unemployed workers.

The City of Gainesville has recently instituted a neighborhood planning program that would assist designated neighborhoods in developing a neighborhood action plan, which will include goals and issues identified by the neighborhood and a proposed list of projects. City staff from several departments will be available to work with and assist the neighborhoods in developing a plan. The plans need to address issues such as land use, housing, codes enforcement, traffic and infrastructure, crime, recreation and beautification. Short and long-term goals identified by the neighborhood and identification of strategies to implement the goals are also included in the plans. Besides providing tangible physical improvements to the neighborhood, the program will enable neighborhood residents and the City to make positive changes by working together in partnership, enhance communication and understanding between the neighborhood and the City and empower neighborhood groups to effectively plan and implement projects and solutions.

APPENDIX A

CITY OF GAINESVILLE
HOUSING CONDITIONS SURVEY

SURVEY COMPLETED BY THE CODES ENFORCEMENT
DIVISION OF THE COMMUNITY IMPROVEMENT DEPARTMENT

JUNE 1992

REPORT PREPARED BY THE DEPARTMENT OF COMMUNITY
DEVELOPMENT
JUNE 1993

OVERALL SURVEY RESULTS

The City of Gainesville has a total of 30,971 dwelling units by physical count. On a scale from one (worst) to four (best), the average dwelling unit has a 3.6 rating. This survey was conducted by the City of Gainesville Code Enforcement Division of the Community Improvement Department, and evaluates the exterior condition of housing units. Surveyors evaluated both the extent of deterioration and the number of major and minor code violations detected in each unit. Housing conditions in the City were determined using the following rating system:

DILAPIDATED (1)

a dwelling or dwelling unit deteriorated in excess of 50% of its value or with numerous major violations.

SUBSTANDARD (2)

(major repairs) a dwelling or dwelling unit with numerous minor violations or a combination of major and minor violations valued at less than 50% of the unit.

SUBSTANDARD (3)

(minor repairs) a dwelling or dwelling unit with three or more minor violations only.

STANDARD (4)

a dwelling or dwelling unit that substantially meets the conditions of the Minimum Housing Code with two or less minor violations.

TO DETERMINE THE DWELLING'S CLASSIFICATION, THE FOLLOWING VISUAL INSPECTION VIOLATION BREAKDOWN WAS USED:

MINOR VIOLATIONS

1. Broken, missing or cracked window panes (one violation each window).
2. Damaged or missing window and door screens (one violation each instance).
3. Exterior wood surface with deteriorated or lacking paint.
4. Deteriorated wood trim (small amount only).
5. Minor roof violation.
6. Trash and debris on premises.

MAJOR VIOLATIONS

1. Multiple instances of minor violations (e.g. numerous broken windows).
2. Deteriorated exterior wood siding and/or support members.
3. Major roof deterioration.
4. Improper piers, sagging, leaning or other structural defects.
5. Inadequate electrical service

COMPARATIVE BREAKDOWN OF HOUSING CONDITIONS

RATING	1992	1982	1992	1982
1	95	502	.3%	1.74%
2	1529	3165	5.0%	11.0%
3	7420	6819	24.0%	23.7%
4	21927	18287	70.7%	63.5%
TOTAL	30971	28773	100%	100%
Total units not meeting standard	9044	10486	29.2%	36.4%

NEIGHBORHOOD DIVISION

The City of Gainesville is divided into 47 Neighborhood Planning Areas (NPA's), shown on Map 1. A survey was conducted in June of 1992 in each NPA to determine the number of housing units and their condition. The results of this survey are depicted in Table 1. This table shows the total number of housing units in each NPA, and using the above rating system (one=worst to four=best), the number of housing units classifed by condition.

Several NPA's have a significant number of dilapidated and substandard housing units needing major repair. Maps 2 is a graphical representation of the percentage of housing units in each NPA that fall into the substandard categories of dilapidated (a condition rating of "1") or needing major repair (a condition rating of "2"). NPA's 4, 14, 18, 19, and 41 have the highest percentage of units falling into these categories. In each of these NPA's between 21 and 40 percent of the units are classified as substandard, with the exception of NPA 19, where 83% of the housing units have been classified as dilapidated or substandard needing major repair. NPA 4 has the highest number of dilapidated units

with 54 units being rated a "1". This is over half of the total number of units rated a "1" in the City.

AVERAGE CONDITION

The average housing unit in the City of Gainesville has a 3.6 housing condition rating. Table 2 shows the average rating for housing units in each Neighborhood Planning Area and indicates whether the average condition is above or below the City average. There are 18 NPA's where the average housing condition rating is below the City average.

CONCLUSION

This housing conditions survey has determined that 29% of the housing units in the City of Gainesville are in substandard condition, 5% of which are considered to be dilapidated or in need of major repair. In comparison to the 1982 Housing Conditions Survey, this percentage is 7% lower and shows that the City has been making progress in reducing the number of housing units that do not meet the standard. The number of units in dilapidated condition have been significantly decreased since 1982. However, housing units that are classified as either dilapidated or substandard continue to present pressing health and safety concerns. According to the City of Gainesville 1991-2001 Comprehensive Plan, the City will monitor housing conditions and conduct a windshield survey every 4 years. The City will continue to utilize federal, state and local resources and housing programs to address housing rehabilitation needs in the future.

NOTE: Survey results are representative of the city limits prior to the June 1992 annexation. Proposed amendments to the Housing Element of the City of Gainesville Comprehensive Plan indicate that a housing conditions survey of all housing units annexed by the City in 1992 will be completed by the year 1995.

TABLE 1

HOUSING CONDITIONS

NPA	4	3	2	1	TOTAL
1	185	75	18	5	283
2	172	101	37	1	311
3	1090	130	9	0	1229
4	287	244	111	54	696
5	530	119	6	0	655
6	980	276	10	0	1266
7	71	62	13	1	147
8	616	155	2	0	773
9 CAMPUS					
10	1117	74	1	0	1192
11	334	13	0	0	347
12	212	104	0	0	316
13	594	186	22	11	813
14	149	90	116	0	355
15	670	285	9	0	964
16	660	142	8	0	810
17	135	183	37	0	355
18	76	39	51	1	167
19	14	37	234	8	293
20	846	911	9	0	1766
21	401	476	9	0	886
22	627	30	1	0	658
23	316	3	0	0	319
24	330	222	0	0	552
25	292	134	41	0	467
26	593	419	94	1	1107
27	INDUS.				
28	47	91	18	0	156
29	821	281	101	3	1206
30	PARK				
31	194	62	4	1	261
32	752	103	23	4	882
33	NO NPA				
34	542	63	0	0	605
35	1025	17	0	0	1042
36	597	29	1	0	627
37	951	52	12	0	1015

38	153	18	0	0	171
39	1018	64	5	0	1087
40	908	147	13	0	1068
41	274	96	158	0	528
42	478	383	54	3	918
43	114	197	41	2	354
44	333	248	95	0	676
45	624	333	47	0	1004
46	638	269	22	0	929
47	1027	437	97	0	1561
48	134	20	0	0	154
TOTAL	21927	7420	1529	95	30971

TABLE 2
AVERAGE HOUSING CONDITIONS

NPA	AVERAGE	ABOVE CITY AVERAGE	BELOW CITY AVERAGE	AT CITY AVERAGE
1	3.5		x	
2	3.4		x	
3	3.9	x		
4	3.1		x	
5	3.8	x		
6	3.8	x		
7	3.4		x	
8	3.8	x		
10	3.9	x		
11	3.9	x		
12	3.7	x		
13	3.7	x		
14	3.1		x	
15	3.7	x		
16	3.7	x		
17	3.3		x	
18	3.1		x	
19	2.2		x	
20	3.5		x	
21	3.4		x	
22	3.9	x		
23	3.9	x		
24	3.5		x	
25	3.5		x	
26	3.4		x	
28	3.2		x	
29	3.6			x
31	3.7	x		
32	3.8	x		
34	3.9	x		
35	4.0	x		
36	3.9	x		
37	3.9	x		
38	3.9	x		
39	3.9	x		
40	3.8	x		
41	3.2		x	
42	3.4		x	
43	3.2		x	
44	3.3		x	
45	3.6			x
46	3.7		x	
47	3.6			x
48	3.8	x		

APPENDIX B

DEFINITIONS

Foster Family Home for Children means a dwelling owned or rented by, and occupied by, parents licensed by the State to provide personal care for one or more foster children, all of whom live together in such dwelling as a family unit with traditional family ties. Any former foster child who has lived continuously in such a home for one year prior to his/her attaining majority age shall be considered a member of the family and the parents may allow that former foster child to continue to live in that home without obtaining a landlord license.

Personal Care Group Home—In 1989, the State adopted Florida Statute 419 which limits local government's ability to regulate personal care group homes. The City is in the process of amending it's zoning code to comply with this Act. In the interim, State law takes precedence over the City's Zoning Code. The Act defines a Community Residential Home as a "dwelling unit licensed to serve clients of the Department of Health and Rehabilitative Services, which provides a living environment for 7 to 14 unrelated residents who operate as the functional equivalent of a family, including the supervision and care by supportive staff as may be necessary to meet the physical, emotional, and social needs of the residents." The Act further states that "homes of six or fewer residents which otherwise meet the definition of a community residential home shall be deemed a single-family unit and a noncommercial, residential use for the purpose of local laws and ordinances. Regulations for homes with more than 14 residents remain the same as stated in the City's Zoning Code.

Community residential home means a dwelling unit licensed to serve clients of the state department of health and rehabilitative services, which provides a living environment for residents who operate as the functional equivalent of a family, including such supervision and care by supportive staff as may be necessary to meet the physical, emotional, and social needs of the residents. Community residential homes are further defined by F.S. Ch. 419, and regulated by the state department of health and rehabilitative services. This definition shall not include foster family homes for children, rooming or boarding homes, clubs, dormitories, fraternities, sororities, monasteries or convents, hotels, residential treatment facilities (Levels I, III or V), nursing homes, emergency shelters, social service homes or halfway houses, or residences for destitute people.

Social Service Home or Halfway House—A facility providing professional care, resident or nonresident, for those requiring therapy, counseling, or other rehabilitative services related to drug abuse, alcohol abuse, social disorders, physical disabilities, mental retardation, or similar problems.

APPENDIX C

Table 35		SELECTED HOUSING CHARACTERISTICS					
			City of Gainesville				
Census Tract	Total Housing Units	# lacking plumbing	% lacking plumbing	# lacking complete kitchen	% lacking complete kitchen	Number overcrowded	Percent overcrowded
1	294	0	0	5	1.7%	0	0
2	2282	33	1.45%	8	0.35%	115	5.0%
3	3289	22	0.67%	6	0.18%	60	1.82%
4	2244	0	0	0	0	94	4.19%
5	2240	12	0.53%	10	0.45	13	0.58%
6	1499	13	0.87%	18	1.20%	183	12.2%
7	1861	21	1.13%	40	2.15%	261	14.0%
8	4139	0	0	0	0	173	4.18%
10	2737	33	1.20%	27	0.97%	60	2.19%
11	2989	7	0.23%	7	0.23%	33	1.10%
12	4205	8	0.19%	0	0	106	2.52%
13	27	0	0	0	0	0	0
14	0	0	0	0	0	26	9.45%
15	0	0	0	0	0	0	0
16	1621	0	0	4	.25%	38	2.3%
17	1558	0	0	0	0	20	1.29%
19.02	0	0	0	0	0	0	0
18.01	229	0	0	0	0	0	0
18.03	1669	0	0	14	.84%	52	3.12%
18.04	87	0	0	0	0	7	8.04%
19.01	0	0	0	0	0	0	0
Totals	33,245	149	0.45%	139	.42%	1241	3.73%

Source: 1990 U.S. Bureau of the Census
Census Tract 9 (University of Florida) was deleted from the analysis

Notes:
A housing unit is classified as "lacking plumbing" when some or none of the three specified plumbing facilities (hot and cold piped water, a flush toilet and a bathtub or shower) are present inside the unit.
The number of units having complete and incomplete plumbing facilities is shown for all housing units. In 1990, the Census Bureau dropped the requirement of exclusive use from the definition of complete plumbing facilities.
The number of units having complete and incomplete kitchen facilities is shown for all housing units.
A housing unit is classified as 'over-crowded' if is occupied by 1.01 or more persons per room.

Table 36	1990 HOUSE HEATING FUEL
	Occupied Housing Units
Utility Gas	13,155
Bottled, Tank or LP Gas	1,674
Electricity	14,886
Fuel Oil, Kerosene, etc	1,630
Coal or Coke	0
Wood	279
Solar Energy	18
Other Fuel	59
No Fuel Used	223
Total	31,924
Source: 1990 Census of Population and Housing	
Note: The number of housing units lacking central heating facilities is not provided in the 1990 Census but the number of housing units utilizing various types of heating fuels is provided. The number of housing units not using any type of heating fuel is used as an indicator of unit condition.	

In Gainesville, of the 31,924 occupied housing units there are 223 that used no fuel, representing less than 1 percent (0.7%) of the occupied housing stock.

Table 37	SUBSTANDARD HOUSING UNIT CONDITION SUMMARY - 1990
occupied housing units exhibiting one or more of the following characteristics:	
lacking complete plumbing of kitchen facilities, 1.01+ persons per room, no heating fuel	
Alachua County	Occupied Units
Alachua	122
Archer	40
Gainesville	1,977
Hawthorne	29
High Springs	55
LaCrosse	8
Micanopy	7
Newberry	33
Waldo	13
Unincorporated (place minus county)	1,480
County Total	3,764
Place Total	2,284
Source: Special cross-tabulation of the 1990 Census of Population and Housing	
prepared by the US Census Bureau for the Shimberg Center for Affordable Housing	

Table 38	UNITS OCCUPIED OR TO BE OCCUPIED BY PERMANENT RESIDENTS						
		(not seasonal, recreational, occasional, for migrant, other)					
	Occupied	Vacant	Total	Vacancy Rate	Vacant Seasonal, etc. Units	Total Units	Vacancy Rate Total Units
City of Gainesville	31,294	2,072	33,996	6.1%	612	34,608	8%
Alachua County	39,334	3,596	42,930	8.4%	1,484	44,414	11%
Source: 1990 Census of Population and Housing and the UF Shimberg Center for Affordable Housing.							
Alachua County figures do not include the City of Gainesville.							

Table 39	1990 HOUSING UNITS BY TYPE									
	Number					Share				
	Single Family (1att./ detach)	Multi-family (2 or more)	Mobile Home	Other	Total	Single Family (1att./ detach)	Multi-family (2 or more)	Mobile Home	Other	Total
City of Gainesville	19,080	14,209	1,035	284	34,608	55.1%	41.1%	3.0%	0.8%	100.0%
Alachua County	21,794	13,046	9,161	413	44,414	49.1%	29.4%	20.6%	0.9%	100.0%
Source: 1990 Census of Population and Housing and the UF Shimberg Center for Affordable Housing.										
Alachua County figures do not include the City of Gainesville.										

Table 40	HOUSING UNITS BY TENURE, VACANCY AND OCCUPANCY STATUS, 1990	
TENURE–NUMBER OF UNITS	Gainesville	Alachua County
Owner Occupied	15,035	23,490
Renter Occupied	16,889	15,844
Total Occupied Units	31,924	39,334
TENURE-SHARE		
Owner Occupied	47.1%	59.7%
Renter Occupied	52.9%	40.3%
For Rent	1,415	2,354
For Sale Only	420	792
RENTED OR SOLD NOT OCCUPIED		
Portion of total-assumed use		
Total	237	450
Owner	112	273
Renter	125	177
TOTAL UNITS BY INTENDED USE		
(occupied or to be occupied by permanent residents)		
Owner	15,567	24,555
Renter	18,429	18,375
Total	33,996	42,930
Source: 1990 Census of Population and Housing and the UF Shimberg Center for Affordable Housing.		
Alachua County figures do not include the City of Gainesville.		

In 1990, Gainesville had 15,035 owner occupied and 16,889 renter occupied units, with an additional 1,415 vacant for rent and 420 vacant for sale. A total of 237 units are rented or sold but not occupied; if distributed according to the proportion of occupied owner and renter units they would consist of 125 rental units and 112 owner units. The total owner housing stock is therefore 15,567 units and the rental stock is 18,429 units. Renter units represent almost 53 percent of the occupied housing stock.

Table 41	GROSS RENT, 1990	
Specified Renter-occupied Housing Units*		
Rent	Gainesville	Alachua County
<$100	473	151
$100-$149	565	258
$150-$199	864	476
$200-$249	1,115	673
$250-$299	1,772	1,280
$300-$349	2,194	2,031
$350-$399	1,877	2,294
$400-$449	2,150	2,063
$450-$499	1,300	1,575
$500-$549	1,010	1,152
$550-$599	635	976
$600-$649	683	657
$650-$699	483	458
$700-$749	466	204
$750-$999	677	468
$1000>	204	168
No Cash Rent	400	697
Total	16,568	15,581
Source: 1990 Census of Population and Housing and the UF Shimberg Center for Affordable Housing.		
*Note: The Census excludes one-family houses on 10 acres or more from the count of specified renter-occupied units.		

Table 42	VALUE OF OWNER-OCCUPIED HOUSING UNITS, 1990
	Specified Owner-occupied Housing Units*
	Gainesville
<$15,000	206
$15,000-$19,999	152
$20,000-$24,999	217
$25,000-$29,999	284
$30,000-$34,999	371
$35,000-$39,999	652
$40,000-$44,999	841
$45,000-$49,999	1,183
$50,000-$59,999	2,202
$60,000-$74,999	2,595
$75,000-$99,999	2,379
$100,000-$124,999	976
$125,000-$149,999	524
$150,000-$174,999	271
$175,000-$199,999	157
$200,000-$249,999	149
$250,000-$299,999	54
$300,000-$399,999	70
$400,000-$499,999	10
$500,000>	0
Total	13,293
Source: 1990 Census of Population and Housing and the UF Shimberg Center for Affordable Housing.	
*Note: Specified owner-occupied units "include only one-family houses on fewer than 10 acres without a business or medical office on the property. The data excludes mobile homes, houses with a business or medical office, houses on 10 or more acres, and housing units in multi-family buildings."	

Table 43: Income Limits

Family Size	Median Income	Low Income (80% MFI)	Very Low Income (50% MFI)	Extremely Low (30% MFI)
1 Person	$29,500	$23,900	$14,950	$ 8,950
2 Persons	$34,200	$27,350	$17,100	$10,250
3 Persons	$38,400	$30,750	$19,200	$11,550
4 Persons	$42,700	$34,150	$21,350	$12,800
5 Persons	$46,100	$36,900	$23,050	$13,850
6 Persons	$49,500	$39,600	$24,750	$14,850
7 Persons	$52,900	$42,350	$26,450	$15,900
8 Persons	$56,400	$45,100	$28,200	$16,900

Table 44: Maximum Monthly Housing Cost (Rent or Mortgage)

Family Size	Median Income	Low Income (80% MFI)	Very Low Income (50% MFI)	Extremely Low (30% MFI)
1 Person	$29,500	$ 597.50	$373.75	$223.75
2 Persons	$34,200	$ 683.75	$427.50	$256.25
3 Persons	$38,400	$ 768.75	$480.00	$288.75
4 Persons	$42,700	$ 853.75	$533.75	$320.00
5 Persons	$46,100	$ 922.50	$576.25	$346.25
6 Persons	$49,500	$ 990.00	$618.75	$371.25
7 Persons	$52,900	$1,058.75	$661.25	$397.50
8 Persons	$56,400	$1,127.50	$705.00	$422.50

Goals, Objectives & Policies

Intergovernmental Coordination Element

GOAL 1

TO COORDINATE THE PLANS AND ACTIVITIES OF THE VARIOUS UNITS OF GOVERNMENT TO PROMOTE EFFECTIVE, EFFICIENT COMPREHENSIVE PLANNING, PROVISION OF URBAN SERVICES, AND MITIGATION OF POTENTIAL CONFLICTS BETWEEN JURISDICTIONS.

Objective 1.1 **The City of Gainesville shall maintain interlocal or other formal agreements that describe joint processes for collaborative planning and decision-making with the School Board of Alachua County (SBAC) and other units of local government that provide services but do not have regulatory authority over the use of land, and with Alachua County and the City of Alachua. The joint processes shall include coordination on siting of facilities with countywide significance, including locally unwanted land uses.**

Policy 1.1.1 The City shall maintain an interlocal agreement with SBAC describing joint processes for collaborative planning and decision-making regarding population projections and criteria for the selection of school sites in accordance with the goals, objectives and policies of this plan. Per Subsection 1013.33(1), F.S., the planning effort must also consider the feasibility of keeping central facilities viable in order to encourage central city redevelopment and efficient use of infrastructure and to discourage urban sprawl.

Policy 1.1.2 All development proposals by the SBAC shall be reviewed according to the provisions of the City of Gainesville Code of Ordinances and Comprehensive Plan, subject to the provisions and exclusions of Chapter 1013, F.S.

Revised 12/18/08, Ord. 080016
Revised 01/19/12, Ord. 110174
Revised 02/21/13, Ord. 120234
Revised 08/15/13, Ord. 120370

Policy 1.1.3 In accordance with the provisions of Section 163.31777, F.S., the City shall coordinate with the SBAC to continue the implementation of the interlocal agreement described in Policy 1.1.1 and to implement the Public School Facilities Element of the Comprehensive Plan to extend concurrency requirements to public schools.

Policy 1.1.4 The City shall meet with representatives of the SBAC and other Alachua County local governments to discuss public school concurrency issues.

Policy 1.1.5 The City shall provide notice of proposed land use amendments and development proposals to governmental agencies providing services that may be affected, including the SBAC, UF, Santa Fe College, applicable Water Management District (WMDs), the Florida Department of Transportation (FDOT), Florida Department of Environmental Protection (FDEP), and Florida Department of Children and Families, and provide an opportunity for the concerns of these agencies to be addressed in the review process.

Policy 1.1.6 The City shall provide notice of proposed land use amendments and development proposals to Alachua County and impacted municipalities within the County and provide an opportunity for the concerns of these local governments to be addressed in the review process.

Policy 1.1.7 The City shall participate in the Metropolitan Transportation Planning Organization (MTPO) to provide coordinated transportation planning for the Urbanized Area in conjunction with the FDOT, Alachua County, Gainesville/Alachua County Regional Airport Authority, SBAC, UF, FDEP, and North Central Florida Regional Planning Council (NCFRPC).

Policy 1.1.8 The City shall coordinate with the MTPO and FDOT in planning services for the transportation disadvantaged within the Regional Transit System service area. Coordination with the MTPO and FDOT shall be achieved through the City's participation in the Technical Advisory Committee of the MTPO.

Policy 1.1.9 The City shall coordinate with the Gainesville/Alachua County Regional Airport Authority to ensure that non-compatible land uses within the 55, 65 and 70 Ldn airport noise contours are eliminated by requesting the Authority's review of proposed Land Use Plan Amendments and Development Plans within the noise contour areas.

Policy 1.1.10 The City shall develop an interlocal agreement with Alachua County regarding airport zoning regulations that pertain to the airport hazard area, as required by Section 333.03, F.S.

Policy 1.1.11 The City shall provide information and assistance to the Gainesville Housing Authority, the Alachua County Housing Authority and other agencies

providing housing assistance for low-income, very low-income, and extremely low-income persons.

Policy 1.1.12 The City shall use the NCFRPC to mediate those issues that cannot be resolved through established coordinating mechanisms, in accordance with Section 186.509, F.S.

Policy1.1.13 The City recognizes the adopted University of Florida Campus Master Plan as the campus master plan prepared pursuant to Florida statutory requirements.

Policy 1.1.14 The City shall coordinate with the University of Florida in efforts to stabilize and strengthen neighborhoods in the university context area.

Policy 1.1.15 The City shall seek to coordinate with Santa Fe College on the implementation of the College's master plan for its downtown campus so that the implementation of the master plan is sensitive to impacts on the Pleasant Street Historic District, the NW Fifth Avenue neighborhood, and the West University Avenue corridor.

Policy 1.1.16 The City shall review Santa Fe College development proposals in accordance with applicable provisions of the City of Gainesville Code of Ordinances and Comprehensive Plan, subject to applicable provisions of the Florida Statutes.

Objective 1.2 The City of Gainesville shall initiate annexation(s) of areas within its designated Urban Reserve Area that meet the criteria of "urban in character" as outlined in the Alachua County Boundary Adjustment Act, and that are projected to be urban in character within the horizon of the Comprehensive Plan.

Policy 1.2.1 The City shall proceed with annexation according to the criteria of the Alachua County Boundary Adjustment Act. Urban areas within its Urban Reserve Area that meet the criteria of "urban in character" as outlined in the Boundary Adjustment Act are subject to annexation by the City.

Policy 1.2.2 The City shall collaborate with Alachua County to develop the required urban services report that will address the fiscal issues related to urban services for residents in the Urban Reserve Area, including minimizing the time that one jurisdiction is providing services to an area for which it is not receiving revenue.

Objective 1.3 The City of Gainesville shall coordinate Level of Service (LOS) standards with Alachua County for those services requiring LOS standards that are provided by the City within unincorporated Alachua County and for those services provided by Alachua County within the City, and shall share information with other agencies and individuals as needed to promote the goals, objectives and policies of the City, County and

Regional comprehensive plans.

Policy 1.3.1 The City shall adopt the LOS standards for potable water and for water supply, which are established in the Potable Water and Wastewater Element.

Policy 1.3.2 The City shall adopt the LOS standards for wastewater, which are established in the Potable Water and Wastewater Element.

Policy 1.3.3 The City shall set an LOS standard for solid waste per capita as established in the Solid Waste Element. This LOS standard shall be coordinated with Alachua County.

Policy 1.3.4 As established in the Stormwater Management Element, the City shall set LOS standards for stormwater quality that, at a minimum, meet the requirements of the applicable Water Management District.

Policy 1.3.5 The City shall coordinate with Alachua County and other governmental entities to ensure that the capacity and function of shared watersheds are maintained and that stormwater quantity LOS standards are designed to maintain floodplain elevations at or below the 10-year flood channel and 100-year floodplain as established in the current Flood Insurance Rate Maps (FIRM) issued by the Federal Emergency Management Agency and kept on file in the Public Works Departments of the City of Gainesville and Alachua County.

Policy 1.3.6 The City shall coordinate with Alachua County, FDOT, and other municipalities to adopt concurrency management mechanisms to maintain adopted LOS standards by:

a. Reviewing all County and City of Alachua Land Use Amendments that may impact adopted LOS standards within the City of Gainesville;

b. Requesting that Alachua County reviews and comments on City of Gainesville Land Use Amendments that may impact adopted LOS standards within the County; and

c. Requesting that the City of Alachua reviews and comments on City of Gainesville Land Use Amendments that may impact adopted LOS standards within the City of Alachua.

Policy 1.3.7 The City shall coordinate its transportation mobility strategies with Alachua County through the Technical Advisory Committee to the MTPO.

Policy 1.3.8 The City shall coordinate with Alachua County on additional funding sources for transportation capital and operating needs and shall obtain its share of such funds either through interlocal agreement or statutory formula.

Policy 1.3.9 The City shall make concurrency management information, inventories and other data collected and maintained by the City available to other units of government and the public.

Objective 1.4 The City shall coordinate with Alachua County and impacted municipalities to resolve planning issues in the urban area.

Policy 1.4.1 The City shall collaborate with Alachua County in developing Land Development Regulations that promote the Goals, Objectives, and Policies of the City's Comprehensive Plan. Coordination efforts shall include:

a. The regulation of land uses and site and facility design in compliance with the Murphree Wellfield Management Code;

b. The development of guidelines for the design of stormwater detention and retention facilities that allow increased use of native vegetation suitable for stormwater treatment and that encourage greater diversity of plant and animal habitat;

c. The adoption of regulations and design criteria to encourage transit, bicycle and pedestrian travel;

d. The development of a plan, regulations and design criteria for the establishment and preservation of tree-lined streets and giving priority to highly visible streets such as gateways to the City and activity centers;

e. The development of a countywide “fair share” housing ordinance for dispersal of affordable housing units; and

f. The development of regulations that discourage the proliferation of urban sprawl as defined in state statutes.

Policy 1.4.2 The City shall maintain interlocal agreements with Alachua County to coordinate the planning, acquisition and management of recreation and open space lands and facilities within the Urban Reserve Area (URA).

Policy 1.4.3 As part of a tourism development program, the City shall cooperate with Alachua County in the County's preparation of a tourism plan and in studies by the County of the economic impacts of cultural, heritage, and eco-tourism on Gainesville and Alachua County.

Policy 1.4.4 The City shall coordinate with Alachua County, other municipalities in Alachua County, University of Florida, Santa Fe College, regional, state and

federal agencies, and with other entities regarding updating and implementing the Local Mitigation Strategy.

Policy 1.4.5 The City shall collaborate with Alachua County to promote cooperative planning within the Urban Reserve Area through the Boundary Adjustment Act.

Policy 1.4.6 Through joint planning processes, the City and Alachua County shall evaluate the impacts of their respective comprehensive plans on "areas of concern" identified in the North Central Florida Regional Policy Plan.

Policy 1.4.7 Upon the annexation of any land, the City shall amend the Comprehensive Plan to reflect data and analysis changes, establish land uses on newly annexed areas, and provide services to meet adopted LOS standards.

Policy 1.4.8 In the interim period between annexation and the amendment of the Comprehensive Plan to include the newly annexed areas, the City shall implement Alachua County's adopted Comprehensive Plan and Land Development Regulations.

Objective 1.5 The City shall collaborate with Alachua County, the several municipalities, the Florida Department of Environmental Protection (FDEP), the Water Management Districts, the United States Environmental Protection Agency (EPA), Santa Fe College, and UF to protect groundwater and other environmental resources throughout Alachua County.

Policy 1.5.1 The City shall collaborate with Alachua County to protect wetlands and significant habitat, and to conserve and acquire significant habitat in the Urban Reserve Area.

Policy 1.5.2 The City shall collaborate with Alachua County regarding criteria for the location of hazardous materials collection/transfer treatment facilities. One criterion shall be consideration of potential groundwater contamination.

Policy 1.5.3 The City shall cooperate with Alachua County and other waste material handlers in the establishment of periodic special waste collection programs for difficult to dispose of waste such as tires, used oil, batteries, and asbestos.

Policy 1.5.4 The City shall cooperate with Alachua County to identify areas of pollution to surface water and groundwater and to document present conditions and cleanup status. The City shall assist in identifying the parties responsible for the polluted areas and require such parties to mitigate pollution problems. The City shall cooperate with the Alachua County Environmental Protection Department, the FDEP, the Water Management Districts, and the EPA and

shall support the appropriate agencies with efforts to accomplish the following:

a. Identify areas of pollution to surface waters and groundwater;

b. Implement monitoring programs that provide reports describing present environmental conditions and clean-up status;

c. Identify parties responsible for polluted areas, and require such parties to mitigate pollution problems;

d. Discourage the creation of new brownfield and other environmental contamination sites by implementing existing regulations and improving them as needed; and

e. Encourage environmentally sound development and redevelopment of existing brownfield and other environmental contamination sites.

Objective 1.6 The City shall collaborate with state agencies to ensure compliance with the State Comprehensive Plan, the North Central Florida Strategic Regional Policy Plan, and agency functional plans.

Policy 1.6.1 The City shall comply with State pollution control requirements at the former Gainesville Airport Landfill and Burn Site described in the Solid Waste Element.

Policy 1.6.2 The City shall maintain water conservation programs that are consistent with the Water Management Districts' plans.

Policy 1.6.3 The City shall improve the development process of group homes and foster care facilities by improving coordination with the Department of Children and Families and by disseminating information on requirements and procedures for siting them.

Policy 1.6.4 The City shall promote compact urban development by increasing densities, concentrating commercial and office activities in appropriate areas, and improving access to multi-modal transportation.

Policy 1.6.5 The City shall evaluate Development of Regional Impact (DRI) proposals that impact the City to ensure appropriate phasing so that the demands of such DRIs are integrated with the expected availability of facilities and services.

Intergovernmental Coordination Element
Data & Analysis

I. Introduction

Intergovernmental coordination is a critical component of the Comprehensive Plan. Local policies that ignore the impacts of other jurisdictional decisions risk impeded implementation or failure. The costs of delays and duplication can be avoided by anticipating the need for coordination, identifying the common goals of coordinating entities, and negotiating appropriate coordinating mechanisms. This report provides strategies for improving the coordinating mechanisms.

II. Data and Analysis

The Intergovernmental Coordination Element (ICE) Data and Analysis Report addresses the 9J-5.015 requirements as they pertain to the relationships among different governmental entities. The purposes of this element are to:

1. Inventory all units of government which provide services but do not have regulatory authority over the use of land;
2. Analyze the effectiveness of existing systems of coordination, specific problems and needs within each comprehensive plan element, and the impacts of development on areas of concern; and
3. Identify "areas of concern" which include resources and facilities in Alachua County and the City of Alachua based on data set forth in the North Central Florida Strategic Regional Policy Plan (NCFSRPP).

Amendments to Chapter 163, F.S. require Alachua County and its municipalities, the School Board of Alachua County (SBAC), and other service providers to establish by agreement joint processes for collaborative planning and decision making. The areas of interest include population projections and public school siting, the location and extension of public facilities subject to concurrency, locally unwanted land uses and siting facilities with countywide significance. The City must amend its plan to establish the joint planning processes envisioned by amendments to the statute.

In addition, the Chapter 163 amendments require the City to provide opportunities for involvement by SBAC and Santa Fe Community College (Santa Fe) in the local planning process. Formal representation, membership on technical advisory committees, or other appropriate means can meet this requirement. The amendments require recognition of campus master plans. The City must amend its plan to ensure opportunities for involvement by SBAC and Santa Fe.

A. Existing Coordinating Mechanisms and their Effectiveness

This section addresses the various federal, state, county and other local agencies with which the City must coordinate on issues involving the development and regulation of land. A short description of the various agencies is found in Appendix A.

Appendix B illustrates the multitude of these agencies, their substantive role in the process, the level of coordination and its effectiveness as well as the agencies within the City of Gainesville that have coordinating responsibilities. The relationship of the City agency is classified as occasional interaction between agencies, coordination handled by developer through submittal of permit requests, formal agreements for joint decision-making, coordination mechanisms requiring public hearings, and coordination mechanisms providing regular meeting for review of issues. The matrix provides an assessment of the effectiveness of the intergovernmental coordination mechanisms.[1]

The City of Gainesville and Alachua County have been successful in coordinating at various levels. The two governments work closely together in determining the boundaries of the Urban Reserve Area. The two regularly submit development proposals (zoning changes, comprehensive plan changes, land development code changes, etc.) to one another for review and comment. The City and County have a designated assistance agreement for fire and rescue services. The two local governments jointly fund both the East Gainesville Task Force and Sustainable Alachua County, Inc. The City and County also coordinate on issues regarding the Gainesville Regional Airport, solid waste, cable franchise agreements, and cellular towers.

The City and County have been working to address stormwater improvements to Sweetwater Branch, which is a conduit to Alachua Sink and the Floridan aquifer. Sweetwater Branch water quality improvements are the result of these coordinated efforts. The two governments have worked closely both to implement the ordinance protecting the Murphree Wellfield and make important technical changes to improve its effectiveness. The City and County also have collaborated to implement the Hazardous Materials Management Code.

The City and County have been less successful in joint planning initiatives, although over the past year the two plan boards have held several meetings on the issue. The recently formed (1999) Local Government Cooperation and Collaboration Committee (comprised of the City's Mayor and Mayor Pro Tem and the Chair and Vice-Chair of the County Commission) is an additional forum for intergovernmental coordination and discussion of issues such as joint planning.

C. Coordination With Regard To Areas of Critical State Concern

[1] Criteria for the analysis are as follows: 1) the agency has personnel designated to handle development issues; 2) it has personnel and policies in place to resolve problems related to land use and land development regulations; 3) its review procedures for permit requests are timely; and 4) its review criteria are compatible with the Goals, Objectives and Policies of this plan.

No areas within the City of Gainesville are designated as Areas of Critical State Concern.

III. Issues and Opportunities

A. Requirements of Chapter 163, Florida Statutes

Growth and Development Proposed in the Strategic Regional Plan "Areas of Concern"

The North Central Florida Strategic Regional Policy Plan (NCFSRPP) implements the state mandate that each local government comprehensive plan be consistent with the Strategic Regional Policy Plan and the State Comprehensive Plan. The NCFSRPP identifies five strategic regional issue areas which, "when viewed from a regional perspective, have the potential to affect the region's significant physical characteristics and/or its quality of life." The regional issue areas are Affordable Housing, Economic Development, Emergency Preparedness, Natural Resources of Regional Significance and Transportation. Within these regional issue areas are regional facilities and resources.

Florida Statutes require an analysis of the growth and development in the "areas of concern" and a comparison with the appropriate regional policy plan in order to evaluate the needs for additional planning coordination. (Appendix C identifies regionally significant resources or facilities within the City or "area of concern"[2] and describes the City's comprehensive plan policies that may affect them.)

Maps 1 and 2 identify regionally significant resources within the City of Gainesville and Alachua County. Several of the regionally significant resources or facilities identified within Alachua County (which is the City's area of concern) are many miles from the Gainesville limits and are not relevant. These include the Santa Fe River Greenway, Santa Fe Swamp, Little Lochloosa Lake, Orange Lake, Lochloosa Forest, Poe Springs, Cross Creek, River Styx, Santa Fe Blue Spring, Rocky Creek, Lake Santa Fe and Little Santa Fe Lake. The City neither expects to annex land including these resources nor anticipates that its comprehensive plan policies will have any impact on them.

Three regionally significant resources identified in the NCFSRPP -- Austin Cary Memorial Forest, San Felasco Hammock State Preserve, and Prairie Creek are beyond city limits, but are close enough to be potentially affected by comprehensive plan policies.

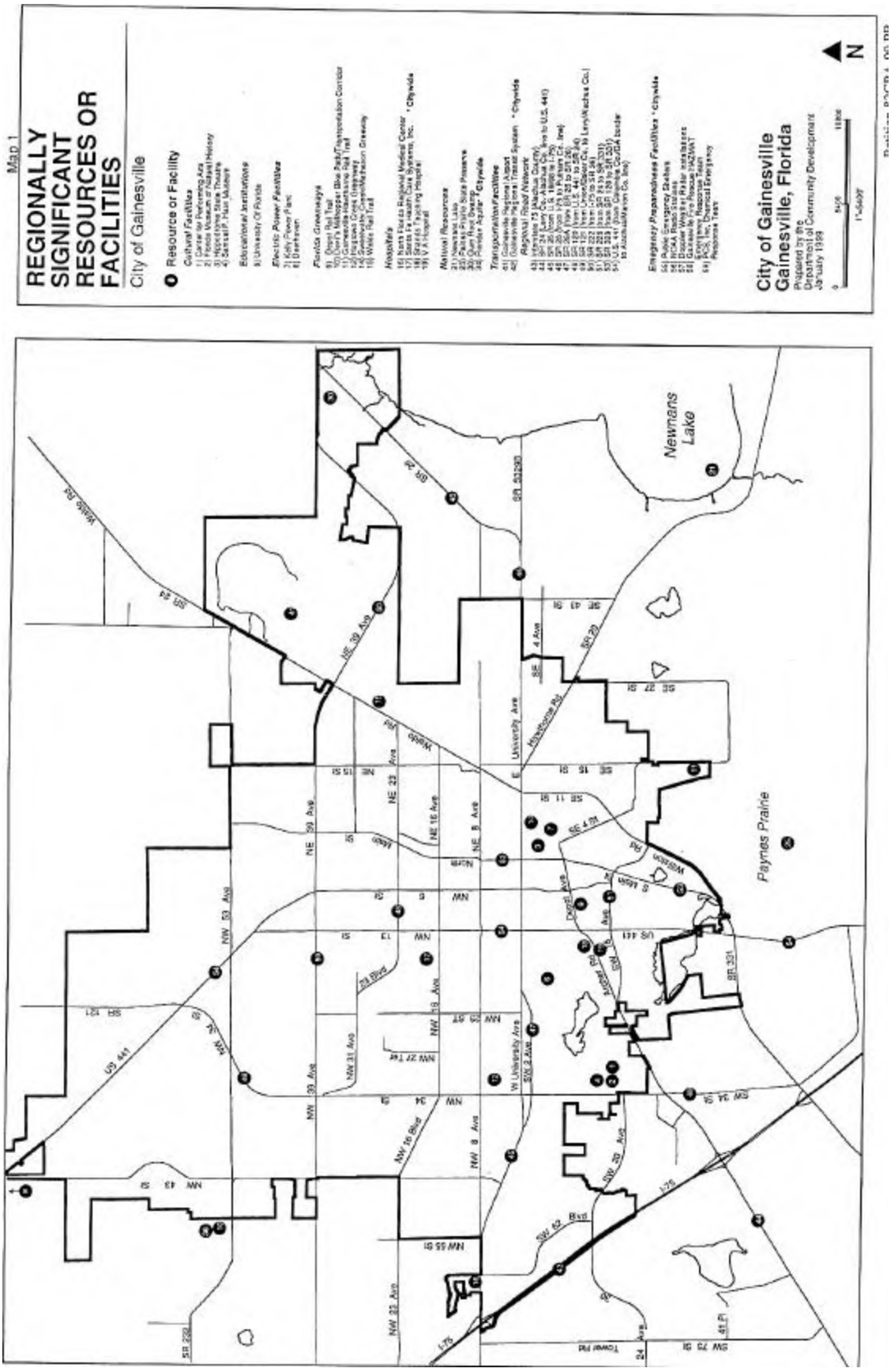
Coordinated Planning with Other Service Providers/Interlocal Agreements

Chapter 163 requires the City to state the principles and guidelines that it will use to coordinate its adopted plan with units of government providing facilities and services to but not having regulatory authority over the use of land. In addition, the intergovernmental coordination element (ICE) is required to describe the joint processes for collaborative planning and decisionmaking on population projections and public school siting, the location and extension of public facilities subject to concurrency, and siting facilities with countywide significance, including locally unwanted land uses whose nature and identity are established in an agreement.

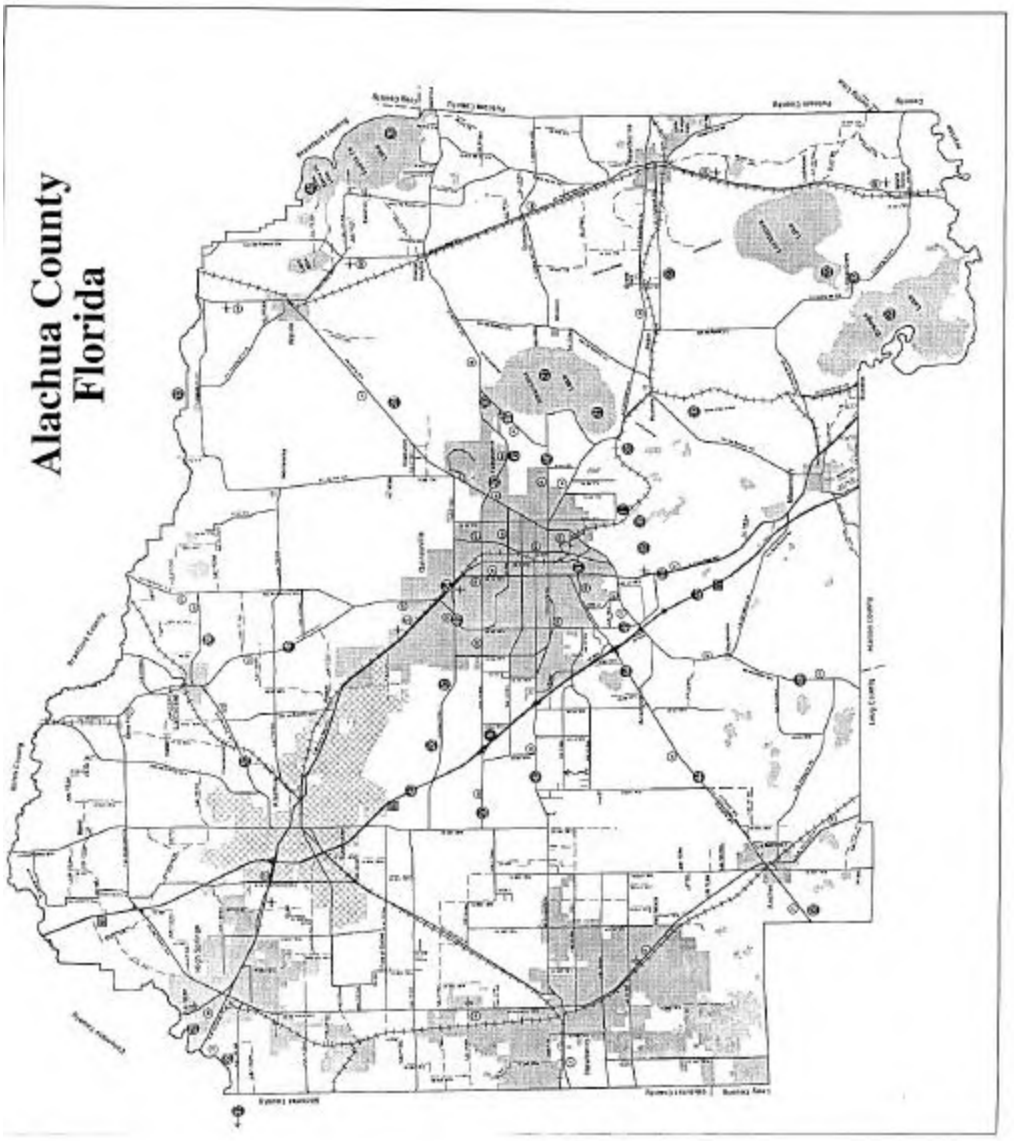
[2] "Areas of concern" are resources or facilities that are located within an adjacent local government.

Furthermore, within one year of the adoption of the ICE, the City is required to enter into an interlocal agreement with all affected units of local government that describes their collaborative planning processes.

Map 1


REGIONALLY SIGNIFICANT RESOURCES OR FACILITIES
City of Gainesville
Resource or Facility
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
January 1999
N
Newnans Lake
Paynes Prairie
University Ave
Archer Rd
SR 24
SR 26
SR 331
US 441
I-75
NW 13 St
NW 43 St
NW 55 St
NW 23 Ave
NW 39 Ave
NW 53 Ave
NW 8 Ave
NW 16 Ave
NW 34 St
NW 39 Blvd
NW 43 Terr
NW 27 Terr
NW 31 Ave
NW 34 Ave
NW 39 Ave
NW 53 Ave
NW 62 Blvd
NW 75 St
NE 39 Ave
NE 23 Ave
NE 16 Ave
NE 8 Ave
NE 4 Ave
SW 20 Ave
SW 24 Ave
SW 34 St
SW 35 Dr
SW 40 Blvd
SW 75 St
SR 121
SR 222
SR 329
SR 331
Waldo Rd
Main St
Depot Ave
Williston Rd
Hawthorne Rd
Tower Rd

Map 2
REGIONALLY SIGNIFICANT RESOURCES OR FACILITIES
Alachua County
Resource or Facility
Educational Institutions
Cultural Resources
Florida Greenways
Hospitals
Natural Resources
Transportation Facilities
Regional Road Network
Emergency Preparedness Facilities
Other Regionally Significant Facilities
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
January 1999


Alachua County
Florida

Section 163.3174, F.S. requires local planning agencies to provide opportunities for involvement by district school boards and applicable community college boards which may be accomplished by formal representation, membership on technical advisory committees, or other appropriate means.

Chapter 189, F.S. requires special districts to submit to the City a public facilities report and annual notice of any changes. The report must describe each facility owned by the district, its current capacity, the current demands placed upon it, and its location, a description of each proposed facility to be built, improved or expanded within the next five years. The St. Johns River Water Management District provides this report annually to the City.

Identification and Implementation of Joint Planning Areas

Chapter 163 requires that the ICE provide for procedures to identify and implement joint planning areas especially in relation to annexation, municipal incorporation, and joint infrastructure service areas.

The sprawl pattern of development further away from the center of Gainesville has quality of life implications for city residents, particularly in regard to traffic congestion. New activity center areas built to support the unincorporated population can lead to abandonment of retail centers, leaving the city with vacant commercial buildings and lower property tax revenues.

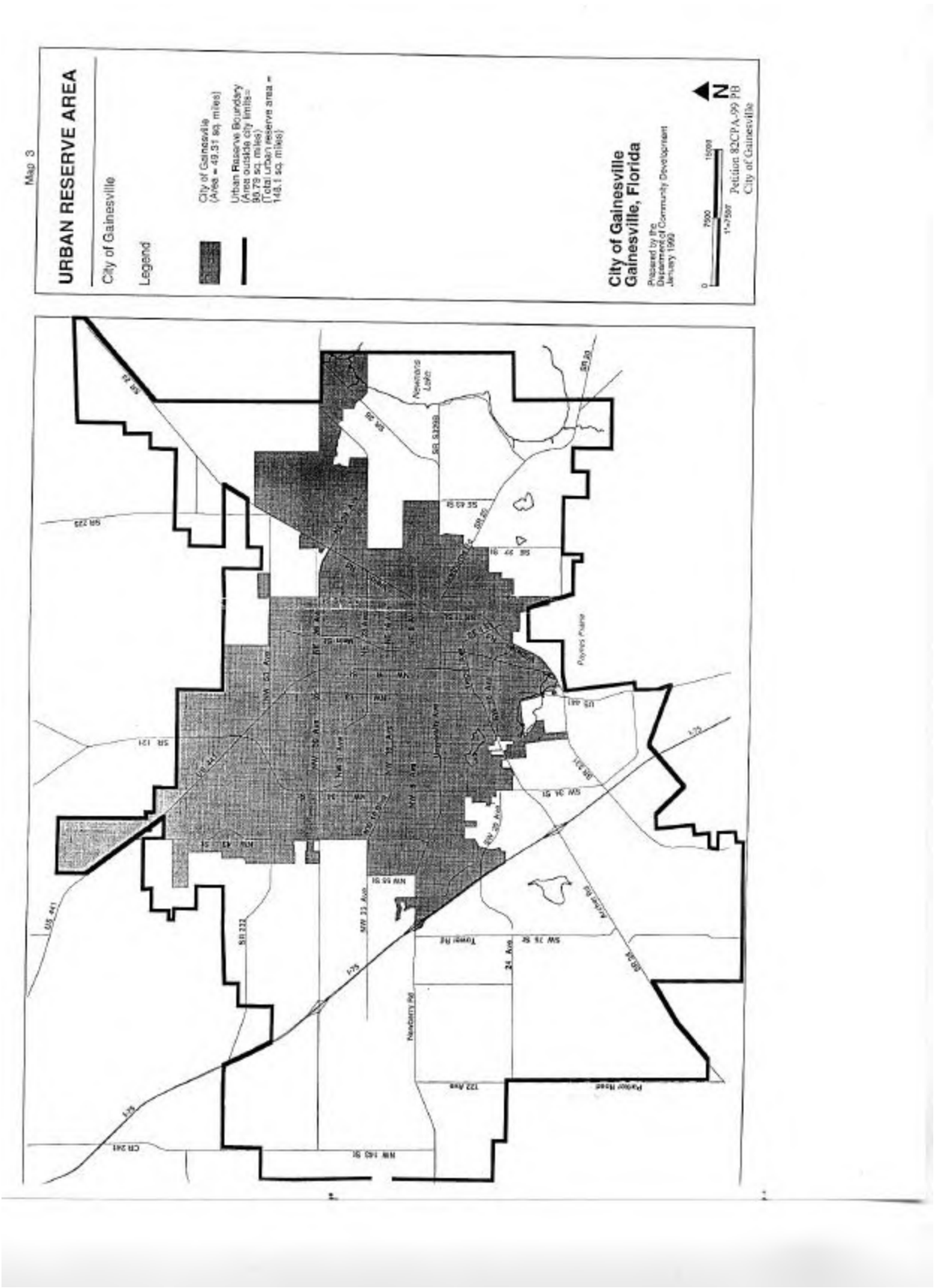
In 1997 the City of Gainesville contracted with David Rusk, a nationally recognized urban expert, to examine growth trends and make recommendations for the future of the Gainesville-Alachua County area. Rusk's January 1998 report pointedly discussed the impact of sprawl development on the city and county. He claimed that "low density development creates high automobile dependence (and) frustrates the goal of sustaining a viable retail district in the central business district and other neighborhood- oriented commercial areas." Rusk also surmised that the "adopted plans seem to envision the continuation of the past pattern of low-density sprawling development" and concluded by stating that phasing plans should be adopted in the Urban Reserve Area (URA) which "slow the constant outward extension of new development."

During a joint meeting of the City and County Commissions in May 1998, the City Commission endorsed the goal of halting the declining share of the population in Gainesville and establishing a constant 46.59 percent share of the Alachua County population through the year 2010.

The Alachua County Boundary Adjustment Act (BAA) was passed as a special act of the Florida legislature and amended in 1991, for the purpose of "establishing municipal reserve areas and for adjusting the boundaries of municipalities through annexation." Urban reserve areas are those areas adjacent to a city and reserved for annexation because they are either "urban in character"[3] or likely to be within ten years (see Map 3 for Gainesville's urban reserve area – adopted by the County

[3] "Urban in character" means an area used for residential, urban recreational or conservation parklands, commercial, industrial, institutional, or governmental purpose or an area undergoing development for any of these purposes including any parcels of land retained in their natural state or kept free of development as greenbelt areas.

Commission). As part of the analyses for designating the URA, Alachua County and the City of Gainesville are required to prepare statements of service that identify any services provided to residents within the proposed reserve area. Generally, the statements deal only with services, although the BAA allows other issues to be included provided each jurisdiction agrees.


Map 3
URBAN RESERVE AREA
City of Gainesville
Legend
City of Gainesville
(Area = 49.31 sq. miles)
Urban Reserve Boundary
(Area outside city limits=
98.79 sq. miles)
(Total urban reserve area =
148.1 sq. miles)
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
January 1999
N
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7900
15800
1"=7900'
Petition 82CPA-99 PB
City of Gainesville
Newnans Lake
Paynes Prairie
SR 121
SR 441
SR 232
SR 331
SR 24
SW 34 St
NW 55 St
NW 143 St
CR 241
SW 75 St
SW 122 Ave
Newberry Rd
Archer Rd
Williston Rd
Tower Rd
Main St
Waldo Rd
NW 43 St
NW 39 Ave
NW 34 Ave
NW 23 Ave
NW 13 Ave
NW 8 Ave
SW 20 Ave
SW 24 Ave
SW 34 Ave
SW 75 St
SW 122 Ave
NW 143 St
NW 55 St
SW 34 St
SR 24
SR 26
SR 222
SR 329
SR 331
SR 441
SR 121
SR 225

The Alachua County Planning Commission and the City of Gainesville Plan Board have approved a joint planning strategy, the ultimate intention of which is to create a metropolitan planning organization within five years. The joint planning strategy is intended both to enhance coordination among local planning entities, including cities, the County, and public educational institutions, and promote "smart growth," examples of which include multi-modal transportation opportunities, mixed-income housing, environmentally sensitive development, and preservation of conservation lands. The joint planning strategy will also promote infill development and neighborhood redevelopment. Areas that should be considered for joint planning in Gainesville/Alachua County include an urban reserve area-wide wetland mitigation program, habitat planning, recreational facilities and programs, extensions of the urban service area, extensions of facilities beyond the urban service area, and a countywide affordable housing approach.

Recognition of the University of Florida Campus Master Plan

Since the 1991-2001 Comprehensive Plan's adoption, the University of Florida has adopted a Campus Master Plan consistent with statutory requirements and with the City's Comprehensive Plan. The University of Florida has an extremely large impact on the transportation network in the city and to this end, the University has contributed approximately $10.3 million for mitigation. Therefore, it is important that the City and the University continue to coordinate transportation planning outside the scope of the Campus Master Plan requirements.

Coordination with Santa Fe Community College.

Chapter 163 requires the City to amend ICE to provide opportunities for Santa Fe Community College to become involved in the local planning process (see Sec.163.3174, F.S.). This can be accomplished by formal representation on boards, membership on technical advisory committees or other appropriate means. It could be accomplished in part by routinely providing Plan Board agendas to Santa Fe as they are now provided to Alachua County. Involvement by Santa Fe in the local planning process could be furthered by becoming a member of the Metropolitan Transportation Planning Organization's (MTPO) Technical Advisory Committee. This recommendation should be made to both Santa Fe and the MTPO.

It is very important that Santa Fe development applications within City limits be reviewed by the City, pursuant to applicable statutory requirements. Santa Fe, as a community college, is not subject to the campus master plan requirements of Chapter 240, and like SBAC is not exempt from development review by the City.

Other issues are the growth of Santa Fe Community College and its impact on the Pleasant Street Historic District and the City's plans for redeveloping the West University Avenue corridor. Over the last few years, the downtown branch campus of Santa Fe has grown considerably. The campus is part of a redevelopment area that includes the Pleasant Street Historic District. Due to the growth potential of the downtown campus, it will be very important for Santa Fe to coordinate with the City's

Comprehensive Plan and its urban design standards to assure that site plans for the college will be compatible with the surrounding neighborhoods. The location of the campus on the NW 6th Street corridor between the downtown and the University of Florida also makes this facility a linchpin in the efforts to integrate those two end points into one dynamic core which includes Santa Fe.

Coordination with the School Board of Alachua County

City staff worked closely with staff of the SBAC with respect to estimates and projections of population during the preparation of the 1991-2001 City of Gainesville Comprehensive Plan. Since 1991, direct coordination between City and SBAC staff on this issue has been minimal. This has not been problematic since the City's population estimates are extremely close to those of the University of Florida's Bureau of Economic and Business Research that have been used by the SBAC. There are no formalized joint decision making processes engaged in by the City and the School Board in regard to establishing population projections.

The School Board does not presently have a 5-year work program for its school district facilities adopted pursuant to F.S. 235.185. The SBAC's practice to date has been to determine new projects and establish budgets on an annual basis, but is now in the process of developing a 5-year facilities work program as required by F.S. 235.185. (Notwithstanding the present lack of a 5-year facilities work program, the SBAC is subject to a State-mandated educational plant survey every five years; the most recent survey was in February 1994. The survey is a systematic study of present and future educational needs and ancillary plants. The 1994 survey team was put together by the Florida Department of Education and did not involve local governments. The 1999 survey team will be assembled by the SBAC. SBAC has formed a site selection committee with representation from the City, County, North Central Florida Regional Planning Council, Metropolitan Transportation Planning Organization and others.)

Although no new schools have been constructed within city limits since adoption of the 1991 comprehensive plan (only two, Lawton Chiles Elementary School and Kanapaha Middle School have been constructed elsewhere in the district), annexation has added two elementary schools – Talbot and Terwilliger, during this period. SBAC staff anticipates that no more than one school – an elementary school-- will be recommended in the upcoming 5-year facilities work program. The new elementary school would most likely be located in unincorporated Alachua County. Consequently, coordination between the City and the SBAC regarding planning/siting school facilities within the City will in all probability continue to be limited to site plan review of modifications and expansions in accordance with both the Land Development Code and applicable provisions of Chapter 235, F.S. The City would like for SBAC to take responsibility for notifying the public and holding public meetings on proposed expansions to their facilities.

As required by amendments to Chapter 163 of the Florida Statutes, the City should provide opportunities for school board and community college boards to become involved in the local planning process. This could be accomplished by formal representation on a development-related board,

membership on technical or other advisory committees, or other appropriate means. Plan Board agendas are provided to the SBAC, Alachua County, and most other affected agencies, including Santa Fe Community College which has recently been added to the recipient list.

The SBAC and the City are among the entities represented on the Technical Advisory Committee (TAC) of the Metropolitan Transportation Planning Organization. The TAC with respect to transportation improvements and long-range planning reviews multi-modal access to schools and any proposed schools.

B. Specific Problems and Needs within Each Comprehensive Plan Element

Future Land Use Element

Amendments to the Florida Statutes concerning public schools have prompted proposed changes to the Future Land Use Element. The proposed changes are anticipated to be adopted by October 1999. These changes will add public schools as allowable uses in the Single Family, Residential Low Density, Residential Medium Density, and Residential High Density land use categories. These changes will provide increased flexibility for the SBAC to meet future needs for either expanding existing sites or siting new schools. The other proposed change is the addition of a policy that will encourage collocation of public schools with public facilities such as parks, libraries, and community centers. Such collocation is in the interest of the City, the SBAC, and will benefit the general public.

Transportation Element

The combination of federal and State monies for transportation improvements are 36 percent of the amount anticipated for the Long Range Transportation Plan in 1991. Approximately one-third of the identified urbanized area projects is expected to receive funding over the 25-year planning period. Of the road construction projects that are assumed to have funding, four are located within city limits. The adopted needs plan is conservative and only represents maintaining the existing adopted service levels and accepts that congested facilities will only be improved by shifts to alternate modes. The City needs to continue to carefully prioritize its transportation goals and identify additional local funds to accomplish these goals. This will require intergovernmental coordination with Alachua County and other entities that are represented on the MTPO.

Notwithstanding the proposed Transportation Concurrency Exception Area within the City of Gainesville, the City will need to continue tracking roadway trips generated by development and must continue its on-going coordination with Alachua County, FDOT, and MTPO with respect to roadway LOS.

Conservation, Open Space, and Groundwater Element

Groundwater Issues

The City and Alachua County have coordinated on groundwater issues for over a decade. Development, as it effects groundwater in the City of Gainesville, is regulated by three Alachua County ordinances - underground storage tanks, wellfield protection, and hazardous materials—as well as by City ordinances concerning stormwater, wetlands, and development in the floodplain.

1. Wellfield Protection

The wellfield protection ordinance is under revision, partly due to a 1995 study that identified the extent of groundwater contamination within wellfield management areas. It found over 60 contamination sites within the one-foot drawdown contour of the Murphree Wellfield zone. The proposed revisions will delineate primary, secondary and tertiary zones based on improved groundwater modeling procedures. As presently proposed, the primary zone will be based on a two-year travel time of a contaminant to the wellhead, the secondary zone will be based on a ten-year travel time, and the tertiary zone based on a twenty-five year travel time. Also proposed are new provisions for inspecting existing wells in the three zones, considering special use permits for certain uses, and establishing well abandonment procedures. The St. Johns River Water Management District (SJRWMD) is negotiating a less-than-fee simple acquisition of land in the Buck Bay flatwoods area, which is within the wellfield protection zone.

2. Aquifer Recharge

The Alachua County Comprehensive Plan currently designates high aquifer recharge areas as those areas in the County where the Floridan Aquifer is unconfined or semi-confined. The SJRWMD and Alachua County disagree over the extent of high aquifer recharge area throughout the county. To that end, the County's Conservation Element has recommended funding a study to better define these areas of high recharge.

Surface Water Issues

Surface water bodies such as creeks, streams, and lakes frequently cross jurisdictional boundaries making it imperative for affected localities to cooperate in protecting water quality. In 1996, the Florida Departmental of Environmental Protection (FDEP) prepared its *305b Water Quality Assessment Report* for surface waters in an around the City. All lakes within or near the City of Gainesville were found by FDEP to have poor water quality, while the quality of Hogtown Creek, Possum Creek, and Gum Root Swamp was "good." Hatchet Creek had fair water quality while Sweetwater Branch has poor water quality

In 1996, the SJRWMD published a report on the Orange Creek basin, which encompasses most of Gainesville and eastern Alachua County, providing detailed recommendations on remedying the water quality of creeks, streams, and lakes. The City and County are working cooperatively on mitigating surface water pollution particularly in the Sweetwater Branch drainage basin. The City of Gainesville is

requesting $2 million to assist in developing and implementing a stormwater management project to protect the Floridan Aquifer from stormwater runoff. Working with the City will be the Florida Department of Environmental Protection, SJRWMD and the Alachua County Environmental Protection Department. The two-part project will consist of acquiring land in the vicinity of SR 331 and Sweetwater Branch and funding planning and engineering studies and partial construction of sediment, debris and nutrient removal systems. Upon completion, the project is expected to remove 90 percent or more of the pollutants from the Sweetwater Branch flow.

Smaller projects upstream that have been initiated in the City include reconstruction of the Duck Pond, the Baffle Box on Sweetwater Park, and the proposed Stormwater Park south of Depot Avenue. Upstream clean up of Sweetwater Branch is important because the cost of remediation at its Alachua Sink discharge point is anticipated to be between $14m and $20m. Pollution reduction of the creek will assist in re-establishing Paynes Prairie State Preserve's natural ecosystems and provide protection for the Floridan Aquifer, which is the major source of drinking water in Florida.

Wetlands Issues

Because the City desires a more compact and dense development form, meeting the "no net loss" of area requirement for wetlands on each development site may not be desirable in all cases. A more appropriate mitigation strategy might be "no net loss" of wetland acreage on a watershed or countywide basis, an approach that will require the involvement of Alachua County and the City and that could include mitigation banking. To this end, City, County, and SJRWMD staff have begun meeting to map wetlands within the city, gather data on the "developability" and location of the parcel on which the wetlands are located, and evaluate the significance of each wetland within the broader mosaic of the natural environment.

Habitat Protection

Annexation has brought several thousand acres of environmentally significant areas into the city limits and has resulted in other significant areas in the unincorporated areas being brought closer to the City. However, many important state properties including San Felasco State Preserve and Paynes Prairie State Preserve are located outside of the Urban Reserve Area (URA) and are therefore not subject to annexation. Intergovernmental coordination between the City, Alachua County, and City of Alachua (in some areas) is needed to conserve important remaining habitat. City, County and SJRWMD staffs are also meeting to identify significant habitat and, in many respects, the research effort will dovetail with the efforts being extended on wetlands. For instance, an important criterion for identifying "important" wetlands will be their connectivity with significant habitat areas.

The following significant habitats lie within or near the city limits.[4]

[4] In 1996, Alachua County completed a habitat inventory (known as here as the KBN/Golder report), which supplements the KBN study from 1987, and identifies significant habitat still in private ownership.

Sugarfoot Hammock. This site located generally at the intersection of I-75 and SW 20th Avenue contains several community types including mesic hammock, basin marsh, floodplain swamp, floodplain forest, sinkhole and sinkhole lake, and a marsh lake. The Hammock was described in the KBN report as "second only to San Felasco as Florida's most outstanding example of mesic hammock, and is seriously fragmented by agricultural and residential development (KBN, 1987 3-21).

Gum Root Swamp. In 1994, the City annexed portions of the Gum Root Swamp, which is on the northern edge of Newnans Lake and east of the airport. This area includes portions outside the city limits and is a large complex of wetlands and pinelands that provides a key regional ecosystem linkage with Newnans Lake and Hatchet Creek. While the bulk of Gum Root Swamp is central wetlands basin, community types also include mesic flatwoods, wet flatwoods, scrubby flatwoods, and sandhill. The KBN/Golder study indicated that "the Gum Root Swamp and the lakeshore swamp are among the highest rated areas in the County on the priority wetlands for listed species map for Alachua County."

Millhopper Flatwoods Annexations in 1992 and 1999 brought portions of the Millhopper Flatwoods, comprising 800 acres of mesic flatwoods, basin swamp and baygall into the City. The 1987 KBN study indicates that the mesic flatwoods are comprised of one-half natural pine and one-half planted pine. Most of the site has a "dense shrub layer with abundant saw palmettos" with some areas strongly invaded by oak. The study indicated the hammock would grow into a "poor quality hammock if left alone without fire."

Palm Point. Palm Point on Newnans Lake lies outside of the city, but is a City park. Community types found on this site include mesic hammock, hydric hammock, xeric hammock, scrub, prairie flatwood lakes and a seepage stream. The tract, totaling approximately 100 acres, also contains a hydric hammock composed of large live oaks and water hickory which "grows nowhere else in Alachua County except on the Santa Fe floodplain."

Buck Bay Flatwoods. Buck Bay is a diverse collection of pine flatwoods forest and wetlands directly north of Gainesville. Totaling 18,018 acres, Buck Bay is a major headwaters area "rather like a miniature Green Swamp" (KBN/Golden, 1996).

East-Side Greenway. KBN designated an area east of Morningside Nature Center, west of Newnans Lake and south of Gum Root Swamp as the "East Side Greenway" which comprises 3,221 acres and is designed to connect all three of these diverse and complex habitats. The study indicated that the "significance for Morningside Nature Center of remaining connected to the larger areas of wildlife habitat is also high."

Hague Flatwoods. This is a 6,344-acre site that contains the Deerhaven Power Station. It contains large areas of basin swamp and many cypress domes. The area is also part of the headwaters of both Rocky Creek and Turkey Creek. The Hague Flatwoods are beyond the URA.

Housing Element

The City will need to work with Alachua County to develop a countywide "fair share" housing ordinance for the dispersal of affordable housing units. Although there are affordable housing opportunities within the City of Gainesville, they tend to be concentrated and not dispersed throughout the community. In the January 1998 report by planning consultant David Rusk entitled "Healthy City, Healthy Region: An Assessment and Recommendations on Regional Planning and Housing Policy for the City of Gainesville and Alachua County," a strategy of requiring a "fair share" of low- and moderate-income housing opportunities in all new developments of a minimum size (20 units was suggested as a possible threshold) was recommended.

A key finding of the Rusk report was the "growing segregation by income class as a result of countywide housing development patterns." While there are affordable housing opportunities within the City of Gainesville, one problem is that they tend to be concentrated and not dispersed throughout the community. The Rusk report goes on to say, "It is essential that Gainesville promote greater income diversity in the housing supply both within the city and throughout the county."

In order to promote a broader dispersal of affordable housing units, the Rusk report recommends a strategy requiring a "fair share" of low- and moderate-income housing in all new developments of a minimum size (a minimum of 20 units was indicated as possibly appropriate). This is based on an ordinance developed in Montgomery County, Maryland known as the Moderately Priced Dwelling Unit (MPDU) Ordinance. Under that ordinance, Montgomery County requires that a minimum of 15 percent of new housing units be affordable to buyers or renters in the lowest third of household income. The county housing authority also has a legal first right to purchase one-third of the affordable units or five percent of all new housing built. This ordinance has resulted in a dispersal of low-income households.

The ICE should be amended to add an objective and related policies concerning working with Alachua County on an ordinance similar to the Montgomery County, Maryland MPDU Ordinance. An intergovernmental strategy is essential to making the dispersal of affordable housing units a viable solution.

Recreation Element

The lack of funding and the subsequent lack of capital improvements (since the 1991 adoption of the Comprehensive Plan) for recreation, with the exception of the Martin Luther King Jr. Multi-Purpose Center, has meant that many of the policies of the Recreation Element have not been met.

There is a general consensus that the City and the County lack adequate park and recreation facilities for the population, notwithstanding that several new facilities have been built in recent years. The Martin

Luther King, Jr. Multi-Purpose Center, funded with a $1.7m special purpose grant from the U.S. Department of Housing and Urban Development, is one example. The Andrew R. Mickle, Sr. Pool in southeast Gainesville is another.

Liability and maintenance concerns by the school board may reduce public access to schools that have traditionally served as neighborhood parks. There is a perceived shortage of neighborhood parks in most parts of the City. There are no City parks that provide a concentration of softball, baseball or soccer fields sufficient to support league or tournament play. There is also a shortage of recreation facilities for skateboarders, rollerbladers and BMX bicycle riders; however, $250,000 of Lease In Lease Out monies were approved by the City Commission in 1999 for developing skate board facilities. In addition, residents of unincorporated Alachua County who use City facilities are reducing levels of service for residents of Gainesville who pay for them.

Intergovernmental cooperation should be improved between the SBAC and the City to implement recreational improvements. Liability concerns is the largest issue. Due to liability concerns, the sharing of recreational facilities by the SBAC and the City has been on a school-by-school basis, and has been inadequate overall. This case of unrealized potential should be addressed in the Goals, Objectives and Policies (GOPs) section of the Recreation Element and the ICE. The Recreation Element is recommending that cooperation be enhanced between the City and SBAC with the City adopting an ordinance to alleviate the additional liability burdens borne by SBAC.

Stormwater Management Element

The Stormwater Element requires the City to prepare master stormwater basin plans for each of the seven creek watersheds in the City -- Hogtown, Lake Alice, Little Hatchet, Lake Forest, Sweetwater Branch, Tumblin Creek, and Calf Pond. Of these seven, Lake Alice is the only one completely contained within the city. Consequently, because these watersheds cross jurisdictional lines, the City and County should consult and coordinate on these plans. To date, Hogtown Creek is the only creek watershed for which a master basin plan has been prepared.

One policy specifically requires inter-jurisdictional coordination to maintain existing capacity and function of shared watersheds (see Policy 1.3.5). Close cooperation between City and county is implied in Policy 1.6.1, which states that "water quality standards in all stream to sink basins shall be consistent with the standards of the applicable WMD or shall receive treatment on the first 'one inch' of runoff…" The Stormwater Management Element, which requires the City to maintain the existing level of wetland acreage and function, will also be affected by the discussions on off-site mitigation of wetlands.

Potable Water and Wastewater Element

The Potable Water and Sewer Elements of the Alachua County Comprehensive Plan allow the extension of potable water and sewer within the urban service area provided the proposed infrastructure

is adequate, the need is demonstrated by population growth, and the existing level of service standards can be maintained. Proposed extensions outside of the urban service area require a more substantial test meeting conditions of health, efficiency, normal service extension, or promotion of economic development and must be approved by the Alachua County Board of County Commissioners.

Solid Waste Element

Alachua County is authorized, through the County Charter, to regulate solid waste collection and disposal throughout the county. The County has delegated to the City the authority for collection within city limits. Alachua County remains exclusively responsible for the disposal of all solid waste within the county, in accordance with state law (Sec. 403.706 [1], FS).

Alachua County owns and operates the solid waste transfer station. The SW Landfill officially closed on December 19, 1998, although a drop-off center where residents can bring up to five bags of garbage per visit will remain in operation at that location on the same schedule as the four rural collection centers in the county. There is currently one privately owned and operated construction and demolition debris within the county. Alachua County also regulates this private landfill.

The City has entered into an interlocal agreement with the county for solid waste disposal. This agreement stipulates that the City is committed to deliver residential and commercial solid waste collected by the City's franchised haulers to the County's designated facilities for solid waste management. (A copy of the agreement can be found on page A-12 in the Appendix of the Data & Analysis section of the proposed Solid Waste Element.)

The City is responsible for the billing and collection of solid waste fees from residential customers within city limits.

Historic Preservation Element and Cultural Affairs Element

One shortcoming of the Historic Preservation and Cultural Affairs Elements is the lack of coordination between complementary attractions and events within Alachua County such as nature parks, heritage sites, and cultural attractions. This has curtailed development of a comprehensive tourism program. Gainesville and Alachua County provide tourists with a diverse offering of high-quality attractions, including: the Hippodrome State Theater; Paynes Prairie State Preserve; Marjorie Kinnan Rawlings State Historic Site; the University of Florida's Performing Arts Center and museums; and UF sporting events. Collectively, the County's attractions promote authentic Florida and should be marketed as a whole. As part of a tourism development program, the City and county should sponsor an economic study of the impact of cultural, heritage and environmental tourism on Alachua County.

Appendix A

Agencies Affecting Land Use Decisions

FEDERAL AGENCIES

Federal Emergency Management Agency

The Federal Emergency Management Agency (FEMA) administers the National Flood Insurance Program. This program maps areas of special flood hazard using the floodway, 100-year, and 500-year flood boundaries, and issues insurance to homeowners based on those maps. To qualify its homeowners for flood insurance, a community must have an ordinance regulating the development of lands in flood prone areas. In this way, FEMA is involved in development.

Environmental Protection Agency (EPA)

The Environmental Protection Agency is the lead agency for implementation of the National Environmental Policy Act (NEPA), Clean Air Act, the Safe Drinking Water Act (PL 93-523), and the Water Pollution Control Act (PL 92-500). NEPA requires the preparation of environmental assessments for federal projects and the consideration of alternative designs. The Clean Air Act sets emission standards for pollutants. The Safe Drinking Water Act establishes minimum drinking water standards and quality standards for the protection of water for public use, including operating standards and quality controls for public water systems. The Water Pollution Control Act relates to the provision of sanitary sewer service and the restoration and/or maintenance of the chemical, physical, and biological integrity of the nation's waters. EPA also administers the Superfund hazardous waste site clean-up program and issues hazardous materials restrictions and guidelines. The Cabot Carbon/Koppers Hazardous Waste Site is regulated by EPA.

United States Army Corps of Engineers (Corps)

The U.S. Army Corps of Engineers regulates the development and maintenance of the nation's water and related land resources, including construction and operation of projects for navigation, flood control, shore and beach restoration and protection, hurricane and flood protection, water supply and water quality. A Corps permit is required for any construction activity in navigable waters. The Corps also has permit authority to regulate activities involving discharges of dredged or fill material in all waters of the United States, including all adjacent wetlands.

United States Fish and Wildlife Service (FWS)

Under the Department of the Interior, the United States Fish and Wildlife Service assesses the impacts on fish and wildlife of all water and related land resource development projects which are federally funded or are constructed under a federal permit or license. FWS establishes regulations and development guidelines for the protection of endangered/threatened species. FWS also provides reports to federal construction or regulatory agencies and to permit applicants. FWS has conducted an inventory of wetlands which is used as background information to identify these areas. This agency acquires significant migratory waterfowl habitat and habitat for endangered species as well as recreation and wilderness areas.

United States Geological Survey (USGS)

The United States Geological Survey provides topographic, geologic and hydrologic maps often used as background information to identify areas of concern, such as areas subject to flooding.

United States Department of Agriculture (USDA)

The Natural Resource Conservation Service, an agency of the United States Department of Agriculture, provides soil classification and soil information. In addition, this agency provides information regarding the suitability of soils for septic tank use and basic construction.

The Soil Conservation and Stabilization Service conducts an agricultural set-aside program that subsidizes farmers for retaining land in agriculture. This program is a device for market control to retain the economic viability of agricultural products.

The Farmers Home Administration (FmHA) is a rural credit agency of the U.S. Department of Agriculture. The FmHA provides a rural rental assistance program and makes loans and grants in rural areas for operating loans, community facilities, including water and waste disposal, and offers loans to further rural business and industrial development.

United States Department of Transportation (DOT)

The United States Department of Transportation administers the nation's transportation policy. The agencies within this department most significant to Alachua County are the Federal Highway Administration (FHWA), the National Highway Traffic Safety Administration (NHTSA), and the Urban Mass Transit Administration (UMTA).

The Federal Highway Administration reviews and approves federally funded highway projects. Such projects include primary, secondary and urban system aid, the federal bridge replacement program and the maintenance and widening of federal facilities. U.S. 441, which bisects Gainesville, is a federal facility. Federal highway facilities are operated and maintained by the Florida Department of Transportation (FDOT) as part of the State Highway System.

The National Highway Traffic Safety Administration shares responsibility with the FHWA for highway safety programs including improved highway design, construction, and maintenance practices. The Urban Mass Transit Administration has review, approval, and funding authority for all federally-assisted paratransit and mass transit projects. Paratransit funds are funneled through the Florida Department of Transportation Disadvantaged Commission (formerly the Coordination Council on the Transportation Disadvantaged) to the Metropolitan Transportation Planning Organization (MTPO).

Federal Aviation Administration (FAA)

The Federal Aviation Administration regulates the nation's aviation system through licensing of airports and provision of funding for maintenance and enhancement of commercial airline service airports. In addition, Federal Aviation Regulation (FAR) Part 150 enables airports to assess aircraft noise impacts on surrounding land uses and implement appropriate mitigation measures. The FAA also regulates height restrictions and landfill siting near airports.

United States Bureau of the Census

The United States Bureau of the Census, under the United States Department of Commerce provides demographic and economic data.

United States Department of Labor

The U.S. Department of Labor contains the Small Business Administration and the Bureau of Labor Statistics. The Small Business Administration provides economic development assistance in the form of loans. The Bureau of Labor Statistics provides economic data.

United States Department of Housing and Urban Development (HUD)

The City of Gainesville is an Entitlement Community, and receives Community Development Block Grant Funds annually. These funds have been used for housing rehabilitation, neighborhood improvements, economic development and the support of a variety of outside agencies which provide services to low and moderate income persons. Every three years the City is required to prepare a housing assistance plan for HUD. HUD also provides monies to the Alachua County and Gainesville Housing Authorities. The Federal Housing Administration (FHA) is under the authority of HUD and provides mortgage insurance on loans for home purchases. HUD also operates the Rental Rehabilitation Program, which is administered in the City by the Public Safety Inspections Department.

United States Department of the Interior

The Department of the Interior administers the National Register of Historic Places. The Secretary of the Interior establishes the standards for rehabilitation of historic structures listed on the National Register.

Veteran's Administration (VA)

The Veterans Administration provides benefit to veterans, including medical services, home loans, and other assistance programs. The Veterans Administration has a hospital in Gainesville, which is a significant employer.

STATE AGENCIES

Alcoholic Beverages and Tobacco (AB&T)

City of Gainesville Code Enforcement is required to verify that the sale of alcoholic beverages (both on-premises consumption and package sales) are permitted uses in the zoning district prior to the issuance of the license by AB&T.

Department of Agriculture and Consumer Affairs (AGR)

BUREAU OF PUBLIC FAIRS & EXPOSITIONS--regulates carnivals and circuses.

DIVISION OF FORESTRY--The Division provides suppression of wildfires and responds to violation of forest protection laws. The division also provides horticultural information and public education.

BUREAU OF SOIL AND WATER CONSERVATION--coordinates with US Department of Agriculture and publishes the Soil Survey of Alachua County.

Department of Community Affairs (DCA) Updated Information Pending (4/14/99)

Division of Housing and Community Development, Bureau of Codes and Standards Division--provides technical assistance on construction and interprets the building code.

Division of Emergency Management - Coordinates with Gainesville Fire Department

BUREAU OF PREPAREDNESS AND RESPONSE -- Bureau has three sections – operations, training and exercise and response planning and three units -- Meteorological Support Unit, Field Services Unit, and Administrative Support all of which serve to support the state's efforts to respond to emergencies.

BUREAU OF RECOVERY AND MITIGATION – Bureau works to reduce or eliminate long-term risk to human life and property from disasters. Recovery from disasters is provided through the Federal and State Public Assistance, Individual Assistance, and Hazard Mitigation Grant Programs to rebuild lives and infrastructure, and to mitigate the impact of future disasters.

BUREAU OF COMPLIANCE AND SUPPORT – Provides staff support to State Emergency Response Commission and revises site plans to enhance first-response efforts at facilities storing hazardous materials.

OFFICE OF POLICY AND PLANNING – Section is involved in modeling disaster probability such as hurricane paths as well as damage costs and inland wind fields. The section also provides planning data such as the location of schools, government buildings, fire stations, etc., that enable the state to identify the impacts upon areas before and after a disaster.

Division of Housing and Community Development

BUREAU OF COMMUNITY DEVELOPMENT – Responsibilities include providing technical assistance on Americans with Disabilities Act, administering the Community Development Block Grant Program and Empowerment Zone and Enterprise Communities Program, and preparing the Statewide Minimum Building Code.

BUREAU OF COMMUNITY ASSISTANCE— Includes Community Services Block Grant, Low-Income Emergency Home Repair Program, Low-Income Home Energy Assistance Program, the Weatherization Assistance Program, State Energy Program, Drug Control and System Improvement Program, and the Local Law Enforcement Block Grants.

Division of Community Planning

BUREAU OF STATE PLANNING – Bureau is responsible for processing Developments of Regional Impact, developing environmental siting and geographic information systems, preparing publications and research, and transportation planning.

BUREAU OF LOCAL PLANNING – Bureau is responsible for review of local government comprehensive plans for consistency with state regulations and administrative guidelines, review of Developments of Regional Impact and Florida Quality Developments, and administration of Areas of Critical State Concern.

Department of Environmental Protection (FDEP) merged Department of Natural Resources and the Department of Environmental Regulation

Offices

STRATEGIC PROJECTS AND PLANNING. The Office of Strategic Projects and Planning guides the agency in achieving meaningful measures of environmental results, utilizing Environmental Problem Solving techniques, implementing common sense regulation and implementing the agency's compliance and enforcement strategy. The Office serves as a liaison with the federal government in a number of reinvention initiatives, such as EPA's Project XL (Excellence and Leadership) Program, the Performance Partnership Agreement and the national Performance Measures Project. The Office also provides staff support to a number of committees, such as the Environmental Regulation Commission and Environmental Council of the States.

COMMUNICATIONS. The Communications Office provides accurate and timely information to the public through the news media, and stays informed of internal issues in each division. The office coordinates with the Governor's office on environmental topics that affect DEP and serves as the primary contact with the media, provides media training, publishes the DEP Media Guide, approves and/or writes press releases for distribution, compiles and distributes DEP News Clips, and coordinates news conferences and special events. The office provides public information support for large scale emergency response situations and publishes the department's internal newsletter, InDEPth.

OMBUDSMAN.The Office of Ombudsman was created to help the public with agency issues. The Office fosters good communication and promotes the Department as responsive and user friendly. Contact the Office of Ombudsman if you have any questions or comments about the FDEP or its programs.

SITING COORDINATION. This office coordinates the inter-agency one-stop permitting process for power plants, transmission lines, statewide multi-purpose hazardous waste sites, sites for business with 50 or more new employees needing permits from at least two agencies, high speed rail siting, natural gas pipeline siting. Administers the pollution control equipment tax certification and assists county tax assessors in determining eligibility of pollution control equipment for assessment at salvage value.

OFFICE OF ECOSYSTEM MANAGEMENT. The Office of Ecosystem Management works to integrate diverse programs to achieve priority environmental goals by orienting program strategies along ecosystem boundaries rather than political or administrative boundaries. The Director oversees the Offices of Ecosystem Planning and Coordination, Intergovernmental Programs, Water Policy, Environmental Education and Greenways and Trails.

Divisions

ADMINISTRATIVE AND TECHNICAL SERVICES. The Division of Administrative and Technical Services consists of Administrative Services including the of Budget, Grants and Planning, Finance and Accounting, General Services (Contracts, Mail Room, Printing, Purchasing and Supplies), Personnel Services; and Technical Services including the bureaus of Systems and Laboratories, the Mercury Program and the Florida Geological Survey.

AIR RESOURCES MANAGEMENT. The Division of Air Resource Management (DARM) administers the state's air pollution control program. The Division has two bureaus and one office: the Bureau of Air Regulation (asbestos, emissions, Title V, IV), the Bureau of Air Monitoring and Mobile Sources (ambient monitoring, Title V general permits, mobile sources), and the Office of Policy Analysis and Program Management (Small Business Program, Partnerships for Ecosystem Protection, pollution prevention).

LAW ENFORCEMENT. The Division of Law Enforcement is responsible for statewide marine and environmental resource law enforcement. As the primary state law enforcement entity for enforcing Florida's marine resource and boating safety laws, Division activities include fisheries enforcement and education, waterway management, and boating safety education and enforcement. The Division has five district offices that are responsible for investigating environmental resource crimes such as abandoned drums and waste tires and illegal dredge and fill activities, as well as responding to emergency incidents which threaten the environment. In 1995, staff responded to 1, 714 hazardous materials incident reports and conducted 847 spill investigations. The Division also provides law enforcement services to Florida State Park System and other state-owned property, which the Department manages. There are over 100 parks and preserves within the Florida State Park System and 500,000 acres of state-owned uplands on which the Division is responsible for protection of persons and property. The Division's Bureaus and Offices include: the Office of Environmental Investigations, Bureau of Environmental Law Enforcement (Marine Patrol),and the Bureau of Emergency Response.

MARINE RESOURCES. The Division of Marine Resources preserves, manages and protects marine resources in Florida waters. Conducts marine biological research. Directs and supervises the development and construction of artificial reefs. Manages public health aspects of shellfish harvesting and processing, Florida's programs of marine sanctuaries and estuarine research reserves, aquatic preserves and state buffer preserves. Coordinates fishing public extension services, manatee recovery activities and other marine mammal activities. Issues whole sale and retail seafood dealers' licenses and saltwater products fishing licenses. Includes the Bureau of Coastal and Aquatic Managed Areas, the Office of Fisheries Management and Assistance (artificial reefs, lobster trap certificate, saltwater licensing, angler outreach, aquatic resource education) , the Bureau of Marine Resource Regulation and Development (shellfish, SEAS), the Bureau of Protected Species Management (manatees, sea turtles, seagrass protection) and the Florida Marine Research Institute.

RECREATION AND PARKS. The Division of Recreation and Parks operates the more than 140 State Parks throughout Florida. The Florida Park Service includes parks, recreation areas, museums, gardens, and preserves in five districts throughout the state. The Division consists of the following bureaus, districts, and offices: the Bureau of Design and Recreation Services (new park development and renovation of older facilities, administers grants and technical assistance programs for local governments.), the Bureau of Natural and Cultural Resources (provides technical support throughout the park system, manages the State Park System's collection of cultural objects, and provides technical support for the design and care of exhibits and interpretation), the Bureau of Operational Services (Coordinates the marketing and promotion, training, IRM and networking for the State Parks System and provides administrative support to the Division.)

OFFICE OF BUDGETING AND OPERATIONAL COMPLIANCE REVIEWS. (Provides budget oversight and review of field accountability and procedures for the Division.) Office of Park Planning (Develops and Maintain Florida's comprehensive outdoor recreation and conservation plan and coordinate development and review of individual park management plans.) Park District Bureaus (The five districts throughout the state are also bureaus of the division. Each is responsible for overseeing the park units within their district.)

DIVISION OF STATE LANDS. The purpose of the Division of State Lands is to acquire and dispose of lands as directed by the Board of Trustees of the Internal Improvement Trust Fund. The division administers, manages and maintains the records of all lands held by the Board of Trustees; administers and maintains the geodetic survey requirements for the State of Florida; sets boundary lines for lands owned by the Board of Trustees; identifies and sets ordinary and mean high water boundaries for purposes of sovereignty and land title; administers and disposes of RICO properties; and controls aquatic and invasive/exotic plant species on public lands.

The Division of State Lands provides oversight for approximately 11 million acres of state lands, including more than 7,000 lakes and 4,510 islands of 10 acres or more in size. The division provides upland leases for educational facilities, vegetable farming, and mineral, oil, and gas exploration. All staff duties and functions related to acquisition, administration and disposition of state lands, the title of which is vested in the Board of Trustees of the Internal Improvement Trust Fund, are performed by this division. The division is comprised of five bureaus: Bureau of Appraisal, Bureau of Aquatic Plant Management, Bureau of Land Acquisition, Bureau of Public Land Administration, and Bureau of Surveying and Mapping. Also included is the Division Director's Office, the Office of Environmental Services, and the Records Modernization Project.

DIVISION OF WASTE MANAGEMENT. This division implements state and federal laws relating to solid and hazardous waste management, and regulates construction and installation of above and below ground storage tanks. It is responsible for cleanup of hazardous waste and pollutant spill sites. The Division has three bureaus: The Bureau of Waste Cleanup (Hazardous Waste Cleanup, Technical Review, Site Investigation) , The Bureau of Solid and Hazardous Waste (Hazardous Waste Management, Hazardous Waste Regulation, Solid Waste Management, Waste Reduction) and The Bureau of Petroleum Storage Systems (Storage Tank Regulation, Petroleum Cleanup.)

WATER FACILITIES. Division of Water Facilities is the most diverse division in the DEP, responsible for protecting the quality of Florida's drinking water as well as its rivers, lakes, wetlands, and beaches, and for reclaiming lands after they've been mined for phosphate and other minerals. As staff to the Environmental Regulation Commission, we establish the technical basis for setting the state's surface and ground water quality standards. We also implement a variety of programs to monitor the quality of those water resources. Water Facilities conducts permitting, compliance and enforcement programs for Florida's more than 3,000 domestic and 1,000 industrial wastewater facilities, its 7,000 drinking water systems, and a myriad of wetlands and coastal activities. Our staff in Tallahassee develops the rules and guidance for implementing these programs consistently throughout Florida by our DEP district offices in Pensacola, Jacksonville, Orlando, Tampa, Ft. Myers, and West Palm Beach.

The Dvision also provides $100-200 million each year to local governments and other recipients to build or improve domestic wastewater and drinking water facilities, restore and renourish eroding beaches, reclaim lands disturbed by mining activities, and implement stormwater and other nonpoint source management projects. This division has five bureaus: Water Facilities Regulation, Water Facilities Funding, Submerged Lands and Environmental Resources, Beaches and Coastal Systems and Mine Reclamation.

Department of Children and Family Services (DCF)

District III administrative offices are located in Gainesville. DCF requires a license for Child Care, Community Residential Homes (including adult congregate living facilities, Adult Foster Family, Habilitation Centers, etc. and Group Homes), and Social Service and Rehabilitation Centers. DCF inspects all facilities for fire and building code violations. The department also has divisions related to alcohol, drug abuse, mental health and the disabled, aging and adult services.

TACACHALE CENTER FOR EXCELLENCE—A DCF-operated developmental services institution providing 24-hour care and services for individuals statewide who are developmentally disabled. Tacachale Center informally cooperates with the City on the use of recreation facilities and participation in cultural programs.

Florida Highway Patrol (FHP)

The FHP provides traffic patrol on state highways. FHP provides and receives mutual aid from the City's police department.

Governor's Energy Office

The Energy Office administers Local Energy Engineering Program through contract with the City.

Insurance & Treasury

STATE FIRE MARSHAL -- primary responsibility for the investigation of suspicious fires on state-owned property, and provides backup investigation for the unincorporated area. The State Fire Marshal provides fire inspection services to the University of Florida and interprets the Fire Code.

LP & GAS DIVISION--installation and abandonment of gas facilities. City Fire/Rescue and Alachua County Office of Environmental Protection coordinate in the review process.

Public Service Commission (PSC)

The PSC regulates the rate structure for electricity, telephone service, cable television, energy conservation programs, and power plant siting,

Department of Transportation (FDOT)

The Florida Department of Transportation is responsible for the State Highway System, including planning, construction, maintenance and access. FDOT prepares budget proposals for funding by the legislature with the advice of the Metropolitan Transportation Planning Organization, in accordance with the Gainesville Urban Area Transportation Study (GUATS). Representatives of FDOT are non-voting members of the Metropolitan Transportation Planning Organization. FDOT, Division Two headquarters are in Lake City.

Secretary of State

DIVISION OF CULTURAL AFFAIRS--reviews and funds grant proposals from the Local Arts Agency.

DIVISION OF HISTORICAL RESOURCES, Bureau of Historic Preservation--City of Gainesville is a certified local government.

St. John's River Water Management District (SJRWMD)

The district regulates the management and storage of surface waters, well construction, stormwater discharge, dredge and fill, and water shortages. St. John's reviews applicant submittals for individual and general permits for surface water systems. The jurisdiction of the St. John's Water Management District includes most of the current city limits, except the Northwood area. St. John's issues permits for water consumption for the Murphree Water Treatment Plant. Divisions include Environmental Resource Compliance, Water Use Compliance, Operations and Land Resources, Water Resources, Permit Data Services, Groundwater Programs, and Water Supply Management.

Suwannee River Water Management District (SRWMD)

SRWMD regulates the management and storage of surface water well construction, stormwater discharge, dredge and fill, and water shortages. Suwannee River reviews applicant submittals for individual and general permits of surface water systems. The jurisdiction of the Suwannee River Water management district includes western Alachua County, but only a portion of Gainesville.

University of Florida (UF)

ADMINISTRATIVE AFFAIRS

WATER--UF receives potable water from the City at a bulk rate by contract.
The University is the largest state institution within the City. City services and city agencies interact with the University daily.

FIRE SERVICES--City Fire Department provides fire suppression and emergency medical services to the university.

CAMPUS PLANNING--Review of campus development. City Director of Community Development attends campus planning meetings and informally reviews plan for impact on city services and neighborhoods.

CAMPUS POLICE--City police provide assistance to campus police upon request.

BUREAU OF ECONOMIC AND BUSINESS RESEARCH (BEBR)--This department of the University provides statistical information for planning and economic development.

Santa Fe Community College – Operates two campuses within Alachua County with an approximate total of 14,000 students. The main campus is located in the Urban Reserve Area in the vicinity of NW 39th Avenue and I-75 and includes an auditorium, gymnasium, and art gallery. The Downtown Campus is located on NW 6th Street in a converted train depot west of the Pleasant Street Historic District.

OUTSIDE AGENCIES

Alachua County Housing Authority

The Alachua County Housing Authority is appointed by the Board of County Commissioners to provide housing programs outside the City of Gainesville. Training programs are cooperatively held in conjunction with the Gainesville Housing Authority. Coordination with City departments is informal, as needed.

Alachua County Library District

The Library District provides library services to Alachua County. The Alachua County Library District Governing Board is composed of two City Commissioners and three County Commissioners. The Governing Board appoints a Board of Trustees of seven members, three nominated by the City Commission, three nominated by the County Commission and one nominated by the Alachua County League of Cities. The Library District is funded by the Library District Tax.

Alachua League of Cities

The League of Cities is a voluntary organization affiliated with the Florida League of Cities. Meetings are held in January, March, May and September. Participating local governments are Alachua, Archer, Gainesville, Hawthorne, High Springs, LaCrosse, Micanopy, Newberry, Waldo, and Alachua County.

Citizen Advisory Committee for Community Development

15-member board appointed by the City Commission to advise the City on Block Grant projects, pursuant to federal requirements.

City-County Cable Television Advisory Committee

The board meets monthly to monitor contract compliance and review system expansion requests. The contract with Cox Cable is jointly executed by the City and the County. The Board is composed of 11 members, with rotating dominance. The Board makes an annual report to the City and County Commissions.

Central Florida Community Action Agency

Independent anti-poverty agency serving Alachua, Levy and Marion Counties, providing housing, job-training and public assistance. The Community Action Agency has received CDBG funds from the City for its food commodity and gardening programs in CDBG target areas. The County Commission appoints public sector and private sector members to the 21-member Board. Residential members are elected from target areas.

Redevelopment Advisory Boards

Created by the City, pursuant to State enabling legislation, to revitalize downtown Gainesville. The seven member board is appointed by the City Commission. The operating budget for the agency is derived from the Tax Increment Trust Fund and the City General Revenue. All project money is from the trust fund. The DRA must approve all expenditures of Tax Increment Trust Fund, including expenditures for tax increment districts not located in the Central Business District.

Gainesville-Alachua County Regional Airport Authority

The Airport Authority manages and operates the airport and the airport industrial park. All revenues are returned to the airport enterprise fund, which funds operation and maintenance of the airport. The City provides matching funds for capital improvements to the airport authority from the City's general revenue. All airport lands and facilities are owned by the City. The Airport Authority has nine members, five appointed by the City, three appointed by the State and one appointed by the County.

Gainesville Cultural Affairs Board

This board advises the City Commission on Cultural Affairs. The Board has 17 members; five seats are reserved for appointment of County residents. No residency requirement currently exists for the other board members.

Gainesville Housing Authority (GHA)

The GHA is an independent authority created by State Statute and is incorporated as a not-for-profit-corporation. GHA is governed by a Board of Commissioners appointed by the City of Gainesville. It is empowered to provide housing within the city limits and in the unincorporated area up to a ten-mile radius of the City. GHA is funded directly by HUD and its rental revenue. GHA contracts with the City for Block Grant services.

Intergovernmental Relations Committee

This committee is composed of City and County Commissioners, one member of the school board and one member of the Alachua League of Cities who chairs the committee. The Committee discusses intergovernmental relations issues. Adopted motions are reported back to each governmental unit for action.

Local Arts Agency

City of Gainesville Department of Cultural and Nature Operations is designated as the Local Arts Agency. It interacts with all county arts organizations and the Secretary of State, Division of Cultural Affairs. Funding is from the City General Fund, revenues from programs and rental of Thomas Center facilities and grants.

Metropolitan Transportation Planning Organization (MTPO)

The MTPO is established in the Gainesville Urban Area to develop a coordinated urban transportation planning program. The MTPO is composed of the five City of Gainesville Commissioners, the five Alachua County Commissioners and two non-voting members representing the Florida Department of Transportation. The MTPO administers the Gainesville Urbanized Area Transportation Study (GUATS). GUATS is a continuing, comprehensive and cooperative urban transportation program for the Gainesville Urbanized Area addressing multi-modal transportation needs.

Technical Advisory Committee is composed of professional staff from the City (including GRU, Regional Transit System), Alachua County, and the Gainesville Alachua County Airport Authority, FDER and FDOT.

Citizens Advisory Committee, composed of citizens appointed by both the City and the County review the work of the MTPO staff. The North Central Regional Planning Council provides staff for the MTPO.

North Central Florida Regional Planning Council (NCFRPC)

The NCFRPC is charged with regional planning within a sixteen county area, including Alachua County. The NCFRPC also staffs the Metropolitan Transportation Planning Organization.

Neighborhood Housing and Development Corporation (NHDC)

NHDC provides home improvement loans and housing rehabilitation in declining neighborhoods. NHDC is a private non-profit business. The NHDC Board of Directors is comprised of business representatives, lenders, public officials and residents, the composition of which changes depending on the projects undertaken. Currently two board members are appointed by the City Manager. NHDC receives CDBG funding.

St. Francis House

St. Francis House has received CDBG funds for the provision of shelter and meals for the homeless.

School Board of Alachua County (SBAC)

The School Board of Alachua County administers the Alachua County School District. The boundaries include all of Alachua County. SBAC administers and operates all public schools within the district. SBAC works with the planning department to obtain population projections. SBAC monitors land use amendments and rezonings in order to determine the impact on school populations and properties. A site selection committee is created by the Board when new schools are needed. At a minimum such committees generally include county and city planning staff, the Regional Planning Council and the MTPO. Site plans for school properties within the City are reviewed in accordance with city plan review procedures and applicable statutory provisions.

United Gainesville Community Development Corporation (UGCDC)

UGCDC is a quasi-public agency. One City Commissioner and one appointee of the Governor sit as ex-officio members of the board. Other members are nominated locally from target areas. The City contracts with UGCDC to provide technical assistance and loan packaging services to small businesses and provide a variety of revitalization and economic development services to distressed areas of the community. UGCDC has contracted with the City to provide services under a State grant for the Affordable Housing Demonstration Program.

ALACHUA COUNTY

Board of County Commissioners County Departments:

ANIMAL CONTROL--provides animal patrol and shelter for the unincorporated area, and by contract with the small cities. The Gainesville Police Department provides patrol services within the City, and contracts with the county for animal shelter.

DEPARTMENT OF FIRE AND RESCUE SERVICES--administers fire services in unincorporated Alachua County and administers rescue services county-wide. Contracts with the City of Gainesville for fire suppression services in the unincorporated area are negotiated as well as a consolidated 911 service.

GROWTH MANAGEMENT

Codes Enforcement--receives referral of citizen reports of code violations informally from City Fire Department.

Office of Planning and Development--works informally with the City Planning Division and receives formal comments from the City on Comprehensive Plan Amendments. City Planning staff provides written comments on zoning agenda items in Gainesville's urban reserve area to the County Planning Commission. The City and County also coordinate on homebuyer training and special needs programs and SHIP.

Tourist Development--Visitors and Convention Bureau-- The agency has a nine member advisory board appointed by the County Commission. The Tourist Development Tax is collected by the state and allocated to the county. Forty-five percent of the tax monies are provided for grants and 45 percent are provided for overall promotion of tourism in the county.

ENVIRONMENTAL PROTECTION DEPARTMENT --investigates hazardous waste, pollution and environmental degradation matters in Alachua County. Provides environmental review of development proposals in the City by formal agreement. Coordinates permitting for landfills, borrow pits and underground fuel storage.

PUBLIC WORKS DEPARTMENT--this department includes traffic engineering, (including permitting connections to County roadways), drainage engineering, recreation, operation of the Alachua County Landfill and contracts with RTS for the Mini-bus.

County Charter Officers

SHERIFF--The Sheriff and the City coordinate with regard to the consolidated 911 service and UHF emergency communications systems.

PROPERTY APPRAISER--The Property Appraiser's office is responsible for the tax parcel maps. The City Planning Department is able to access the Property Appraiser's files directly by computer.

CLERK OF THE COURT--The Clerks office keeps official records including property transactions.

SUPERVISOR OF ELECTIONS--Any annexation referendum will be scheduled and held by this office.

TAX COLLECTOR--collects taxes.

ADJACENT CITIES

CITY OF ALACHUA--is located to the north of the City of Gainesville. The City of Gainesville's Deerhaven Power Plant is the most prominent land use located near the city boundary. Pending Reserve Area designations pursuant to the Alachua County Boundary Adjustment Act would bring about a larger common boundary, thus requiring greater coordination in the future.

SURROUNDING URBAN CLUSTERS AND RURAL EMPLOYMENT CENTERS

JONESVILLE-- Gainesville Regional Utilities provides water and sewer service.

FAIRBANKS-- Gainesville Regional Utilities provides water and sewer service.

UTILITIES FURNISHED BY PRIVATE COMPANIES

SOUTHERN BELL--participates in review of site plans by GRU and has expressed interest in participating in the Departmental Review Meeting.

COX CABLE (TV)--franchise holder for cable TV. Participates in GRU site plan review.

BROWNING-FERRIS INDUSTRIES (BFI)--contracts with separately with the City and the County for garbage collection.

CITY OF GAINESVILLE

Charter Offices

CITY MANAGER (CM)--directs work of all City Departments except GRU and coordinates with City-County. Cable Television Committee and Airport Authority. The Economic Development office administers programs aimed at leveraging the private sector investment to retain and create jobs and to increase the productivity of the small businesses.

LAW--City attorney prepares all ordinances, and advises city departments on legal issues.

CLERK OF THE COMMISSION--keeps records of all city commission actions

CITY AUDITOR--monitors the city's financial records and grants.

GAINESVILLE REGIONAL UTILITIES (GRU)-- GRU is owned and operated by the City of Gainesville. The General Manager of the Utility is a Charter Officer of the City. GRU provides water, wastewater, gas and electricity in the Gainesville urban area and specified services by contract to the City of Alachua. The Board of County Commissioners must also approve any sewer or water extension outside the city limits.

City Departments

GAINESVILLE FIRE-RESCUE DEPARTMENT (GFD)--provides fire protection and emergency medical services within the City of Gainesville, and fire suppression services at the University of Florida and by contract with the County within the Gainesville Urban Area. Fire staff inspect all non-state HRS facilities at least once a year. GFD is staff liaison to the City Hazardous Waste Advisory Board. Fire staff seeks technical assistance from FDEP with regard to hazardous materials.

BUILDING DIVISION -- reviews and inspects all construction.

COMMUNITY DEVELOPMENT (CD)—includes: Planning Division that provides comprehensive planning and land development regulation. The Department also administers the Enterprise Zone; Code Enforcement, which inspects zoning code violations, and issues permits and determines compliance with the zoning code and coordinates with Alcohol, Beverage and Tobacco on the issuance of liquor licences; Housing Division and Community Development Block Grant (CDBG) which administer the City's housing program and prepares block grant applications and administers the grant funds. The City and County also coordinate on homebuyer training and special needs programs administered through SHIP.

PUBLIC WORKS (PW)--provides development review and the maintenance and construction of streets, sidewalks. Public Works manages the Stormwater Management Utility, which maintains stormwater management facilities and programs. PW also manages Regional Transit Systems (RTS) which operates the bus system in the urban area and Traffic Engineering which provides traffic analysis, signalization for the urban area and transportation planning.

CULTURAL AFFAIRS--operates cultural programs such as the Downtown Arts Festival and Hoggetown Medieval Faire and operates and maintains the Thomas Center and Gardens.

PARKS AND RECREATION (REC)--provides recreation programs in the City and maintains City parks and grounds as well as operates nature facilities and programs at Bivens Arm Park, Morningside Park, Loblolly, and Ring Park. The City Arborist coordinates with all other departments with regard to maintaining the health and safety of the tree canopy city-wide.

OFFICE OF BUDGET MANAGEMENT --Strategic Planning prepares fiscal reports with regard to annexation.

Appendix B

Inventory and Assessment of Intergovernmental Coordination Mechanisms

Agency	Subject	Role	City Department	Relationshi		
				Occasional Interaction	Developer Submits Information	Form Agreer
State						
Alcohol, Beverage & Tobacco	Liquor License	RA	Code Enforcement	X		
Administration	Administrative hearings	RA	All			
Department of Agriculture	Forestry	IR	Community Development Parks and Recreation	X		
Department of Community Affairs (DCA)	Comp. Planning	RA,IR	Community Development	X	X	
	Construct. Prac.	RA,IR	Building Division	X		
	Resource Planning	RA	Community Development	X		
	Emergency Mgt.	FR	Fire Department			X
	Enterprise Zone	RA,IR	Community Development			X
Florida Department of Environmental Protection	Hazardous Waste	RA	Fire Department		X	
	Water Quality	PA	Public Works		X	
	Air Quality	RA	GRU	X		
	Natural Resources	IR, FP	Community Development Public Works	X		
Department of Transportation (FDOT)	Access Management	PA	Public Works	X	X	
	State Highway System Planning	FP	Community Development Public Works RTS			
	Mass Transit	RA	RTS			
	Airport	RA	City Manager	X		
	Planning		RTS			
Department of Children and Family Services	Residential facilities	PA	Community Development	X		
	Family Day Care	PA	Community Development	X		

Agency	Subject	Role	City Department	Relationshi		
				Occasional Interaction	Developer Submits Information	Forn Agreer
	Tacachale Center	FR	GRU	X		
Florida Highway Patrol	Mutual Aid Pact	FP, FR	Police			X
Insurance & Treasury	State Fire Marshall	RA	Fire Department	X		
Public Services Commission (PSC)	Electric Utilities	PA	GRU			
Department of State	Historic Preservation	IR,RA	Community Development	X	X	X
St. John's River Water Management District	Water Quantity; Quality and Wetland Protection	PA	Public Works		X	
Suwannee River Water Management District	Water Quantity; Quality and Wetland Protection	PA	Public Works		X	
University of Florida	BEBR	FP, IR	Community Development	X		
	Water	FR	GRU			X
	Fire Services	FR	Fire Department	X		
	Campus Planning	IR	Community Development	X		
	Bus Service	FR	RTS			X
	Campus Police	FR	Police			X
Santa Fe Community College	Water	FR	GRU			X
	Fire Services	FR	Fire Department	X		
	Campus Planning	IR	Community Development	X		
	Bus Service	FR	RTS	X		
	Campus Police	FR	Police			X
Outside Agencies						
Alachua County. Housing Authority	Subsidized housing	IR	Community Development	X		
Alachua League Cities	Municipal cooperation	IR	Community Development			

Agency	Subject	Role	City Department	Relationshi		
				Occasional Interaction	Developer Submits Information	Form Agreer
Cable TV Advisory Committee	Monitor cable franchise	IR	City Manager			
Community Redevelopment Agency & Advisory Boards	Downtown Advisory Board	IR, RA	Community Development			
	NW Fifth Avenue/ Pleasant Street Advisory Board	IR, RA	Community Development			
	College Park/University Heights Advisory Board	IR, RA	Community Development			
Gainesville/Alachua County Airport Authority	Safety & Maintenance	FP	Fire Department Police			X
	Development review	FP	Community Development			
Gainesville Housing Authority	Subsidized housing	FP	Community Development			X
Gainesville/ Alachua County Library District	Facility location	FP	Community Development			
Local Arts Agency	Cultural affairs	FR	Cultural Affairs			X
Metropolitan Transportation Planning Organization	Arterial Roads, Transit	RA	Community Development Public Works RTS			X
Neighborhood Housing and Development Corporation	Affordable housing	IR	Community Development			
North Central Florida Regional Planning Council	Regional planning/Plan review	RA,IR	Community Development		X	X
	Local government planning	IR	Community Development	X		
	Developments of Regional Impacts	RA	Community Development		X	

Agency	Subject	Role	City Department	Relationshi		
				Occasional Interaction	Developer Submits Information	Form Agreer
School Board of Alachua County	SBAC Development Projects	FP	Community Development	X	X	
	Recreation facilities	FR,FP	Parks and Recreation	X		
Alachua County						
Animal Control	Stray animals	FP	Police			X
Emergency Services	Fire Services	FR	Fire Department			X
	Rescue	FP	Fire Department			X
Environmental Protection Department	Environ. evaluation	IR	Community Development Public Works RTS			X
Health Department	Septic Tank Permits	PA,RA	Community Development GRU	X		
Law Enforcement	County Sheriff	FP	Police			X
Growth Management	Comprehensive Planning	RA	Community Development		X	X
	Zoning	PA, RA	Community Development		X	X
	Tourist Development	FP, IR	Cultural Affairs			X
Property Appraiser	Parcel records	IR	Community Development Public Works GRU	X		
Public Works	Traffic	FR	Public Works			X
	Recreation	FP, FR	Parks and Recreation			
	Land Fill	FP	Solid Waste			X
	Mini-bus	FR	RTS			X
	Development Review	PA	Public Works		X	
	Stormwater Management	PA	Public Works	X		
Adjacent Cities						
City of Alachua	Land Use	RA	Community Development	X		

Agency	Subject	Role	City Department	Relationshi		
				Occasional Interaction	Developer Submits Information	Form Agreer
	Annexation	RA	Budget	X		

Appendix C

Consistency with Regional Policy Plan on Regionally Significant Resources or Facilities

Applicable Resource or Facility	Relevant Regional Policy	Consist
Cultural Facilities Locally Affected Resources Center for Performing Arts Florida Museum of Natural History Hippodrome State Theater Samuel P. Harn Museum	**Goal 2.4** Expand the regional tourist industry **Policy 2.4.1** Provide assistance to the regional tourism development effort currently underway	City is proposing to amend the of comprehensive plan to requ plan that would incorporate h tourism. In addition, the plan with Alachua Country and aff
Educational Institutions		
Santa Fe Community College	No relevant Regional Policies	
University of Florida	**Goal 5.2** Mitigate adverse impacts to regional transportation facilities associated with enrollment growth at the University of Florida. **Policy 5.2.1** Construct parking lots and garages which serve the University of Florida off-campus and operate a series of University-sponsored shuttle buses between the parking lots and the campus instead of constructing additional parking spaces on campus. **Policy 5.2.2** Increase the percentage of students living on campus from the current level of 24.5 percent. **Policy 5.2.3** Provide an evening division of classes in order to reduce off-campus impacts on the regional road network during peak hour traffic periods. **Policy 5.2.4** Complete multi-modal corridor studies as soon as possible for the following roads: a. SR 26 from west of I-75 east to SR 24 b. US 441 from SR 331 north to NW 6th Street c. SR 121 from SR 331 north to US 441 d. SR 24 from SW 75th Street east to US 441 **Policy 5.2.5** Adopt transportation demand management strategies such as carpools, vanpools, public transit, bicycling, incorporating public transit costs in University of Florida student activity fees, and walking to encourage the use of the multi-modal corridors for mode of travel other than single-occupant vehicles. **Policy 5.2.6** Adopt measures such as prohibiting freshman from purchasing parking decals to park on campus to reduce the demand for parking facilities and encouraging freshmen to use public transit, bicycles, and walking while traveling to and from the University area.	The City has been very proact modal transportation opportu including the University of Fl downtown. The Transportatio particular sets forth several p implement transit. Generally, City to provide main bus serv intensity mixed use areas (Poli addition, the element promote Concurrency Management Ar University Sub-Area designe activity, bicycling, and mass t Policies 1.4.1 through 1.4.4). Land Use Element has targete neighborhoods for higher de alternatives to commuting by Presently, the City is proposi Concurrency Exception Area portions of the city, including University of Florida, will be " transportation concurrency re
Electric Power Facilities Locally Affected Resources	No relevant Regional Policies	

Applicable Resource or Facility	Relevant Regional Policy	Consist
Kelly Power Plant Deerhaven		
Florida Greenways <u>Locally Affected Resources</u> Depot Rail Trail Devil's Millhopper Bike Path/Transportation Corridor Gainesville-Hawthorne Rail Trail Hogtown Creek Greenway Sweetwater Creek/ Matheson Greenway Waldo Rail Trail	No relevant Regional Policies	The City has been very active a system of greenways throug all but one of the greenways i Central Florida Regional Plan Policy Plan are confined to or Several policies within the Re Open Space, Space elements interconnectedness, multi-mo recreational and open space v
Hospitals <u>Locally Affected Resources</u> North Florida Regional Medical Center Shands Teaching Hospital VA Hospital	No relevant Regional Policies	
Natural Resources	**Goal 2.4** **Policy 2.4.3** Conserve the region's natural resources of regional significance as economic as well as natural resource assets.	The City is proposing the dev tourism plan which will includ things, an ecotourism compor
Surface Water Resources <u>Locally Affected Resources</u> Paynes Prairie State Preserve Newnans Lake Gum Root Swamp Alachua Sink	**Goal 4.6** Maintain the quantity and quality of the region's surface water systems in recognition of their importance to the continued growth and development of the region. **Policy 4.6.1** Pursue a regulatory environment consisting of the minimum regulatory burden necessary for the maintenance of the quantity and high quality of the region's surface water systems. **Policy 4.6.6** Use non-structural water management controls as the preferred water management approach for rivers, lakes, springs, and freshwater wetlands. **Policy 4.6.13** Ensure that local government comprehensive plans, DRIs, and requests for federal and state funds for development activities reviewed by the Council include adequate provisions for stormwater management, including retrofit programs for known surface water quality runoff problem areas, and aquifer recharge protection in order to protect the quality and quantity of water contained in the Floridan Aquifer and surface water systems identified as natural resources of regional significance. **Policy 4.6.15** Minimize the effect of mining on the surface water quality and seasonal flows of surface waters identified as natural resources of regional significance.	Based on several objectives a Conservation, Open Space, an City adopted "Surface Water District" (Section 30-300 *et se* Code [LDC]) in 1992 that coc creeks, and lakes required by with some exceptions regardi utilities, is prohibited within 3 wetland, landward extent of a regulated creek. The "Surface Overlay District" also require of runoff from development ir wetlands and lakes and prohil integral to the ecological valu water.
Groundwater Resources <u>Locally Affected Resources</u> Floridan Aquifer Alachua Sink	**Goal 4.2** Maintain an adequate supply of high-quality groundwater to meet the needs of north central Florida residents in recognition of its importance to the continued growth and development of the region.	Policy 2.3.4 of the Conservati Groundwater Element allows place septic tanks in commerc industrial districts, under cert County's Hazardous Material

Applicable Resource or Facility	Relevant Regional Policy	Consist
	Policy 4.2.5 Coordinate land use and water resources planning for groundwater resources designated as natural resources of regional significance among the Council, local governments, and the water management districts through regional review responsibilities, participation in committees and study groups, and ongoing communication. **Policy 4.2.7** Identify and map the capture zones of all public water supply wellfields. **Goal 4.3** Protect all sources of recharge to the Floridan aquifer from all activities which would impair these functions r cause a degradation in the quality of the water being recharged in recognition of the importance of maintaining adequate supplies of high-quality groundwater for the region. **Policy 4.3.3** Pursue a regulatory environment consisting of the minimum regulatory necessary for the maintenance of the quantity and quality of groundwater recharge in Areas of High Recharge Potential..., Stream-to-Sink Watersheds and Sinks identified as natural resources of regional significance. **Policy 4.3.6** Ensure that local government comprehensive plans, DRIs, and requests for federal and state funds for development activities reviewed by the Council include adequate provisions for stormwater management and aquifer protection in order to protect the quality and quantity of water contained in the Floridan Aquifer. **Policy 4.3.8** Minimize the effect of mining activities on water quality and quantity of the Floridan Aquifer. **Regional Goal 4.6 and Policies 4.6.1, 4.6.6, 4.6.13, & 4.6.14** (Applicable to Alachua Sink)	(HMMC), which is the primar policy was in place prior to th The "Wellfield District" (Sec. implements the element by rec development to comply with t Management Code, Storage T HMMC. In addition, new sep non-residential uses in the Mu management primary and sec The "Surface Waters and We *et seq*.) protects stream-to-sin installation of new septic tank regulated surface water body. nonresidential development p demonstrate that toxic, hazarc not be disposed of in the on-s relevant policies and regulatio Resources.")
Natural Systems <u>Locally Affected Resources</u> Devil's Millhopper State Geologic Site Gum Root Swamp Paynes Prairie State Preserve Newnans Lake	**Goal 4.4** Protect all listed species in north central Florida. **Policy 4.4.1** Work with local governments and the FGFWFC to ensure the survival of all listed species found in the region. **Policy 4.4.4** Endangered and threatened species and their habitats shall be protected. **Policy 4.4.5** When a land use designation change is proposed or an increase in allowable land use density is proposed, species of special concern, and their habitat, known to exist on site shall be protected. Protection should include, but not necessarily be limited to, the following: a) conservation easements b) on and offsite mitigation banks c) tax breaks d) transferable densities e) management agreements f) agriculture and silviculture best management practices **Policy 4.4.6** Working with private property owners, encourage voluntary protection of listed species and their habitats located on private property through the use of best management practices and public education programs.	Policy 1.1.1(f) of the Conserv Groundwater Element require in areas identified as "Upland district ordinance (Section 30- identify and preserve sites ov ordinance requires that at leas communities within a designa preserved. As required by Policy 1.1.2 of staff developed a ranking syst inventoried approximately 105 anticipated development dens proximity to parks, natural res inclusion in Gainesville's "Em other parks, multiple use, rarit and sensitivity, ecosystem int development pressure and exc Policy 1.1.3 of the Conservati Groundwater Element require dedicate land and easements, of buffers along and around s

Applicable Resource or Facility	Relevant Regional Policy	Consist
	Policy 4.4.8 Direct those land uses that are not consistent with the protection and maintenance of listed species and their habitats away from such resources. **Goal 4.5** Protect natural resources of regional significance identified in this plan as "Planning and Resource Management Areas." **Policy 4.5.2** Seek the input of local governments and the regional planning council in the preservation of management plans for public conservation lands private conservation lands, and SWIM water bodies identified as natural resources of regional significance. **Goal 4.6, Policies 4.6.1, 4.6.6, 4.6.13, 4.6.15**	reservations and to facilitate t greenways. The City has ado Wetlands Districts" (Section 3 District (Sec. 30-307), "Uplanc allowing on-site transfer of de create buffers. The "Greenwa also specifies provisions rega easements. Policy 1.1.4 of the Element re $150,000 annually to purchas lands. Since 1991, the City has purchasing land for the Hogto
Planning and Resource Management Areas <u>Locally Affected Resources</u> Devil's Millhopper State Geologic Site Gum Root Swamp Paynes Prairie State Preserve	**Goal 4.5** Protect natural resources of regional significance identified in this plan as "Planning and Resource Management Areas." **Policy 4.5.1** Provide technical assistance to local governments in the development of appropriate local government comprehensive plan policies and land development regulations necessary to maintaining areas and water bodies identified as natural resources of regional significance classified in this plan as "Planning Resource Management Areas." **Policy 4.5.2** Seek the input of local governments and the regional planning council in the preparation of management plans for public conservation lands, private conservation lands, and SWIM water bodies identified as natural resources of regional significance. **Policy 4.5.3** Continue to provide input to state and local agencies in reviewing existing or proposed designations of areas or water bodies as one of the categories identified as natural resources of regional significance classified in this plan as "Planning Resource Management Areas."	See summary of comprehensi development regulations for *Groundwater Resources* and
Transportation Facilities		
Gainesville Regional Airport	**Goal 5.3** Maximize the use of the Gainesville Regional Airport before developing a new regional airport. **Policy 5.3.1** Coordinate development plans of the Gainesville Regional Airport with the City of Gainesville and Alachua County comprehensive plans to avoid unnecessary conflicts, to ensure the safety of airport operations, and to allow for future increases in the operational capacity of the airport.	The City of Gainesville has th Element designed to promote facility for the City and its air The policies are designed to g around the airport (Policy 1.1. Facility Overlay (Policy 1.1.2) uses in the vicinity of the airpo land not compatible with the a of structures and other uses a in and around the airport (Poli
Regional Transit System	**Goal 5.4** Reduce the unmet General Trip demand of north central Florida Transportation Disadvantaged problem. **Policy 5.4.1** Improve mobility options for low-income, elderly, and disabled persons. **Policy 5.4.2** Increase funding for coordinated transportation systems for the transportation disabled. **Goal 5.5** Increase the percentage of north central Florida	The Transportation Mobility E forth several policies designed Generally, the Element require bus service to mixed and high (Policies 1.1.7 and 1.1.9). In a promoted the Transportation Area in the Downtown-Unive enhance pedestrian activity, b

Applicable Resource or Facility	Relevant Regional Policy	Consist
	residents using public transportation as a primary means of transportation. **Policy 5.5.1** Coordinate with Gainesville RTS, the MTPO for the Gainesville Urbanized area, the University of Florida, the City of Gainesville, and Alachua County to provide opportunities through their respective plans and programs for a greater likelihood of increased public transit ridership.	(Objective 1.4 and Policies 1.4 Future Land Use Element has neighborhoods for higher den alternatives to commuting by
Regional Road Network <u>Locally Affected Facilities</u> Interstate 75 (Alachua County) SR24 (Levy Co.-Alachua Co. line to US 441) SR26 (from US 19/98 to I-75) SR26 (from I-75 to Putnam Co. line) SR26A (from SR 26 to SR 26) SR 120 (from US 441 to SR 24) SR 121 (fm. Union/Baker Co. to Alachua/Levy Co.) SR 222 (fm. I-75 to SR 26) SR 226 (fm. SR 24 to SR 331) SR 235 (fm. US 441 to SR 121) SR 329 (fm. SR 120 SR 331) US 441 (fm. Columbia Co./GA border to Alachua/Marion Co. line)	**Goal 5.1** Maintain a regional road network which operates at or above the minimum level of service standard identified in local government comprehensive plans. **Policy 5.1.2** Coordinate with the Florida Department of Transportation regarding proposed improvements to the regional road network to assure consistency with local government comprehensive plans. **Policy 5.1.3** Review proposals for road widening and new transportation corridors for impacts upon natural resources of regional significance and adjacent local governments. **Policy 5.1.7** Mitigate adverse impacts of development upon regional transportation facilities. **Policy 5.1.8** Mitigate impacts created by development so as to maintain the minimum level of service standard on the Florida Intrastate Highway System (FIHS) as established by the Florida Department of Transportation. **Policy 5.1.12** Direct future transportation improvements to aid in the management of growth and that promote economic development in designated areas. (See also Goal 5.2 and Policies 5.2.1 through 5.2.6 under the Educational Institutions category and responses)	The City continues to particip provide coordinated transport urbanized area in conjunction County, and other entities as r The City regularly reviews all and zoning applications, and r County with the opportunity t plan amendments and zoning review is an opportunity for th standards, and is consistent wi City already participates in the and outside its limits, which is 1.6.7. The City's adopted roadway l minimum LOS standards for t mitigation measures for any d would otherwise cause the LO Policy 5.1.2 is implemented th participation in the MTPO (ICI
Emergency Preparedness Facilities <u>Locally Affected Facilities</u> Public Emergency Shelters NOAA Radio Stations Doppler Weather Radar Installations Gainesville Fire Rescue HAZMAT Emergency Response Team PCS, Inc., Chemical Emergency Response Team	**Policy 3.1.2** Establish NOAA weather radio station coverage for all of North Central Florida. **Policy 3.1.4** Maintain up-to-date hurricane evacuation and inland hurricane shelter plans for North Central Florida. **Goal 3.4** Improve the ability of emergency response teams to respond to hazardous materials emergencies.	NOAA coverage is locally the Alachua County Office of Em NOAA weather band radios h schools and fire stations throu the 911 dispatch center. The County Office of Emerge agency re: hurricane evacuati City and County are designate hurricane evacuees. The City of Gainesville Fire & Hazardous Materials Team is designated emergency respon materials within this 11-county provided throughout the regio among five counties (Alachua and Suwannee) and three citie Lake City) is being developed administrative framework for technical committee will subs be tasked with developing co procedures.

Applicable Resource or Facility	Relevant Regional Policy	Consist
	Policy 3.4.4 Provide local emergency dispatch operators with a summary of hazards analysis information so as to inform responders as to what types of hazardous materials are at the scene of the emergency. **Policy 3.5.1** Actively promote north central Florida local governments to adopt the statewide mutual aid agreement for catastrophic disaster response and recovery.	Computerized data on hazard within the City's fire trucks th emergencies. The City of Gainesville is a si mutual aid agreement for cata and recovery.
Other Regionally Significant Facilities <u>Locally Affected Facilities</u> Alachua County Southwest Landfill Community Correctional Center	No relevant Regional Policies	The Alachua County Southwe closed and no longer function waste facility.

Potable Water & Wastewater Element

GOAL 1

TO PROVIDE ADEQUATE, SAFE, ECONOMIC, RELIABLE AND ENVIRONMENTALLY SOUND WATER AND WASTEWATER UTILITY SERVICES.

Objective 1.1

Water and wastewater services shall be provided at adequate levels of service (LOS) to meet the needs of existing and future populations.

Policies

1.1.1 The following LOS standards shall be adopted for potable water:

a. Maximum Day (Peak) Design Flow: 200 gallons per capita per day;

b. Storage Capacity: 1/2 of peak day volume in gallons. This requirement may be met by a combination of storage and auxilary power;

c. Pressure: The system shall be designed for a minimum pressure of 40 psig under forecasted peak hourly demands to assure 20 psig under extreme and unforeseen conditions;

d. The City shall reserve potable water capacity for the annual water demand projected by the City for the University of Florida and the power plants.

1.1.2 The following LOS standards shall be adopted for wastewater services:

Average Day Standard: 106 gallons daily flow per capita.

1.1.3 The following LOS standard shall be adopted for water supply:

Average Daily Flow: 147 gallons per capita per day.

Revised 9/22/03, Ord. 020721
Revised 6/12/95, Ord. 4082 & 4082
Revised 7/24/00, Ord. 990731
Revised 1/5/12, Ord. 110249

1.1.4 Within 18 months of the adoption of water supply plans by the St. Johns River Water and Suwannee River Water Management Districts, the City shall amend the Comprehensive Plan to:

a. identify alternative and traditional water supply projects, and conservation and reuse measures that will meet the water needs identified in the water supply plans;

b. incorporate a work plan for at least a 10-year planning period for the development of water supply projects that will meet the water needs identified in the water supply plans.

1.1.5 The City shall maintain forecasts of plant flow requirements and provide for plant capacity and other facility expansions in GRU's annually-updated, five-year capital budget to meet the LOS standards.

1.1.6 The City shall perform ongoing evaluations and studies to determine the water and wastewater systems' needs to meet the requirements of existing and future customers, with the LOS standards to be employed as minimum criteria. The City shall provide financial resources in GRU's operating and annually-updated, five-year capital budgets to renew, replace, improve and maintain the systems in accordance with prudent utility practice as defined in the Utilities System Revenue Bond Resolution (adopted June 6, 1983).

1.1.7 The City shall not commit to provide water or wastewater service if sufficient capacities or facilities to serve the proposed project cannot be made available at the time that the system impacts of the project will occur. The City shall maintain, as part of its Concurrency Management System, records of the expected amount of system demand from projects to which commitments are made and expected project lead and completion times in order to monitor capacity and facility requirements.

1.1.8 Every five years, the City shall hire independent and qualified consulting firms to evaluate the condition of the water and wastewater systems and the adequacy of the financial and facilities planning performed to maintain the system.

Objective 1.2

The City shall continue to upgrade and expand water/wastewater facilities, as shown in the 5-Year Schedule of Capital Improvements, to meet established LOS standards. The City shall give priority to correcting existing deficiencies in levels of service prior to expanding facilities to new, unserved areas.

Revised 9/22/03, Ord. 020721
Revised 6/12/95, Ord. 4082 & 4082
Revised 7/24/00, Ord. 990731
Revised 1/5/12, Ord. 110249

Objective 1.3

The City shall provide potable water and wastewater services throughout the urban area in an efficient and economical manner, with the cost of service expansion being borne by those requiring such expansion. Upon Plan adoption, the City of Gainesville, as the urban area service provider of potable water and wastewater through Gainesville Regional Utilities, shall coordinate the extension and increases in capacity of potable water and wastewater facilities outside of city limits through policies established in the Alachua County Comprehensive Plan.

Policies

1.3.1 In order to discourage urban sprawl, Gainesville Regional Utilities shall extend potable water and wastewater facilities outside city limits in accordance with policies in the Alachua County Comprehensive Plan.

1.3.2 The City shall encourage development of property in close proximity to existing service areas through the continued use of appropriate economic incentives concerning the extension of water and wastewater services as listed below:

a. The City shall continue its policy of having all new water and wastewater service connections pay the fully allocated cost of the treatment facilities required to serve them in the form of plant connection fees, and the cost of distribution or collection facilities, unless the service is on a developer-installed system;

b. The City shall continue its policy of having development contribute the water and wastewater distribution and collection system internal to a development. Contributions in aid of construction are paid if the City does not project an adequate return on investment for water distribution or wastewater collection system extensions;

c. The City shall continue its policy that all facilities constructed and contributed to the utility system must be approved, inspected and built to City standards.

1.3.3 The City shall not reserve potable water or wastewater capacity outside of city limits without a determination that the development order is consistent with the Future Land Use Element of Alachua County.

Revised 9/22/03, Ord. 020721
Revised 6/12/95, Ord. 4082 & 4082
Revised 7/24/00, Ord. 990731
Revised 1/5/12, Ord. 110249

Objective 1.4

The use of existing water and wastewater facilities shall be maximized by adopting the following policies:

Policies

1.4.1 All new developments at equivalent residential densities greater than 2 units per acre that require potable water, within the City of Gainesville, shall be required to connect to the centralized potable water system except as specified in Policy 1.4.5. Equivalent development densities shall be determined as estimated by Gainesville Regional Utilities.

1.4.2 All new developments at equivalent residential densities greater than 2 units per acre that require wastewater treatment, within the City of Gainesville, shall be required to connect to the centralized wastewater system except as specified in Policies 1.4.4 and 1.4.5. Equivalent development densities shall be determined as estimated by Gainesville Regional Utilities. Non-residential development proposed to be on septic tanks must demonstrate that it will not dispose of toxic, hazardous, or industrial waste in the septic tank.

1.4.3 Industrial pre-treatment plants shall be allowed.

1.4.4 New construction of package wastewater plants must meet the relevant standards established by the State of Florida and the Federal government and must connect to central wastewater treatment facilities within 5 years of central wastewater facilities becoming available. New package plants shall be permitted only when:

a. The developer of such temporary package treatment plant is required to enter into a legally binding agreement that dedicates and assigns responsibility for the proper maintenance and operation of the plant to an appropriate agency of local government; and

b. Such agreement shall provide adequate compensation by the developer to the local government agency for the proper operation and maintenance of the plant; and

c. The package plant is approved by the appropriate government agency assigned plant operation and maintenance as meeting standards for design, operation and maintenance.

1.4.5 New development of existing lots in platted subdivisions and other existing legal lots of record shall be excluded from the requirements stated in Policies 1.4.1 and 1.4.2 unless there are existing distribution or collection facilities in the right-of-way or easements abutting the property.

Revised 9/22/03, Ord. 020721
Revised 6/12/95, Ord. 4082 & 4082
Revised 7/24/00, Ord. 990731
Revised 1/5/12, Ord. 110249

1.4.6 The City shall continue its connection charge installment program, as outlined in the Code of Ordinances, to encourage users to abandon wells and/or package or on-site wastewater treatment systems and to connect to the centralized potable water and wastewater systems.

Recognizing the importance of potable water supplies, the City shall encourage water conservation through the programs and methods listed below:

Objective 1.5

Policies

1.5.1 The City shall continue to offer water conservation education and information to residential and non-residential customers through its Energy/Water Survey Program.

1.5.2 The City shall continue to minimize water losses from unaccounted sources through its ongoing water loss reduction program.

1.5.3 The City shall continue its conservation rate structure as an economic means of promoting water conservation throughout the year.

1.5.4 The City shall continue to include water conservation techniques, including "Florida Friendly" landscaping, in the City's landscape ordinance.

1.5.5 The City shall continue to offer free water conservation information as part of at least one utility billing statement per year.

1.5.6 The City shall require the use of reclaimed water in reclaimed water service areas.

1.5.7 The City shall continue to require low-volume plumbing devices, consistent with applicable building codes.

1.5.8 The City will work with Alachua County and the water management districts to develop a model ordinance or plan to better regulate private irrigation wells.

1.5.9 The City will conserve water on City properties by maximizing the use of "Florida Friendly" landscaping to the extent feasible in new landscaping projects.

Revised 9/22/03, Ord. 020721
Revised 6/12/95, Ord. 4082 & 4082
Revised 7/24/00, Ord. 990731
Revised 1/5/12, Ord. 110249

Potable Water and Wastewater Data and Analysis Report

Public and Private Potable Water Facilities

Service Area

The City of Gainesville, through Gainesville Regional Utilities (GRU), is the supplier of potable water for all areas within city limits. There are currently no private potable water systems in the city. Both Tachachale Community of Excellence (formerly Sunland Training Center) and St. Michael's Child Care Center have been hooked to the City's centralized system. Tachachale was hooked to the City's centralized water system in 1998 because significant quantities of pollution (benzene and other toxic chemicals) were found in their water wells. The water plant at Tachachale has been placed on inactive status according to the Florida Department of Environmental Protection. Tachachale is billed for 123,288 gallons per day, which is well within the limits of the Murphree Plant's capacity. The City's Murphree Water Plant also provides water to urban fringe areas surrounding the city. Map 1 illustrates the service area for the Murphree Water Plant.

Proportional Capacity

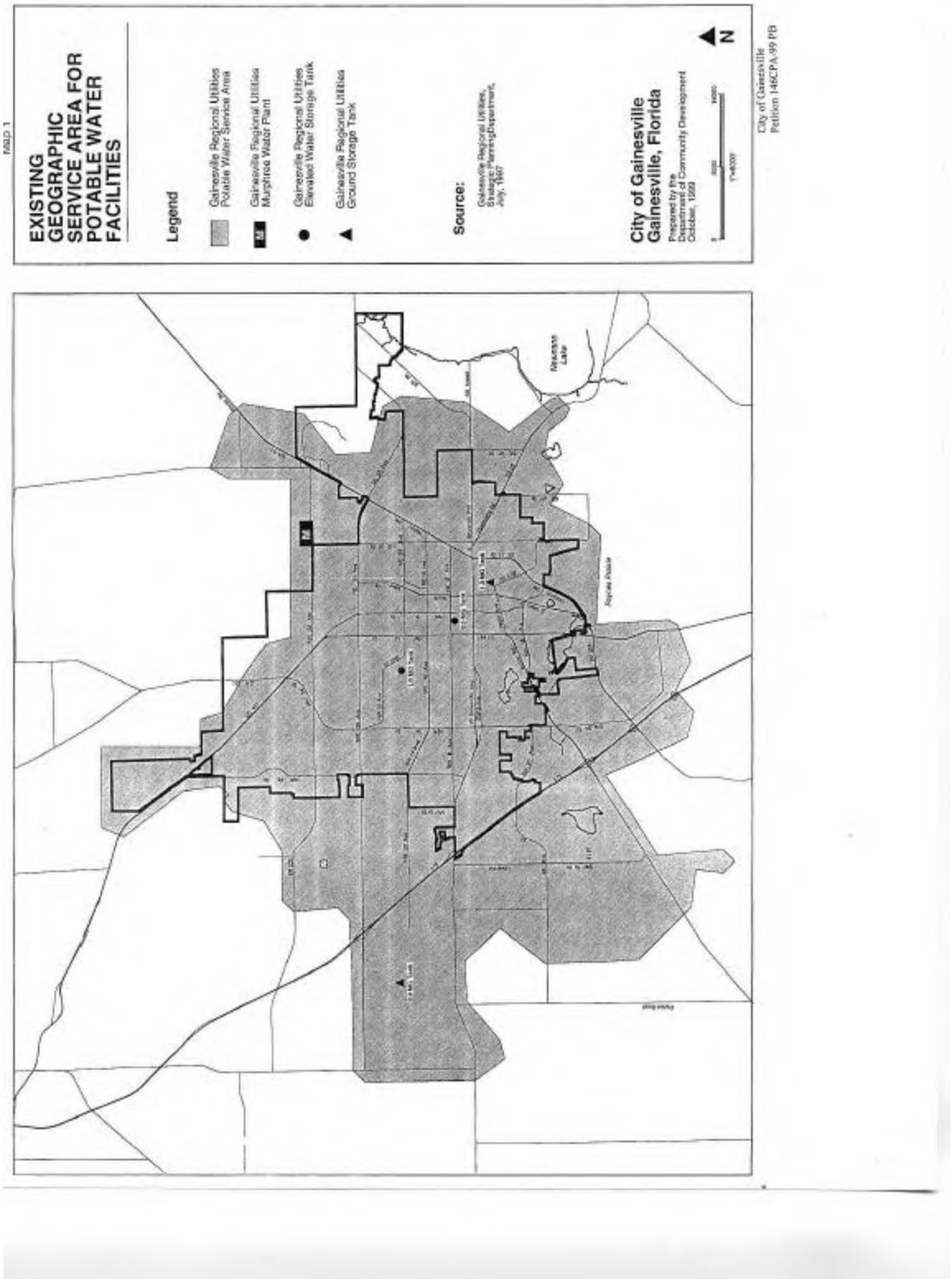
Proportional Capacity for the Murphree Water Plant

While the City does provide potable water for areas beyond its corporate limits, there are no formal or informal agreements allocating proportional capacity to any specific sub-areas. According to the Gainesville Code of Ordinances (see Appendix A, page A-1), service is provided on a "first come-first served" basis regardless of geographic or jurisdictional area.

Because there is a single water plant designed, operated and maintained to serve the urban area, it is not necessary to allocate proportional capacity. Plant capacity increases have historically been based on urban area level data and analyses since that is the population which is being served and will continue to be served.

There is adequate capacity (with a surplus) projected for both the City of Gainesville and the urban fringe in the two planning years, 2005 and 2010. In 2005 a 10.2 mgd surplus is projected; in 2010 a 5.9 mgd surplus is projected (see page 14). It should be especially noted that those surpluses are based on the maximum daily demand and not on average daily demand.

Based on the housing unit projections found in the Housing Element Data and Analysis Report, there will be more than enough capacity available to service the potable water


Map 1
EXISTING GEOGRAPHIC SERVICE AREA FOR POTABLE WATER FACILITIES
Legend
Gainesville Regional Utilities Potable Water Service Area
Gainesville Regional Utilities Murphree Water Plant
Gainesville Regional Utilities Elevated Water Storage Tank
Gainesville Regional Utilities Ground Storage Tank
Source:
Gainesville Regional Utilities, Strategic Planning Department, July, 1997
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
October, 1999
N
City of Gainesville
Petition 146CPA-99 PB

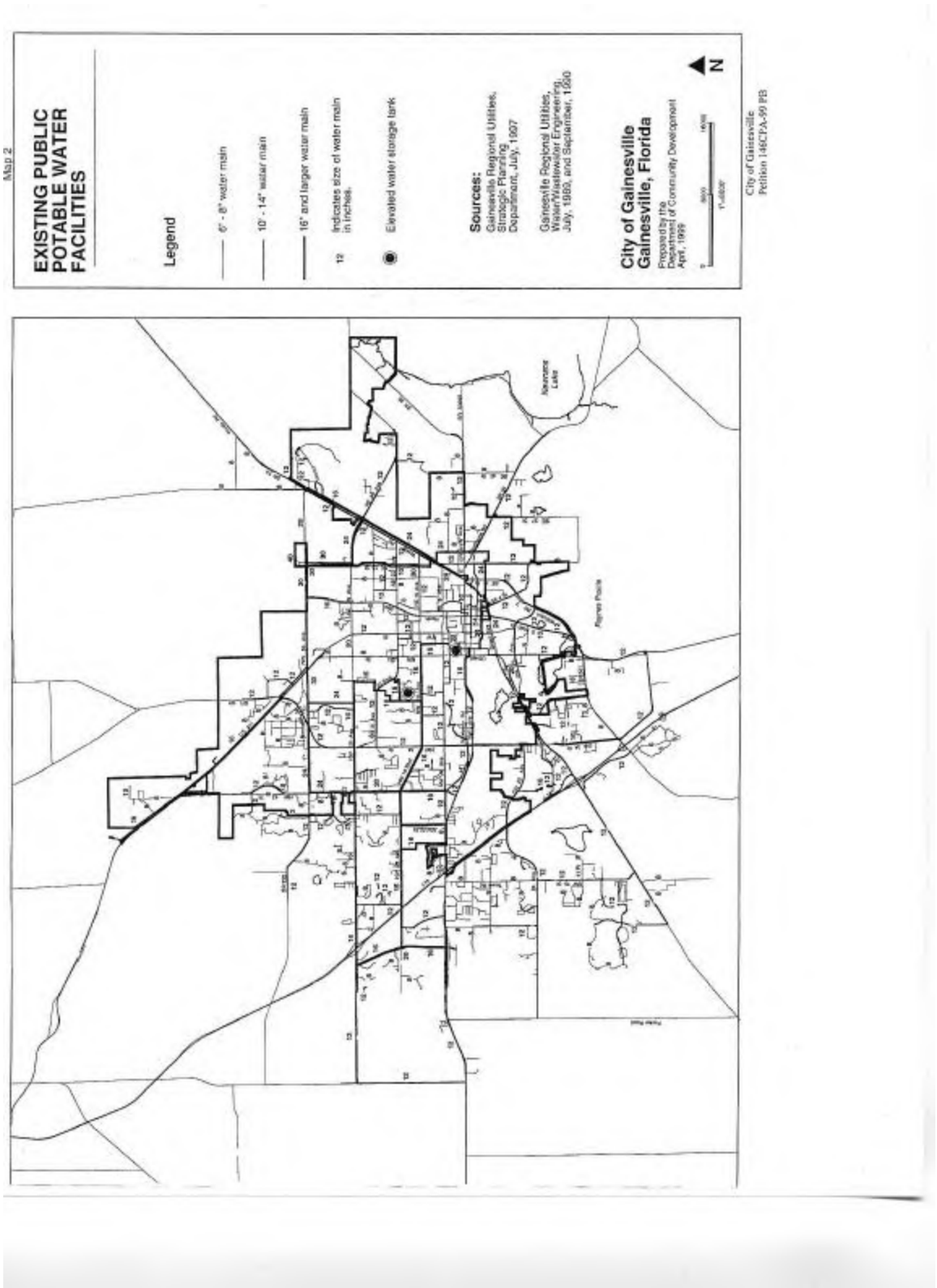
needs within city limits. The Housing Data and Analysis Report indicates that 1,977 households (off-campus housing units only) will be added between 2000 and 2005. That is an average addition of 395 units per year. There will be 3,038 housing units (off-campus housing units only) added between 2005 and 2010 (or approximately an average of 607 units per year). The projections are calculated using the UF Shimberg Center Affordable Housing Needs Assessment model, with the inclusion of the City's population projections.

Examining GRU's historical data for the period 1992-1996, it was found that the average number of connections to residential units per year (both inside and outside city limits) was 1,420. The average number of commercial connections in the same period was 115. The number of residential and commercial connections has increased slowly and with little variance. Projections (1997-2002) indicate a similar slow and low variance pattern (average of 1,175 residential units and 116 commercial units per year). Given the city's projected low population and housing unit growth rate, it is expected that GRU could service every anticipated housing and commercial unit to be built in the city within the planning horizon. Additionally, the anticipated 10.2 mgd surplus in 2005 allows for considerable projection error should the growth rate change radically in the first 5 years of the planning horizon. Thus, it is considered unnecessary to indicate a proportional capacity for the two jurisdictions since excess capacity exists for the projected needs of both areas.

The 2005 potable water maximum flow needed within the city to service the 1,977 projected housing units is .93 mgd (200 gallons per capita x (1,977 units x 2.354 persons per household (1999 figure obtained from the Bureau of Economic and Business Research). The additional 3,038 residential units projected for the period 2005-2010 will require about 1.43 mgd of capacity (200 gallons per capita x (3,038 units x 2.354). In both projection years, excess capacity exists to service the potable water needs of the city.

Public Facilities

Map 2 illustrates public potable water facilities: the Murphree Water Plant (which includes the water production wells, water treatment facilities, water storage and high service pumping equipment), elevated storage tanks and the distribution mains. The


Map 2
EXISTING PUBLIC POTABLE WATER FACILITIES
Legend
6" - 8" water main
10" - 14" water main
16" and larger water main
12 Indicates size of water main in inches.
Elevated water storage tank
Sources:
Gainesville Regional Utilities, Strategic Planning Department, July, 1997
Gainesville Regional Utilities, Water/Wastewater Engineering, July, 1999, and September, 1999
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
April, 1999
N
City of Gainesville
Petition 146CPA-99 PB

Murphree Plant is classified as a Community Water System (62-550.200 Florida Administrative Code (F.A.C.)).

The University of Florida's (UF) water supply comes from the Murphree Plant. However, UF owns and maintains its own water distribution mains. The UF Campus Master Plan contains maps showing those mains and the connection points to the City's water supply.

Operational Responsibility

The Murphree Water Plant is owned by the City of Gainesville and operated by Gainesville Regional Utilities.

Predominant Types of Land Uses Served by Potable Water Facilities

In order to document the predominant land uses served by the potable water facilities, it is necessary to break down the areas into two categories: existing land uses within the City of Gainesville and existing land uses outside of city limits which are controlled by Alachua County.

Category 1: Existing Land Uses within City Limits

Map 1 in the Future Land Use Element shows the existing land uses in the City of Gainesville and the contiguous urbanized area. Using that map, in conjunction with Map 1 of this Report, the predominant land uses within city limits associated with the Murphree Water Plant can be noted.

Table 1 in the Future Land Use Element summarize the various land uses and indicate percentages of each land use type. Table 1 from the Future Land Use Element Data and Analysis Report is replicated (in part) below as Table 1.

TABLE 1: Existing Land Uses within the City of Gainesville (Served by the Murphree Water Plant)

Land Use	Acreage	Percent of Total	Percent of Improved
Residential			
Single Family	6,456.72	23.48%	37.54%
Residential (Low)	1,077	3.92%	6.26
Residential (Medium)	780	2.83%	4.54%
Residential (High)	263	.96%	1.53%
Mixed Use Residential	35	.13%	.20%

Business			
Office	366.72	1.33%	2.13%
Commercial	416	1.51%	2.42%
Industrial	1,069	3.89%	6.21%
Mixed Use			
Mixed Use Low	376	1.37%	2.19%
Mixed Use Medium	319	1.16%	1.85%
Mixed Use High	119	.43%	.69%
Other			
Agriculture	1,495.91	5.44%	NA
Conservation	2,578.86	9.38%	NA
Education	2,205	8.02%	12.82%
Planned Use District	136	.49%	.79%
Public Facilities	3,387	12.32%	19.69%
Recreation	194	.71%	1.13%
Unimproved Land	6,226	22.64%	NA
TOTAL:	27,500.21		
TOTAL IMPROVED:	17,199.44		

Source: City of Gainesville Master Property System database, 1999.
As can be noted from the table, the predominant land uses served by the water plant are Residential and Public Facilities (accounting for approximately 70% of all improved land uses).

Category 2: Existing Land Uses outside City Limits

The Murphree Water Plant serves areas outside of city limits. Based on information from Alachua County, the predominant developed land uses in the urban fringe area are Residential and Institutional (including education, public buildings, and other public facilities).

Category 3: Existing Land Uses served by Private Facilities

Design Capacity and Current Demand

The design capacity and current demand levels for the water plant are listed in Table 2. Demand levels are given in millions of gallons per day (mgd). The demand figures for the Murphree Plant include demand from the entire service area (inside and outside of city limits).

TABLE 2: Design Capacity and Current Demand for the Murphree Plant

Water Plant	Design Capacity	Current Demand[1]
Murphree Water Plant	40.0 mgd	22.2 mgd
St. Michael's Child Care Center	5.0 tgd	2.0 tgd

[1]Figures for the Murphree Plant are for 1996. Demand is measured as average daily demand as delivered to the water distribution system.

Source: GRU Strategic Planning Department, 1997

Existing Levels of Service

Public Facilities

Four existing level of service (LOS) indicators have been examined for the Murphree Water Plant facility. These are:

1. Minimum design flow (measured as average daily per capita consumption in gallons)

2. Peak flow design capacity (measured as maximum daily demand)

3. Pressure

4. Storage tank capacity

LOS 1: Minimum Design Flow

The 1996 per capita daily consumption was calculated for the Murphree Plant. The contributions to this total consumption rate include average daily base consumption, commercial and other consumption. Other consumption includes unaccounted water uses such as fire hydrant tests, fire flows, theft, leaks, treatment uses, etc. However, sales to the University of Florida (927.83 mg) and power plants (59.63 mg) are excluded.

Water usage by UF is projected to range from approximately 939 mg in 1997 to 1,015 mg in 2005. Projections for the intermediate years can be found in GRU's Budget Year 1998 Forecast of Customer Sales and Revenues (May 1997). Water usage by the power plant is projected to be an average of 60 mg yearly during the period 1997 through 2005. The projected annual water usage for UF and the power plants will be reserved annually for them and will not be included within the available capacity for future development. The projections will be monitored annually to determine whether the annual reserved capacity should be changed.

The 1998 data indicate that 56% of GRU's potable water customers live inside city limits. The remaining 44% are customers living outside city limits.

Total 1996 water consumption was 6,997.39 mg (6,309.64 mg in sales increased by 10.9% for unaccounted water use, this excludes sales to UF and power plants). There were 45,594 residential connections and 4,257 non-residential connections in 1996 (GRU, 1997, Strategic Planning Dept.). Master metering in some multi-family units necessitates the use of a units per connection factor. Based on information from GRU, the 1996 number of units per connection was 1.37. Calculation of the existing 1996 level of potable water service is shown as follows.

Residential Connections x Units per Connection = Total Residential Units

45,594 x 1.37 = 62,464

Multiplying the total number of units by the persons per household (pph) yields an estimate of the population served by the water facility. A 1998 estimate of pph was obtained from the Bureau of Economic and Business Research (BEBR) at UF. Averaging the 1998 Alachua County pph (2.4) and the City of Gainesville pph (2.354) results in an estimate of 2.38 pph for the urban area served by the Murphree Plant. The pph is used in conjunction with total residential units to produce an estimate of population served.

Residential Units	x	pph	=	Population served
62,464	x	2.38	=	148,664

The per capita consumption rate is obtained by dividing total water consumption (excluding UF and power plant consumption) by total population served (6,997.39 mg/148,664). The 1996 per capita consumption was 47,068.5 gallons. Dividing by 365 to obtain the average daily per capita consumption, the result is 129 gallons.

1996 average daily per capita consumption: 129 gallons

The same methodology can be employed to calculate the overall per capita use which will be used to set the flow rate level of service standard. The standard is set using all flows (residential, non-residential, and unaccounted uses, but excludes flows to UF and the power plants).

Potable water demand is highly related to weather conditions. In order to set a level of service standard that reflects the impact of weather, a five-year average daily flow per capita was calculated using data for 1992 through 1996. The dwelling units per

residential connection, persons per household figures and 10.9% unaccounted use factor discussed above were used in combination with the average daily demand to calculate the LOS.Using the five-year average daily flow of 17.96 mgd divided by the five-year average size of the service population -- 139,505, the result is 129 gallons average flow per capita per day (identical to the 1996 average flow per capita per day). Given the very slight variation (8 gallons less) found between the LOS average standard set in 1995 (137 gallons) and the current figure of 129 gallons, the City has decided to maintain the existing standard of 137 gallons. Given the uncertainty cause by weather conditions (intervening El Nino and La Nina years have occurred), the City finds the 137 gallons average daily demand per capita standard to be reasonable.

LOS Average Standard:	**137 gallons average daily demand per capita** (retains 1995-adopted standard)

LOS 2: Peak flow design capacity

Peak flow design capacity is measured as maximum daily demand. This is the basis for FDEP's permitting of GRU's water facilities.

Peak demand is estimated using the maximum daily demand to average day demand ratio from historical GRU operating records (1976 to 1996) . To determine peak daily demand the average daily demand is multiplied by 1.46 (represents the average of 1976-1996 peak to average day ratios).

Using the data from the previous section and applying the peak factor ratio (1.46), the peak per capita daily demand is estimated to be 188.3 gallons (129 gallons x 1.46). The previously adopted (1995) LOS peak standard of 200 gallons daily flow per capita is not significantly different from the 188.3 gallons (less than 12 gallons per day) found during the Evaluation and Appraisal Report (EAR) process for the element. The final EAR for the Potable Water Element determined that the latest usage information did not exceed the adopted LOS standard. And, since the new figure is insignificantly different from the 1995-adopted standard, the City decided to maintain the existing standard.

LOS Maximum Day (Peak) Standard:	**200 gallons daily flow per capita** (maintains the 1995-adopted LOS standard).

LOS 3: Pressure

Adequate system pressure is required to meet fire flow demands and to maintain sanitary conditions in the water mains. Maintaining at least 20 pounds per square inch gauge (psig) pressure minimizes the chance of bacterial contamination.

The State of Florida has set a minimum pressure standard of 20 psig for potable water systems (62-555.320(7) F.A.C.). In the Gainesville service area the minimum system pressure in 1999 was approximately 50 psig (GRU, 1999). GRU's internal planning criteria is 40 psig, which is used to evaluate facilities under peak hour conditions assuming normal system operation. This criteria provides a necessary margin of safety to accommodate main breaks and fire flows while assuring at least 20 psig in GRU's facilities.

LOS standard: 20 psig for the overall water system

LOS 4: Storage Tank Capacity

Storage is required to meet distribution equalization, repump needs, fire and operational reserves. GRU's internally adopted standard is to provide storage capacity equal to 1/2 the maximum daily flow.

The 1996 maximum day consumption was 32.4 mgd. Thus, a storage tank capacity of 16.2 mg is the existing standard. Currently, there is 18.3 mg of storage available (1.5 mg in elevated storage tanks and ground storage of 16.8 mg), representing a surplus over the adopted LOS standard.

LOS standard: 1/2 of maximum day consumption volume

Needs Analysis

Facility capacity analysis based on existing conditions

The Murphree Water Plant has excess capacity available based on existing average daily demand. Table 3 contains data for the plant and shows the amount of surplus capacity. The capacity and demand figures are for the entire potable water service area, both inside and outside of city limits.

TABLE 3: Existing surpluses at the Murphree Water Plant

Facility	Design Capacity	Existing Average Demand[1]	Existing Peak Demand[1]	Surplus Based on Peak
Murphree Plant	40 mgd	22.2 mgd	31.8 mgd	8.2 mgd

[1]Based on 1996 data. Average and peak demand are measured as delivered to the water distribution system.

SOURCE: GRU Monthly Operating Records, Strategic Planning Dept., 1997

As can be noted from the table, an existing surplus capacity of 8.2 mgd exists and can be used for future development. However, GRU has indicated that it has commitments to serve 2,400 unbuilt residential units (this includes residential units located inside and outside of city limits). Including these future units in analyzing potable water capacity, GRU estimates that the peak demand from these units would add about 1.14 mgd to the total demand (2,400 x 2.38 (1998 city/county average persons per household)) x 200 gallons per capita per day). Table 4 accounts for the mgd already committed and shows the results. A surplus of 7.06 mgd remains even after the committed, but unbuilt units are taken into account.

TABLE 4: Total existing Potable Water Surplus

Facility	**Design Capacity**	**Peak Plus Committed Demand**	**Surplus**
Murphree Plant	40 mgd	32.94 mgd	7.06 mgd

Projected Needs Analysis

Projected needs are based on a GRU econometric model which calculates future water sales and connections for the entire service area (both inside and outside of city limits).[1] One component of this model is BEBR medium level population projections. The model predicts total sales (residential and non-residential). GRU's facility planning is based on the results of this model. The model assumes the absorption of the unbuilt, but committed units previously discussed. This alternative method of determining needs was used because the potable water service area does not correspond to a specific area for which population projections are available. Thus, it was decided that the best available information for projections would be from GRU's models.

The model projects total water sales through Fiscal Year 2018. It should be noted that these total sales projections include use by UF and the power plants. Water sales were multiplied by 1.109 to add a factor for unaccounted use. The resulting total was divided by 365 to provide a projection of average daily demand in the future.

2005 Facility capacity analysis

Table 5 contains data for the plant and indicates a projected 10.2 mgd surplus capacity in 2005. Since the demand column includes sales to UF and the power plants, the

surplus capacity represents the total amount of capacity projected to be available to serve new development.

TABLE 5: Projected 2005 Capacity Analysis at Water Plant

Facility	Design Capacity[1]	2005 Demand[2]	Surplus
Murphree Plant	51 mgd	33.0 mgd	10.2 mgd

1 Capacity represents planned plant expansion by end of FY 2002/2003.

2 Demand based on projections by GRU (GRU, 1996, Strategic Planning Department) which includes a 10.9% factor for unaccounted use. Demand represents maximum daily demand.

SOURCE: GRU, 1996, Strategic Planning Dept.

2010 Facility capacity analysis

The Murphree Plant's design capacity in 2010 will remain at 51 mgd based on a FY 2002/2003 projected expansion. Table 6 contains data for the plant and projects an excess capacity of 5.9 mgd in 2010.

TABLE 6: Projected 2010 Capacity Analysis at Water Plant

Facility	Design Capacity	2010 Demand[1]	Surplus
Murphree Plant	51 mgd	45.1 mgd	5.9 mgd

1 Demand based on projections by GRU (GRU, 1996, Strategic Planning Dept.) which includes a 10.9% factor for unaccounted use. Demand represents maximum daily demand.

SOURCE: GRU, 1996, Strategic Planning Dept.

General Performance of Existing Facilities

Adequacy of Current LOS provided by the Murphree Facility

LOS 1 and 2: Minimum and Peak Design Capacity

The Murphree Plant is currently meeting average and peak daily demand for the entire service area with an available surplus. In 1996, the maximum daily demand was 31.8 mgd. The maximum daily flow that has been experienced at the Murphree Water Treatment Plant was 36.6 mgd (this occurred in June 1998). This amount is within the plant's rated capacity.

As mentioned earlier, an expansion has already been scheduled for completion by the end of FY 2002/2003 for the Murphree Plant. The expansion will increase the plant capacity to 51 mgd.

LOS 3: Pressure

The water distribution system currently operates on an average day at pressures higher than the State-required 20 psig level of service. All fire flow deficiencies have been corrected.

LOS 4: Storage Capacity

As noted earlier, the existing storage capacity represents a surplus in the level of service standard which was set.

Other Measures of Potable Water System Performance

Well Capacity

The FDEP suggested standard for well capacity is average day use rate plus an excess equal to the capacity of the largest well. The largest well at the Murphree Plant is rated at 8 mgd. The average day use rate (based on 1996 data) is 22.2 mgd (based on raw water pumping). Combining these figures, the standard for the Murphree Plant would be 30.2 mgd. Currently, the well capacity is at 55 mgd. This capacity exceeds the FDEP standard.

High Service Pumping Capacity

FDEP recommends maximum day use rate as a standard for high service pumping capacity. In 1990 the maximum day use rate was 31.3 mgd of treated water. The existing high service pumping capacity at the Murphree Plant is 64 mgd. Thus, the plant exceeds the standard for high service pumping capacity.

Water Quality

The Federal Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP) set standards for water quality which are used for

evaluating water quality from the Murphree Plant. Currently, the Murphree Plant meets all EPA and FDEP water quality standards. GRU also softens, filters, fluoridates and stabilizes its water. These actions exceed minimum State requirements for a groundwater source of potable water.

General Condition and Expected Life of Facilities

A 1998 study undertaken by Black & Veatch (Five Year Report for the Period October 1, 1993 to September 30, 1998) to satisfy bonding requirements evaluated the potable water facilities and presented the following findings :

1. The general condition of water facilities observed during the inspections was found to be good. All of the wells and treatment process units, storage reservoirs and high service pumping facilities observed at the Murphree Plan were in satisfactory operating condition.

2. Both the Water Distribution and Water Treatment Departments maintain current standard operating procedures which ensure that the operations staff have proper information and directions to have the facilities perform in an efficient and effective manner.

3. The water treatment plant meets all FDEP standards. High service pumping facilities are sufficient to meet the demands of the system, and the pumping facilities meet FDEP standards for standby power for 50 percent of design capacity. The GRU water system is considered to be in compliance with all applicable regulatory requirements.

4. GRU procedures for maintaining the water system conform to accepted industry standards regulatory requirements.

5. The capital improvements program is indicative of a well administered utility, with planning for future system expansions to meet community needs, programming of improvements as they are required to sustain or expand service, and budgeting of the projects to manage cost. The projected ability of the water system to meet debt service coverage requirements and to meet its financial obligations under the existing rates for utility service is considered by Black & Veatch as reasonable and attainable.

Based on these findings, the potable water system is deemed to be in very good condition and the life of facilities extends beyond the 2010 planning horizon of the Comprehensive Plan.

Impact of the Facilities on Adjacent Natural Resources

There are no known negative impacts on adjacent natural resources from the Murphree Water Plant. The only documented effect of the Murphree Plant has been drawdown in the potentiometric surface of the underlying Floridan Aquifer due to withdrawals (GRU, 1989a and GRU, 1987c).[2] No ill effects have been noted from this drawdown because the confined nature of the Floridan Aquifer produces artesian conditions which preserve system pressure.

Opportunities for Facility Replacement, Expansion and New Facility Siting

Improvements or expansions to the current public potable water system include the following (GRU, et al., 1997, Strategic Planning Dept.):

1. An 11.0 expansion of the Murphree Water Treatment Plant is scheduled for completion by the end of FY 2002/2003.

2. A 2 mg expansion of storage facilities was completed in FY 97/98.

Improvements scheduled through the end of FY 2003/2004 have funding for the capital improvements secured from internally generated funds and external funds generated from revenue bonds (GRU, Strategic Planning, 1996). Utility bond proceeds will be used to fund the remaining capital improvements. GRU has established a schedule of rates to assure its ability to secure and service anticipated debt to fund programmed improvements.

Public and Private Wastewater Facilities

Service Area

Gainesville Regional Utilities (GRU), owned by the City of Gainesville, provides wastewater services for areas within the city limits and the surrounding unincorporated urbanized fringe (Alachua County's jurisdiction). The University of Florida (UF) provides wastewater services on its campus. Information about the UF Wastewater System has been deleted from this report because that is included in the UF Campus Master Plan, per State law. Map 3 illustrates the existing GRU geographic service area. As indicated on the map, the University of Florida (UF) has its own wastewater facilities which provide service to university property.

Proportional Capacity

Proportional Capacity for the City-owned Wastewater Plants

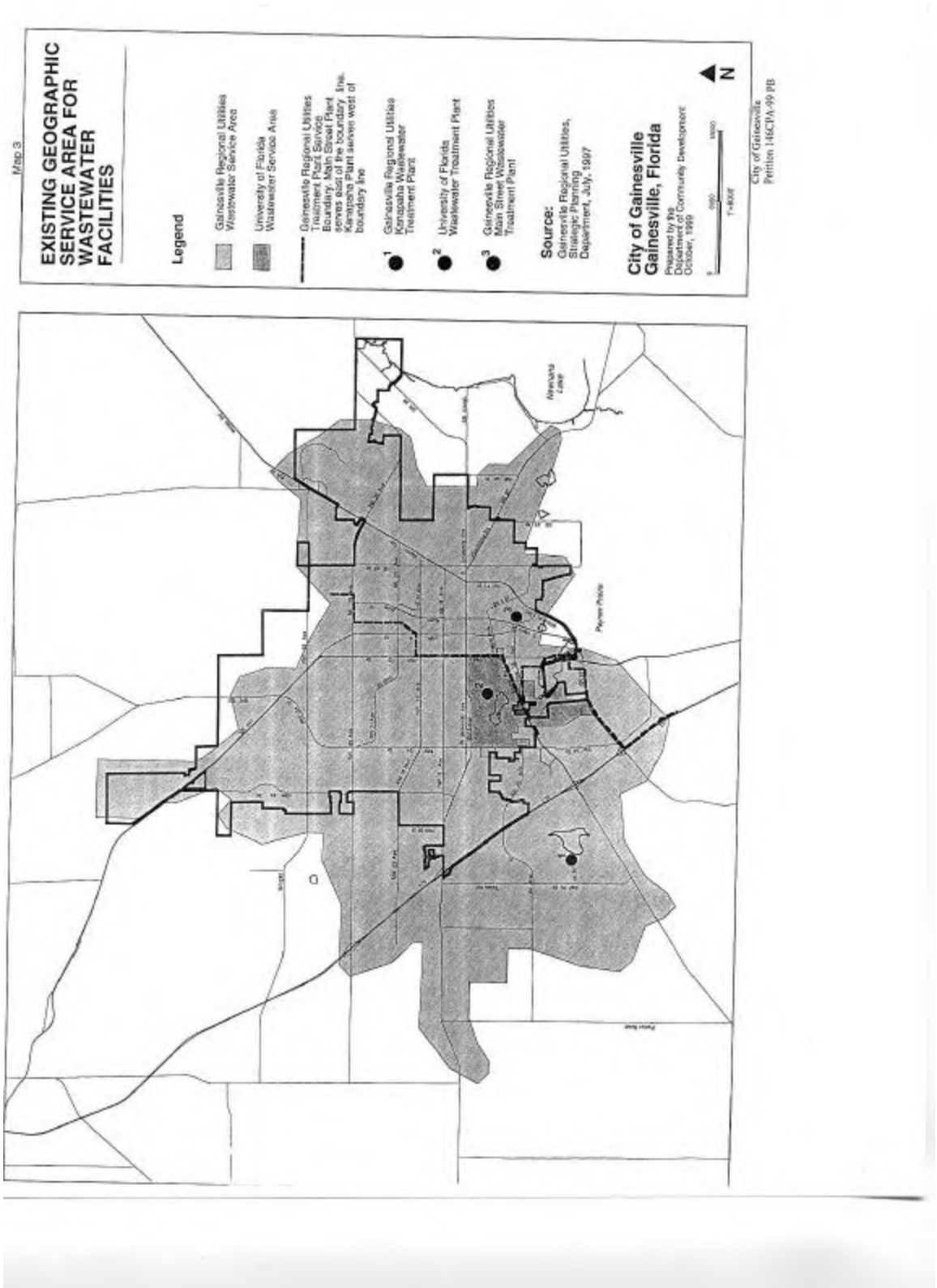
While the City does provide wastewater services for areas beyond its corporate limits, there are no formal or informal agreements allocating proportional capacity to any specific sub-areas. According to the Gainesville Code of Ordinances (see Appendix A, page A-1), service is provided on a "first come-first served" basis regardless of geographic or jurisdictional area.

Because the wastewater plants are designed, operated and maintained to serve the urban area, it is not necessary to allocate proportional capacity. During FY 1991/1992 an automated shunt system was constructed which increased the capacity to shift flows between the plants to 3.5 mgd. Plant capacity increases have historically been based on urban area level data and analyses since that is the population which is being served and will continue to be served.

There is adequate capacity (with a surplus) projected for both the City of Gainesville and the urban fringe in the two planning years, 2005 and 2010. In 2005 a 3.71 mgd surplus is projected; in 2010 a 1.96 mgd surplus is projected (see page 26). It should be especially noted that those surpluses are based on the average daily flow since that is how the plants are rated for flow limitation capacity by the Florida Department of Environmental Protection.

Based on the housing unit projections found in the Housing Element Data and Analysis Report, there will be more than enough capacity available to service the wastewater needs within city limits. The Housing Report indicates that 1,977 households will be added between 2000 and 2005. That is an average addition of 395 units per year. There will be 3,038 housing units added between 2005 and 2010 (or approximately an average of 607 units per year). The projections are calculated using the UF Shimberg Center Affordable Housing Needs Assessment model, with the inclusion of the City's population projections.

Examining GRU's historical data for the period 1993-1996, it was found that the average number of residential connections per year (both inside and outside city limits) was 1,216. The average number of non-residential connections in the same period was 70. The number of residential and non-residential connections has increased slowly. Projections (1996 to 2001) indicate a similar slow growth pattern (average of 1,465 residential connections and 83 non-residential connections per year). Given the city's projected low population and housing unit growth rate, it is expected that GRU could service every anticipated housing and commercial unit to be built in the city within the planning horizon. Additionally, the anticipated 3.71 mgd surplus in 2005 (see Table 12, p. 26) allows for considerable projection error should the growth rate change radically in the first 5 years of the planning horizon. Thus, it is considered unnecessary to indicate a proportional capacity for the two jurisdictions since excess capacity exists for the projected needs of both areas.


Map 3
EXISTING GEOGRAPHIC SERVICE AREA FOR WASTEWATER FACILITIES
Legend
Gainesville Regional Utilities Wastewater Service Area
University of Florida Wastewater Service Area
Gainesville Regional Utilities Treatment Plant Service Boundary. Main Street Plant serves east of the boundary line. Kanapaha Plant serves west of boundary line
1 Gainesville Regional Utilities Kanapaha Wastewater Treatment Plant
2 University of Florida Wastewater Treatment Plant
3 Gainesville Regional Utilities Main Street Wastewater Treatment Plant
Source:
Gainesville Regional Utilities, Strategic Planning Department, July, 1997
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development October, 1999
N
City of Gainesville
Petition 146CPA-99 PB

The 2005 wastewater flow needed within the city to service the 1,977 projected housing units is .53 mgd (113 gallons per capita x (1,977 units x 2.354 pph)). The additional 1,909 residential units projected for the period 2005-2010 will require about .81 mgd of capacity (113 gallons x (3,038 units x 2.354 pph)). In both projection years, excess capacity exists to service the wastewater needs of the city.

Public Sanitary Sewer Facilities

GRU operates two sewage treatment plants, Kanapaha and Main Street, which provide service to the Gainesville urban area. Map 3 shows the location of these treatment plants and the regions which they serve.

Map 4 displays the sanitary sewer facility system. The treatment plants, trunk mains, interceptors and lift stations are delineated on this map. The Kanapaha Plant uses deep well injection into the aquifer on site and water re-use as the disposal system. The Main Street Plant discharges into the Sweetwater Branch.

The Kanapaha Plant currently operates as a tertiary treatment plant. The Main Street Plant is classified as an advanced secondary treatment plant.

Private Facilities

Aside from individually-owned septic tank systems, there are no private wastewater facilities (package plants) operating within city limits (Florida Dept. of Environmental Protection, 1996). There are several package plants in the existing wastewater service area; however, they fall outside city limits.

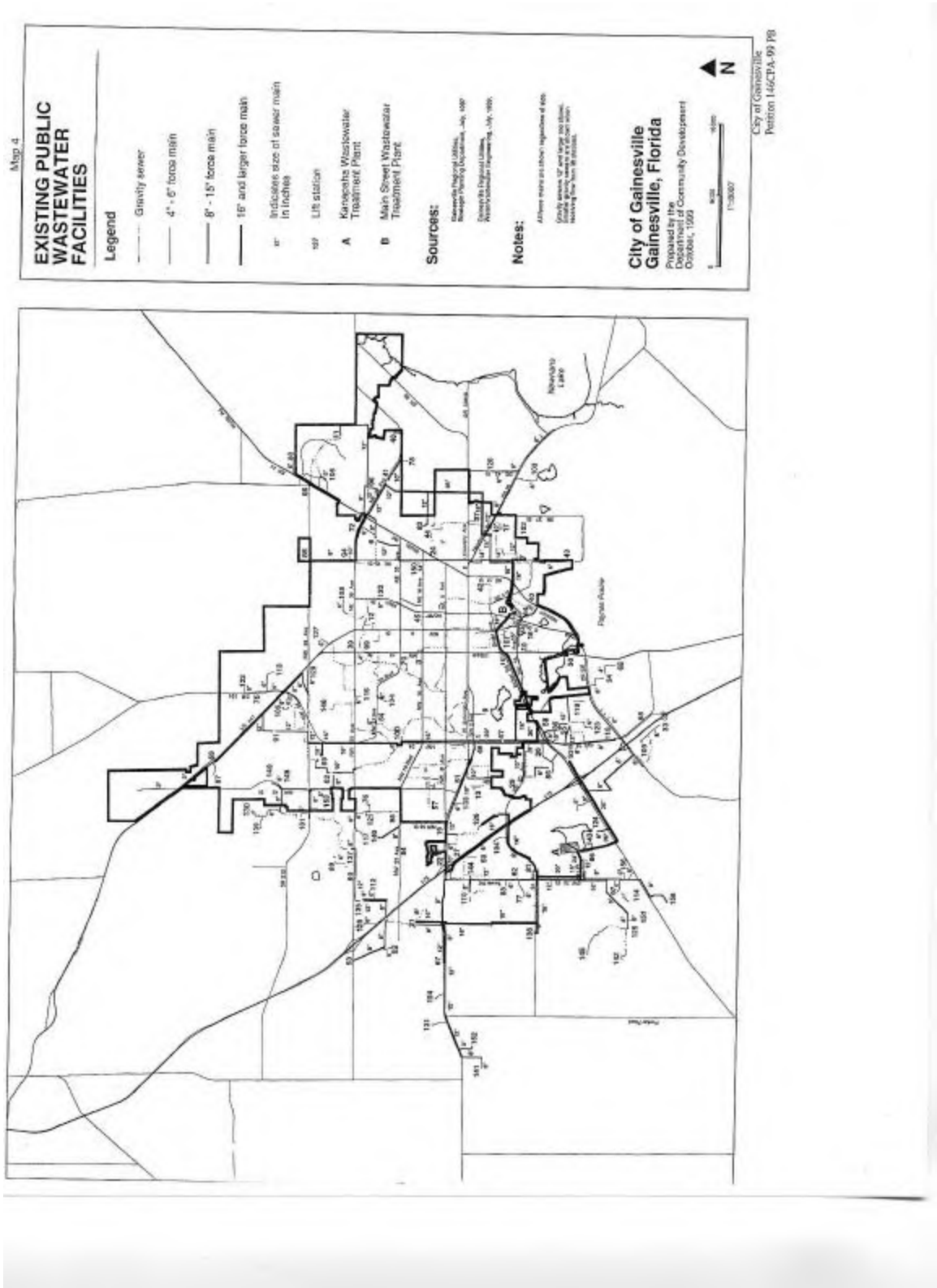
Operational Responsibility

Table 7 lists the entity having operational responsibility for each facility.

TABLE 7: Operational Responsibility for Sanitary Sewer Facilities

Sanitary Sewer Facility	Operational Responsibility
Kanapaha Water Reclamation Facility	Gainesville Regional Utilities (City of Gainesville)
Main Street Wastewater Treatment Plant	Gainesville Regional Utilities (City of Gainesville)

SOURCE: Gainesville Regional Utilities, 1998.


Map 4
EXISTING PUBLIC WASTEWATER FACILITIES
Legend
Gravity sewer
4" - 6" force main
8" - 15" force main
16" and larger force main
Indicates size of sewer main in inches
Lift station
A Kanapaha Wastewater Treatment Plant
B Main Street Wastewater Treatment Plant
Sources:
Notes:
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development October, 1999
N
City of Gainesville
Petition 146CPA-99 PB

Predominant Types of Land Uses Served by Sanitary Sewer Facilities

In order to document the predominant land uses served by the two wastewater treatment facilities, it is helpful to break down the areas into two categories: existing land uses within the City of Gainesville and existing land uses outside of city limits which are controlled by Alachua County.

Category 1: Existing Land Uses within City Limits

Map 1 in the Future Land Use Element shows the existing land uses in the City of Gainesville and the contiguous urbanized area. Using that map, in conjunction with Map 3 of this Data and Analysis Report, the predominant land uses within city limits associated with the Kanapaha and Main Street Plants can be noted.

Table 1 in the Future Land Use Element Data and Analysis Report summarizes the various land uses and indicate percentages of each land use type. Table 1 is replicated (in part) as Table 8 below. Acreage and land uses associated with the University of Florida have been subtracted out of this table because they are served by the UF sewage treatment facility.

TABLE 8: Existing Land Uses Within the City of Gainesville Served by City-owned Wastewater Facilities

Land Use	Acreage	Percent of Total	Percent of Improved
Residential			
Single Family	6,456.72	25.16%	41.88%
Residential (Low)	1,077	4.20%	6.98%
Residential (Medium)	780	3.03%	5.06%
Residential (High)	263	1.02%	1.71%
Mixed Use Residential	35	.14%	.23%
Business			
Office	366.72	1.43%	2.38%
Commercial	416	1.62%	2.70%
Industrial	1,069	4.17%	6.93%
Mixed Use			
Mixed Use Low	376	1.46%	2.44%
Mixed Use Medium	319	1.24%	2.07%

Mixed Use High	119	.46%	.77%
Table 8.--Continued			
Other			
Agriculture	1,495.91	5.83%	NA
Conservation	2,578.86	10.05%	NA
Education	422.98	1.65%	2.74%
Planned Use District	136	.53%	.88%
Public Facilities	3,387	13.20%	21.97%
Recreation	194	.76%	1.26%
Unimproved Land	6,170.87	24.05%	NA
TOTAL:	25,663.06		
IMPROVED TOTAL:	15,417.42		

[1]NOTE: This total does not include circulation, right-of-way or UF acreage served by the UF Wastewater Plant.

SOURCE: Department of Community Development, April 1999.

As can be noted from the table, the predominant developed land uses served by both wastewater plants are Residential and Public Service (accounting for 77.8% of all improved land uses).

Category 2: Existing Land Uses outside City Limits

Both the Kanapaha and Main Street Plants serve areas outside of city limits. Based on information from Alachua County Plan, the predominant land uses in the urban fringe area are Residential and Institutional (including education, public buildings, and other public facilities).

Design Capacity and Current Demand

The design capacity and current average and peak daily flow levels for each wastewater plant are listed below in Table 9. Demand levels are indicated in millions of gallons per day (mgd). The design capacity and demand figures for Main Street and Kanapaha include demand from the entire service area (inside and outside of city limits).

Table 9: Design Capacity and Current Demand for Wastewater Plants

Wastewater Plant	Design Capacity	Current Demand	Current Peak Demand[2]
Kanapaha Wastewater Plant[1]	10.0 mgd	8.2 mgd	9.9 mgd
Main Street Plant[1]	7.5 mgd	6.5 mgd	8.0 mgd

[1]Figures are averages for 1996. Demand is measured as average daily flow.

[2]Peak demand is measured as maximum 3-month average daily flow.

SOURCE: GRU Monthly Operating Records, Strategic Planning Dept., 1996.

Existing Levels of Service

Public Facilities

Two existing level of service (LOS) indicators have been examined for wastewater facilities. These are:

1. Average flow design capacity (measured as average daily per capita flow)

2. Peak flow design capacity (measured as a ratio of maximum 3-month average daily flow to annual average daily flow)

It should be noted that all discussions of flows and associated levels of service are for the entire wastewater service area, both inside and outside of city limits.

LOS 1: Average flow design capacity

The daily per capita flow was calculated from the combined flows to the Main Street and Kanapaha plants because flows can be shunted between the plants. The contributions to this total flow rate include average daily base flow, infiltration/inflow, commercial and industrial flows.

The 1998 data indicate that 59% of the billed wastewater flow is for customers inside city limits (percentage based on a total which excludes flows due to infiltration/inflow). The remaining 41% is for customers outside city limits.

Total 1996 sewage flow was 5,267 mg (reflects plant flow data which includes infiltration/inflow). There were 41,602 residential connections and 3,198 non-residential connections (GRU, 1997, Strategic Planning Department). Because master metering is common in multi-family units, it is necessary to multiply the number of connections by a units/connection factor to determine total residential units served. GRU estimates that the units per wastewater connection are 1.41. Calculation of the existing 1996 level of wastewater service is shown below.

Residential Connections x Units per Connection = Total Residential Units

41,602 x 1.41 = 58,659

Multiplying the total number of units by the persons per household (pph) yields an estimate of the population served by the wastewater facilities. A 1998 estimate of pph was obtained from the Bureau of Economic and Business Research at UF. Averaging the 1998 Alachua County pph (2.4) and the City of Gainesville pph (2.354) results in an estimate of 2.38 pph for the urban area served by the wastewater plants. The calculation of estimated population served is illustrated as follows.

Residential Units x pph = Population served

58,657 x 2.38 = 139,603

The per capita wastewater discharge rate is obtained by dividing total wastewater flow by population (5,267 mg/ 139,603). The 1996 per capita flow was 37,728.4 gallons. Dividing by 365 to obtain the average daily per capita flow, the result is 103.3 gallons for the system as a whole.

1996 average daily flow per capita: 103.3 gallons

The same methodology can be employed to calculate the overall per capita flow which will be used to set the flow rate level of service standard. The standard is set using all flows (residential, non-residential, and infiltration/inflow). A five year average daily flow per capita was calculated using wastewater plant flow data for 1992 through 1996 (GRU, 1997). The dwelling units per residential connection and persons per household figures discussed above were used in combination with the average flow to calculate the LOS.

Using the five-year average annual daily flow of 13.54 mgd divided by the five-year average size of the service population--136,031, the result is 100 gallons average flow per capita per day. The previously adopted (1995) LOS standard of 113 gallons average daily flow per capita is not significantly different from the 100 gallons (13 gallons per day) found during the Evaluation and Appraisal Report (EAR) process for the element. The final EAR did not identify a need to change the 1995-adopted standard. During the EAR process, it was determined that the latest usage information did not exceed the adopted 1995-adopted LOS standard. Thus, the City decided to maintain the 1995-adopted standard.

LOS Average Standard: **113 gallons average daily flow per capita** (maintains the 1995-adopted LOS standard)

LOS 2: Peak flow design capacity

Peak flow design capacity is measured as maximum 3-month average daily flow. However, it should be noted that the Florida Department of Environmental Protection (FDEP) uses average daily flow as the basis for permitting of GRU's wastewater facilities. This permitting sets the standard for the maximum effluent limitation which can be handled by the wastewater plants. Thus, that is why the average daily flow is used to set the wastewater level of service standard.

Peak flow is estimated using a maximum 3-month average daily flow to average day flow ratio from historical GRU wastewater records (GRU, 1996, Strategic Planning Department). To determine peak daily flow, the average daily flow is multiplied by 1.092 (represents the average of the years 1992-1996 of maximum 3-month average daily flow data to annual average day ratios). Multiplying 1.092 times the average daily flow of 100 results in a figure of 109 gallons peak flow per capita. As with the average flow LOS standard, the City has decided to maintain the 1995-adopted standard since the differences are minor.

LOS Peak Standard: **123 gallons daily flow per capita** (maintains the 1995-adopted LOS standard)

Needs Analysis

Facility capacity analysis based on existing conditions: city-owned systems

Both the Kanapaha and Main Street plants have capacity surpluses based on existing average daily flows. Table 10 contains data for each plant and shows the amount of surplus capacity at each plant. The capacity and demand figures are for the entire wastewater service area, both inside and outside of city limits.

TABLE 10: Existing surpluses at Wastewater Plants

Facility	Design Capacity	Current Average Flow	Surplus Based on Average Flow
Kanapaha Plant	10.0 mgd	8.2 mgd	1.8 mgd
Main Street	7.5 mgd	6.5 mgd	1.0 mgd
TOTAL	17.5 mgd	14.7 mgd	2.8 mgd

As indicated in the table, a surplus capacity of 2.8 mgd, based on average daily flow, currently exists which can be used for future development. However, GRU has indicated that it has commitments to serve 2,121 unbuilt residential units (this includes residential units located inside and outside of city limits). Sewage capacity to serve these future units must be considered in calculating available surpluses. GRU estimates that the average sewage flow from these units would add about .57 mgd to the total demand. Table 11, below, accounts for the mgd associated with commitments to serve and reflects the results of including those units.

TABLE 11: Total existing Wastewater Plant Surplus

Facility	Design Capacity	Average Daily and Committed Flow	Surplus Based on Average Flow
TOTAL	17.5 mgd	15.27 mgd	2.23 mgd

Projected Needs Analysis

Projected needs are based on a GRU econometric model which calculates future wastewater sales and connections for the entire service area using BEBR medium population projections as one factor in the model.[3] Historical trends (connections resulting from population growth) are also a factor in the model. The model predicts total sales (residential and non-residential). GRU's facility planning is based on the results of this model. The model includes absorption of the unbuilt, but committed units. This alternative method of determining needs was used because the wastewater service area does not correspond to a specific area for which population projections are available. Thus, it was decided that the best available information for projections would be from GRU's models.

GRU's policy (in City ordinances) is that development (inside or outside of city limits) pays the fully allocated cost of treatment facilities required to serve it. GRU also has a policy that requires developers to contribute the water and wastewater distribution or collection systems internal to a development. Because development pays its way in providing water and wastewater facilities, a built-in mechanism for provision of projected facility needs is already in existence.

The model projects total wastewater connections for the entire service area (both inside and outside of city limits) through FY 2018. Projected wastewater connections were multiplied by 323.6 gallons per day/connection, the median wastewater generation per customer for the years 1989 through 1996. Projections of peak flows were made by multiplying average daily flows by 1.066 (the ratio of maximum 3-month average daily flow to annual average day flow for the years 1992-1996). A 1.0 mgd base infiltration/inflow factor was also added to the peak flow projections.

2005 Facility capacity analysis

Flow projections are for the combined plants because currently up to 3.5 mgd of wastewater flows can be shifted between the plants using an automated shunt system. Table 12 contains data which project the total 2005 average daily flow and peak flow to both plants.

TABLE 12: Projected 2005 Capacity Analysis for Wastewater Plants

Facility	Design[1] Capacity	2005 Average Daily Flow	2005 Peak Flow	Surplus Based on Average Daily Flow
TOTAL	21.5 mgd	17.79 mgd	14.6 mgd	3.71 mgd

[1]This reflects an expansion of 4.0 mgd at Kanapaha in FY 2001.

SOURCE: GRU, 1997, Strategic Planning Department.

2010 Facility capacity analysis

Table 13 contains projections for 2010 average and peak day total flows. The overall system capacity still shows a surplus through the year 2010.

TABLE 13: Projected 2010 Capacity Analysis for Wastewater Plants

Facility	Design Capacity[1]	2010 Average Daily Flow	2010 Peak Flow	Surplus Based on Average Daily Flow
TOTAL	21.5 mgd	19.54 mgd	21.49 mgd	1.96 mgd

[1]This reflects an expansion of 4.0 mgd at Kanapaha in FY 2001.

SOURCE: GRU, 1997, Strategic Planning Department.

General Performance of Existing Facilities

Adequacy of Current level of service provided by the City-owned Facilities

LOS 1: Average daily flow design capacity

The Kanapaha and Main Street plants are currently meeting the existing average daily demand with surplus capacity available at both plants. A planned expansion of the Kanapaha Water Reclamation Facility should assure adequate average daily flow capacity through the planning time-frame.

LOS 2: Peak flow design capacity

Both wastewater treatment plants are currently meeting peak flow demands with excess capacity. A 4.0 mgd expansion for Kanapaha has been scheduled for completion during FY 2001 (included in the capital budget to be complete by the end of FY 2000/2001).

General Condition and Expected Life of City-owned Facilities

A 1998 study undertaken by Black & Veatch (Five Year Report for the Period October 1, 1993 to September 30, 1998) to satisfy bonding requirements evaluated the wastewater facilities and presented the following findings :

1. The general condition of the GRU wastewater collection and treatment facilities observed during the inspections was found to be good. All of the pump stations and the treatment process units observed at the Kanapaha and Main Street Plants were in satisfactory operating condition.

2. The best indication of the general state of the wastewater system was found to be the record of compliance with wastewater treatment plant effluent limits. Both of the treatment plants are required to meet extremely high standards of performance, and the record of compliance was found to be outstanding.

3. The two wastewater treatment plants regularly meet the effluent quality requirements established by their operating permits.

4. GRU has an active commercial and industrial waste pretreatment program in conformance with the EPA requirements and as contained in state regulations. The program provides assurance that wastewater discharged to the collection system from commercial and industrial sources is of acceptable quality and will not be harmful to the wastewater system.

5. GRU procedures for maintaining the wastewater system conform to industry standards and regulatory requirements.

6. Based on a review of the Water/Wastewater Systems FY 1998-2005 Capital Budget Request report, it is evident that GRU has a satisfactory system for planning , programming, and financing capital improvements required to maintain the condition of the existing wastewater system as well as provide for expansion of the system to meet projected demands. The capital improvements program is indicative of a well administered utility, with planning for future system expansions to meet community needs, programming of improvements as they are required to sustain or expand service, and budgeting of the projects to manage costs.

Based on these findings and the GRU Strategic Planning Department's assessment, the wastewater system is deemed to be in very good condition and the life of facilities extends beyond the 2010 planning horizon of the Comprehensive Plan.

Impact of the City-owned Facilities on Adjacent Natural Resources

In 1989 the Main Street Wastewater Plant was listed by the US Environmental Protection Agency (EPA) as having levels of lindane and silver higher than currently permissible for Class III surface waters (the effluent is being disposed into Sweetwater Branch Creek). A major upgrade was completed in 1992 which now allows the plant to meet the current effluent limits. GRU has also instituted an Industrial Pre-treatment Program to reduce lindane and silver levels.

The Kanapaha Plant's major impact on the environment is an alteration of the groundwater quality at a depth of 450 - 1020 feet below ground level in the Floridan Aquifer. However, extensive monitoring and analysis have found that water is at background conditions for nutrients, organic chemicals and microbiological constituents within 2,300 feet of the plant due to absorption, adsorption, filtration, precipitation and bacterial breakdown below the surface (GRU, 1987).

The re-use of reclaimed water from the Kanapaha Water Reclamation Facility (KWRF) for the creation of water features and landscape irrigation was initiated in 1993. Expansions are planned near the KWRF that will eventually provide 4.2 mgd of reclaimed water for beneficial use.

A large holding pond at the plant is used for by-pass should the effluent not meet drinking water standards prior to aquifer recharge. This pond has suffered water loss in the past due to sinkhole formation and is now lined to prevent the re-occurrence of such events. As a precautionary measure, all private wells adjacent to the plant have been replaced by central potable water.

Odors have been significantly reduced at the plant by the installation of a biofilter for odor control. Monitoring of this system by UF has found it to remove 99.9% of the hydrogen sulfide from the waste air stream (Allen, 1989).

Sludge from the wastewater plants is land applied by GRU at various farming sites which request the sludge. The sludge is sampled monthly and reports are sent to FDEP. GRU's sludge is rated as Grade B under the FDEP criteria for land application or disposal of domestic wastewater treated sludge (62-640 F.A.C.). GRU submits for FDEP review a new Land Application Field Package for Grade B Sludges (FDEP Form 62-40.210(2)(a)) for each site where land application will occur. Given the grading level of the sludge and FDEP oversight, no adverse environmental impacts are expected.

Opportunities for City-owned Facility Replacement, Expansion and New Facility Siting

Improvements or expansions to the current public wastewater system include the following (GRU Strategic Planning, 1997):

1. The Main Street Treatment Plant has been upgraded to provide advanced secondary treatment. This upgrade included replacing the existing trickling filter process train with an activated sludge process train; upgrading the clarifiers; and providing grit removal, chemical treatment, filtration, and gravity belt thickeners. (Improvement begun FY 1989 and completed in 1992).

2. A 4.0 mgd expansion of wastewater treatment capacity at the Kanapaha Water Reclamation Facility is planned to be complete by the end of Fiscal Year 2001.

Improvements scheduled through the end of FY 01/02 have funding for the capital improvements secured from external funds generated from revenue bonds (GRU, Strategic Planning Dept., 1997). Utility bond proceeds will be used to fund the remaining capital improvements. GRU has established a schedule of rates to assure its ability to secure and service anticipated debt to fund programmed improvements.

Opportunities for expanding centralized wastewater facilities to septic tank areas

Records from the Alachua County Health Department (1998-1999) indicate that septic tank problems are minimal within the City of Gainesville. According to Mark Lander with the Health Department (phone conversation 10/20/99), less than ten percent of the complaints received by the Health Department are for septic tanks within city limits. Drainfield problems (often caused by lack of owner maintenance) is the most common problem. All problems (20-25 cases) have been resolved by system repairs or by encouraging property owners to hook to the centralized system, where available. Thus, to date, expansion of wastewater facilities to service those areas currently being served by septic tanks which seem to be in good operating order has not been a priority.

It should be noted that the City amended its connection policy ordinance (change adopted September 30, 1991) which provides an economic incentive for owners of septic tanks to hook up to the centralized system. Ordinance 3740, which amended the utilities section of the City's Code of Ordinances, included a provision for the elimination of frontage charges. In an analysis of those charges (GRU, "Water and Wastewater Connection and Extension Charges Policy Review,"July 16, 1991), GRU found that there were frequent requests for hook up information from existing structures adjacent to existing wastewater facilities. However, the frontage fee charges were seen as a serious impediment to this type of system infill. The elimination of the frontage fees encourages those adjacent to existing wastewater facilities to voluntarily hook up.

The City also has existing mechanisms for property owners to hook into the centralized sewer system, if they so desire. Property owners can pay the costs of expansion to them directly or through a special assessment procedure. The special assessment method allows property owners to pay the costs of hook up over a fixed time period as part of their annual property tax bill. The City also passed an ordinance which makes available an installment payment plan for connection charges so that property owners served by septic tanks or package treatment plants are encouraged to hook to the centralized system by spreading payments over a ten-year period.

In the case of a septic tank problem causing a sanitary nuisance or endangering a water supply, an existing section of City code (Section 27-168.2) (see copy of text in Appendix B), requires connection to the public sanitary sewer, within 30 days of notice, if the property is abutting on any street, alley or right-of-way in which a public sanitary sewer is installed, or within 200 feet of the nearest available public sanitary sewer. Chapter 64E-6 F.A.C of the State of Florida regulates how abandoned septic tanks must be handled.

Soil Suitability for Septic Tanks

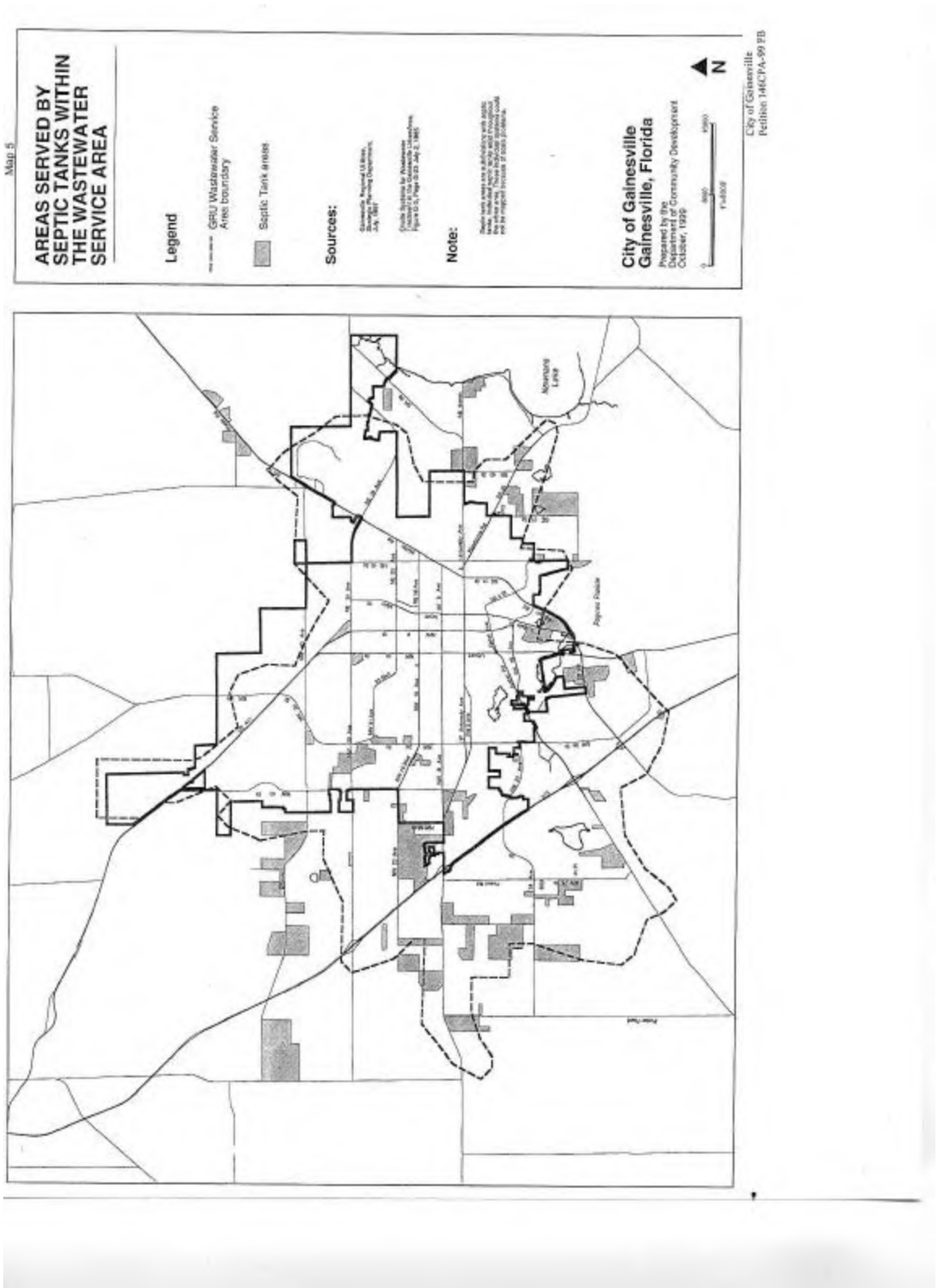
Subdivisions served by septic tanks are indicated on Map 5. Soil suitability for these septic tanks in these subdivisions is superimposed on the septic tank areas and is illustrated in Map 6. The soil limitations for septic tanks are rated as slight, moderate or severe as shown on the map. The soils constituting each level of limitation can be found in Appendix B Table B2. As can be

noted, there are several areas of septic tank concentration with soils which are either moderately or highly unsuitable for septic tanks. The small scale of the Soil Conservation Service maps precludes their use for specific sites. Thus, Map 5 should only be used for generalized purposes.

Map 7 illustrates the approximate locations of existing septic tanks in the Gainesville urban area. As can be noted from the map, septic tanks are scattered over various areas within city limits. Table B2 in Appendix B (based on the US Department of Agriculture Soil Conservation Service (USDASCS) ratings) shows the soil types corresponding to moderate and severe limitations for septic tanks. The mapped soil type information from the USDASCS is very generalized and not at a scale which can be used to determine suitability for a particular location. Terry Shipley of the Alachua County Public Health Unit has indicated that soil profiles on a particular parcel can change within 10-20 feet.
The State of Florida has granted statutory authority (FS 381 and Chapter 64E-6 of F.A.C.) for permitting septic tanks to public health departments (a division of the Florida Department of Health). The Alachua County Health Department uses soil suitability as only one criteria in determining whether a septic tank permit will be granted. Site evaluations are made for each permit granted and mounding or other engineering methods can be used as mitigation techniques for some soils which are unsuitable. The City believes that the permitting criteria established by the Alachua County Health Department and the State are adequate to prevent problems associated with septic tanks.

Analyzing the information on Map 6 and the information in the USDASCS atlas, it can be noted that septic tanks do exist in areas with both moderate and severe limitations for septic tanks. Despite this, the number of septic tank complaints received by the Public Health Department is very low. Given this low reporting of problems and an indication from the Health Department that corrections could easily be made with repairs, septic tanks do not appear to pose a major problem in the City of Gainesville. Thus, while it is possible to note where unsuitable soils for septic tanks exist in Gainesville, given the scale of the soil maps, it is not a useful predictor of septic tank problems or acceptability.

It should also be noted that the use of septic tanks for new development is uncommon in the city. City Building Inspections Department personnel have indicated that over the last few years (1994-1999) very few new construction building permits have been issued for buildings using septic tanks (averaging about two per year). Most new construction hooks to existing wastewater lines (recall that Gainesville is about 80 percent built out and that much of the new construction is infill type) or pays the cost of line extension from a proximate location.


Map 5
AREAS SERVED BY SEPTIC TANKS WITHIN THE WASTEWATER SERVICE AREA
Legend
GRU Wastewater Service Area boundary
Septic Tank areas
Sources:
Note:
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development October, 1999
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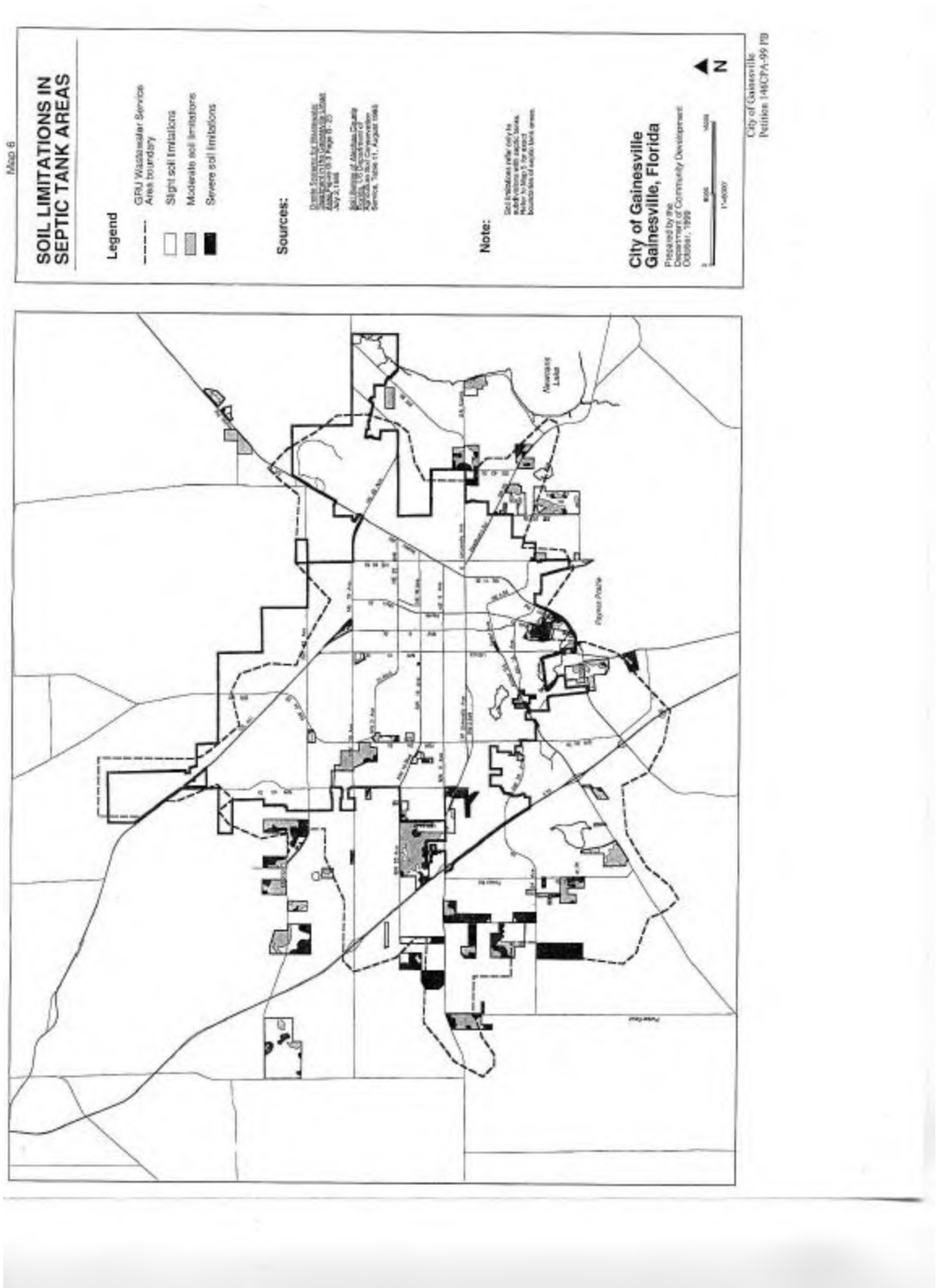
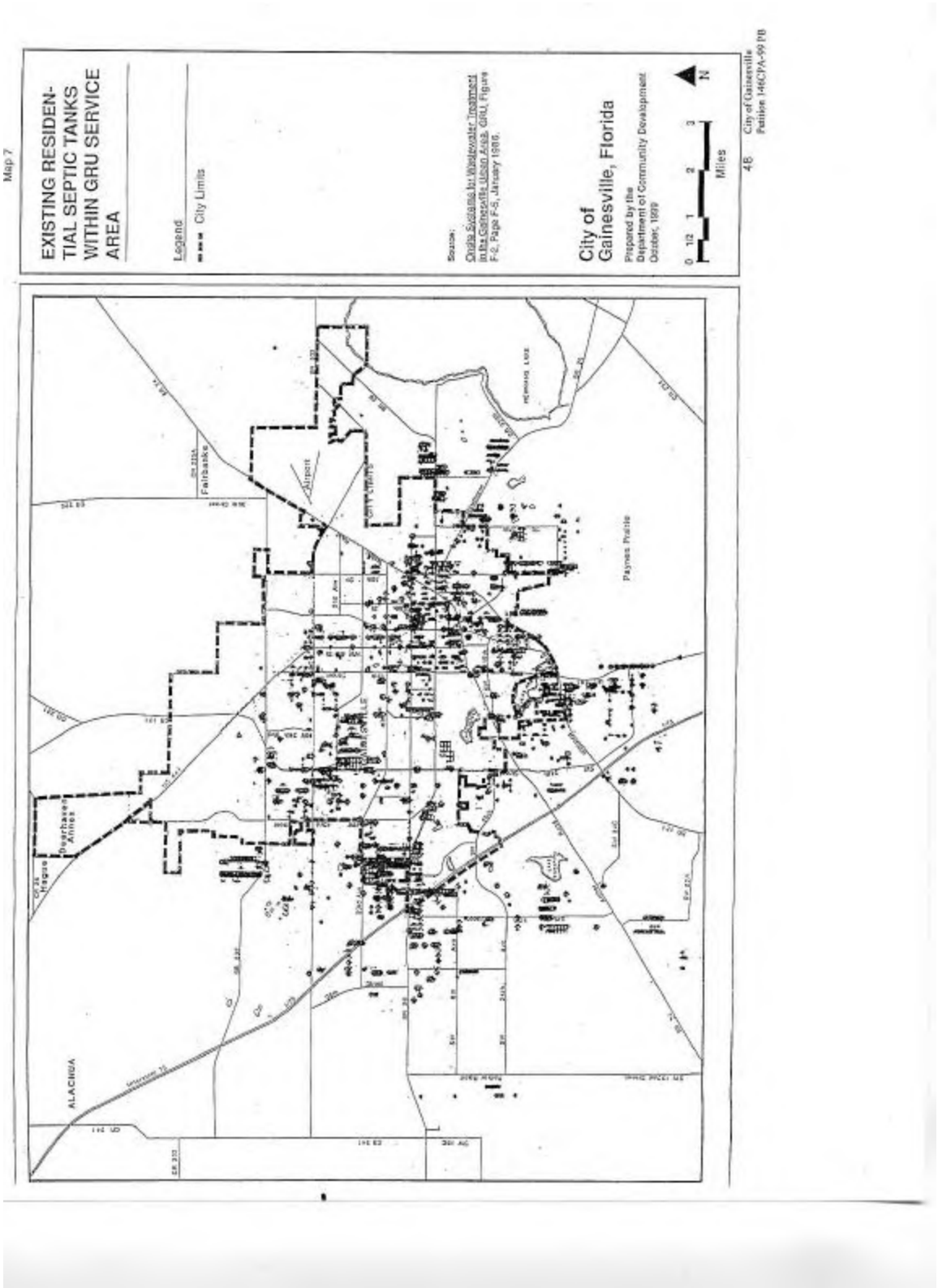
City of Gainesville
Petition 146CPA-99 PB


Map 6
SOIL LIMITATIONS IN SEPTIC TANK AREAS
Legend
GRU Wastewater Service Area boundary
Slight soil limitations
Moderate soil limitations
Severe soil limitations
Sources:
Note:
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
October, 1999
N
City of Gainesville
Petition 146CPA-99 PB


Map 7
EXISTING RESIDEN-
TIAL SEPTIC TANKS
WITHIN GRU SERVICE
AREA
Legend
City Limits
Source:
Onsite Systems for Wastewater Treatment
in the Gainesville Urban Area, GRU, Figure
F-2, Page F-5, January 1986.
City of
Gainesville, Florida
Prepared by the
Department of Community Development
October, 1999
0 1/2 1 2 3
Miles
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48
City of Gainesville
Petition 146CPA-99 PB
Fairbanks
Airport
Duckhaven
Annex
Haven
Paynes Prairie
ALACHUA

FOOTNOTES

APPENDIX A

Potable Water Information

GRU

INTER-OFFICE COMMUNICATION

LEGAL SERVICES

DATE: January 4, 1991

TO: Norman Bowman
Community Development Director

FROM: Raymond Manasco
Utilities Attorney

SUBJECT: Allocation of Water and Wastewater Capacity

Rule 9J-5.011(1)(C), FAC, promulgated under the Florida Growth Management Act requires each local government that shares facilities to indicate "proportional capacity of the system allocated to serve its jurisdiction". Since GRU serves both the City of Gainesville and unincorporated Alachua County, capacity in GRU's facilities is shared between the City and County. I have been asked to articulate GRU's policy on the allocation of water and wastewater capacity between the City of Gainesville and the unincorporated area of Alachua County that receives service from GRU. The following is my interpretation of the City of Gainesville's ordinances concerning capacity allocation.

Chapter 27, Article IV of the Gainesville Code of Ordinances contains ordinances pertaining to GRU's Water and Wastewater System. These ordinances deal in detail with matters such as specifications for connection to GRU's system, fees for various services rendered in connection with water or wastewater service, water and wastewater treatment plant connections, and off-site extensions of water or wastewater facilities. The ordinances do not differentiate between requests for service in the City or in the County. Extension ordinances and plant connection ordinances treat extension requests or capacity requests the same regardless of whether or not they are in the City. As such, capacity is available to all customers on a first come-first served basis, and is not allocated on a geographical or jurisdictional basis. This applies to capacity in collection or distribution facilities as well as treatment plant capacity. It is our understanding that capacity allocation on a first come - first served basis is consistent with the requirements of 9J-5, FAC. If I may be of any further assistance, please feel free to contact me.

M/s

cc: Ralph Hilliard, Chief of Comprehensive Planning
Mike Kurtz
Bob Moye
Bob McVay
Ed Regan
David Richardson

City of Gainesville
Petition 146CPA-99 PB

A-1

APPENDIX B

Wastewater Information

and other applicable federal and state laws and regulations;

(6) Improve the opportunity to recycle and reclaim wastewaters and sludges from the wastewater treatment system.

(c) This section shall apply to the city and to persons outside the city who are, by contract or agreement with the city, users of the municipal wastewater treatment system. Except as otherwise provided in this division, the general manager for utilities or his/her designee shall administer, implement, and enforce the provisions set forth in this division.
(Code 1960, § 28-56; Ord. No. 3696, § 16, 2-18-91)

Sec. 27-167. Permit fee for plumbing and sewerage installation.

Before a permit is issued for any plumbing, sewer or drainage work or installation for which a permit is required, a fee therefor shall be paid to the plumbing inspector in accordance with the schedule set out in Appendix A.
(Code 1960, § 28-57)

Sec. 27-168. Sewer connection—New buildings.

No building permit for the construction of any building or structure located on property abutting any street, alley or right-of-way in which there is located a public sanitary sewer shall be issued, unless all waste disposal from the sanitary facilities in the buildings or structures shall be directly connected with a public sanitary sewer or to a graywater disposal system approved pursuant to section 27-182(b). However, if there is no available sanitary sewer located within 200 feet of the nearest property line whereon the building or structure is to be constructed, the terms of this section shall not apply.
(Code 1960, § 28-58)

Sec. 27-168.1. Same—Existing buildings generally.

The owner of any house, building, or other improvement on any property used, or to be used, for human occupancy, employment, recreation, business, or other purpose which is or shall be served by a sewerage disposal system other than a direct connection to the city's public sanitary sewer system and located on property abutting on any street, alley, right-of-way, or easement on which a public sanitary sewer line is installed, and located within 200 feet of such sewer line, shall, within two years after the completed construction of such sewer line in operative condition, connect, or cause to be connected, all sanitary sewerage disposal facilities from the property and improvement to the public sanitary sewer line or to a graywater disposal system approved pursuant to section 27-182(b).
(Code 1960, §§ 28-56.1(a), 28-59.1(a); Ord. No. 3754, § 80, 1-27-92)

Sec. 27-168.2. Same—Existing buildings with inadequate, unsatisfactory, etc., individual sewage disposal system.

The owner of any existing house, building or property used, or to be used, for human occupancy, employment, recreation, business or other purpose now served by an individual sewage disposal system other than a direct connection to a public sanitary sewer, and located on property abutting on any street, alley or right-of-way in which a public sanitary sewer is installed, or within 200 feet of the nearest available public sanitary sewer, shall be required, within 30 days after date of notice that the individual sewage disposal system is inadequate, unsatisfactory, causing a sanitary nuisance or endangering the water supply, to abandon the existing individual sewage disposal system and fill the same with suitable materials approved by the city health officer, and connect all waste from sanitary fixtures used by him/her directly with the public sanitary sewer or to a graywater disposal system approved pursuant to section 27-182(b).
(Code 1960, § 28-59; Ord. No. 3754, § 80, 1-27-92)

Sec. 27-169. Rates and charges.

(a) *Rates.* There is hereby established a schedule of monthly rates and charges for the use of or availability for the use of wastewater collection, treatment and disposal services to read as set out in the schedule in Appendix A, which in part is based on the amount of water used from the city's water system. Wastewater service charges shall

~~APPENDIX TABLE B2: Soil Types associated with Limitations for Septic Tanks~~

~~Slight~~	~~Moderate~~	~~Severe~~
~~2B, 2C Candler~~	~~8B, 8C Millhoppper~~	~~7B Kanapaha~~
~~3B, 3C Arredondo~~	~~9B Millhopper~~	~~11 Riviera~~
~~4B Arredondo~~	~~20B Tavares~~	~~13 Pelham~~
~~5B Fort Meade~~	~~33B, 33C Norfolk~~	~~14 Pomona~~
~~6B, 6C Apopka~~	~~39B Bonneau~~	~~15 Pompano~~
~~30B, 30C Kendrick~~	~~45 Millhopper~~	~~16 Surrency~~
~~35B, 35C Gainesville~~	~~46B Bonneau~~	~~17 Wauchula~~
~~46B Cadillac~~		~~18 Wauchula~~
~~47B Candler~~		~~19 Monteocha~~
~~48 Apopka~~		~~21 Newnan~~
~~55B Lake~~		~~22 Floridana~~
~~58B Lake~~		~~23 Mulat~~
		~~25 Pomona~~
		~~26 Samsula~~
		~~28 Chipley~~
		~~29B, 29C Lochloosa~~
		~~31A Blichton~~
		~~31B, 31C Blichton~~
		~~32 B, 32C Bivans~~
		~~32D Bivans~~
		~~34 Placid~~
		~~37 Zolfo~~
		~~41B Pedro~~
		~~42B Pedro~~
		~~42B Jonesville~~
		~~44B Blichton~~
		~~46B Jonesville~~
		~~48 Myakka~~
		~~49A Lochloosa~~
		~~50 Sparr~~
		~~51 Plummer~~
		~~52 Ledwith~~
		~~53 Shenks~~
		~~54 Emeralda~~
		~~56 Wauberg~~
		~~57B Micanopy~~
		~~59 Pottsburg~~
		~~60 Udorthents~~
		~~61 Oleno~~
		~~62C Boardman~~
		~~63 Terra Ceia~~
		~~64 Okeechobee~~
		~~65 Martel~~
		~~66 Lynne~~
		~~67C Wacahoota~~

Appendix C

References

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[1] For a detailed explanation of this model see GRU, 1989c.

[2] In the Murphree Plant area the Floridan Aquifer is overlain with roughly 200 feet of clay known as the Hawthorne Formation. The integrity and degree of confinement afforded by the Hawthorne Formation at the Murphree Plant is such that withdrawals have not resulted in any known surface water table effects.

The drawdown which was mentioned in the text is evident in the Floridan Aquifer. At Lake Alice and Alachua Sink, both of which receive treated wastewater effluent, the direction of groundwater flow in the Floridan appears to be towards the Murphree Wellfield based upon the regional potentiometric surface. These water bodies discharge into intermediate zones of the Hawthorne Formation and GRU does not anticipate movement of these waters into the wellfield in the foreseeable future.

[3] For a detailed explanation of this model, see GRU, 1989a. future.

Goals, Objectives & Policies

Property Rights Element

Objective 1.1 **The City of Gainesville will respect constitutionally protected and judicially acknowledged private property rights, and will consider private property rights as part of the local decisionmaking process.**

Policy 1.1.1 The following rights shall be considered in local decisionmaking:

a. The right of a property owner to physically possess and control the owner's interests in the property, including easements, leases, or mineral rights.

b. The right of a property owner to use, maintain, develop, and improve the owner's property for personal use of for the use of any other person, subject to state law and local ordinances.

c. The right of the property owner to privacy and to exclude others from the property to protect the owner's possessions and property.

d. The right of a property owner to dispose of owner's property through sale or gift.

Goals, Objectives & Policies

Public Schools Facilities Element

GOAL 1

THE CITY SHALL COLLABORATE WITH THE SCHOOL BOARD OF ALACHUA COUNTY (SCHOOL BOARD) TO PLAN FOR PUBLIC SCHOOL CAPACITY TO ACCOMMODATE PROJECTED ENROLLMENT DEMAND WITHIN THE FIVE YEAR, TEN YEAR, AND TWENTY YEAR PLANNING PERIODS.

Objective 1.1. **The City of Gainesville shall consider public school capacity when making future land use decisions, recognizing the School Board's statutory and constitutional responsibility to provide a uniform system of free and adequate public schools, and the City's authority for land use, including the authority to approve or deny petitions for future land use and rezoning for residential development that generate students and impact Alachua County's public school system.**

Policy 1.1.1 The City, in conjunction with the School Board, shall annually update and maintain a Public School Facilities Map Series as supporting data and analysis. The Public School Facilities Map Series in the data and analysis shall include at a minimum:

a. A map or maps that identify the existing locations of public school facilities by type and existing locations of ancillary plants;

b. A future conditions map or map series that depicts the planned general locations of public school facilities and ancillary plants and renovated facilities by year for the five-year planning period and the long-range planning period; and

Revised 12/18/08, Ord. 080014
Revised 01/19/12, Ord. 110173
Revised 08/15/13, Ord. 120370

c. A map or map series that depicts School Concurrency Service Areas (hereinafter "SCSAs") for high schools, middle schools and elementary schools.

Policy 1.1.2 The City shall coordinate land use decisions with the School Board's Long Range Facilities Plans by requesting School Board review of proposed Comprehensive Plan amendments and rezonings that would increase residential density.

Policy 1.1.3 For purposes of coordinating land use decisions with school capacity planning, the SCSAs that are established for high, middle and elementary schools as part of the Interlocal Agreement for Public School Facility Planning (hereinafter the "Interlocal Agreement") shall be used for school capacity planning.

Policy 1.1.4 In reviewing land use decisions, the School Board may address the following issues as applicable:

a. Whether school capacity or planned improvements to accommodate the enrollment is available;

b. Whether school sites and facilities are located within neighborhoods;

c. Whether parks, recreation and neighborhood facilities are collocated with school sites;

d. Whether bikeways, trails, and sidewalks are provided for safe access to schools;

e. Traffic circulation in the vicinity of schools, including the provision of off-site signalization, signage, access improvements, sidewalks to serve schools, and the inclusion of school bus stops and turnarounds;

f. Encouraging the private sector to identify and implement creative solutions for developing adequate school facilities in residential developments; and

g. Whether the proposed location is consistent with any local government's school design and planning policies.

Policy 1.1.5 The School Board shall report its findings and recommendations regarding a land use decision in a report (hereinafter, the "Report") to the City. If the School Board determines that capacity is insufficient to support the proposed land use decision, the "Report" shall include recommendations to remedy the capacity deficiency including estimated costs. The School Board shall forward the "Report" to all local governments within the County.

Policy 1.1.6 The City shall consider and review the School Board's findings and recommendations regarding the availability of school capacity in the evaluation of land use decisions.

Policy 1.1.7 Capacity Enhancement Agreements shall be encouraged to ensure adequate capacity is available at the time the school impact is created. The School Board's Long Range Facilities Plans for the 5-year, 10-year and 20-year periods shall be amended to incorporate capacity modification commitments established by Capacity Enhancement Agreements.

Policy 1.1.8 The School Board shall annually provide a cumulative report of land use decisions and the effect of those decisions on public school capacity to the Elected Officials Group that has been established pursuant to the Interlocal Agreement.

GOAL 2

PROVIDE ADEQUATE PUBLIC SCHOOL CAPACITY TO ACCOMMODATE ENROLLMENT DEMAND WITHIN THE SCHOOL BOARD'S FIVE-YEAR CAPITAL IMPROVEMENTS PROGRAM.

Objective 2.1 The City shall incorporate by reference the School District's annually updated "5-Year District Facilities Work Program" in its Capital Improvements Element and 5-Year Schedule of Capital Improvements.

Policy 2.1.1 The School Board shall annually update and amend the School District's "5-Year District Facilities Work Program" to reflect the LOS standards for schools to add a new fifth year, which continues to achieve and maintain the adopted LOS for schools. The 5-Year District Facilities Work Program ensures that the LOS standards for public schools are achieved and maintained within the period covered by the 5-year schedule of capital improvements. The "5-Year District Facilities Work Program" shall also address the correction of existing facility deficiencies and facilities needed to meet future needs. After the first 5-year schedule of capital improvements, annual updates to the schedule shall ensure that the LOS is achieved and maintained within the subsequent 5-year schedules of capital improvements necessary to address existing deficiencies and meet future needs, based upon achieving and maintaining the adopted LOS standards. The City shall have neither the obligation nor responsibility for funding the School District's "5-Year District Facilities Work Program" by incorporating it by reference in the Capital Improvements Element of the City's Comprehensive Plan.

Objective 2.2 The City shall coordinate with the School Board in considering the impact that final development orders will have on the future availability of adequate public school facility capacity through its authority to

implement school concurrency.

Policy 2.2.1 The City, School Board, County, and other municipalities in Alachua County shall use the Interlocal Agreement for Public School Facility Planning to guide the implementation of school concurrency within Alachua County. The Interlocal Agreement shall be consistent with the goals, objectives and policies of this Element.

Policy 2.2.2 The City's land development regulations shall include provisions for public school concurrency management.

Objective 2.3 Final development orders approved by the City shall meet the adopted Level of Service (LOS) standards within the 5-year period of the School District's "5-Year District Facilities Work Program" (which is updated on an annual basis).

Policy 2.3.1 The uniform, district-wide LOS standards for elementary, middle and high schools shall be 100% of Program Capacity as annually adjusted by the School Board. This LOS standard shall apply to all school concurrency service areas (SCSAs) (within Gainesville's city limits) as adopted in the Interlocal Agreement. For combination schools, the School Board shall separately determine the capacity of each school to accommodate elementary, middle and high school students, and shall apply the LOS standard prescribed above for elementary, middle and high school levels respectively.

Policy 2.3.2 Amendments to the LOS standards shall be accomplished by execution of an amendment to the Interlocal Agreement by all parties and adoption of amendments to the local government comprehensive plans. Changes to the LOS standards shall be supported by adequate data and analysis showing that the amended LOS standard can be achieved and maintained within the period covered by the applicable five years of the School District's "5-Year District Facilities Work Program."

Objective 2.4 The City, in coordination with the School Board and the local governments within Alachua County, shall evaluate whether adequate school capacity is available within the SCSAs based on the adopted LOS standards.

Policy 2.4.1 SCSAs for high, middle and elementary schools shall be as adopted in the Interlocal Agreement. SCSA boundaries shall be included in a map series as part of the Data and Analysis for this Element.

Policy 2.4.2 SCSAs shall maximize available school capacity and make efficient use of new and existing public schools in accordance with the LOS standards, taking into account transportation costs, student travel times, any court-approved

desegregation plans, and capacity commitments pertaining to development approvals by the local governments within Alachua County.

Policy 2.4.3 SCSA boundaries shall consider the relationship of school facilities to the communities they serve, including reserve area designations and extraterritorial areas established under the "Alachua County Boundary Adjustment Act," and the effect of changing development trends.

Policy 2.4.4 The City, in coordination with the School Board and the local governments within Alachua County, shall use the following process to modify SCSAs:

a. Any party to the adopted Interlocal Agreement may propose a modification to the SCSA boundary maps;

b. Modifications to SCSA boundaries shall be based upon the criteria as provided in Policy 2.4.2., and shall be within the five-year period described by the School District's "5-Year District Facilities Work Program";

c. The School Board shall transmit to the Elected Officials Group the proposed SCSA boundary modification with data and analysis to support the changes;

d. The Elected Officials Group shall review the proposed SCSA boundary modifications and send its comments to the School Board and the parties to the Interlocal Agreement; and

e. Modifications to a SCSA shall become effective as provided in the Interlocal Agreement for Public School Facility Planning.

Objective 2.5 In coordination with the School Board, the City shall establish a joint process for implementation of school concurrency, which includes applicability, capacity determination, availability standards, and school capacity methodology.

Policy 2.5.1 The issuance of final development orders for residential development shall be subject to the availability of adequate school capacity based on the Level of Service (LOS) standards adopted in this Element.

Policy 2.5.2 The following residential developments are exempt from the school concurrency requirements:

a. Single-family lots of record that received final subdivision or plat approval prior to December 18, 2008, or single-family subdivisions or plats that were filed with the City and received preliminary

development approval prior to December 18, 2008, where such development approval has not expired.

b. Multi-family residential development that received a final development order prior to December 18, 2008, or multi-family development plans that were filed with the City and received preliminary development plan approval prior to December 18, 2008, where such development approval has not expired.

c. Amendments to final development orders for residential development that were approved prior to December 18, 2008, and which do not increase the number of students generated by the development.

d. Age-restricted developments that prohibit permanent occupancy by persons of school age. Such restrictions must be recorded, as covenants running with the land and irrevocable for a period of at least thirty (30) years and lawful under applicable state and federal housing statutes. The applicant must demonstrate that these conditions are satisfied.

e. Group quarters that do not generate students that will be housed in public school facilities, including residential facilities such as local jails, prisons, hospitals, bed and breakfasts, motels and hotels, temporary emergency shelters for the homeless, adult halfway houses, firehouse dorms, college dorms exclusive of married student housing, and religious non-youth facilities.

Policy 2.5.3 Student generation rates used to determine the impact of a particular development application on public schools, and the costs per student station, shall be determined in accordance with professionally accepted methodologies and adopted annually by the School Board in the School District's "5-Year District Facilities Work Program."

Policy 2.5.4 The School Board shall determine the level of service or utilization rate of each school using a uniform methodology. The School Board shall use program capacity as the standard to determine the capacity of elementary, middle, and high school facilities. School enrollment shall be based on the enrollment of each individual school based on counts reported by the School Board to the Department of Education.

Policy 2.5.5 The School Board staff and City staff shall jointly establish methods and procedures for concurrency review for all development approvals subject to school concurrency.

a. Adequate school capacity means there is sufficient school capacity at the adopted LOS standards to accommodate the demand created by a

proposed development for each type of school within the affected SCSA.

b. The City will determine if public schools facilities concurrency is met and will issue a concurrency decision, based on the School Board's findings for specific developments where applicable, or based on the thresholds established in the annual report issued by the School Board pursuant to Section 8.5.8 of the Interlocal Agreement.

Policy 2.5.6 School concurrency applies only to residential development or a phase of residential (single-family and multi-family) development requiring a subdivision or plat approval, development plan, or its functional equivalent, proposed or established after December 18, 2008.

The City shall amend the concurrency management system in its Land Development Code to require that all new residential development be reviewed for school concurrency no later than the time of final subdivision, final plat or final development plan. The City shall not deny a final subdivision, final plat or final development plan for residential development due to a failure to achieve and maintain the adopted LOS standards for public school capacity where:

a. Adequate school facilities will be in place or under construction within three years after the issuance of a final development order or its functional equivalent, as programmed in the School District's "5-Year District Facilities Work Program" incorporated by reference in the Capital Improvements Element;

b. Adequate school facilities are available in an adjacent SCSA or will be in place or under actual construction in an adjacent SCSA within three years after the issuance of a final development order or its functional equivalent, as programmed in the School District's "5-Year District Facilities Work Program" incorporated by reference in the Capital Improvements Element; or

c. The developer executes a legally binding commitment to provide mitigation proportionate to the demand for public school facilities to be created by development of the property, including, but not limited to, the options described in Subsection 163.3180(6)(h)2.a., F.S.

Policy 2.5.7 The City shall not issue a concurrency certification for any nonexempt residential development application until the City has issued a decision pursuant to Policy 2.5.5 verifying that school capacity is available to serve the development. The decision shall indicate a temporary commitment of capacity of necessary school facilities for a period not to exceed twelve (12)

months or until a final development order is issued, whichever occurs first, or as specified for phased projects in the City's Land Development Code.

a. Once the City reserves school capacity for concurrency purposes as a part of the final development order, the school capacity necessary to serve the development shall be considered reserved for a period not to exceed three (3) years, except when the School Board concurs that there is sufficient capacity for a reservation for a longer period. These time frames shall be subject to any State-mandated extensions of development approvals.

b. Phased projects, as provided for in the City's Land Development Code, may obtain approval for a longer period, provided the development order is in accordance with an agreement entered into by the School Board, the City of Gainesville, and the developer, which may include a phasing schedule or other timing plan for development plan approvals, capacity reservation fees, capacity enhancement agreements, or other requirements as determined by the School Board.

c. The City shall notify the School Board within fifteen (15) working days of the approval or expiration of a concurrency reservation for a residential development. No further determination of school capacity availability shall be required for the residential development before the expiration of the certificate of final concurrency, except that any increase in impact requires review.

Policy 2.5.8 In the event that it has been determined pursuant to Policy 2.5.5 that there is not sufficient capacity in the affected concurrency service area or an adjacent concurrency service area to address the impacts of a proposed development, the following standards shall apply. Either (1) the final development order must provide for proportionate share mitigation sufficient to meet the development's impacts per Objective 2.6; or (2) the final development order must be delayed to a date when capacity enhancement and the LOS standard can be met concurrent with the impact of the development.

Objective 2.6 The City, in coordination with the School Board, shall provide for proportionate share mitigation alternatives that are determined by the School Board to achieve and maintain the adopted LOS standard consistent with the School District's adopted "5-Year District Facilities Work Program."

Policy 2.6.1 Mitigation shall be allowed for those developments that cannot meet the adopted LOS Standards. Mitigation options shall include options listed below for which the School Board assumes operational responsibility through

incorporation in its adopted "5-Year District Facilities Work Program," and which will maintain adopted LOS standards.

a. The payment of a proportionate share amount as calculated by the formula prescribed in Policy 2.6.3 or the equivalent contribution, construction, or funding of school facilities or sites sufficient to offset the demand for public school facilities created by the proposed development;

b. The creation of mitigation banking within designated areas based on the construction of a public school facility in exchange for the right to sell capacity credits; or

c. The establishment of a charter school with facilities constructed in accordance with the State Requirements for Educational Facilities (SREF).

Policy 2.6.2 Mitigation shall be directed to projects in the School District's "5-Year District Facilities Work Program" that the School Board determines will satisfy the demand created by that development approval. Such mitigation proposals shall be reviewed by the School Board, the City, and any affected local government. Consistent with Section 163.3180, F.S., mitigation shall include a legally binding agreement between the School Board, the City, any affected local government, and the applicant that shall be executed prior to the City's issuance of the final development order or the functional equivalent. If the mitigation proposal is for a project that is not within the School District's adopted "5-Year District Facilities Work Program," and if the School Board agrees to the mitigation, the School Board must commit in the agreement to placing the improvement required for mitigation in the School District's "5-Year District Facilities Work Program."

Policy 2.6.3 The applicant's total proportionate share obligation to resolve a capacity deficiency shall be based on the following:

Number of Student Stations (by School Type) = Number of Dwelling Units by Housing Type X Student Generation Multiplier (by Housing Type and School Type);

Proportionate Share Amount = Number of Student Stations (by School Type) X Cost per Student Station for School Type;

The above formula shall be calculated for each housing type within the proposed development and for each school type (elementary, middle or high) for which a capacity deficiency has been identified. The sum of these calculations shall be the proportionate share amount for the development under review;

Revised 12/18/08, Ord. 080014
Revised 01/19/12, Ord. 110173
Revised 08/15/13, Ord. 120370

The School Board average cost per student station shall only include school facility construction and land costs, and costs to build schools to emergency shelter standards when applicable; and

The applicant's proportionate-share mitigation obligation shall be credited toward any school concurrency related impact or exaction fee imposed by local ordinance for school concurrency for the same development, on a dollar-for-dollar basis, at fair market value as of the date of contribution.

GOAL 3

THE CITY SHALL COORDINATE WITH THE SCHOOL BOARD IN THE SCHOOL BOARD'S EFFORTS TO PROVIDE PUBLIC SCHOOLS IN APPROPRIATE LOCATIONS.

Objective 3.1 **Public schools are allowed in the Residential, Mixed-Use, Urban Mixed-Use, Office and Education land use categories described in Policy 4.1.1 of the Future Land Use Element, and can be a use specified within a given Planned Use District. Public schools should be compatible with surrounding uses.**

Policy 3.1.1 All new public schools built within Gainesville's municipal boundaries will be coordinated by the School Board with the City in order to: verify consistency between the location of the school and the Comprehensive Plan; ensure that new schools are proximate to, consistent with and accessible from existing and proposed residential areas; ensure that new schools are co-located with other appropriate public facilities when possible; and ensure that the on-site and off-site infrastructure is in place or available to support the new schools.

Policy 3.1.2 The City, in conjunction with the School Board, shall promote the neighborhood concept in new developments or redevelopment by encouraging the use of public schools as neighborhood centers.

Policy 3.1.3 The City shall consider compatibility of uses adjacent to public schools when it considers land use and zoning proposals, and shall consider input from the School Board concerning compatibility of proposed uses with existing schools and known future school sites.

Objective 3.2 **The City shall coordinate with the School Board on the reduction of hazardous walking conditions.**

Policy 3.2.1 To reduce hazardous walking conditions consistent with Florida's Safe Paths School program, the City shall coordinate with the School Board to implement

the provisions of Section 1006.23, F.S., including identification and correction of hazardous conditions along walking routes to schools, and identification of proposed projects to remedy such conditions, subject to the availability and appropriation of funding.

Objective 3.3 Potential school sites shall be evaluated consistent with the school site evaluation requirements in the Interlocal Agreement.

Policy 3.3.1 The School Board and the City shall follow the school site evaluation procedures that are in the Interlocal Agreement when evaluating new school sites within Gainesville's city limits.

Objective 3.4 The City herein establishes development requirements for public school sites within Gainesville's city limits in order to achieve compatibility with surrounding neighborhoods and with the Comprehensive Plan.

Policy 3.4.1 The City shall require the development of school sites to be consistent with the following minimum requirements, provided they are not in conflict with the State Requirements for Educational Facilities (SREF):

a. Playgrounds, playing fields, and athletic courts (including lighting, if applicable) shall be located and buffered so as to minimize impacts to adjacent residential property;

b. The following minimum size guidelines have been recommended by the School Board: Elementary School - 25 acres, Middle School - 35 acres, High School - 65 acres. These guidelines shall not preclude smaller sites if determined to be acceptable by the School Board.

c. The school structure's maximum height shall adhere to the height requirements established for the school site's zoning district;

d. Building setbacks from property lines or build-to lines for all schools shall adhere to the requirements established in the Land Development Code;

e. All parking areas on school sites shall adhere to the minimum setback requirements or locational requirements established for the school site's zoning district;

f. Access to school sites shall be governed by the City's, County's and FDOT's access management regulations as relevant, including installation by the School Board, or other party as determined by the City, of all access-related improvement required by such regulations;

g. The site shall be required to provide bicycle/pedestrian connections to sidewalks, trails, and bikeways internal or adjacent to residential neighborhoods, including the provision of safe roadway crossings;

h. Development of the site shall be consistent with applicable policies of the City's Comprehensive Plan; and

i. Development of the site shall meet the applicable environmental requirements of the City's Land Development Code.

Objective 3.5 The City shall coordinate with the School Board regarding supporting infrastructure for proposed new school facilities.

Policy 3.5.1 As part of the annual review and update of the Capital Improvements Element, the City shall consider infrastructure required to support proposed new school facilities within city limits.

GOAL 4

PROMOTE AND OPTIMIZE INTERGOVERNMENTAL COOPERATION FOR EFFECTIVE PLANNING OF PUBLIC SCHOOL FACILITIES.

Objective 4.1 The City shall include representatives of the School Board on the City Plan Board and the Technical Review Committee.

Policy 4.1.1 As provided in the Interlocal Agreement, the City shall include a representative appointed by the School Board on the City Plan Board to attend meetings at which the Plan Board considers Comprehensive Plan amendments and rezonings that would, if approved, increase residential density on the property that is the subject of the proposed plan amendment or rezoning.

Policy 4.1.2 As provided in the Interlocal Agreement, the School Board will appoint a representative to advise the Technical Review Committee on development and redevelopment that could have a significant impact on student enrollment or school facilities.

Objective 4.2 The City shall participate in meetings and other actions established to promote coordination and the sharing of data and information.

Policy 4.2.1 As provided in the Interlocal Agreement, a staff working group of the School Board and of the local governments within Alachua County will meet to identify issues and assemble and evaluate information regarding the coordination of land use and school facilities planning.

Policy 4.2.2 As provided in the Interlocal Agreement, one or more representatives of the School Board and of the local governments within Alachua County will meet

at least annually in joint workshop sessions. The joint workshop sessions will be opportunities for the elected officials to hear reports, discuss policy, set direction, and reach understandings concerning issues of mutual concern regarding coordination of land use and school facilities planning, including population and student growth, development trends, school needs, off-site improvements, and joint use opportunities. The School Board shall be responsible for making meeting arrangements and providing notification to the general public of the annual meeting.

Objective 4.3 The School Board will coordinate with the City and with the other local governments within Alachua County to maintain and update student enrollment and population projections.

Policy 4.3.1 The School Board will coordinate with the City and the other local governments within Alachua County to base school planning upon consistent projections of the amount, type, and distribution of population growth and student enrollment. Countywide 5-year population and student enrollment projections shall be reviewed and updated annually.

Policy 4.3.2 The School Board will use student population projections based on information produced by the demographic and education estimating conferences pursuant to Section 216.136, F.S., and the Department of Education Capital Outlay Full-Time Equivalent (COFTE). The School Board may request adjustment to the projections based on actual enrollment and development trends. In formulating such a request, the School Board will coordinate with the other local governments in Alachua County regarding development trends, enrollment projections and future population projections.

Policy 4.3.3 As provided in the Interlocal Agreement, the City shall annually provide the School Board a report on growth and development trends within its municipal boundaries for the preceding calendar year. The report is for the School Board's consideration in allocating projected student enrollment into school attendance zones.

Policy 4.3.4 No later than October 1st of each year, the School Board shall submit to the City the information pertaining to the School District's "5-Year District Facilities Work Program." The program will be consistent with the requirements of Sections 1013.31 and 1013.35, F.S., and will include projected student populations apportioned geographically, an inventory of existing school facilities, projections of facility space needs, information on relocatables, general locations of new schools for the 5, 10 and 20-year time periods, and options to reduce the need for additional student stations. The City shall review the program and provide comments to the School Board within 30 days on the consistency of the program with the City's Comprehensive Plan, including the Capital Improvements Element, and as to

whether a Comprehensive Plan amendment will be necessary for any proposed educational facility within Gainesville's city limits.

Policy 4.3.5 At least one year prior to preparation of each Educational Plant Survey, the staff working group established pursuant to Policy 4.2.1 will assist the School Board in an advisory capacity in preparation of the Survey. The Survey shall be consistent with the requirements of Section 1013.31, F.S., and include an inventory of existing educational facilities, recommendations for new and existing facilities, and the general location of each. The staff working group will evaluate and make recommendations regarding the location and need for new schools, significant expansions of existing schools, closures of existing facilities, and the consistency of such plans with the local government comprehensive plan(s).

Objective 4.4 The School Board, in coordination with the City and the other local governments in Alachua County, shall implement an effective process for identification and selection of school sites and for review of significant expansions and school closures.

Policy 4.4.1 The School Board will establish a School Planning Advisory Committee (SPAC) for the purpose of reviewing potential sites for new schools, proposals for significant school expansions, and potential closure of existing schools. Based on information gathered during the review, the SPAC will submit recommendations to the Superintendent of Schools. The SPAC will be a standing committee that will meet on an as-needed basis. In addition to appropriate representatives of the School Board staff, the SPAC will include staff representatives from each of the local governments within Alachua County, and a diverse group of community members.

Policy 4.4.2 When the need for a new school site is identified in the School District's "5-Year District Facilities Work Program," the SPAC will develop a list of potential sites. The list will be submitted to the local government(s) with jurisdiction for an informal assessment regarding consistency with this Element. Based on the information gathered during this review, and the evaluation criteria set forth in this Element, the SPAC will make a recommendation to the Superintendent of Schools on one or more sites.

Policy 4.4.3 The SPAC will make appropriate recommendations to the Superintendent on significant expansions and potential closures of schools.

Policy 4.4.4 At least 60 days prior to acquiring or leasing property that may be used for a new public educational facility within Gainesville's city limits, the School Board shall provide the City written notice of its intent. The City shall notify the School Board within 45 days of receipt of this notice as to the proposed new public education facility site's consistency with the Comprehensive Plan.

This notice does not constitute the local government's determination of consistency of any proposed construction pursuant to Section 1013.33, F.S.

GOAL 5

THE CITY SHALL MONITOR AND EVALUATE THE PUBLIC SCHOOL FACILITIES ELEMENT.

Objective 5.1 On an ongoing basis, the City shall evaluate the Comprehensive Plan with the school facilities plans of the School Board to ensure consistency.

Policy 5.1.1 The City and the School Board will coordinate during updates or amendments to the Comprehensive Plan and during updates or amendments to long-range plans for School Board facilities. The City shall consider amendments to the Comprehensive Plan, as necessary.

Policy 5.1.2 Consistent with the Interlocal Agreement, a staff working group will meet to discuss issues related to the effectiveness of implementing this Element and the Interlocal Agreement.

Policy 5.1.3 During the Evaluation and Appraisal process, City staff will review the Comprehensive Plan and make a recommendation to the City Plan Board regarding the need for plan amendments that would help to support public schools within or proximate to city limits.

City of Gainesville

Public School Facilities Element

Data and Analysis

February 6, 2008

TABLE OF CONTENTS

Chapter 1: Purpose & Overview 4
Public School Facilities Element (PSFE) Requirements 4
Overview 6
Chapter 2: Existing Community Conditions 10
Introduction 10
Population & Housing 10
Relationship of Growth and Public Schools 14
Guidelines for the Development of Schools 15
High Schools 20
Middle Schools 22
Elementary Schools 24
Special Purpose Schools 26
Charter Schools 27
Relocatables 30
Ancillary Facilities 31
Summary of School Facilities 33
Relationship to Alachua County and Municipalities 33
Enrollment & Capacity 60
Funding for Capital Improvements 61
Chapter 3: School Capacity Needs 67
School Capacity Planning Areas 67
High Schools 68
Middle Schools 76
Elementary Schools 84
Chapter 4: Definitions 95

LIST OF MAPS

Map PSFE 1: Municipalities 8
Map PSFE 2: Schools and Municipal Reserve/ Extraterritorial Area 9
Map PSFE 3: 2000 Population Distribution 11
Map PSFE 4: School Board Facilities 18
Map PSFE 5: High Schools & Attendance Zones 21
Map PSFE 6 Middle Schools & Attendance Zones 23
Map PSFE 7: Elementary Schools & Attendance Zones 25
Map PSFE 8: Special Purpose Schools 27
Map PSFE 9: Charter Schools 29
Map PSFE 10: Ancillary Facilities 32
Map PSFE 11: Composite Future Land Use Map 34
Map PSFE 12: Co-location Opportunities 58
Map PSFE 13: High Schools & Modified Concurrency Service Areas 69
Map PSFE 14: High Schools Future Conditions 5 Year Planning Period 73
Map PSFE 15: High Schools Future Conditions 10 Year Planning Period 74
Map PSFE 16: High Schools Future Conditions 20 Year Planning Period 75
Map PSFE 17: Middle School Concurrency Service Areas 78
Map PSFE 18: Middle Schools Future Conditions 5 Year Planning Period 81
Map PSFE 19: Middle Schools Future Conditions 10 Year Planning Period 82

Map PSFE 20: Middle Schools Future Conditions 20 Year Planning Period 83
Map PSFE 21: Elementary Schools & Concurrency Service Areas 87
Map PSFE 22: Elementary Schools Future Conditions 10 Year Planning Period 93
Map PSFE 23: Elementary Schools Future Conditions 20 Year Planning Period 94

LIST OF TABLES

Table PSFE 1: Alachua County Population Growth – 1950-2007 10
Table PSFE 2: Alachua County Population Characteristics by Municipality 12
Table PSFE 3: School Age & Total Population 2000- 2030 13
Table PSFE 4: Alachua County 2000 Housing Characteristics 13
Table PSFE 6: Population & Student Enrollment Projections 14
Table PSFE 5: Student Generation Multipliers 16
Table PSFE 7: Alachua School District -Florida Inventory of School Houses (FISH) Data 20
Table PSFE 8: Inventory of Alachua County Public High Schools 20
Table PSFE 9: Inventory of Alachua County Public Middle Schools 22
Table PSFE 10: Inventory of Alachua County Public Elementary Schools 24
Table PSFE 11: Inventory of Alachua County Public Special Schools & Programs 26
Table PSFE 12: Inventory of Alachua County Public Charter Schools 28
Table PSFE 13: 2007 Use of Relocatables 30
Table PSFE 14: Ancillary Facilities Inventory 31
Table PSFE 15: 2007 Summary of Alachua County Public Schools 33
Table PSFE 16: Schools as Emergency Shelters 59
Table PSFE 17: Department of Education, COFTE Public Student Enrollment, Historic & Projected 60
Table PSFE 18: Projected Capital Outlay Revenue: 2007-2008 62
Table PSFE 19: Projected Student Station Costs - 5 Yr Construction Program 63
Table PSFE 20: 20 Yr Construction Program 65
Table PSFE 21: 5 Yr District Facilities Plan – High Schools by School 70
Table PSFE 22: Allocation of Districtwide High School Capacity & Enrollment 70
Table PSFE 23: 5 Yr District Facilities Plan – High Schools by CSA 71
Table PSFE 24: Long Range District Facilities Program: High Schools 72
Table PSFE 25: 5 Yr District Facilities Plan – Middle Schools by School 77
Table PSFE 26: Allocation of Districtwide Middle School Capacity & Enrollment 77
Table PSFE 27: 5 Yr District Facilities Plan – Middle Schools by School by CSA 79
Table PSFE 28: Long Range District Facilities Program: Middle Schools 80
Table PSFE 29: 5 Yr District Facilities Plan – Elementary Schools 88
Table PSFE 30: Allocation of Districtwide Elementary School Capacity & Enrollment 90
Table PSFE 31: Long Range District Facilities Program: Elementary Schools 91

PUBLIC SCHOOL FACILITIES ELEMENT

Chapter 1: Purpose & Overview

The 2005 Florida Legislature adopted requirements that strengthen the relationship between land use planning and development, and planning for public schools and availability of school capacity. Under the statewide schedule, the Alachua County School District, Alachua County, and the cities of Alachua, Archer, Gainesville, LaCrosse, High Springs, Hawthorne, Micanopy, Newberry and Waldo must work together to adopt the necessary comprehensive plan amendments to establish school concurrency by July 1, 2008.

The School Board, the County and the municipalities are required to coordinate the adoption of the Public School Facilities Element (PSFE) and amendments to the Intergovernmental Coordination and Capital Improvements Elements to ensure all local government comprehensive plan elements within the County are consistent with each other.

The Public School Facilities Element must contain data and analysis that address the standards used by the School Board to evaluate school facilities; an inventory of existing facilities and planned future facilities; an evaluation of the school system based on these standards and determination of need; an analysis of funding; an analysis of coordination between school planning and local land use planning; and goals, objectives and policies for such coordination.

In addition, the data and analysis supports the PSFE for Alachua County required to implement school concurrency. The study evaluates the school system and its relationship to development and growth from both a countywide perspective and a finer grain look at schools within sectors and communities. The findings and conclusions support the goals, objectives and policies of the element including the establishment of levels of service standards and the delineation of concurrency service areas.

Public School Facilities Element (PSFE) Requirements

Over the past decade the Florida Legislature has progressively strengthened the ties between school planning and general land use and comprehensive planning through amendments to Chapters 163 and 1013, Florida Statutes.

The 2005 Legislature mandated that the availability of public schools be made a prerequisite for the approval of residential construction and directed a closer integration of planning for school capacity with comprehensive planning. Senate Bill 360:

- *requires that existing Interlocal Agreements between school boards and local governments be updated and expanded to comply with the legislation;*
- *requires each local government[1] to adopt a PSFE as part of its comprehensive plan;*
- *mandates school concurrency;*

[1] Some local governments may qualify for exemption under s. 163.3177(12)(a)and (b), F.S.

- *requires that local governments update their Intergovernmental Coordination Elements to coordinate public school planning;*
- *requires that procedures for comprehensive plan amendments related to Capital Improvement Element updates; and,*
- *requires the establishment of a process and uniform methodology for proportionate share mitigation.*

The law requires that local governments adopt a public school facilities element as a part of their comprehensive plans to establish a framework for the planning of public schools (Section 163.3177(12), Florida Statutes). Local governments were granted approximately three years to adopt a public school facilities element. As directed by the legislation, the Florida Department of Community Affairs has established a phased schedule for adoption of the elements with each local government adopting no later than December 1, 2008[2]. This schedule established due dates which are staggered throughout the course of the 2008 calendar year. In addition, the Legislature established enforcement mechanisms should a local government and school district fail to adopt a public school concurrency program.[3]

The data and analysis portion of the PSFE must address[4]:

- *how level-of-service (LOS) standards will be achieved and maintained;*
- *the interlocal agreement adopted pursuant to Section 163.31777, Florida Statutes, and the five-year school district facilities work program adopted pursuant to s. 1013.35;*
- *the educational plant survey prepared pursuant to Section 1013.31, Florida Statutes, and an existing educational and ancillary plant map or map series;*
- *information on existing development and development anticipated for the next five years and the long-term planning period;*
- *an analysis of problems and opportunities for existing schools and schools anticipated in the future;*
- *an analysis of opportunities to co-locate future schools with other public facilities such as parks, libraries, and community centers;*
- *an analysis of the need for supporting public facilities for existing and future schools;*
- *an analysis of opportunities to locate schools to serve as community focal points;*

[2] s. 163.3177(12)(i), F.S.
[3] s. 163.3177(12)(j & k), F.S.
[4] s. 163.3177(12)(c), F.S.

- *projected future population and associated demographics, including development patterns year by year for the upcoming five-year and long-term planning periods; and,*

- *anticipated educational and ancillary plants with land area requirements.*

The legislation prescribed the following minimum content requirements for goals, objectives, and policies[5]:

- *procedure of annual update process;*

- *procedure for school site selection;*

- *procedure for school permitting;*

- *provision of infrastructure necessary to support proposed schools; and,*

- *provision for co-location of other public facilities in proximity to public schools; provision for location of schools proximate to residential areas and to complement patterns of development; measures to ensure compatibility of school sites and surrounding land uses; and coordination with adjacent local governments and the school district on emergency preparedness issues.*

In addition, the element is to include one or more future conditions maps which generally depict the anticipated location of educational and ancillary plants anticipated over the five-year and long-term planning period.

- *depict the anticipated location of educational and ancillary plants, including the general location of improvements to existing schools or new schools anticipated over the five-year or long-term planning period; and*

of necessity, the maps will be general for the long-term planning period and more specific for the five-year period. Maps indicating general locations of future schools or school improvements may not prescribe a land use on a particular parcel of land.

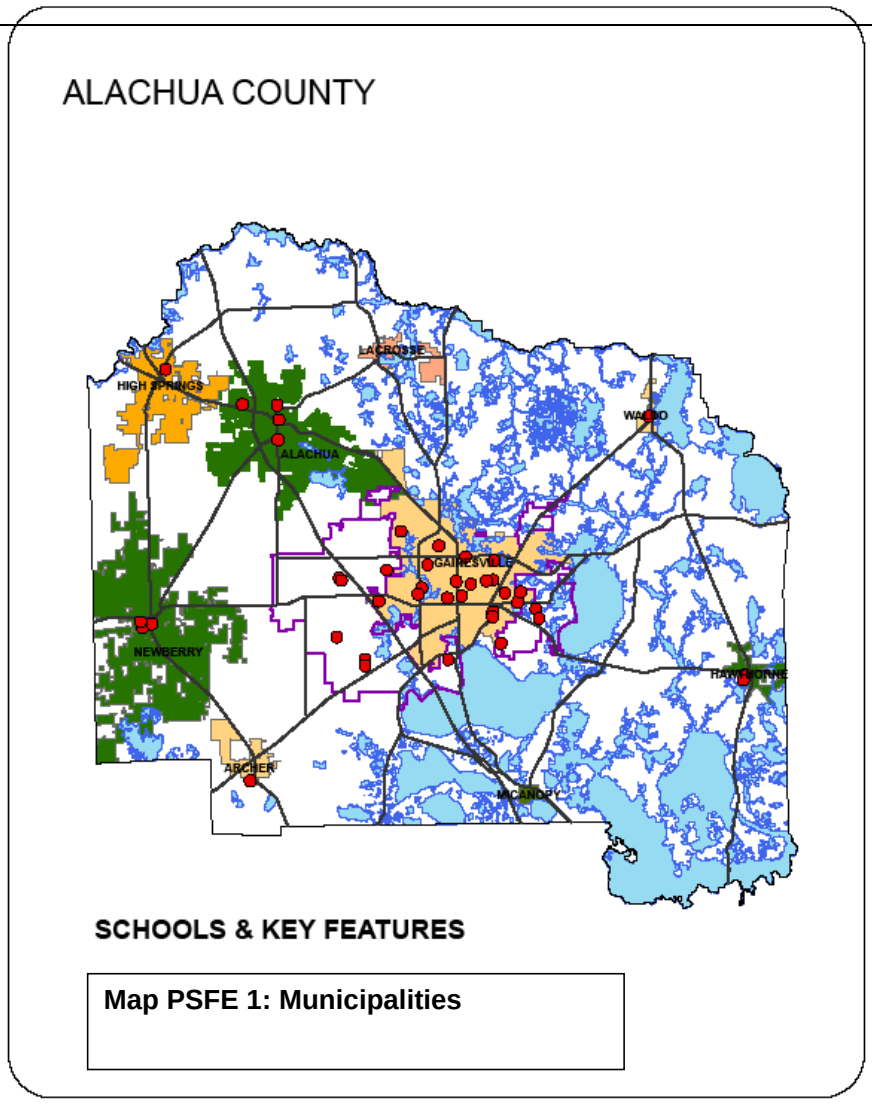
Overview

Schools can act as an anchor in the community. They are a symbol of a neighborhood's stability and attract families to the community. They transmit knowledge to new generations, advance knowledge, display the achievements of society and bring neighbors together for Parent Teacher Association meetings, school plays, and sporting events. They offer their classrooms and media centers to residents for adult education classes, and community and club meetings. They are key determinants of the quality of life and are valued symbols of community identity and achievement. The entire community benefits from schools. Moreover, the community is often evaluated on the basis of the quality of its schools. The planning process that guides decision-making on school size, location, and programs should therefore be coordinated with the process that guides all community development.

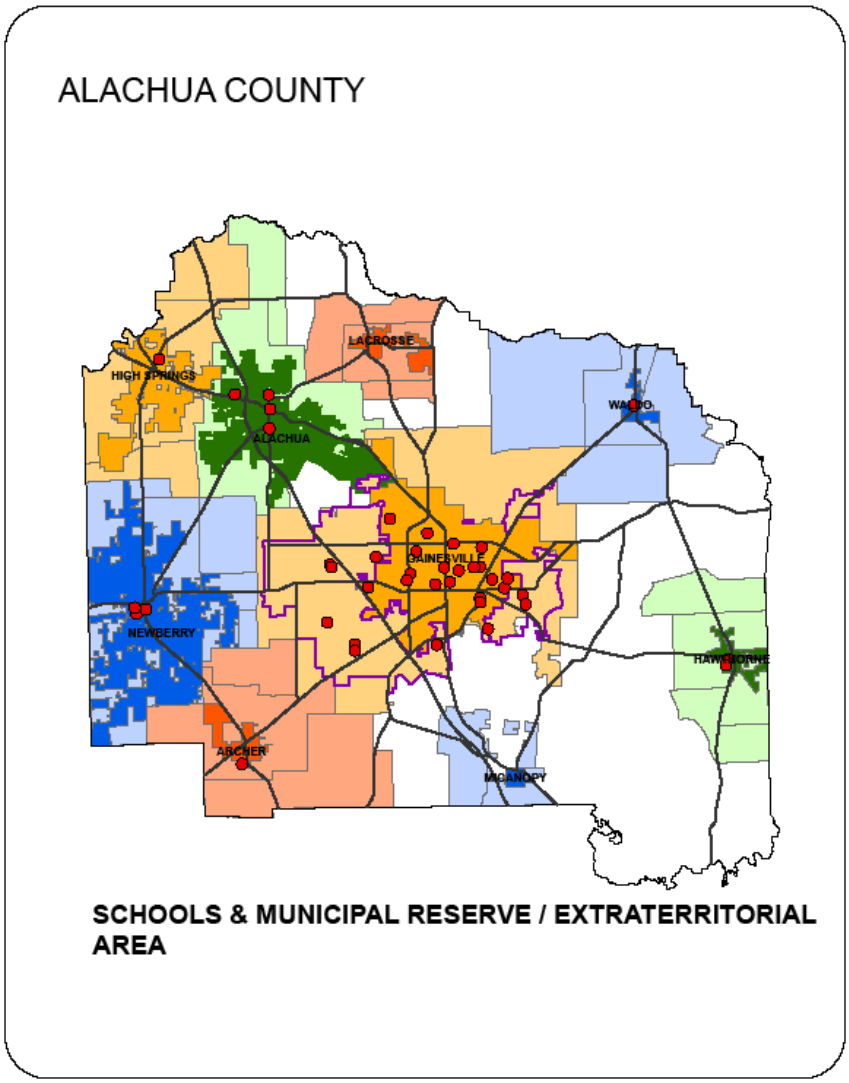
[5] s. 163.3177(12)(g), F.S.

Planning for school facilities is one of the responsibilities of the local School Board. In the past, it was often a separate process from local government planning. The proper functioning and the best distribution of schools is possible only when school planning is coordinated with the larger process of community planning for growth and change. Recognizing this fact, Alachua County governments, in cooperation and coordination with the School Board of Alachua County (School Board), are seeking to incorporate public schools in the framework of the Comprehensive Plan. Currently there is no specific regulatory mandate that all public school levels of service (LOS) standards be met prior to the issuance of a development order and permit. The 2005 legislation now requires that school concurrency be included in the concurrency management system of local government.

Coordinated school facility planning requires a partnership between the school district and local governments. Consequently, this data and analysis recognizes the role of Alachua County, the cities of Gainesville, Alachua, Archer, Hawthorne, High Springs, LaCrosse, Micanopy, Newberry and Waldo and the Alachua County School District. **Map PSFE 1** shows the location of schools and the geographic relationships of these participants. **Map PSFE 2** shows the location of schools in relation to the municipal reserve boundaries.



Map PSFE 1: Municipalities



Map PSFE 2: Schools and Municipal Reserve/ Extraterritorial Area

Chapter 2: Existing Community Conditions

Introduction

Alachua County is situated in north central Florida and encompasses a total land area of 874 square miles. The population is estimated to be 247,561 as of April 1, 2007 (refer to **Table PSFE 1**) representing a density of 283 persons per square mile. The population predominantly resides in the urbanized areas associated with the City of Gainesville.

As shown by **Map PSFE 1**, the municipalities of Alachua, Archer, Gainesville, Hawthorne, High Springs, LaCrosse, Micanopy, Newberry, Waldo are located within the County.

The primary purpose of this analysis is to (1) describe the historical and current relationship between population, housing and school enrollment and (2) provide a framework for projecting the demands of projected growth on school capacity.

Population & Housing

Population

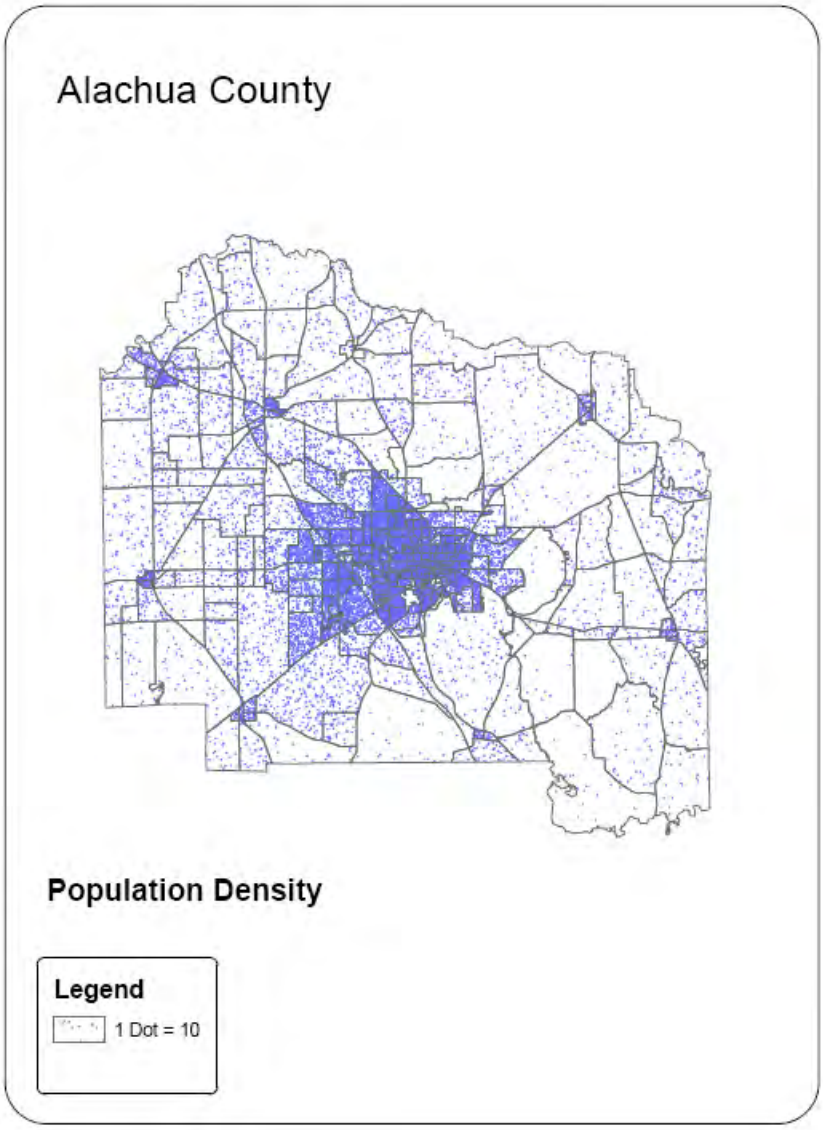
The population of Alachua County has expanded steadily and rapidly since the year 1940.

Table PSFE 1: Alachua County Population Growth – 1950-2007

Year	Alachua County Total Population	10 Yr Increase (%)	Average Annual Growth (%)	Unincorporated Alachua County	10 Yr Increase (%)	Unincorporated as % of Total
1950	57,026	74.7%	7.5%	21,753	-36%	38%
1960	74,074	29.9%	3%	26,163	20%	35%
1970	104,764	41.4%	4.4%	30,020	15%	29%
1980	151,369	44.5%	4.5%	61,885	106%	41%
1990	181,596	20.0%	2.0%	83,815	35%	46%
2000	217,955	20.0%	2.0%	104,910	25%	48%
2005*	240,764	10.5%	2.1%	100,507	-4.2%	42%
2007**	247,561	2.8%	1.4%	103,217	2.9	42%

Source: US Bureau of the Census; 2005 Estimate, Florida Estimates of Population, Bureau of Economic & Business Research, University of Florida
* 5 Yr Increase (%)
** 2 Yr Increase (%)

Map PFSE 3 illustrates the population distribution throughout Alachua County.



Map PSFE 3: 2000 Population Distribution

The county's population by municipality is shown the **Table PSFE 2**.

Table PSFE 2: Alachua County Population Characteristics by Municipality

Municipality	Population			2000 Population Characteristics		
	1990	2000	2007	Median Age	% Under 18	% Over 65
Alachua	4,529	6,098	7,854	37.1	27.8%	11.7%
Archer	1,372	1,289	1,229	33.6	31.3%	11.6%
Gainesville	84,770	95,447	122,671	26.4	17.8%	9.8%
Hawthorne	1,305	1,415	1,401	38.0	28.3%	17.2%
High Springs	3,144	3,863	4,739	39.4	25.4%	15.7%
La Crosse	122	143	195	41.8	17.5%	14.7%
Micanopy	612	653	637	43.0	19.8%	14.2%
Newberry	1,644	3,316	4,787	35.1	27.7%	11.0%
Waldo	1,017	821	831	36.9	26.1%	15.6%
Unincorporated Alachua County	83,081	104,910	103217	30.0	21.2%	4.2%
Total Alachua County	181,596	217,955	247,561	29.0	20.2%	9.6%
Florida	12,938,071	15,982,824	18,680,367	38.7	22.8%	17.6%
United States	248,709,873	281,421,906	301,621,157	35.3	25.7%	12.4%

Source: US Bureau of the Census; 2007 Estimate, Florida Estimates of Population, Bureau of Economic & Business Research, University of Florida.

With a median age of 29 years (2000), Alachua County's population is less than the Florida's median age of 38.7 years and the national median age of 35.3 years. Correspondingly, the percentage of persons under the age of 18 is 25.7% in Alachua County compared to 22.8% for the State and 25.7% nationally. This difference is attributed to the influence of the University of Florida on the demographics of Gainesville.

The communities within Alachua County exhibit different demographic characteristics that are significant for school planning, as shown in **Table PSFE 2**.

School Age Population

In 2006, Alachua County's school age population (5-17) represented 13.51% of the total population compared to 16.9% for the State. This percentage is forecasted to increase to 13.54% by 2020 and then to decline to 13.09% in 2030 due to the aging of the population and the tendency toward smaller families (refer to **Table PFSE 3**).

Table PSFE 3: School Age & Total Population 2000- 2030

Year	*School Age Population (Ages 5-17)*	*Numerical Change*	*Percent Change*	*Total Population*	*Numerical Change*	*Percent Change*	*School Age Population (% of Total)*
2000	32,777			217,955			15.04%
2006*	32,933	156	0.48%	247,561	29,606	13.58%	13.51%
2010**	34,427	1,494	4.54%	259,838	16,059	6.59%	13.25%
2015**	37,169	2,742	7.96%	277,311	17,473	6.72%	13.40%
2020**	39,502	2,333	6.28%	291,780	14,469	5.22%	13.54%
2025**	40,795	1,293	3.27%	304,745	12,965	4.44%	13.39%
2030**	41,459	664	1.63%	316,783	12,038	3.95%	13.09%

Source: Bureau of Economic & Business Research, Bulletin 148, University of Florida, June 2007
*Estimate
** Projection

Housing Characteristics

Table PSFE 4 displays the differences in ownership, occupancy, and household size between the municipalities in Alachua County.

Table PSFE 4: Alachua County 2000 Housing Characteristics

	Housing Units	Occupied Housing Units	% Occupied	Vacant Housing Units	% Vacant	% Seasonal	Average Household Size (occupied units)
Alachua, City of	2,501	2,348	93.9%	153	6.1%	0.5%	2.59
Archer	529	487	92.1%	42	7.9%	0.8%	2.65
Gainesville	40,105	37,279	93.0%	2,826	7.0%	0.4%	2.25
Hawthorne	598	537	89.8%	61	10.2%	1.0%	2.64
High Springs	1,668	1,539	92.3%	129	7.7%	0.8%	2.47
La Crosse	64	62	96.9%	2	3.1%	0.0%	2.31
Micanopy	346	302	87.3%	44	12.7%	1.7%	2.16
Newberry	1,360	1,258	92.5%	102	7.5%	0.4%	2.64
Waldo	407	347	85.3%	60	14.7%	3.4%	2.37
Unincorporated	47,535	43,350	91.20%	4,185	8.80%	0.9%	2.38
Total County	**95,113**	**87,509**	**92.0%**	**7,604**	**8.0%**	**0.7%**	**2.34**

Source: US Bureau of the Census, 2000.

Relationship of Growth and Public Schools

The population of Alachua County is projected to grow from its 2007 estimate of 247,561 to 304,700[6] by 2025 representing an increase of over 57,000 residents. This projection is shown by **Figure PSFE 1.**

As shown by **Table PSFE 6**, the 2007 public school enrollment is 26,235 or 10.6% of the population. Using the assumption that this ratio of public school students to population will continue through 2025, the public school enrollment is projected to be 32,290 by 2025 representing a growth approximately 6,000 students.

Table PSFE 6: Population & Student Enrollment Projections

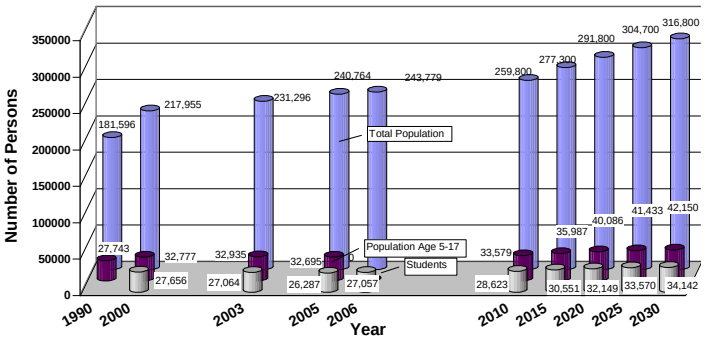
	2007	2010	2015	2020	2025	2007 -2025 Growth
Population	247,561	259,800	277,300	291,800	304,700	57,139
Public School Enrollment*						
Elementary	11,831	12,416	13,252	13,945	14,562	2,731
Middle	5,676	5,957	6,358	6,690	6,986	1,310
High	8,728	9,159	9,776	10,288	10,742	2,014
Total	26,235[7]	27,532	29,387	30,923	32,290	6,055
Public School Capacity						
Elementary	13,556					
Middle	7,842					
High	8,917					
Total	30,315[8]					
Public School Capacity Needs						
Elementary	1,725	1,140	304	-389	-1,006	
Middle	2,166	1,885	1,484	1,152	856	
High	189	-242	-859	-1,371	-1,825	
Total	4,080	2,783	928	-608	-1,975	

***** Public School Enrollment for years 2010 through 2025 is derived by applying the 2007 ratio of elementary, middle and high school student enrollment (actual) to the BEBR 2007 population estimate. This method assumes that the 2007 public school enrollment / population ratio will remain constant for the planning period.

The "permanent program capacity" provided by the Alachua County school district in 2007-08 is 30,315. By 2025, the projected student growth will generate a long-range need for approximately 1,000 additional elementary student stations and about 1,800 additional high school stations.

[6] Bureau of Economic and Business Research, University of Florida
[7] Actual enrollment, Oct 2007, School Board of Alachua County
[8] Permanent program capacity, 2007-08, School Board of Alachua County

Figure 1 - Actual and Projected Alachua County Population and SBAC Enrollment: 1990-2030



Sources: Florida Dept. of Education Final Capital Outlay FTE Forcast (7/31/06) for Actual and Projected Enrollment 2003 to 2010; SBAC Facilities Dept. for Year 2000 FTE Enrollment. US Census Bureau for County Population 1990 and 2000. Bureau of Economic and Business Research for Estimated and Projected County Population 2005 to 2030.

- Students Enrolled (or projected) in SBAC
- Population Age 5-17 per BEBR
- Total County Population per Census/BEBR

Student Generation Multipliers

The relationship between housing and the capacity of public schools is derived by the application of a "student generation multiplier". **Table PSFE 5** shows the "student generation multipliers" (SGM) for Alachua County derived from the 2000 US Census.[9] The ratios shown include public school enrollment only.

Table PSFE 5 distinguishes between the urban area of Alachua County, generally defined as Gainesville and its immediate surroundings, and the suburban portions of the County including the small municipalities and the unincorporated areas. A composite SGM is also shown. The composite SGM is used to define the population and public student enrollment

The multipliers are also segregated by the type or level of school i.e. elementary (PK-5), middle (6-8) and high (9-12) and by housing type i.e. single-family and multi-family.

[9] Public Use Micro Sample (PUMS)

Table PSFE 5: Student Generation Multipliers

PUMA1001	ELEM	MIDDLE	HIGH	TOTAL
Single Family	0.163	0.130	0.141	0.434
Multi Family	0.063	0.049	0.048	0.159
Composite	0.112	0.088	0.093	0.293
PUMA 1002	**ELEM**	**MIDDLE**	**HIGH**	**TOTAL**
Single Family	0.143	0.131	0.143	0.417
Multi Family	0.103	0.086	0.072	0.260
Composite	0.122	0.107	0.106	0.335
Composite	**ELEM**	**MIDDLE**	**HIGH**	**TOTAL**
Single Family	0.153	0.130	0.142	0.425
Multi Family	0.084	0.068	0.060	0.212
Composite	0.117	0.098	0.100	0.315

Source: 2000 US Census, Public Use Micro Sample Data

Guidelines for the Development of Schools

The public school system in Alachua County has expanded to meet the needs of growth. A profile of this system is provided in this section.

The Educational Facilities Plant Survey, a school district's official list of approved projects, is required by the State at least every five years. Alachua County School's latest survey was completed in 2007.

According to the State Requirements for Educational Facilities (SREF), a school site should be adequate to address existing needs based on school programs and enrollment and to allow economical future expansion and development. The choice of sites for new schools is of critical importance in the overall development of a school facilities program. New sites should be located to minimize transportation and infrastructure costs and should be sized so that they provide adequate space for school buildings, stormwater retention, off street parking, queuing for parent and bus loading and unloading, and playground areas.

SREF presents minimum space requirements based on program needs, pursuant to Rule A-2.032, Florida Administrative Code, Size of Space, and Occupant Design Capacity Criteria. The minimum space requirements include student capacity, student stations, gross square footage of buildings, and facilities utilization. Student capacity is the maximum number of students a school facility is designed to accommodate. A student station is the area necessary for a student to engage in learning activities, and varies with particular types of activities. It is a measure of the use of space in schools.

According to State criteria, student capacity in elementary schools can be equated to the number of student stations, since elementary school students are assigned to one classroom throughout the day. In secondary schools (middle and high), however, students move from

classroom to classroom depending on their subjects. Scheduling then becomes a factor in calculating capacity as well as the number of students and student stations. Therefore, utilization factors of 90% for middle schools and 95% for high schools have been established in determining capacity.

According to the Educational Facilities Survey, the optimum size of elementary schools is 600-800 students. The School Board has indicated that the operation and administration of larger schools is more economically feasible than smaller schools, so long as the educational standards are maintained. It is educationally and economically desirable for an elementary school to be large enough to justify a full time principal, a librarian, and instructional and clerical services. The optimum size for middle schools is 1,000-1,200 students, and for high schools it is 1,800-2,000 students.

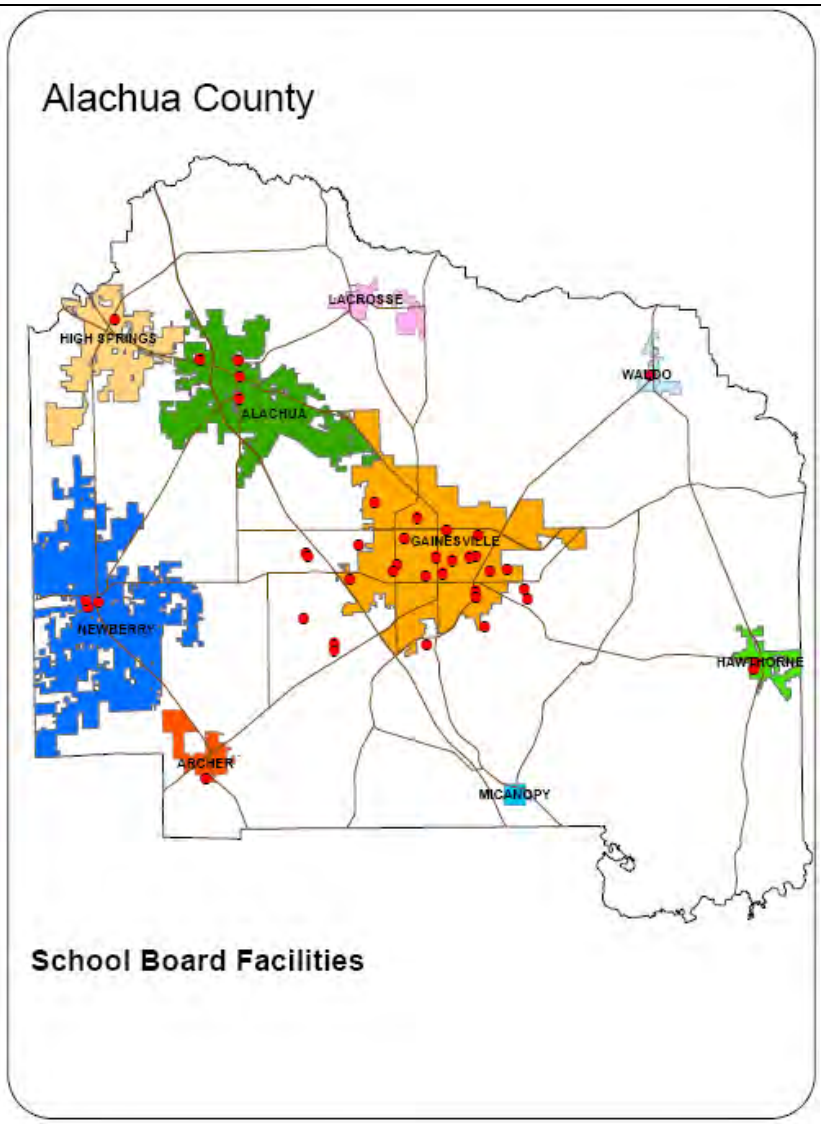
Alachua County School District reports capacity to the Department of Education using the standards of the Florida Inventory of School Houses (FISH). FISH capacity is reported in a variety of ways including: permanent satisfactory student stations, satisfactory student stations assigned to relocatables (portables) and FISH capacity from permanent facilities and from portables. Alachua County uses FISH capacity for reporting purposes to the Department of Education.

For the purposes of implementing school concurrency the Alachua County School Board has directed District staff to modify FISH capacity based on program use as an alternative method for measuring the capacity of some schools within the District. This capacity measure is a more exact means of reflecting the actual programs and capacity of its schools, taking into account special needs students and special programs that may or may not be counted as capacity. In some instances, specialized programs may be recognized as legitimate classroom uses and therefore may add capacity to FISH. In other instances, program capacity may reduce FISH capacity. If these factors are not considered when discussing capacity, the result may be a mistaken impression that classrooms are being under- or over-utilized.

Historic Overview

The growth of the public school system is reflected in **Table PFSE 7**. As noted, 11% of the physical plant was constructed in the last 10 years with 21% constructed during the last 20 years. Only 18% of this physical plant was in place prior to 1955 (50 years).

In Alachua County, elementary schools include pre-kindergarten through fifth grade (PK-5), while middle schools include grades 6-8, and high schools, grades 9-12. As of 2007, Alachua County had twenty-four elementary schools, seven middle schools, seven high schools, three special education schools, and thirteen charter schools. **Map PSFE 4** presents the location of existing School Board facilities.



Map PSFE 4: School Board Facilities

Current State of Public Schools

The Alachua School District currently reports the following profile for the 2007-08 school year:

Elementary	24 schools	11,750 students
Middle	9	5,573
High	7	8,488
Special	3	390
Charter Schools	13[10]	1,274
TOTAL	**56**	**27,475**

As of June 30, 2007, Florida Department of Education records indicate that the total FISH capacity of the public school system is 33,125[11]. Approximately 93% of this capacity is housed in permanent structures with the remaining 7% provided by relocatables.

The District maintains approximately 5 million sq ft of school facilities with 1.6 million sq ft of classroom space. (Refer to **Table PSFE 7**).

The analysis of school capacity and its impact on adopted LOS standards presented in the PSFE is based on **"permanent program capacity**." The LOS standard for schools is expressed as a percentage of student enrollment to school capacity based on its program capacity.

Whereas the Department of Education's FISH capacity is determined by formulas applied to each school's design, program capacity is a District-determined measure based upon the actual use of the school. For program capacity, the major capacity factors are constitutional class size limits, student educational needs, and staff scheduling. District staff analyzed the capacity of each school to determine its program capacity. For elementary, middle and high schools only the capacity of permanent facilities was considered. Finally, the capacity of schools was adjusted based on the planned addition of permanent and relocatable spaces over the five period corresponding to the concurrency management program.

[10] Charter schools are not maintained by the School Board of Alachua County
[11] "FISH Capacity" is defined as the total design capacity of a school including relocatables

Table PSFE 7: Alachua School District -Florida Inventory of School Houses (FISH) Data	
PHYSICAL PLANT	
High Schools	**7**
Middle Schools	**7**
Elementary Schools	**24**
Special Schools	**3**
Relocatable Buildings	**266**
Permanent Stations	**32,109**
Relocatable Stations	**2,312**
Total Stations	**34,421**
FISH CAPACITY	**33,125**
Permanent Classrooms	**1,534**
Relocatable Classrooms	**108**
Total Classrooms	**1,642**
TOTAL NET SQ FT	**5,003,560**
Permanent Net Sq Ft	**4,819,275**
Relocatable Net Sq Ft	**184,285**
Instructional Net Sq Ft	**1,561,597**
% Sq Ft 1 – 10 Years Old	***11%***
% Sq Ft 11 – 20 Years Old	***21%***
% Sq Ft 21 – 30 Years Old	***9%***
% Sq Ft 31 – 40 Years Old	***26%***
% Sq Ft 41 – 50 Years Old	***14%***
% Sq Ft Over 50 Years Old	***18%***

Source: Florida Department of Education, Office of Educational Facilities, June 30, 2007

HIGH SCHOOLS

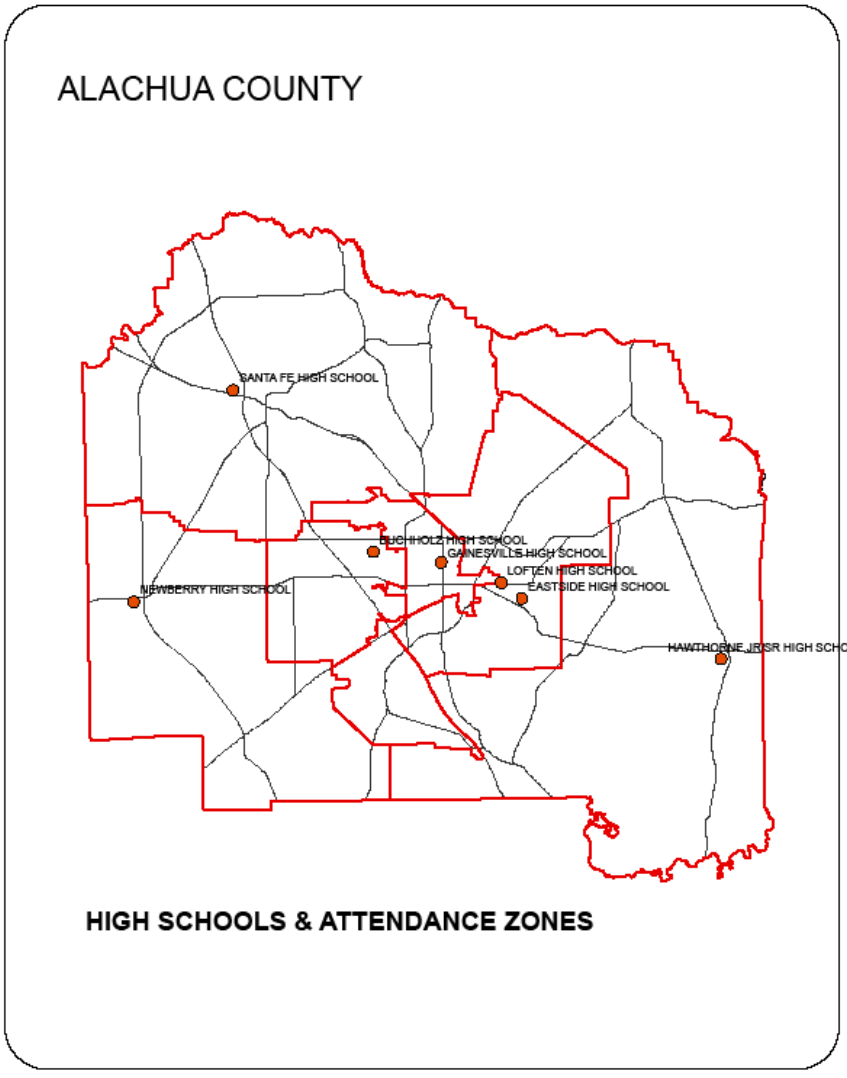
Seven public high schools are provided by the Alachua County School District. High school capacity is also provided by three special schools. A profile of these schools is shown by **Table PSFE 8**. Their locations and attendance zones are illustrated by **Map PSFE 5**.

Table PSFE 8: Inventory of Alachua County Public High Schools

School	Permanent Program Capacity 2007-08	Actual COFTE Enrollment 2007-08	Actual Utilization 2007-08
BUCHHOLZ	2,054	2,376	115.7%
EASTSIDE	2,037	1,839	90.3%
GAINESVILLE	2,029	2,023	99.7%
HAWTHORNE	464	261	56.3%
LOFTEN	420	178	42.4%
NEWBERRY	612	581	94.9%
SANTA FE	1,001	1,230	122.9%
TOTAL HIGH SCHOOLS	**8,617**	**8,488**	**98.5%**
HIGH CAPACITY / ENROLLMENT IN SPECIAL SCHOOLS			
AQ JONES	44	37	84.1%
HORIZON	150	118	78.7%
ANCHOR	106	85	80.2%
ALL HIGH CAPACITY	**8,917**	**8,728**	**97.9%**

Source: Alachua County School District, 2007-08

The permanent program capacity of the Alachua County high schools is 8,917. The 2007-08 reported actual enrollment within the seven high schools is 8,728 students. On a district-wide basis, Alachua County's high schools are operating at 97.9% of their permanent program capacity. With the exception of Santa Fe High and Buchholz High, student enrollment at high schools is below the permanent program capacity.



Map PSFE 5: High Schools & Attendance Zones

MIDDLE SCHOOLS

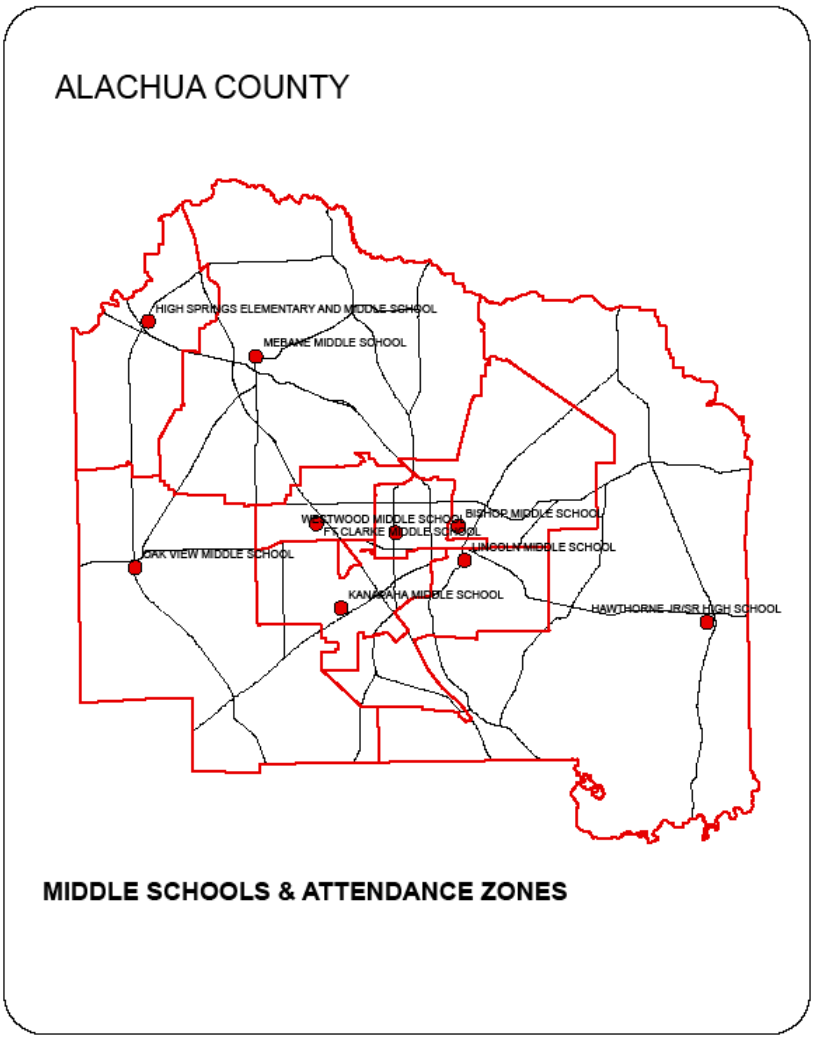
Seven public middle schools and one community school are provided by the Alachua County School District. A profile of these schools is shown by **Table PSFE 9**. Their locations and attendance zones are illustrated by **Map PSFE 6**.

Table PSFE 9: Inventory of Alachua County Public Middle Schools

School	Permanent Program Capacity 2007-08	Actual COFTE Enrollment 2007-08	Actual Utilization 2007-08
BISHOP	1,108	785	70.8%
FORT CLARKE	868	862	99.3%
HAWTHORNE	244	183	75.0%
HIGH SPRINGS	436	349	80.0%
KANAPAHA	1,079	879	81.5%
LINCOLN	1,053	734	69.7%
MEBANE	778	463	59.5%
OAK VIEW	579	394	68.0%
WESTWOOD	1,122	924	82.4%
TOTAL MIDDLE SCHOOLS	**7,465**	**5,573**	**74.7%**
MIDDLE CAPACITY / ENROLLMENT IN SPECIAL SCHOOLS			
LOFTEN (8)	108	25	23.1%
AQ JONES	33	17	51.5%
HORIZON	142	47	33.1%
LANIER	94	14	14.9%
ALL MIDDLE CAPACITY	**7,644**	**5,676**	**74.3%**

Source: Alachua County School District, 2007-08

The 2007-08 reported actual enrollment within the seven middle schools and four special schools is 5,676 students. The permanent program capacity for middle schools is 7,644. On a district-wide basis, Alachua County's middle schools are operating at 74.3% of their permanent program capacity. All middle schools in Alachua County are currently operating below the 100% utilization rate.



Map PSFE 6 Middle Schools & Attendance Zones

ELEMENTARY SCHOOLS

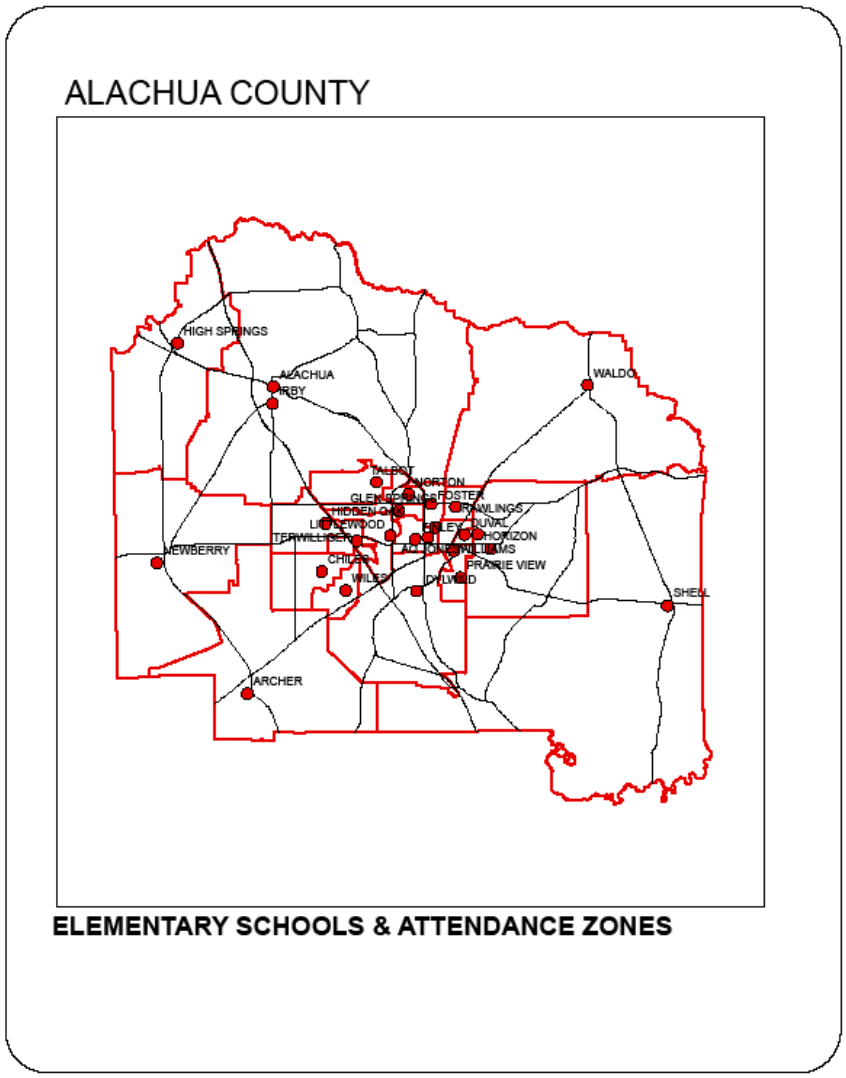
Twenty four public elementary are provided by the Alachua County School District. A profile of these schools is shown by **Table PSFE 10**. Their locations and attendance zones are illustrated by **Map PSFE 7**.

Table PSFE 10: Inventory of Alachua County Public Elementary Schools

School	Permanent Program Capacity 2007-08	Actual COFTE Enrollment 2007-08	Actual Utilization 2007-08
ALACHUA	525	462	88.0%
ARCHER	429	321	74.8%
CHILES	761	799	105.0%
DUVAL	492	468	95.1%
FINLEY	489	420	85.9%
FOSTER	495	479	96.8%
GLEN SPRINGS	475	464	97.7%
HIDDEN OAK	743	819	110.2%
HIGH SPRINGS	544	608	111.8%
IDYLWILD	615	576	93.7%
IRBY	595	477	80.2%
LAKE FOREST	466	368	79.0%
LITTLEWOOD	616	615	99.8%
METCALFE	509	295	58.0%
NEWBERRY	507	594	117.2%
NORTON	687	654	95.2%
PRAIRIE VIEW	575	199	34.6%
RAWLINGS	518	344	66.4%
SHELL	406	194	47.8%
TALBOT	721	700	97.1%
TERWILLIGER	615	507	82.4%
WALDO	268	211	78.7%
WILES	724	677	93.5%
WILLIAMS	535	499	93.3%
TOTAL ELEMENTARY SCHOOLS	**13,310**	11,750	88.3%
ELEMENTARY CAPACITY & ENROLLMENT IN SPECIAL SCHOOLS			
AQ JONES	179	30	16.8%
HORIZON	67	51	76.1%
ANCHOR	0	0	0.0%
ALL ELEMENTARY CAPACITY	**13,556**	**11,831**	**87.3%**

Source: Alachua County School District and Florida Department of Education, 2007-08

The 2007-08 reported enrollment within elementary schools is 11,831. The permanent program capacity for elementary schools is 13,556. On a district-wide basis, Alachua County's elementary schools are operating at 87.3% of their permanent program capacity.



Map PSFE 7: Elementary Schools & Attendance Zones

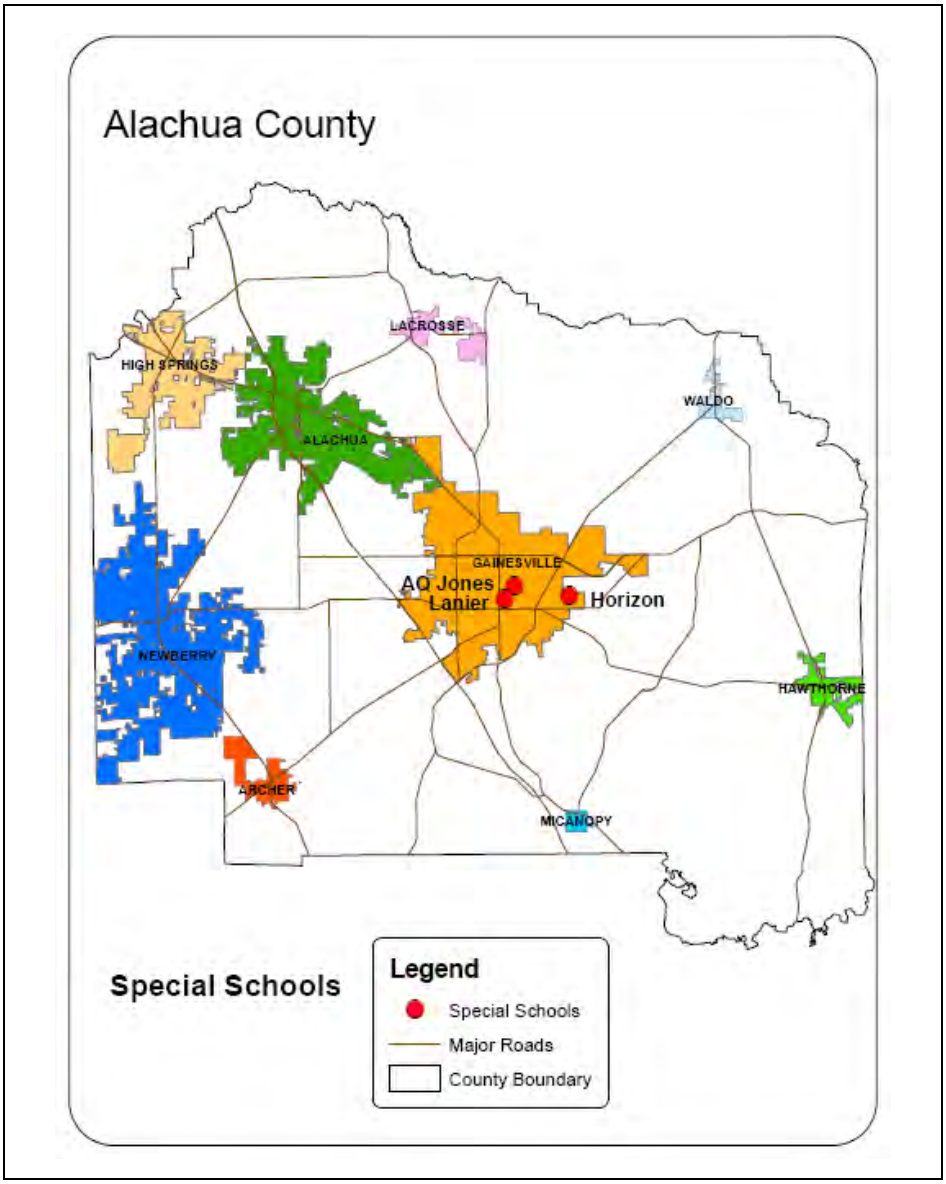
SPECIAL PURPOSE SCHOOLS

Alachua County School District operates three special schools and programs providing a variety of educational services. These schools and programs are as listed in **Table PSFE 11**. Special schools and programs are available to students on a district-wide basis. Their locations are illustrated by **Map PSFE 8**.

Table PSFE 11: Inventory of Alachua County Public Special Schools & Programs

	Actual Permanent Program Capacity	Actual COFTE Enrollment	Actual Utilization
SCHOOL	**2007-08**	**2007-08**	**2007-08**
AQ Jones	144	100	69.4%
Horizon	387	122	31.5%
Sidney Lanier/ Anchor	409	168	41.1%
Total Special Schools	940	390	41.5%

Source: Alachua County School District and Florida Department of Education, 2007-08



Map PSFE 8: Special Purpose Schools

CHARTER SCHOOLS

The Alachua County School District charters 13 schools to be operated by private organizations. Although charter schools are public schools, the enrollment within these schools is excluded from the Capital Outlay Full Time Equivalent (COFTE) counts and projections provided by the Florida Department of Education (DOE). Charter school facilities are not required to meet the building standards of public schools nor are their curriculum dictated by the District. The capacities of charter schools are self reported. Additionally, there are no uniform standards for reporting charter school capacity. Their locations are illustrated by **Map PSFE 9**.

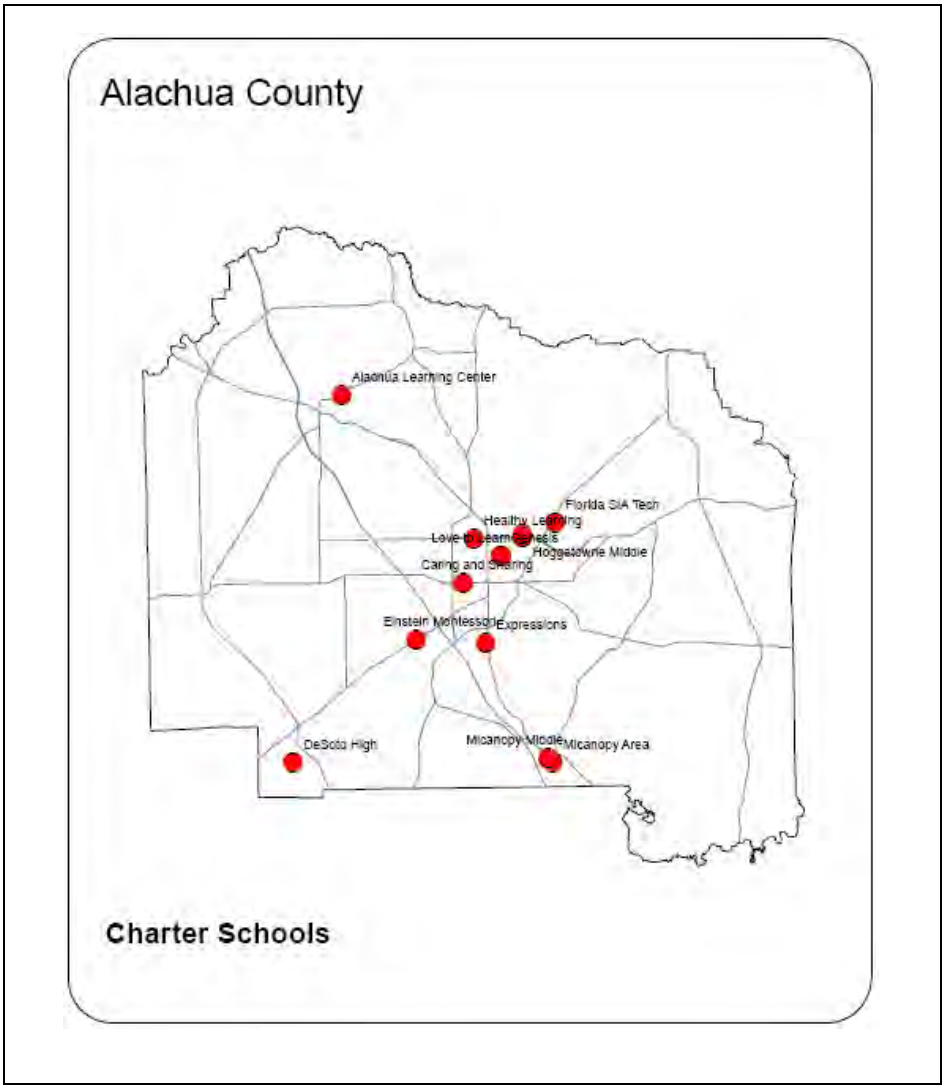
Table PSFE 12 provides an inventory of charter schools within Alachua County.

Table PSFE 12: Inventory of Alachua County Public Charter Schools

SCHOOL	Capacity - Student Stations[12] 2007-08	Actual COFTE Enrollment 2007-08	Actual Utilization 2007-08
Alachua Learning Center Inc.	144	144	100%
Caring and Sharing Learning School, Inc.	130	110	85%
DeSoto High School, Inc.	72	42	58%
Einstein Montessori School, Inc.	126	99	79%
Expressions Learning Arts Academy, Inc.	108	83	77%
Florida SIA Tech at Gainesville Job Core Center	57	200	351%
Genesis Preparatory School	80	72	90%
Healthy Learning Academy, Inc.	54	29	54%
Hoggetowne Middle School	144	135	94%
Love to Learn Educational Center, Inc.	80	52	65%
Micanopy Area Cooperative School, Inc.	126	117	93%
Micanopy Middle School, Inc.	72	71	99%
One Room School House Project, Inc.	120	120	100%
Total Charter Schools	1,313	1,274	97%

Source: Alachua County School District and Florida Department of Education, 2007-08

[12] The capacities of charter schools are self-reporting. There are no uniform standards for reporting charter school capacity.



Map PSFE 9: Charter Schools

RELOCATABLES

The District addresses capacity deficiencies and other program needs at individual schools by the use of relocatables or portables. As shown by **Table PSFE 13**, the District uses a total of 234 relocatables providing 2,147 student stations.

Table PSFE 13: 2007 Use of Relocatables

School Type	Number of Relocatables	Student Stations
High Schools	74	1,108
Middle Schools	37	426
Elementary Schools	107	498
Specials Schools	16	115
District Totals	**234**	**2,147**

Source: Alachua County School District, 2007-08

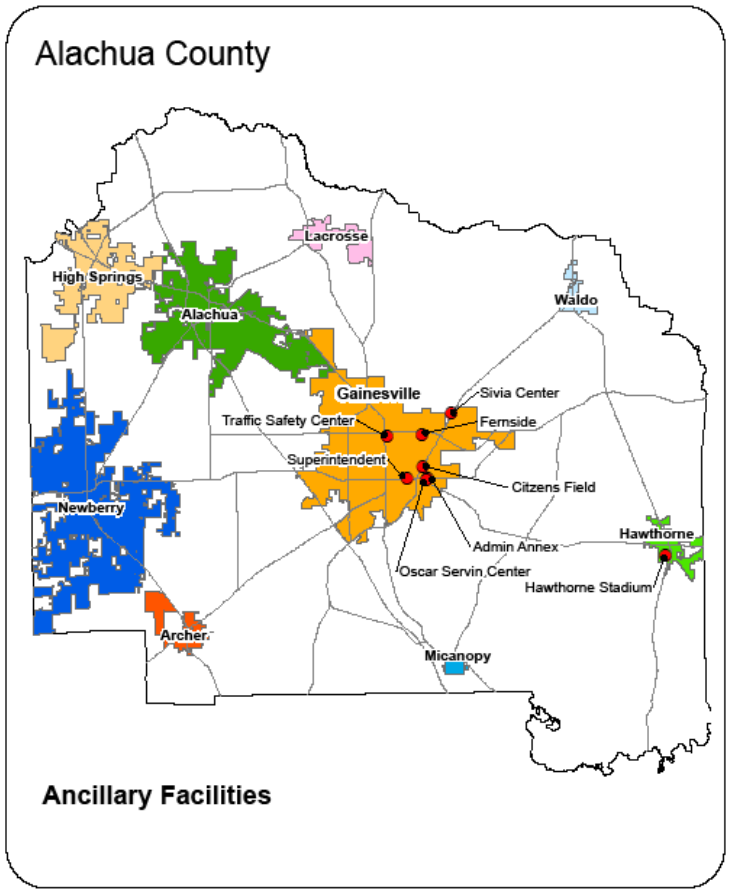
ANCILLARY FACILITIES

Ancillary facilities provide general support for the operation of the District not related to individual schools. An inventory of these facilities is provided by **Table PSFE 14**. Their locations are illustrated by **Map PSFE 10**.

Table PSFE 14: Ancillary Facilities Inventory

Facility	Site Size (acres)	Building Size (sq ft)
Traffic Safety Center	4	5,986
Administrative Annex	12	97,763
Alachua Superintendent	7	54,477
Camp Crystal	120	24,243
Citizens Field	10	11,026
Oscar Servin Center	10	3,383
Fearnside Family Services	15	20,677
Hawthorne Stadium	8	3,137
Sivia Center	18	75,122
Total Inventory	**204**	**295,814**

Source: Alachua County School District, 2007-08.



Map PSFE 10: Ancillary Facilities

SUMMARY OF SCHOOL FACILITIES

Table PSFE 15 provides a summary of the capacity, enrollment and level of service district-wide for the high, middle, elementary and special purpose schools operated by the district. As noted, elementary, middle and high schools are generally operating at enrollment levels less than 100% of their permanent program capacity.

Table PSFE 15: 2007 Summary of Alachua County Public Schools

	Permanent Program Capacity	Actual COFTE Enrollment	Actual Utilization
School Type	**2007-08**	**2007-08**	**2007-08**
HIGH TOTAL	8,617	8,488	98.5%
MIDDLE TOTAL	7,465	5,573	74.7%
ELEMENTARY TOTAL	13,310	11,750	88.3%
SPECIAL TOTAL	940	390	41.5%
CHARTER TOTAL	1,313	1,274	97.0%
ALL SCHOOLS	**31,645**	**27,475**	**86.8%**

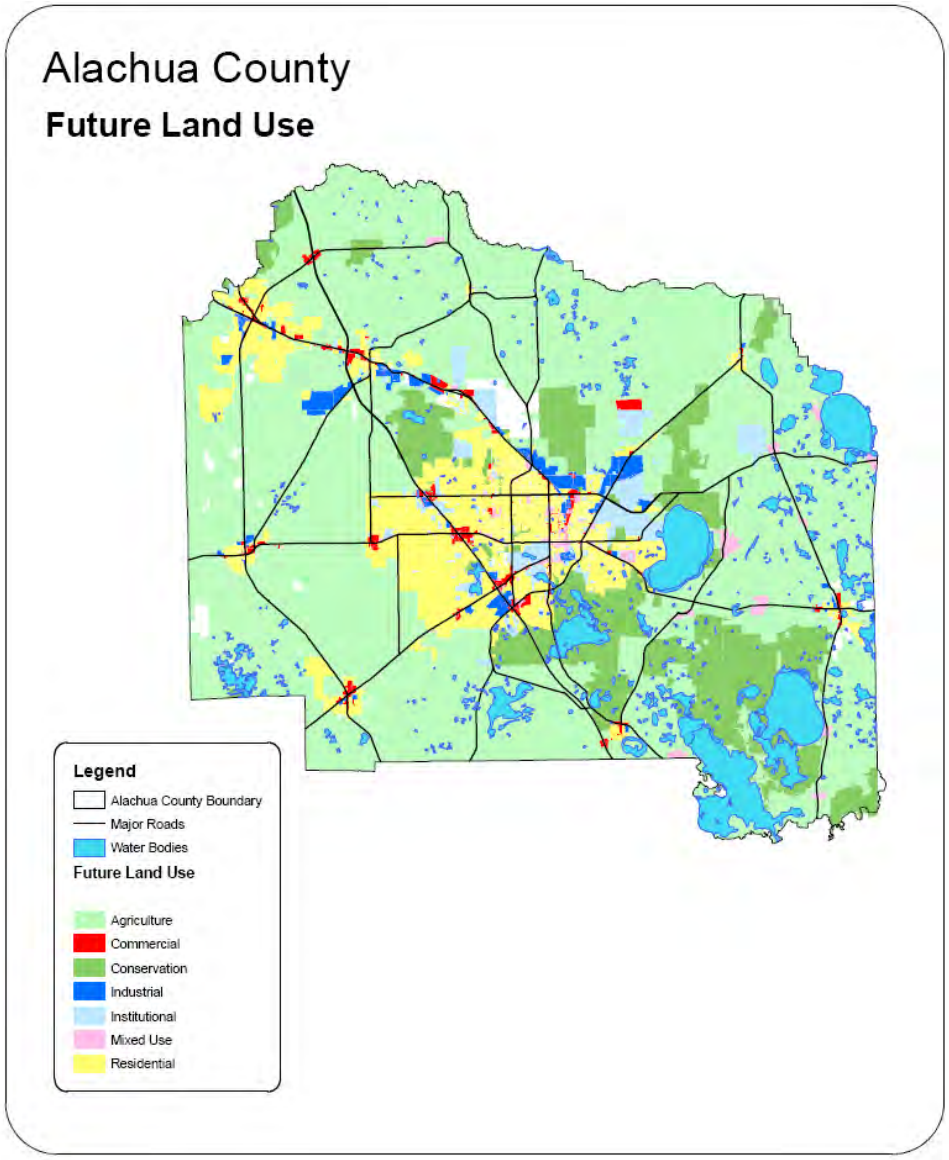
Source: Alachua County School District , 2007-08

RELATIONSHIP TO ALACHUA COUNTY AND MUNICIPALITIES

Future Land Use Element / Future Land Use Map

The municipalities of Alachua, Archer, Gainesville, Hawthorne, High Springs, LaCrosse, Micanopy, Newberry, Waldo, and Alachua County each maintain a comprehensive plan and implement land development regulations consistent with Florida statutes and rules. Each of the municipalities has incorporated school siting and coordination policies in their comprehensive plans. Alachua County has incorporated public schools in the framework of the Comprehensive Plan by including schools in the institutional policies and Future Land Use Element. This section provides a summary of the current status of these programs as they relate to school facilities planning and coordination.

Map PSFE 11 shows a composite Future Land Use Map. The categories are generalized and the color code reconciled to reflect general land use types and densities.



Map PSFE 11: Composite Future Land Use Map

Summary of Objectives and Policies related to Alachua County Public Schools

Alachua County Objectives and Policies	
Future Land Use Element	
Objective 1.1	Encourage development of residential land in a manner which promotes social and economic diversity, provides for phased and orderly growth consistent with available public facilities, and provides for access to existing or planned public services such as schools, parks, and cultural facilities.
Policy 1.5.1	New residential development shall meet all of the requirements for adequate facilities based on the level of service standards adopted in this Plan for roads, potable water, sanitary sewer, solid waste, stormwater, recreation and open space facilities, and mass transit and the concurrency provisions of this Plan.
Policy 1.5.2	In addition to the facilities for which level of service standards are adopted as part of the concurrency management system of this Plan, other facilities that should be adequate to serve new urban residential development include: d. primary and secondary schools.
Policy 5.1.2	The following uses are considered institutional and governmental uses in Alachua County: a. Public and Private Educational Facilities (meeting State of Florida compulsory education requirements), Day Care Centers, and Nursery Schools.
Objective 5.3	Educational Facilities
Policy 5.3.1	The following areas shall be avoided when locating future educational facilities in Alachua County: Noise Attenuation Area or Noise Sensitive District, and other airport impact areas as prohibited by Chapter 333, Florida Statutes. Environmentally sensitive areas as determined in accordance with the conservation policies of Alachua County (see the Conservation and Open Space Element. Areas designated for Rural/Agriculture land use. Existing or designated industrial districts (except for vocational schools). Any area where the nature of existing or proposed adjacent land uses would endanger the safety of students or decrease the effective

Comment [GB1]: Consistency of Headings as per Laura Dedenbach

	provision of education.
Policy 5.3.2	Elementary and middle schools are encouraged to locate: a. within existing or proposed residential areas or village centers, and b. near existing or designated public facilities such as parks, recreational areas, libraries, and community centers to facilitate the joint use of these areas.
Policy 5.3.3	To ensure the safety of children, elementary schools shall be located on paved roads. Direct access should be available from local or collector streets, or from arterials with an interior road to the school.
Policy 5.3.4	To ensure accessibility, middle and senior high schools shall be located near arterial streets.
Policy 5.3.5	To ensure safety and accessibility, all schools shall be linked with surrounding residential areas by bikeways and sidewalks.
Policy 5.3.6	Alachua County shall co-locate public facilities such as parks, recreational areas, libraries, and community centers with schools to the extent possible.
Policy 5.3.7	a. Public educational facilities shall be allowable uses in the following land use categories designated on the Future Land Use Map: 1. Urban Residential: Low density, Medium density, Medium-high density, and High density ranges. 2. Institutional, within the urban cluster. b. Public educational facilities may also be allowed as conditional uses in activity centers, institutional areas designated outside of the urban cluster, and other land use categories. c. Land proposed for donation for school sites shall comply with Future Land Use Element Policy 7.1.10 . . . f. Land development regulations for public and private educational facilities shall include reasonable development standards and conditions, and shall provide for consideration of the site plan's adequacy as it relates to environmental concerns, health, safety, and general welfare, promotion of safe pedestrian and bicycle access with interconnections to related uses, and effects on adjacent property.
Policy 5.3.8	Existing schools shall be considered consistent with the Comprehensive Plan. If the School Board of Alachua County submits an application to expand an existing school site, the County may impose reasonable development standards and conditions on the expansion only, and in a manner consistent with s. 235.34(1), Florida Statutes. Standards and conditions may not be imposed which conflict with those established in chapter 235, F.S., or the State Uniform Building Code, unless mutually agreed. In

	accordance with chapter 235, F.S., site plan review or approval shall not be required for: a. The placement of temporary or portable classroom facilities; or b. Proposed renovation or construction on existing school sites, with the exception of construction that changes the primary use of a facility, includes stadiums, or results in a greater than 5 percent increase in student capacity, or as mutually agreed.
Policy 7.1.10	Land proposed to be donated for school sites must be approved by the School Board of Alachua County. The following minimum size standards have been recommended by the School Board: Elementary School - 15 acres, Middle School - 30 acres, High School - 65 acres.
Policy 7.1.11	All new development shall meet level of service requirements for roadways, potable water and sanitary sewer, stormwater, solid waste, mass transit, and improved recreation in accordance with LOS standards adopted in the elements addressing these facilities.
Policy 7.1.12	The concurrency management provisions of the land development regulations shall specify the period for which certification of level of service compliance shall be valid.
Recreation and Open Space Element	
Objective 1.2	The County shall utilize recreation sites and funding mechanisms provided by the County, municipalities, State and Federal Governments, School Board of Alachua County, volunteer organizations and private groups to expand the recreational opportunities of Alachua County citizens.
Policy 1.2.3	The County shall pursue agreements or contracts with the School Board of Alachua County to jointly provide neighborhood recreation facilities at or adjacent to school grounds which would promote the most efficient use of public lands to meet recreation needs. Such agreements will include provisions for capital improvements, operations and maintenance and liability
Policy 1.2.4	The County shall provide assistance to the School Board, through the School Site Selection Committee, on the location, phasing, and design of future school sites to enhance the potential of schools as recreation sites. Per Policy 5.3.6 of the Future Land Use Element, Alachua County shall seek to collocate public facilities, including parks, with schools to the greatest extent possible.

Intergovernmental Coordination Element	
Policy 1.4	The School Board of Alachua County shall locate sites for new public schools consistent with the criteria in the Future Land Use Element for siting new public school facilities. In order to facilitate coordination between the School Board and the County: a) Alachua County shall continue to participate at a staff level in the School Acquisition Committee or other such committees of the Alachua County School Board to ensure coordination of their comprehensive development plans with the Alachua County Comprehensive Plan. Determinations of the consistency of new school sites proposed by the School Board of Alachua County as required by S. 235.193, F.S., shall be made in accordance with procedures identified in an inter-local agreement between the School Board and Alachua County. b) Alachua County shall coordinate with the School Board of Alachua County through the Recreation and Open Space Advisory Committee and other committees to explore the expanded use of public school facilities for recreation and to develop and implement a standard use agreement. c) Alachua County staff shall coordinate with the School Board staff on methodologies for population projections, from which public school enrollment projections are made. Alachua County staff shall also coordinate with School Board staff on the geographic distribution of enrollment projections as part of the School Board's annual Enrollment Projections & Capacity Analysis Report. d) Alachua County shall solicit specific comments from the School Board on public schools that could be attended by children in proposed new residential developments, including the current and projected capacity and enrollment of such schools. This information shall be included in staff reports on items before the Local Planning Agency and Development Review Committee. e) The County Commission and the School Board shall meet periodically to address issues of mutual concern including consideration of impact fees for schools.
Policy 2.3	Alachua County shall continue to notify and consult with the following entities when there is any proposed development that could have an impact on that entity before action is taken on the proposed development. Comments by these entities will be incorporated into the appropriate development reports. . .School Board of Alachua County. . .
Objective 3	Coordinate planning activities mandated by the various elements of the comprehensive plan with other local governments, school boards,

	other units of local government providing services but not having regulatory authority over the use of land, the region and the state.
Objective 6	- Coordinate with relevant state or regional agencies, local governments, or other entities with operational and maintenance responsibility for such facilities in establishing levels of service standards and guidelines.
Capital Improvements Element	
Policy 1.1.2	Alachua County shall coordinate the timing and location of capital improvement projects with improvement projects of the municipalities in Alachua County, the School Board of Alachua County, the Alachua County Library District, and surrounding counties. This shall be implemented as follows: As part of the annual update of the Capital Improvements Program (CIP), and Capital Budget, capital improvement plans of local agencies relevant to the facilities provided in Alachua County's CIE and CIP shall be identified and analyzed. This analysis may be in the form of maps identifying existing facilities, planned improvements for the upcoming fiscal year, and five-year plans. In turn, Alachua County shall provide information concerning the timing, location, and design of proposed capital improvements by the County to these entities and shall maintain a data base on facilities affecting or affected by facilities provided by the County.
Objective 1.2	Alachua County shall define types of public facilities and establish the standards or guidelines for level of service (LOS) by facility type to be used in developing and updating the five year capital improvement program to implement this element.
Objective 1.3	Maintenance of adopted LOS standards to meet existing and future facility needs by coordinating land use decisions with a schedule of capital improvements.
Objective 1.6	Programming and funding of capital projects consistent with the Goals, Objectives, and Policies of the Comprehensive Plan and Future Land Use Map, to maintain adopted LOS standards, and/or meet other public facility needs not dictated by LOS standards.
City of Alachua Objectives and Polices	
Future Land Use Element	
Objective 1.1	The City of Alachua shall designate an Agriculture land use category in order to maintain agriculture operations within the city limits as well as preserve the rural character and small-town charm of Alachua
Policy 1.1.b	Supporting community services, such as schools, houses of worship, parks and community centers.

Policy 1.2.a	Moderate density residential (0 to 4 dwelling units per acre):The moderate density residential land use category allows residential development at a maximum density of 4 dwelling units per acre. The following uses are allowed in the moderate density residential land use category: . . . 8. Supporting community services, such as schools, houses of worship, parks, and community centers. . . 10. Supporting community services, such as schools, houses of Worship, parks, and community centers
Policy 1.2.c	High density residential (8 to 15 dwelling units per acre): The high density residential land use category allows residential development at a density of 8 dwelling units per acre to 15 dwelling units per acre, as well as certain complementary uses, such as a limited range of neighborhood-scale retail and services. The following uses are allowed within the high density residential land use category: . . . 10. Supporting community services, such as schools, houses of worship, parks, and community centers.
Policy 1.3.a	Community Commercial: The Community Commercial land use category is established to provide neighborhood and community scale goods and services to adjacent neighborhood and residential areas. The following uses are allowed within the Community Commercial land use category: . . . 8. Supporting community services, such as schools, houses of worship, parks, and community centers;
Policy 1.5.a	Education 1. The City shall require the location of public, private and charter school sites to be consistent with the following criteria: a. The proposed school location shall be compatible with present and projected use of adjacent property; b. Adequate public facilities and services are, or will be available concurrent with the development of the school; c. There are no significant environmental constraints that would preclude development of an educational facility on the site; d. There will be no adverse impacts on archaeological or historic sites or structures listed on the State of Florida Historic Master Site File, which are located on the site; e. The proposed location is well drained and soils are suitable for development or are adaptable for development and outdoor educational purposes with drainage improvements; f. The proposed site can accommodate the required parking and circulation of vehicles on the site; and

	g. Where feasible the proposed site is so located to allow for co-location 2. The City shall require the development of public, private and charter school sites to be consistent with the following standards: a. Middle and high schools shall be located on collector or arterial roadways (as functionally classified within this comprehensive plan), which have sufficient capacity to carry traffic to be generated by the school and are suitable for high volume traffic during evening and special events as determined by generally acceptable traffic engineering standards; b. The location, arrangement and lighting of play fields and playgrounds shall be located and buffered as may be necessary to minimize impacts to adjacent residential property; and c. All structural setbacks, building heights, and access requirements shall be governed
Objective 1.3	The City shall coordinate the establishment and amendment of level of service standards for public facilities with State and local entities having operational and maintenance responsibility for such facilities prior to the adoption or any amendment affecting level of service standards.
Policy1.3.a	The City, shall, as part of the Comprehensive Plan monitoring and evaluation process, coordinate amendments of any level of service standards with appropriate State, regional and local agencies, such as the Florida Department of Transportation, Florida Department of Environmental Protection Suwannee River Water Management District, North Central Florida Regional Planning Council, the City of Gainesville, the City of High Springs, Alachua County and the School Board of Alachua County prior to adoption of such amendment.
Conservation Element	
Objective 2.1	The City shall conserve natural resources by educating the public about the impacts of humans on natural resources and the benefits of employing conservation and stewardship practices.
Policy 2.1.a	The City shall partner with the Alachua County School Board, Alachua County Environment Protection Department, Florida Department of environmental Protection (DEP), Suwannee River Water Management District, University of Florida Institute of Food and Agricultural Services, Santa Fe Community College and other appropriate agencies to provide environmental education to residents of all ages.
Recreation and Open Space Element	
Objective 1.1	Long Range Planning and Funding: The City shall secure the provision, coordination and maintenance of recreational land, cultural facilities for current and future residents

	and visitors, and guarantee safe access to these facilities for all persons, regardless of special need or condition.
Objective 1.2	Facilities, Levels of Service and Hierarchy of Parks: The City shall provide a variety of recreational facilities and opportunities that respond to appropriate levels of service for the established hierarchy of parks.
Policy 1.2.f	The City shall develop a master plan outlining the location of present and future parks by January 2007. This plan shall delineate the community needs met by each park, including detailed descriptions of specialized programs, such as those serving after-school, senior and indoor recreation needs.
Objective 1.4	Partnerships: The City shall improve on its federal, state, regional and local, public and private partnerships to provide recreational facilities to residents and visitors.
Policy 1.4.a	The City shall continue working with the Alachua County School Board to maintain lease and rental agreements for recreation facilities at Alachua Elementary School, W.W. Irby Elementary School, Mebane Middle School and Santa Fe High School.
Intergovernmental Coordination Element	
Policy 1.1.a	By July 2004, the City of Alachua will enter into an interlocal agreement with the School Board of Alachua County which shall describe, at a minimum, processes related to joint meetings, population projections, coordination and sharing of information, site selection, renovations and closures, and shared uses.
Policy 1.1.b	The City shall review all proposals for new school facilities according to the provisions for school siting found in the City of Alachua Land Development Regulations and the Future Land Use Element.
Objective 1.2	The City shall provide the City of Gainesville, the City of High Springs, the Suwannee River Water management District, the North Central Florida Regional Planning Council and the Florida Department of Community Affairs, and any other affected agency the opportunity to comment on Comprehensive Plan amendments, rezoning, and other development proposals.
Policy 1.2.a	The City shall provide notice to and coordinate the review of all proposed comprehensive plan amendments with Alachua County, the City of Gainesville, the City of High Springs, the School Board of Alachua County, the Suwannee River Water Management District, the North Central Florida Regional Planning Council, State and any other units of local government providing services but not having regulatory authority over the use of land.

Policy 1.2.d	The City shall, as part of the development review process, provide notice of development proposals to governmental agencies providing services that may be impacted, such as the School Board of Alachua County, the Suwannee River Water Management District, the Florida Department of Transportation, and the Florida department of Environmental Protection, and provide the opportunity for concerns to be addressed.
City of Archer Objectives and Policies	
Intergovernmental Coordination Element	
Objective VII.3	The City of Archer, upon adoption of this comprehensive plan, shall coordinate the establishment and amendment of level of service standards for public facilities with state and local entities having operational and maintenance responsibility for such facilities prior to the adoption.
Policy VII.3.1	The City of Archer shall, as part of the Comprehensive Plan monitoring and evaluation process, coordinate amendments of any level of service standards with appropriate state regional and local agencies, such as the Florida Department of Transportation, Florida Department of Environmental Regulation, Florida Department of Natural Resources, the Suwannee River Water Management District, the North Central Florida Regional Planning Council, Alachua County government and the Alachua County School Board prior to such amendments.
Objective VII. 1	The City of Archer, upon adoption of this comprehensive plan, shall coordinate its comprehensive planning with the Alachua County School Board, Suwannee River Water Management District, adjacent local government comprehensive plans and other units of local government providing services but not having regulatory authority over the use of the land.
Policy VII. 1.1	The City of Archer shall establish a procedure, as part of the Comprehensive Plan review and amendment process, that all plan amendments proposed within the Comprehensive Plan are coordinated with adjacent local governments, the Alachua County School Board, Suwannee River Water Management District, North Central Florida Regional Planning Council, State and other units of local government providing services but not having regulatory authority over the use of land.
Recreation and Open Space Element	
Objective VI.1	The City, upon adoption of this comprehensive plan, shall maintain accurate recreation activity facility inventories so that accurate levels of service can be determined, based upon the total public and private recreation resources available to the City.
Policy VI.1.1	The City shall establish cooperative policies with other units of

	government, the Florida Department of Natural Resources, Water Management District, School Board and community organizations to meet recreation demands.
City of Gainesville Objectives and Policies	
Future Land Use Element	
Objective 1.1	Adopt city design principles which adhere to timeless (proven successful), traditional principles.
Policy 1.1.1	To the extent possible, all planning shall be in the form of complete and integrated communities containing housing, shops, work places, schools, parks and civic facilities essential to the daily life of the residents
Objective 1.2	Protect and promote viable transportation choices (including transit, walking and bicycling, and calmed car traffic).
Policy 1.2.9	The City shall require, on long block faces (480 or more feet), the provision of intermediate connections in the pedestrian network. For example, direct walkway and bicycle routes to schools should be provided.
Policy 1.3.3	Centers should, to the extent feasible, contain a range of mixed land use types—preferably within a one-quarter mile area—including such uses as neighborhood-scaled retail, office, recreation, civic, school, day care, places of assembly and medical uses. The uses are compact, and vertically and horizontally mixed. Multiple connections to and from surrounding areas should be provided along the edges of a mixed use area.
Objective 1.4	Adopt land development regulations that promote mixed-use development within the city
Policy 1.4.5	When considering the acquisition and establishment of public facilities such as parks, libraries, and neighborhood centers, the City should, to the extent appropriate, select a location and/or design the facility in such a way that collocation of the facility with a public school is either achieved with an existing school, or can be retrofitted for such a collocation.
Objective 1.5	Discourage sprawling, low-density dispersal of the urban population
Policy 1.5.2	The City should work with the School Board of Alachua County to enhance schools within city limits, particularly to make the schools more accessible to students without a car.
Objective 3.5	Ensure that the future plans of State government, the School Board of Alachua County, the University of Florida, and other applicable entities are consistent with this Comprehensive Plan to the extent permitted by law.
Policy 3.5.1	The City shall continue to coordinate with governmental entities to ensure that the placement of public facilities promotes compact development and is consistent with the adopted LOS standards
Policy 3.5.2	The review of development plans of government entities shall be

	consistent with the policies of the Intergovernmental Coordination Element of this Comprehensive Plan.
Objective 4.1	The City shall establish land use designations that allow sufficient acreage for residential, commercial, mixed use, office, professional uses and industrial uses at appropriate locations to meet the needs of the projected population and which allow flexibility for the City to consider unique, innovative, and carefully construed proposals that are in keeping with the surrounding character and environmental conditions of specific sites.
Policy 4.1.1	Public schools may be located in the following land use categories: single-family, residential low-density, residential medium density, residential high density, mixed-use residential, mixed-use low-intensity, mixed-use medium-intensity, mixed-use high-intensity, urban mixed-use 1, urban mixed-use 2, office, education,
Policy 4.3.3	The Orton Trust Planned Use District shall consist of a mix of residential and non-residential uses under the following conditions and restrictions: . . .No non-residential activity, with the exception of places of religious assembly or private schools, shall be allowed along Northwest 31st Avenue or within 500 linear feet north of the frontage of Northwest 31st Avenue. . . A maximum of 80,000 square feet of non-residential use, including retail/commercial, eating places, office, civic, schools, day care centers, and places of religious assembly shall be allowed. A maximum of 600 feet of the Northwest 39th Avenue frontage shall be used for non-residential uses. The total allowable retail/commercial uses shall not exceed 40,000 square feet. Retail/commercial uses shall be as defined by the 1987 Standard Industrial Classification Manual major groups 52 thru 57 inclusive, 59; and 70 thru 79 inclusive. All non-residential uses on the perimeter of the planned use district shall be adequately buffered from surrounding residential uses through the use of greenspace, fences, or walls. The buffer widths shall be established in the planned development zoning ordinance.
Recreation Element	
Objective 1.3	Eliminate conflicts and maximize coordination among service providers in the planning and management of recreation and open space within the urban area to maximize efficiency and equity in the provision and funding of recreation services.
Policy 1.3.3	By 2004, the City shall reach an inter-local agreement with regarding public use of school facilities for recreational purposes.
Objective 1.7	The development of recreation programs for youth is the most important recreational priority. Given this, the City shall establish youth recreation programs sufficient to meet the unmet needs for such programs by city youth.
Policy 1.7.1	The City shall continue to coordinate with the University of Florida and SBAC, a recreational tutorial after-school program for elementary and middle school-aged city youth.

Policy 1.7.3	To meet the needs of pre-school and school-aged children, the City shall design programs that are designed to accommodate the typical work schedules of parents.
Objective 2.1	A trail network, shall be established by the acquisition and development of proposed and existing parks in a manner that promotes the establishment of such a network. The trail network should include paved and unpaved trails along water bodies, utility corridors, and rail corridors that link environmentally significant natural areas, parks, neighborhoods, schools, shopping areas, cultural centers and job centers to each other and which provide safe and pleasant public access for all citizens, including seniors, children, and the disabled.
City of Hawthorne Objectives and Policies	
Future Land Use Element	
Objective1.4	The City shall adopt innovative land development regulations to implement the Comprehensive Plan by June 1, 1992, which shall include provisions for Planned Unit Development. The purpose of the Planned Unit Development regulations is to permit Planned Unit Development within the City which is intended to encourage the development of land as planned communities, commercial or industrial complexes; encouraging flexible and creative concepts of site planning; preserving the natural amenities of the land by encouraging scenic and function open area to accomplish a more desirable environment than would be possible through the strict application of other provisions of the City's land development regulations and provide for an efficient use of land resulting in smaller networks of utilities and streets and thereby lowering development and housing costs; and provide a stable environment compatible with surrounding areas. The following uses shall be permitted by right in a Planned Unit Development: 2. Churches, schools, community or club buildings and similar public and semi-public facilities;
Policy I.13.1	The City Commission shall use the following criteria in considering for approval the following essential services; electrical transmission lines and substations, natural gas transmission lines, and radio, telecommunications and television antennas and towers, owned or operated by publicly regulated entities: (a) No such essential service shall be sited within 500 feet of any single or multi-family residence, group living facility, school or hospital, said distance to be measured from the centerline of the electrical and natural gas transmission lines, as constructed, or the fenced area of electrical substations. In addition, all radio and telecommunication towers shall also maintain the rated self-collapsing distance from any use listed above.

Recreation and Open Space Element	
Objective VI.2	The City, by June 1, 1992, shall maintain accurate recreation activity/facility inventories so that accurate levels of service can be determined, based upon the total public and private recreation resources available to the City.
Policy VI.2.1	The City shall establish cooperative policies with other units of government, the Florida Department of Natural Resources, Water Management District, School Board and community organizations to maintain accurate recreation activity/facility inventories in order to determine the need for recreation facilities.
Intergovernmental Coordination Element	
Objective VII.l	The City, upon adoption of this Comprehensive Plan, shall coordinate its comprehensive planning with the school board, Water Management District, adjacent local government comprehensive plans and other units of local government providing services but not having regulatory authority over the use of the land.
Policy VII. 1 .1	The City shall establish a procedure, as part of the Comprehensive Plan review and amendment process, that all plan amendments proposed within the Comprehensive Plan are coordinated with adjacent local governments, the School Board, Water Management District, Regional Planning Council, State and other units of local government providing services but not having regulatory authority over the use of land, the Regional Planning Council, and the State.
Objective VII.3	The City shall coordinate the establishment and amendment of level of services standards for public facilities with state and local entities having operational and maintenance responsibility for such facilities prior to the adoption or any amendment such adopted level of service standards.
City of High Springs Objectives and Policies	
Future Land Use Element	
Objective 1.1	The City shall make available or schedule for availability public facilities for future growth and urban development as development occurs in order to provide for urban densities and intensities within the City.
Policy 1.1.2	The City's Future Land Use regulations will allow the siting of public, charter, and private schools in any zoning district except Industrial. A Conditional Use permit and Site and Development review and approval will be required for school siting. The location of school facilities has been excepted from the Industrial zone classification due to noise, odors, dust, and traffic impacts and hazards.

Policy 1.1.7	Schools are encouraged to locate near: A. existing or proposed residential areas, B. existing or proposed public facilities such as parks, recreation areas, libraries, and community centers to facilitate the joint use of these areas
Objective 1.6	Recommendations for amendments to the City's land development regulations shall address the impact the changes will have on adjacent Future Land Uses both within the City and in the surrounding county, as appropriate. This will include coordination with the Alachua County School Board. This report will be prepared by, or at the direction of, the Plan Board.
Intergovernmental Coordination Element	
Objective 1.5	The City will coordinate the objectives and policies of this comprehensive plan with the Alachua County School Board. This coordination will include the establishment of a policy to address a joint process with the School Board for collaborative planning and decision-making concerning population projections and school siting.
Policy 1.5.1	The City will employ the following procedure to ensure intergovernmental coordination with the Alachua County School Board for the location of educational facilities within the City: A. upon receipt of a written notice from the School Board informing the City of the acquisition or leasing of property to be used for new educational facilities, the City shall notify the School Board within 45 days as to the consistency of the site with the City's comprehensive plan, and B. the City shall determine the consistency with the City's comprehensive plan of any educational capital improvement projects, for which such compliance determination has been requested by the School Board.
Policy 1.5.2	The following procedure will be utilized by the City to govern the collaborative planning program between the City and the Alachua County School Board: A. Upon receipt of the annual report specified in Chapter 235, Florida Statutes, whereby the School Board would notify the City of any additions to the School Five Year School Facilities Plan, the City shall respond to the receipt in accordance with Policy 1.5.1. of this Element. B. The City shall coordinate the decennial US Census Bureau's preliminary counts with the School Board to help ensure accuracy and consistency of data. C. The City shall coordinate population estimates and projections conducted by the City as part of its planning process with the School Board as requested, and at a minimum, once each year as part of the review of the School Facilities Plan.
Policy 1.5.3	In order to address the extension of public facilities subject to concurrency to existing or new schools, all expansions or new

	construction of public, charter, or private schools shall require site and development plan approval.
Parks, Recreation, and Open Space Element	
Objective 1.1	A system of parks and recreation facilities meeting the needs of the population shall be in place to provide for the acceptable levels of service (LOS).
Policy 1.1.2	The City will strive to locate future parks at, nearby or adjoining existing school sites through coordination with the Alachua County School Board, where feasible.
Policy 1.1.3	Existing joint-use agreements with schools shall be maintained and the joint development of future school recreational areas should be coordinated between the school's administration and the City
Town of Lacrosse Objectives and Policies	
Intergovernmental Coordination Element	
Objective VII.1	The Town, upon adoption of this Comprehensive Plan, shall coordinate its comprehensive planning with the School Board, Water Management District, adjacent local government comprehensive plans and other units of local government providing services but not having regulatory authority over the use of the land
Policy VII.1.1	The Town shall establish a procedure, as part of the Comprehensive Plan review and amendment process, that all plan amendments proposed within the Comprehensive Plan are coordinated with other units of local government, the School Board, Water Management District. Regional Planning Council, State and other units of government providing services but not having regulatory authority over the use of land.
Objective VII.3	The Town shall coordinate the establishment and amendment of level of service standards for public facilities with state and local entities having operational and maintenance responsibility for such facilities prior to the adoption or any amendment of such level of service standards.
Policy VII.3.1	The Town, as part of the Comprehensive Plan monitoring and evaluation process, shall coordinate amendments of any level of service standards with appropriate state, regional and local agencies, such as the Florida Department of Transportation, Florida Department of Envil-onmenta.1 Regulation, Florida Department of Natural Resources, Water Management District, Regional Planning Council, adjacent local governments and the School Board prior to such amendment.
Recreation Element	
Objective VI.2	The Town, by May 1.1992, shall maintain accurate recreation activity/facility inventories so that accurate levels of service can be determined, based upon the recreation resources available to the Town.

Policy VI.2.1	The Town shall establish cooperative policies with other units of government, the Florida Department of Natural Resources. Water Management District. School Board and community organizations to maintain accurate recreation activity/facility inventories in order to determine the need for recreation facilities.
Town of Micanopy Objectives and Policies	
Future Land Use Element	
Objective 1.4	Upon adoption of this comprehensive plan, the Town of Micanopy shall attain public, private and civic support for the acquisition, development, operation and maintenance of recreational opportunities and open space areas.
Policy 1.4.3	The Town of Micanopy shall establish cooperative policies with other units of government, the Florida Department of Natural Resources, Water Management District, School Board and community organizations to meet recreation demands.
Recreation and Open Space Element	
Objective 1.4	Upon adoption of this comprehensive plan, the Town of Micanopy shall attain public, private and civic support for the acquisition, development, operation and maintenance of recreational opportunities and open space areas.
Policy 1.4.3	The Town of Micanopy shall establish cooperative policies with other units of government, the Florida Department of Natural Resources, Water Management District, School Board and community organizations to meet recreation demands.
Intergovernmental Coordination Element	
Objective 1.1	The Town of Micanopy, upon adoption of this comprehensive plan, shall coordinate this plan with the school board, the SJRWMD, adjacent governments providing services but not having regulatory authority.
Policy 1.2.3	The Town of Micanopy will seek meetings and working relations with the Counties of Alachua, Marion, and Levy on matters of mutual concern. More specifically the Town of Micanopy intends to work with the Alachua Board of Education on planning the future location of a school in the Town for the growing student enrollment.
Policy 1.2.4	The Town of Micanopy has appointed The Citizens Committee for Micanopy Schools to conduct a feasibility study to locate an elementary school in the area of the Town of Micanopy.
Objective 1.4	The Town of Micanopy, upon adoption of this comprehensive plan, shall coordinate with adjacent governments, the school board and SJRWMD regarding all development proposals with the potential for impacting upon their plans.

City of Newberry Objectives and Polices	
Future Land Use Element	
Objective I.1.	The city shall adopt land development regulations by June 1, 1992, which shall make available or schedule for availability the public facilities for future growth and urban development as development occurs in order to provide for urban densities and intensities within the city.
Policy I.1.2	Land Development Regulations should allow public, private, and charter schools to locate in the following land use classifications: industrial, medium and high density residential, commercial, and mixed-use.
Policy I.1.6.	Require the location of public, private and charter school sites to be consistent with the following criteria: 1. The proposed school location shall be compatible with present and projected use of adjacent property; 2. Adequate public facilities and services are, or will be available concurrent with the development of the school; 3. There are no significant environmental constraints that would preclude development of an educational facility on the site; 4. There will be no adverse impacts on archaeological or historic sites or structures listed on the State of Florida Historic Master Site File, which are located on the site; 5. The proposed location is well drained and soils are suitable for development or are adaptable for development and outdoor educational purposes with drainage improvements; 6. The proposed site can accommodate the required parking and circulation of vehicles of the site; and 7. Where feasible the proposed site is so located to allow for co-location with parks, libraries and community centers.
Policy I.1.7	The city shall require the development of public, private and charter school sites to be consistent with the following standards: 1. Middle and high schools shall be located on collector or arterial roadways (as functionally classified within this comprehensive plan), which have sufficient capacity to carry traffic to be generated by the school and are suitable for high volume traffic during evening and special events as determined by generally acceptable traffic engineering standards; 2. The location, arrangement and lighting of play fields and playgrounds shall be located and buffered as may be necessary to minimize impacts to adjacent residential property; and 3. All structural setbacks, building heights, and access requirements shall be governed by the city's land development regulations.
Intergovernmental Coordination Element	

Objective VII.1.	The city, upon adoption of this Comprehensive Plan, shall coordinate its comprehensive planning with the school board, water management district, adjacent local government comprehensive plans and other units of local government providing services but not having regulatory authority over the use of the land.
Policy VII.1.1.	The city shall establish a procedure, as part of the Comprehensive Plan review and amendment process, that all plan amendments proposed within the Comprehensive Plan are coordinated with other units of local government, the school board, and other units of government providing services but not having regulatory authority over the use of land.
Objective VII.3	The city shall coordinate the establishment and amendment of level of service standards for public facilities with state and local entities having operational and maintenance responsibility for such facilities prior to the adoption or any amendment of such level of service standards.
Policy VII.3.1.	The city, as part of the Comprehensive Plan monitoring and evaluation process, shall coordinate amendments of any level of service standards with appropriate state, regional and local agencies, such as the Florida Department of Transportation, Florida Department of Environmental Regulation, Florida Department of Natural Resources, water management district, regional planning council, adjacent local governments and the school board prior to such amendment.
Objective VII.6.	The city shall upon adoption of this objective, coordinate the Comprehensive Plan with the school board five-year facilities plan.
Policy VII.6.1.	Until such time as interlocal agreement is adopted by the city and the school board in accordance with the requirement of F.S. Ch. 163, part II and F.S. Ch. 235, the following procedure shall be used to ensure intergovernmental coordination with the school board for the location of educational facilities within the city: 1. Upon receipt of a written notice from the school board informing the city of the acquisition or leasing of property to be used for new public educational facilities, the city shall notify the school board within 45 days as to the consistency of the site with the Comprehensive Plan; and 2. Subsequent to a request by the school board for a comprehensive plan determination, the city shall determine the consistency, with the Comprehensive Plan, of any proposed educational capital improvement projects
Policy VII.6.2.	Until such time as an interlocal agreement is adopted by the city and the school board in accordance with the requirements of F.S. Ch. 163, part II and F.S. Ch. 235, the following procedure shall govern the collaborative planning program and decision making concerning population projections and public school siting between the city and the school board:

Policy VII.6.3.	In order to address the extension of public facilities to existing or new schools, subject to concurrency, all expansions or new construction of public, charter and private schools shall be subject to site and development plan review and approval.
Policy VII.6.4.	In order to coordinate the effective and efficient provision and siting of educational facilities with associated infrastructure and services within the city, representatives of the city and the school board shall meet by the end of the year 2000 to develop mechanisms for coordination of educational facilities planning.
Policy VII.6.5.	The city shall focus on the following coordinating mechanisms when discussing the interlocal agreement, required by F.S. Ch. 163, part II and F.S. Ch. 235, with the school board: 1. Coordinate the review of the annual update of the Capital Improvements Element of the city and the annual educational facilities report and five-year school facilities plan of the school board; 2. Coordinate the review and assessment of the associated costs and expenditures of siting and developing schools with needed public infrastructure; 3. Coordinate the review of land uses that increase residential density; 4. Use a unified data base, including population forecasts (student population), land use and facilities; and 5. Use recreational and physical plant facilities in a manner which fosters the coordination of use of the facilities consistent with their multi-function design.
City of Waldo Objectives and Policies	
Future Land Use Element	
Objective I.13	The City, upon adoption of this Comprehensive Plan, shall require the location of the following essential services, electrical transmission lines and substations, natural gas transmission lines, and radio, telecommunication and television antennas and towers, owned or operated publicly regulated entities, to be approved by the City Council. All other essential services, which are hereby defined to include and be limited to electrical distribution lines, water distribution lines and mains, sanitary sewer collection lines, force mains and lift stations, natural gas distribution lines and mains, telephone lines and substations, and cable television lines shall be exempt from any City approval and shall be permitted in any land use category. All public buildings and grounds, and public facilities not defined as an essential service herein and to be located outside of a public right-of-wav or easement shall require an amendment to the Future Land Use Plan Map for designation as a public use.

Comment [GB2]: Modify Waldo as Laura Dedenbach material

Policy I.13.1	The city Council shall use the following criteria in considering for approval the following essential services; electrical transmission lines and substations. Natural gas transmission lines, and radio, telecommunications and television antennas and towers. owned or operated publicly regulated entities: (a) No such essential service shall be sited within 500 feet of any single or multi-family residence, group living facility. school or hospital, said distance to be measured from the centerline of the electrical and natural gas transmission lines, as constructed, or the fenced area of electrical substations. In addition, all radio and telecommunication towers shall also maintain the rated self-collapsing distance from any use listed above.
Recreation and Open Space Element	
Objective VI.2	The City, by May 1, 1992, shall maintain accurate recreation activity/facility inventories so that accurate levels of service can be determined, based upon the recreation resources available to the City.
Policy VI.2.1	The City shall establish cooperative policies with other units of government, the Florida Department of Natural Resources. Water Management District. School Board and community organizations to maintain accurate recreation activity/facility inventories in order to determine the need for recreation facilities.
Intergovernmental Coordination Element	
Objective VII. 1	The City, upon adoption of this Comprehensive Plan, shall coordinate its comprehensive planning with the School Board, Water Management District, adjacent local government comprehensive plans and other units of local g0vernmer.t providing services but not having regulatory authority over the use of the land.
Policy VII.l.l	The City shall establish a procedure, as part of the Comprehensive Plan review and amendment process, that all plan amendments proposed within the Comprehensive Plan are coordinated with other units of local government, the School Board, and other units of government providing vices but not having regulatory authority over the use of land.
Objective VII.3	The City shall coordinate the establishment and amendment of level of service standards for public facilities with state and local entities having operational and maintenance responsibility for such facilities prior to the adoption or any amendment of such level of service standards.
Policy VII.3.1	The City, as part of the Comprehensive Plan monitoring and evaluation process, shall coordinate amendments of any level of service standards with appropriate state, regional and local agencies, such as the Florida Department of Transportation, Florida Department of Environmental Regulation, Florida Department of Natural Resources. Water Management District, Regional Planning Council,

	adjacent local governments and the School Board prior to such amendment.

Coordinated Planning Techniques

School planning is about providing adequate facilities, supporting network and services to meet the demands of growth and ensure a quality education for Florida's residents. In 2002, Governor Bush identified school planning as a critical issue facing Florida's communities and proposed legislation that required a comprehensive focus on school planning by requiring coordination of information.

The legislation requires local governments and school boards to enter into interlocal agreements that address school siting, enrollment forecasting, school capacity, infrastructure, collocation and joint use of civic and school facilities, sharing of development and school construction information, and dispute resolution and oversight.

In 2006, Alachua County, Alachua, Archer, Gainesville, Hawthorne, High Springs, LaCrosse, Micanopy, Newberry, Waldo and the School Board adopted the Interlocal Agreement for Public School Facility Planning. The process to adopt and implement the interlocal agreement has improved the working relationships between the County, School District and Municipalities and has led to a better understanding of each other's issues and concerns.

The result has been better understanding and cooperative decision making for school projects, collaborative initiatives to purchase lands and utilize existing County- and School Board–owned lands, better coordination of neighborhood compatibility and infrastructure with school projects, and improved data sharing. Coordinated planning efforts are leading to improved timing of sidewalk projects, improved traffic flow surrounding schools, improved buffers with school neighbors, and improved sensitivity for historical structures.

Along with the coordination prompted by the interlocal agreement, Section 163.3174, Florida Statutes, requires the local planning agency, which in Alachua County is the Planning Commission, include a representative of the school district as a nonvoting member. This membership, along with the school board's review of development approval plans, keeps the School Board up-to-date on land use decisions that could affect future student populations.

Section 163.3177 (6) (a), Florida Statutes, requires that the future land use element of the comprehensive plan clearly identify the land use categories in which public schools are an allowable use. When delineating the land use categories where public schools are an allowable use, a local government is required to include in the categories sufficient land proximate to residential development to meet the projected needs for schools in coordination with public school boards and may establish differing criteria for schools of different type or size. Each local government shall include lands contiguous to existing school sites, to the maximum extent possible, within the land use categories in which public schools are an allowable use.

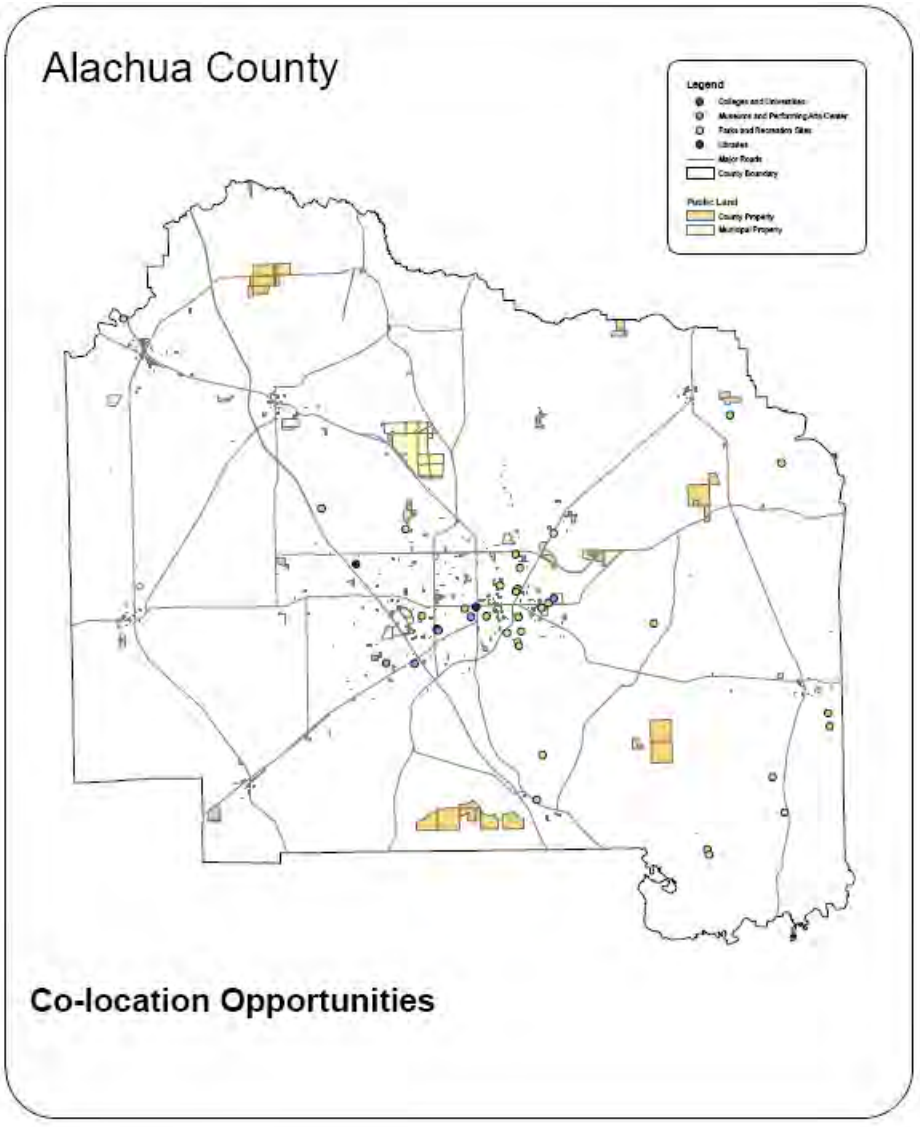
Co-location and Shared Use of Schools

Building schools for multiple purposes can serve the needs for both education and the community. Opportunities may exist to co-locate schools with compatible public facilities, such as parks, recreation, libraries and other community facilities. Joint use of

school board and local government facilities and the creation of community-based programs with school facilities can enrich community life and provide a cost effective way to expand facilities.

The quality of schools can affect residential growth patterns, impact urban sprawl and can provide a catalyst in neighborhood revitalization. Successful neighborhoods incorporate schools and recreation and park sites within their boundaries. Linking schools with parks and recreation areas and other community facilities such as libraries can enhance the educational environment and bring the school closer to the community.

Map PSFE 12 lustrates existing co-location opportunities throughout the County. These maps indicate schools and complimentary public facilities such as libraries and parks are frequently located in close proximity offering opportunities for shared use.



Map PSFE 12: Co-location Opportunities

Emergency Shelters

New educational facilities located outside a category 1, 2 or 3 evacuation zone are required to have core facility areas designed as Enhanced Hurricane Protection Areas unless the facility is exempted based on a recommendation by the local emergency management agency or the Department of Community Affairs. Certain factors are considered to qualify for the exemption, such as low evacuation demand, size, location, accessibility, and storm surge. For example, schools within counties that have adequate shelter capacity may be exempt. **Table PSFE 16** provides an inventory of schools that serve as emergency shelters.

Table PSFE 16: Schools as Emergency Shelters

Facility	Location
Westwood Middle School Food Service Building #18 (EHPA)	3215 NW 15th Avenue Gainesville, Florida 32605
Buchholz High School Classroom Building #8	5510 NW 27th Avenue Gainesville, Florida 32606
Eastside High School Classroom Building #15	1201 SW 43rd Street Gainesville, Florida 32641
Kanapaha Middle School Classroom Buildings #3 and #4	5005 SW 75th Street Gainesville, Florida 32608
Oakview Middle School Classroom Buildings #3 and #4	1203 SW 250th Street Newberry, Florida 32669
Talbot Elementary School Food Service #3	5701 NW 43rd Street Gainesville, Florida 32653
Shell Elementary School Food Service Building #5	21633 SW 65th Avenue Hawthorne, Florida 32640
High Springs Community School Classroom Building #5	1015 North Main Street High Springs, Florida 32643
Rawlings Elementary School Food Service Building #4 (EHPA)	3500 NE 15th Street Gainesville, Florida 32653

Source: Alachua County School District, 2007-08.

Enrollment & Capacity

The evaluation of the present and future relationship of enrollment and school capacity is fundamental to effective school facilities planning and concurrency management. The Five-Year District Facilities Plan and the annual Capital Outlay Full Time Equivalent (COFTE) projections (cohort – survival technique) provided by the Florida Department of Education (DOE) as adjusted by Alachua County School District provide the foundation for this assessment.

Florida statutes require that the school enrollment projections made the DOE and the school districts be reconciled with population and housing projections used for comprehensive planning purposes.

Historic & Projected Enrollment

Current COFTE projections prepared by the DOE extend through the 2017-18 school year. **Table PSFE 17** shows this projection of public school enrollment for Alachua County.

The COFTE projections include public school students only and do not include students receiving their education in private schools, by home schooling, charter schools or other facilities such as the county jail. In 2006 the public school enrollment in Alachua County represented approximately 80% of the school age population and approximately 11% of the total population. The relative growth of high, middle and elementary public school enrollment is illustrated in **Figure PSFE 2.**

Table PSFE 17: Department of Education, COFTE Public Student Enrollment, Historic & Projected

School Year	K-12 Enrollment	Students Added	Percent Increase	Elem Students	Middle Students	High Students
2005-06*	26,526			11,420	6,248	8,858
2006-07*	26,262	-264	-1.00%	11,918	5,933	8,411
2007-08*	26,235	-27	-0.10%	11,831	5,676	8,728
2008-09**	26,462	227	0.86%	12,468	5,993	8,001
2009-10**	26,636	174	0.66%	12,616	6,142	7,878
2010-11**	26,957	321	1.21%	12,901	6,177	7,879
2011-12**	27,285	328	1.22%	13,027	6,433	7,825
2012-13**	27,750	465	1.70%	13,187	6,576	7,987
2013-14**	28,242	492	1.77%	13,438	6,712	8,092
2014-15**	28,731	489	1.73%	13,775	6,629	8,327
2015-16**	29,238	507	1.76%	14,061	6,625	8,552
2016-17	29,715	477	1.63%	14,279	6,776	8,660
2017-18	30,400	685	2.31%	14,680	6,987	8,733

Source: Florida Department of Education, COFTE Projections, Alachua County School District

* Actual Note: Any discrepancy with actual figures shown in Table PSFE 18 are due to different reporting time-frames

** Projected

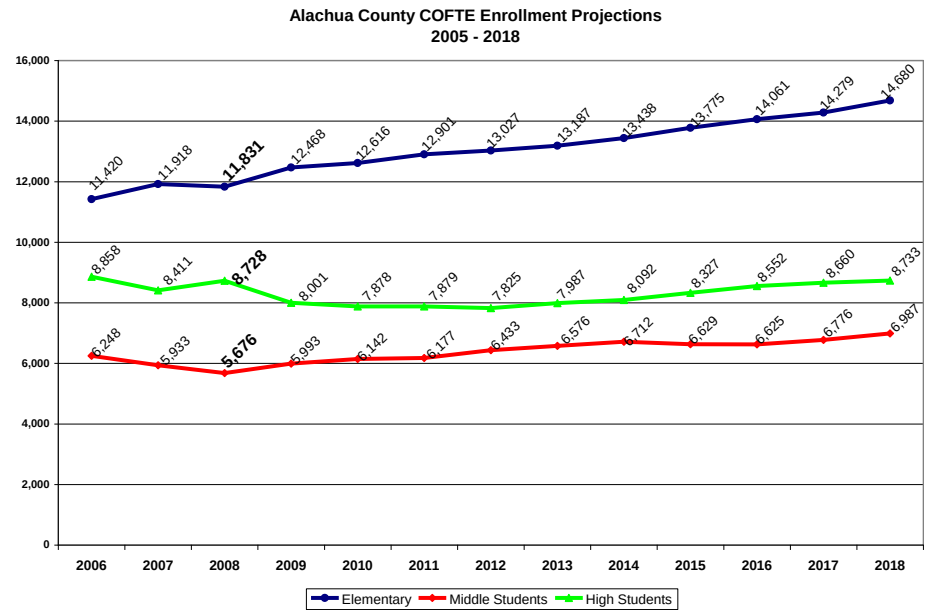


Figure PSFE 2: Alachua County COFTE Enrollment Projections

Funding for Capital Improvements

Ultimately the ability of the Alachua County School District to meet the capacity demands of the growing population depends upon the availability of funding for capital improvements and the effective application of these funds.

Capital Outlay Revenues

Alachua County Public Schools receive capital outlay revenues from a variety of sources as identified in **Table PSFE 18**.

Table PSFE 18: Projected Capital Outlay Revenue: 2007-2008

Revenue Source	2007-08 Actual Budget	2008-09 Projected	2009-10 Projected	2010-11 Projected	2011-12 Projected	5 YR Total Projected
Capital Investment Tax (2 mil)	**$24,411,669**	**$25,367,679**	**$26,460,061**	**$27,625,944**	**$28,981,328**	**$132,846,681**
less school bus purchase	$1,450,000	$1,500,000	$1,500,000	$1,500,000	$1,500,000	$7,450,000
less other vehicle purchase	$365,000	$200,000	$200,000	$200,000	$200,000	$1,165,000
less transfer to maintenance	$2,602,885	$2,260,240	$2,260,240	$2,260,240	$2,025,000	$11,408,605
less debt service	$6,202,358	$6,152,090	$6,151,900	$6,150,000	$6,150,000	$30,806,348
less other expenditures	$7,838,575	$5,607,752	$5,909,123	$6,117,801	$6,279,867	$31,753,118
Net Available for Capacity	**$5,952,851**	**$9,647,597**	**$10,438,798**	**$11,397,903**	**$12,826,461**	**$50,263,610**
PECO New Construction	$2,389,512	$635,832	$346,631	$509,526	$544,968	**$4,426,469**
PECO Maintenance	$3,678,193	$3,529,001	$3,153,171	$2,940,156	$2,921,161	**$16,221,682**
COPs Proceeds				$24,000,000	$33,000,000	**$57,000,000**
CO & DS Maximum Proceeds	$198,571	$198,571	$198,571	$198,571	$198,571	**$992,855**
Effort Index Grant	$0	$0	$0	$0	$0	$0
Classrooms for Kids	$5,727,637	$0	$0	$0	$0	$5,727,637
Private Donations - Fuel Tax Refund	$0	$0	$0	$0	$0	$0
Interest, Including POI	$1,200,000	$1,200,000	$1,200,000	$1,200,000	$1,200,000	$6,000,000
Transfer from Food Service Fund	$225,000	$225,000	$225,000	$225,000	$225,000	$1,125,000
Net Available for Capacity	**$15,693,571**	**$11,907,000**	**$12,409,000**	**$37,531,000**	**$47,995,000**	**$125,535,571**

Source: Alachua County Public Schools, 5 Year District Facilities Plan, 2007-08

The **Capital Investment Tax (2 mil)** is the most significant of the capital revenue sources. The District may allocate these funds only on capital projects contained in the DOE-approved School Plant Survey and the revenues tend to increase with both population growth and increasing property values. As noted, the CIT revenue is projected to rise from about $24 million dollars annually to about $29 million by 2011-12. Almost $133 million is projected to be raised over the coming five years with about 38% of these funds ($50 million) available for capacity enhancement.

Public Education Capital Outlay (**PECO**) funds provided by the Department of Education are based on demonstrated capacity need. Over the five-year period, about $4.4 million is expected from this source for expanded capacity.

Other revenue sources include: the **Capital Outlay and Debt Service (CO&DS) Trust Fund**, **Capital Outlay Participation Bonds (COPs),** a one-time appropriation for **Classroom for Kids**, **Interest (including POI)**, and transfer from **Food Service Fund**.

As shown by **Table PSFE 18**, the District projects net revenues available for capacity to be approximately $125.5 million over the five-year planning period.

Cost per Student Station

Table PSFE 19 provides an indication of the "cost per student station" that has been experienced historically and the projected increases anticipated during the upcoming five years. Although actual costs will depend upon factors largely outside the control of the District, the five-year plan anticipates substantial cost escalation.

Table PSFE 19: Projected Student Station Costs - 5 Yr Construction Program

Project Description	Planned Cost	Student Stations	COST/per StuSta
Alachua Elem - 10 Classroom Buildings	$3,760,000	200	$18,800
Santa Fe Senior High - New Classroom Building	$4,587,000	250	$18,348
FW Buchholz Senior High - New Science Lb Building	$8,120,000	200	$40,600
New Elementary F – High Springs	$24,000,000	378	$63,492
New Elementary H – West Urban	$33,000,000	756	$43,650
5-Year Total	**$73,467,000**	**1,784**	**$41,181**

Source: Alachua County Public Schools, 5 Year District Facilities Plan, 2007-08

The average "cost per student station" for the two new elementary schools programmed for the next 5 years is $50,265.

The costs projected in the following tables reflect the "cost per student station" estimates described above. As indicated by **Table PSFE 20**, the District has identified $80.9 million in capacity needs.

Planned Capacity Enhancements

The 2007-08 Five-Year District Facilities Plan identifies the capacity enhancements programmed by the District for five-, ten- and twenty-year periods. As indicated by **Table PSFE 20**, the District has identified $ 80.9 million in capacity needs.

The five-year period extending from 2007-08 through 2011-12 anticipates the expenditure of $110.1 million. This expenditure is programmed to add 1,584 permanent student stations within the schools identified in **Table PSFE 20**. The Five-Year Facilities Plan also allocates $29.2 million to the renovation of existing schools and general capital upgrades to the educational facility plant.

The District has also projected its needs for the twenty-year time period. These projections and the corresponding allocation of funds are also summarized in **Table PSFE 20**. Over the twenty-year period from 2007-08 through 2026-27, the District projects the expenditure of approximately $314 million for capacity enhancements. This expenditure is programmed to add 6,464 student stations. The effect of this capital program on levels of service is discussed in the next section of this report.

Table PSFE 20 also indicates the total land needs by school type to accommodate the five, ten and twenty-year program. Over the twenty-year planning period, 210 acres will be needed to accommodate new schools. Two (2) sites or fifty (50) acres will be required in the first 5 years.

Table PSFE 20: 20 Yr Construction Program

Facility	5 Yr Program		10 Yr Program		20 Yr Program	
	New Student Capacity	Budget	New Student Capacity	Budget	New Student Capacity	Budget
Capacity Enhancements						
Alachua Elementary	200	$6,977,000				
Santa Fe High	250	$10,774,000				
Finley Elementary			80	$2,261,000		
Fort Clarke Middle			300	$3,889,000		
Elementary "F" High Springs	378	$24,000,000				
Elementary "G" West Urban	756	$33,000,000				
Newberry Elementary			88	$1,771,000		
Elementary "H" Newberry			378	$25,500,000		
Elementary "I" – Northwest Gainesville			378	$25,500,000		
Elementary "J" – South Gainesville			378	$25,500,000		
Elementary "K" - Alachua			378	$25,500,000		
Eastside High			200	$7,320,000		
Buchholz High			200	$8,120,000		
High "AAA"					2,000	$60,000,000
Middle Expansion					500	$25,000,000
Total Capacity Enhancements	1,584	$80,901,000	2,380	$119,211,000	2,500	$85,000,000
Renovation & Major Maintenance						
Williams Elementary	0	$1,008,571				
High Springs	0	$4,450,000				
Westwood Middle	0	$3,700,000				
Gainesville High	0	$2,500,000				
Loften High	0	$1,700,000				
Administration Annex	0	$120,000				
Citizens Field	0	$60,000				
Traffic Safety Center	0	$705,000				
Rawlings Elementary	0	$289,000				
Lincoln Middle	0	$1,000,000				
Newberry Elementary	0	$4,000,000				
Waldo Community	0	$217,000				
Sidney Lanier Center	0	$600,000				
Shell Elementary	0	$1,285,000				
Newberry High	0	$5,060,000				
Horizon Center	0	$2,500,000				
Total Renovation & Maintenance	0	$29,194,571				
20 Year Total					6,464	$314,306,571

Source: Alachua County Public Schools, 5 Year District Facilities Plan, 2007-08

Table PSFE 20: 20 Yr Construction Program (continued)

Land Needs				
Facility Type	***5 Yr Program***	***10 Yr Program***	***20 Yr Program***	**Total**
High Schools	**0**	**0**	**60**	**60**
Middle Schools	**0**	**0**	**0**	**0**
Elementary Schools	**50**	**100**	**0**	**150**
Total	**50**	**100**	**60**	**210**

Source: Alachua County Public Schools, 5 Year District Facilities Plan, 2007-08

Chapter 3: School Capacity Needs

Alachua County Public Schools currently accommodates an enrollment of 26,235 students (refer to **Table PSFE 6**). The current program capacity within the high, middle, elementary, and special schools operated by the District is 30,315 student stations representing a district-wide utilization factor of 86.5% and a surplus of 4,080 student stations.

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The public student enrollment projection corresponding to the BEBR Medium projection indicates that approximately 6,000 students (refer to **Table PSFE 6**) will be added district-wide by 2025. Overall the addition of 6,400 new student stations as planned by the District (refer to **Table PSFE 20**) would appear to meet this demand. However, the availability of student stations should also match the student demand for each type of school and be geographically proximate to that demand.

Permanent program capacity is used as the basis for determining elementary, middle, and high school capacity for purposes of managing school concurrency. To ensure that adequate school capacity is available, a level of service (LOS) standard 100% of permanent program capacity is established for elementary, middle, and high schools.

The following sections of this report examine each of these school types to determine if the program for capacity enhancement is sufficient to (1) alleviate existing capacity deficiencies and (2) maintain adopted levels of service throughout the planning period.

SCHOOL CAPACITY PLANNING AREAS

School concurrency as established by Florida statutes is applied in the regulatory context at the time new residential development impacts the school system. This point is defined by the statute to be at the final plat stage (single family residential) or its equivalent site plan stage (multi-family) that is the point in the development process where the investment in infrastructure (streets, water, sewer, etc.) is committed. The configuration and alternatives discussed in this report are directed at this regulatory requirement.

In reality, the task of planning for school capacity to coincide with the demand created by new development must begin much earlier in the development process. Comprehensive plan amendments, developments of regional impacts, rezonings, planned developments, preliminary plans and preliminary site plans that potentially generate public school students should include a review of school capacity needs.

Planning for schools should primarily address the geographic relationship of high, middle and elementary capacity to the residential development and the communities that it serves. Consequently, school capacity should be an integral part of the planning of new residential development throughout the planning process. The identification and preservation of sites and the timely commitment of funds for the building of schools cannot wait until the final stages of construction.

To assure that the planning of school capacity is integrated into the comprehensive planning process, it is recommended that the Public School Facilities Element and the Interlocal Agreement recognize the distinction between long range school facility

planning and the regulatory application of school concurrency at the actual development stage.

The SPCAs should form the basis for evaluating school capacity for all planning and preliminary regulatory review for residential development throughout Alachua County and serve as the basis for "developer agreements" designed to preserve school sites and assure the timely commitment of school construction.

This objective can be accomplished by the establishment of "School Capacity Planning Areas" (SCPAs) as distinct components of the Public School Facilities Element.

HIGH SCHOOLS

High School Capacity Planning Areas

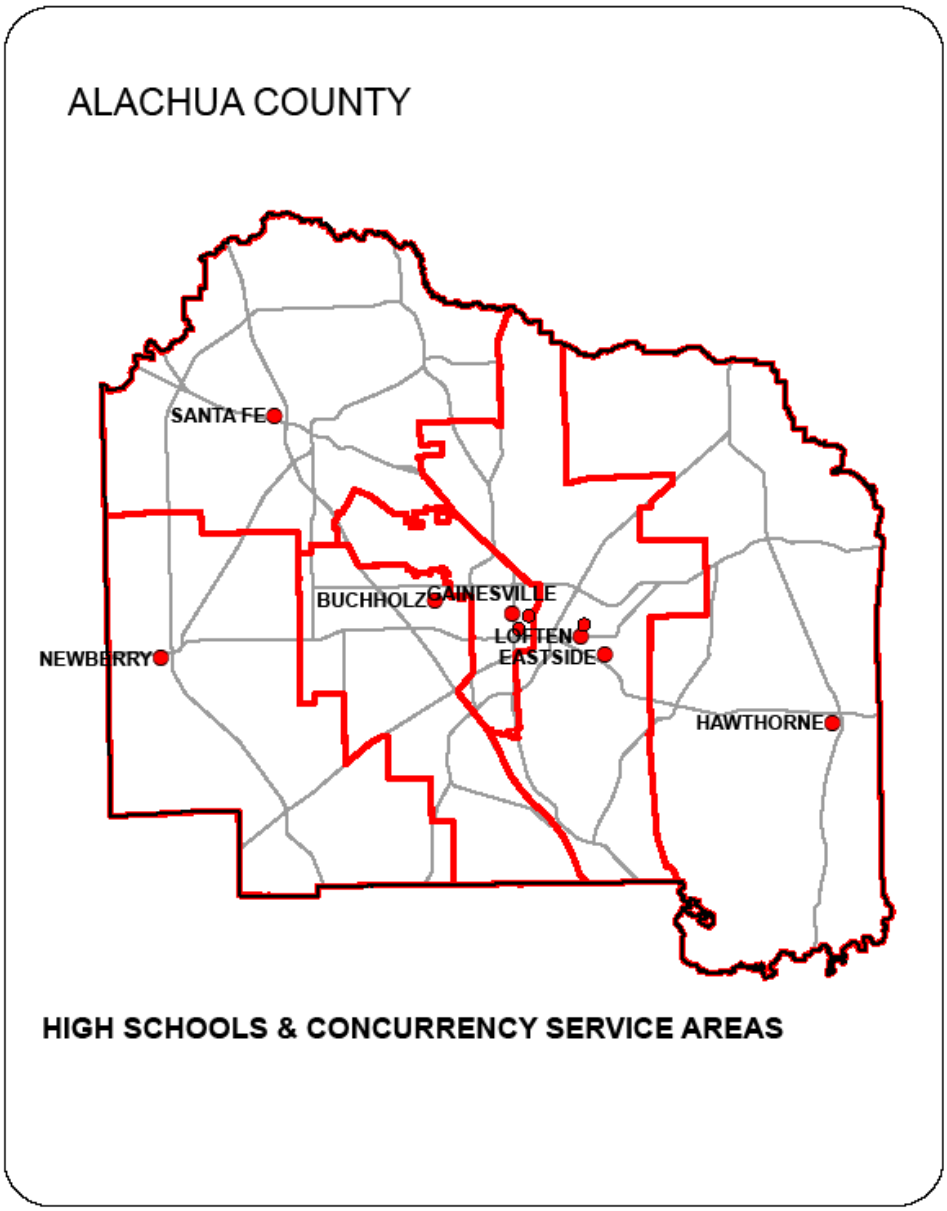
High School Capacity Planning Areas (SCPAs) coincide with High School Concurrency Service Areas and reflect the following factors:

1. Community-based boundaries generally identified by municipal reserve and extraterritorial area created by the boundary adjustment act; and
2. The identification of recognizable geographic features such as major roadways and environmental features such as lakes and major wetland systems.

High School Concurrency Service Areas

For the purpose of implementing school concurrency, modified concurrency service areas have been developed as illustrated by **Map PSFE 15**. These modified CSAs represent an adaptation of current middle school attendance zones to reflect the following factors

1. Community-based boundaries generally identified by municipal reserve and extraterritorial area created by the boundary adjustment act;
2. The reduction of the effect of the "adjacency" rule; and
3. The identification of recognizable geographic features such as major roadways and environmental features such as lakes and major wetland systems.



Map PSFE 13: High Schools & Modified Concurrency Service Areas

High school enrollment in Alachua County is accommodated by seven high schools and 3 special purpose schools. These schools provide a total permanent program capacity of 9,347 student stations (refer to **Table PSFE 21**). The 2007-08 actual enrollment is 8,728 representing a district-wide level of service of 97.9%. Buchholz and Santa Fe are currently operating in excess of the 100% utilization rate.

Table PSFE 21: 5 Yr District Facilities Plan – High Schools by School

School	2007-08			2011-12		
	Permanent Program Capacity 2007-2008	Actual COFTE Enrollment 2007-08	Actual Utilization (%) 2007-08	Projected Program Capacity	Projected COFTE	Projected Utilization (%)
Buchholz	2,054	2,376	115.7%	2,054	1,860	90.6%
Eastside	2,037	1,839	90.3%	2,037	1,661	81.5%
Gainesville	2,029	2,023	99.7%	2,029	1,933	95.3%
Hawthorne	464	261	56.3%	464	232	50.0%
Loften	420	178	42.4%	420	160	38.1%
Newberry	612	581	94.9%	612	605	98.9%
Santa Fe	1,001	1,230	122.9%	1,431	1,158	80.9%
AQ Jones	44	37	84.1%	44	34	76.4%
Horizon	150	118	78.7%	150	106	70.6%
Lanier	106	85	80.2%	106	77	72.6%
TOTAL HIGH	8,917	8,728	97.9%	9,347	7,825	83.7%

Source: Alachua County Public Schools, 5 Year District Facilities Plan, 2007-08 and Florida Department of Education, COFTE Projections, 2007

Table PSFE 21 shows the capacity-relationship by high school concurrency service areas (CSA). This table is derived by prorating the capacity and enrollment of Loften High School and the AQ Jones, Horizon and Lanier special schools. The applied ratios shown by **Table PSFE 22** reflect the proportion of the high school enrollment in each CSA to the total districtwide high school enrollment.

Table PSFE 22: Allocation of Districtwide High School Capacity & Enrollment

CSA	Ratio
BUCHHOLZ CSA	28%
EASTSIDE CSA	22%
GAINESVILLE CSA	24%
HAWTHORNE CSA	5%
NEWBERRY CSA	7%
SANTA FE CSA	14%

This analysis indicates that the Buchholz and Santa Fe CSAs are operating above the 100% utilization rate in 2007-08. Due the capacity enhancements noted in Table 25, declining enrollment projections and operational modifications[13], all high school CSA's will be operating below the 100% standard by 2011-12.

[13] Operational modifications include the alteration of attendance zones, modification of student assignment polices, modification of capacity utilization within schools and other modifications within the SBAC's operational prerogatives.

Table PSFE 23: 5 Yr District Facilities Plan – High Schools by CSA

School	2007-08			2011-12		
	Permanent Program Capacity 2007-2008	Actual COFTE Enrollment 2007-08	Actual Utilization (%) 2007-08	Projected Program Capacity	Projected COFTE	Projected Utilization (%)
BUCHHOLZ CSA	2,256	2,493	110.5%	2,256	1,965	87.1%
EASTSIDE CSA	2,195	1,931	88.0%	2,195	1,744	79.4%
GAINESVILLE CSA	2,202	2,123	96.4%	2,202	2,023	91.9%
HAWTHORNE CSA	500	282	56.4%	500	251	50.2%
NEWBERRY CSA	662	610	92.1%	662	631	95.3%
SANTA FE CSA	1,102	1,289	116.9%	1,532	1,211	79.0%
TOTAL HIGH	8,917	8,728	97.9%	9,347	7,825	83.7%

Source: Alachua County Public Schools, 5 Year District Facilities Plan, 2007-08 and Florida Department of Education, COFTE Projections, 2007

FIVE YEAR PROGRAM

As indicated in **Table PSFE 23**, the Five-Year District Facilities Plan anticipates the addition of 250 student stations through improvements to existing schools. This increase along with program adjustments will produce a district-wide high school 2011-12 level of service for permanent program capacity of 83.7%. All high schools and CSAs in the five year program are projected to operate within the adopted level of service standard by 2011-12. The Five Year Program is illustrated by **Map PSFE 14.**

Land Requirements No new high school sites are required in the Five-Year Facilities Plan.

Supporting Infrastructure Supporting infrastructure is deemed adequate to support the high school system under the Five-Year District Facilities Plan.

Ancillary Facilities Improvements are planned to the Administration Annex, Citizens Field and the Traffic Safety Center during the five year program **(refer to Table PSFE 21).**

TEN YEAR PROGRAM.

No new high schools are planned within the ten year period, refer to **Table PSFE 24** and **Map PSFE 15**. Additional capacity for 400 students will be provided by expansions at Eastside High and Buchholz High.

Land Requirements No additional land will be required for the ten year period.

Supporting Infrastructure High schools will not require substantial infrastructure investments.

Ancillary Facilities The current and planned inventory of ancillary facilities is adequate to support the school system through the 2016-17 school year.

Table PSFE 24: Long Range District Facilities Program: High Schools

High School Facility	5 Yr Program		10 Yr Program		20 Yr Program	
	Capacity Added	Budget	Capacity Added	Budget	Capacity Added	Budget
GAINESVILLE	0	$2,500,000				
LOFTEN	0	$1,700,000				
SANTA FE	250	$10,774,000				
EASTSIDE			200	$ 7,320,000		
BUCHHOLZ			200	$ 8,120,000		
LANIER	0	$600,000				
HORIZON	0	$2,500,000				
NEWBERRY	0	$ 5,060,000				
High AAA					2,000	$60,000,000
Total	250	$23,136,000	400	$15,440,000	2,000	$60,000,000
			20 Yr Program Total		2,650	$98,574,000
Land Needs	0		0		60	
			Total Land Needs		60	

Source: Alachua County Public Schools, 5 Year District Facilities Plan, 2007-08

TWENTY YEAR PROGRAM

During the twenty year planning period, one new high school will be required and located within the western portion of the County (**Table PSFE 24**). **Map PSFE 16** illustrates the improvements planned over a twenty year period.

Land Requirements. One new site will be required.

Supporting Infrastructure. Infrastructure requirements to support a new high school have not been determined.

Ancillary Facilities The current and planned inventory of ancillary facilities is adequate to support the school system through 2025.

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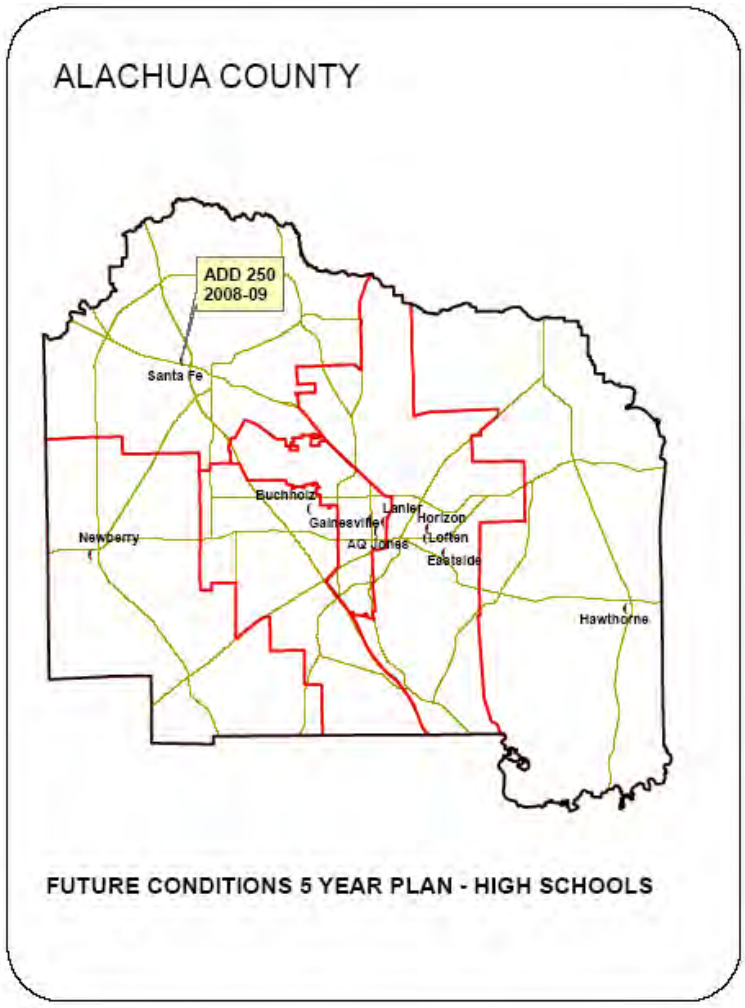
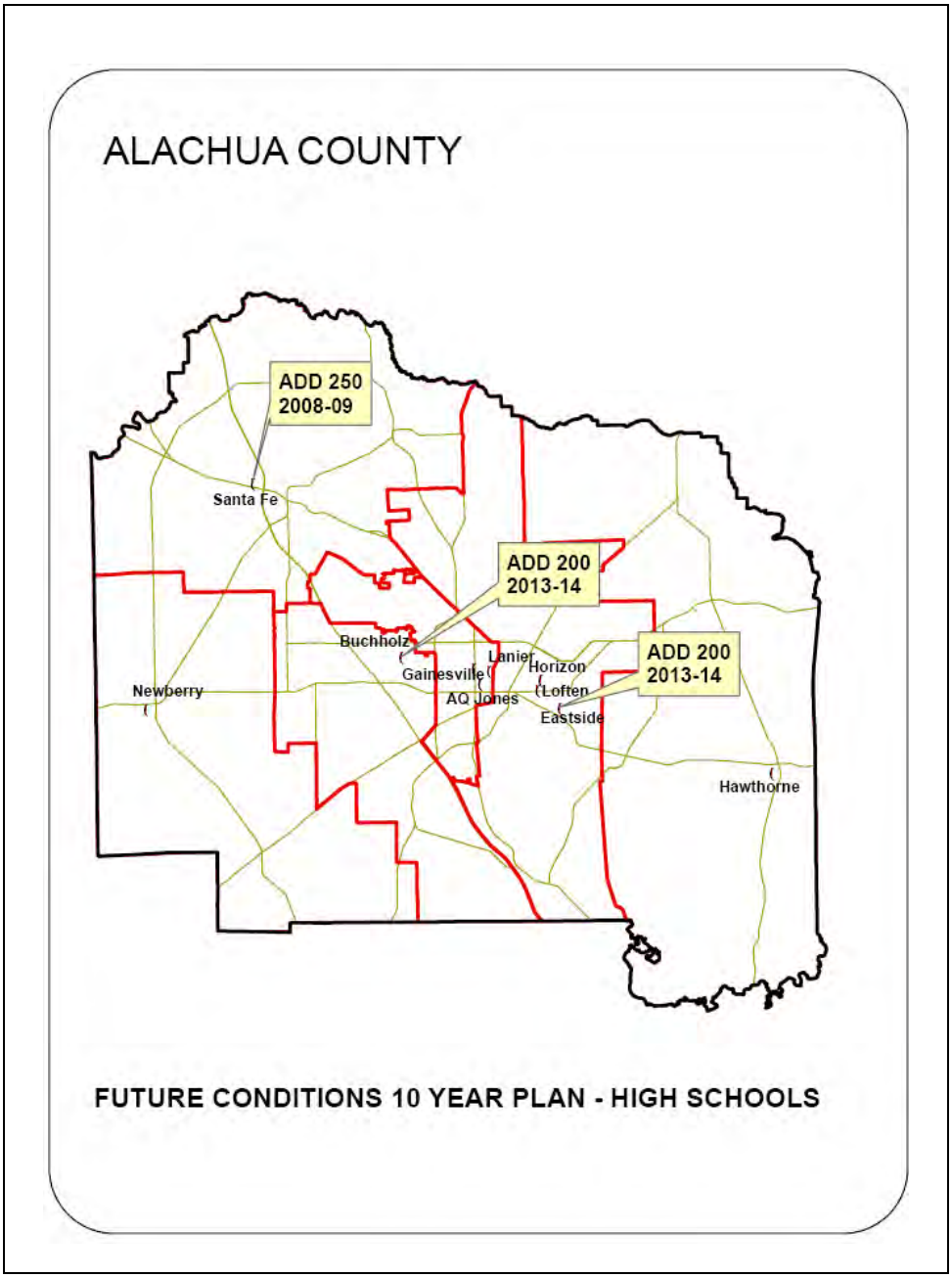
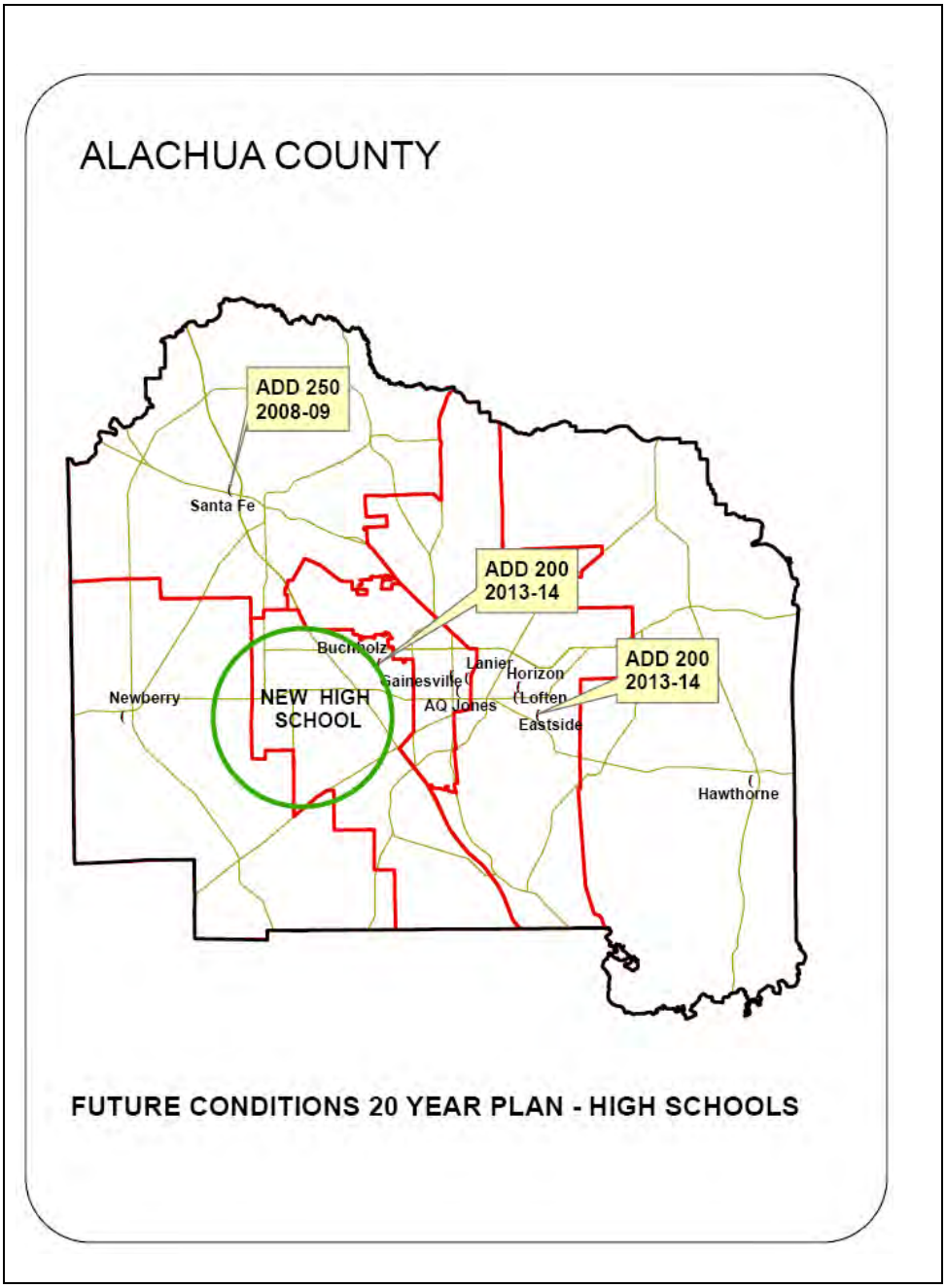


Map PSFE 14: High Schools Future Conditions 5 Year Planning Period



Map PSFE 15: High Schools Future Conditions 10 Year Planning Period



Map PSFE 16: High Schools Future Conditions 20 Year Planning Period

MIDDLE SCHOOLS

Middle School Capacity Planning Areas

Middle School Capacity Planning Areas (SCPAs) coincide with Middle School Concurrency Service Areas and are intended to reflect the following factors:

1. Community-based boundaries generally identified by municipal reserve and extraterritorial area created by the boundary adjustment act; and
2. The identification of recognizable geographic features such as major roadways and environmental features such as lakes and major wetland systems.

Middle School Concurrency Service Areas

For the purpose of implementing school concurrency, modified concurrency service areas have been developed as illustrated by **Map PSFE 17**. These CSAs represent an adaptation of current high school attendance zones to reflect the following factors

1. Community-based boundaries generally identified by municipal reserve and extraterritorial area created by the boundary adjustment act;
2. The reduction of the effect of the “adjacency” rule; and
3. The identification of recognizable geographic features such as major roadways and environmental features such as lakes and major wetland systems.

Alachua County currently has nine middle schools (refer to **Table PSFE 25**). Middle school capacity is also provided within three special schools and Loften High. **MAP PSFE 18** shows the location of middle schools and the improvements planned by 2011-12.

Table PSFE 25: 5 Yr District Facilities Plan – Middle Schools by School

School	2007-08			2011-12		
	Permanent Program Capacity	Actual COFTE	LOS Permanent Program Capacity (%)	Permanent Program Capacity	Projected COFTE	LOS Permanent Program Capacity (%)
BISHOP	1,108	785	70.8%	1,108	883	79.7%
FORT CLARKE	868	862	99.3%	868	819	94.4%
HAWTHORNE (6-8)	244	183	75.0%	244	149	61.1%
HIGH SPRINGS	436	349	80.0%	436	393	90.1%
KANAPAHA	1,079	879	81.5%	1,079	1,048	97.1%
LINCOLN	1,053	734	69.7%	1,053	825	78.3%
MEBANE	778	463	59.5%	778	520	66.8%
OAK VIEW	777	394	50.7%	657	566	86.1%
WESTWOOD	1,122	924	82.4%	1,122	1,115	99.4%
LOFTEN (8)	108	25	23.1%	108	28	25.9%
AQ JONES	33	17	51.5%	33	19	57.6%
HORIZON	142	47	33.1%	142	53	37.3%
LANIER	94	14	14.9%	94	15	16.0%
TOTAL MIDDLE	7,842	5,676	72.4%	7,722	6,433	83.3%

Source: Alachua County Public Schools, 5 Year District Facilities Plan, 2007-08 and Florida Department of Education, COFTE Projections, 2007

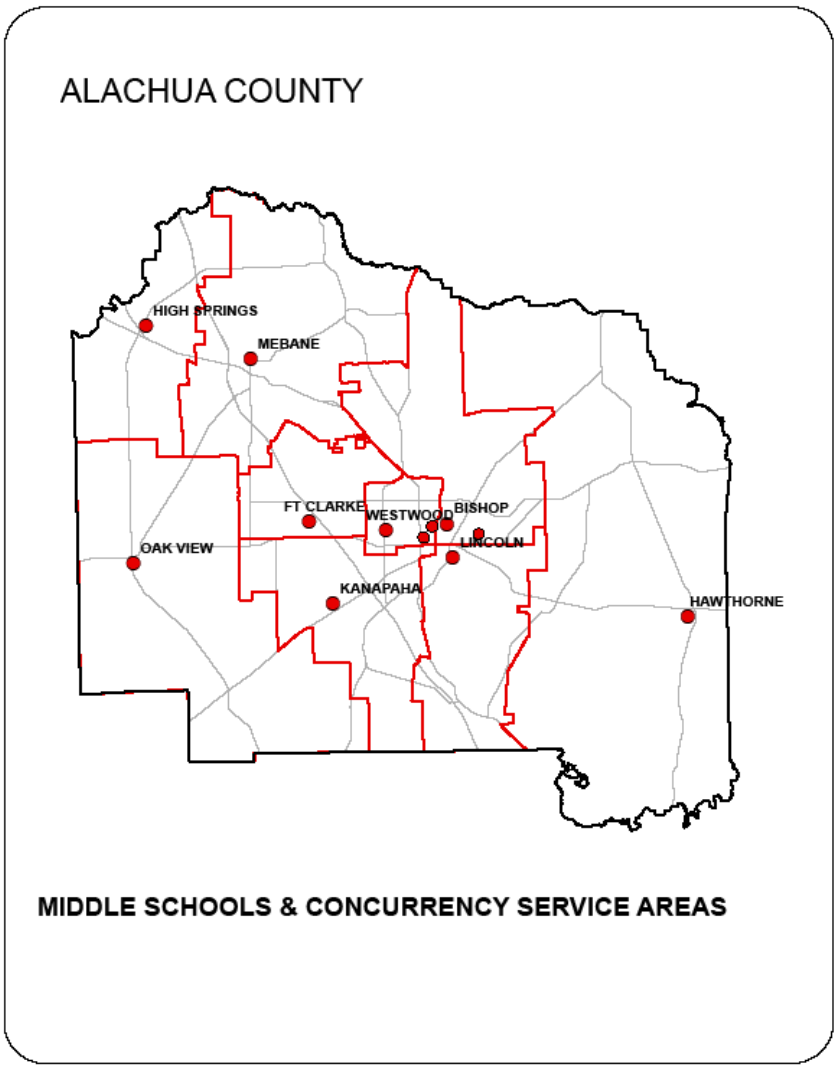
FIVE YEAR PLAN

As indicated in **Table PSFE 27**, 2007-08 permanent program capacity is 7,842 student stations. The 2007-08 enrollment is 5,676 students representing a districtwide utilization rate of 72.4%. The SBAC expects to convert 120 student stations to elementary capacity by 2011-12. By that year the enrollment is projected to reach 6,433 producing a utilization rate of 83.3%. Due to capacity enhancements and modifications in attendance zones, all middle schools and CSA's will operate below the 100% utilization rate thorough the 2011-12 school year.

Table PSFE 26: Allocation of Districtwide Middle School Capacity & Enrollment

CSA	Ratio
BISHOP CSA	14%
FORT CLARKE CSA	16%
HAWTHORNE CSA	3%
HIGH SPRINGS CSA	6%
KANAPAHA CSA	16%
LINCOLN CSA	13%
MEBANE CSA	8%
OAK VIEW CSA	7%
WESTWOOD CSA	17%

The applied ratios shown by **Table PSFE 26** reflect the proportion of the middle school enrollment in each CSA to the total districtwide high school enrollment.



Map PSFE 17: Middle School Concurrency Service Areas

Table PSFE 27: 5 Yr District Facilities Plan – Middle Schools by School by CSA						
School	2007-08			2011-12		
	Actual Program Capacity	Actual COFTE	LOS Permanent Program Capacity (%)	Projected Program Capacity	Projected COFTE	LOS Permanent Program Capacity (%)
BISHOP CSA	1,161	799	68.9%	1,161	899	77.5%
FORT CLARKE CSA	928	878	94.6%	928	837	90.2%
HAWTHORNE CSA	255	186	72.9%	255	152	59.7%
HIGH SPRINGS CSA	459	355	77.4%	459	400	87.2%
KANAPAHA CSA	1,139	895	78.6%	1,139	1,066	93.6%
LINCOLN CSA	1,102	747	67.8%	1,102	840	76.2%
MEBANE CSA	808	471	58.3%	808	529	65.5%
OAK VIEW CSA	803	401	49.9%	683	574	84.0%
WESTWOOD CSA	1,186	942	79.4%	1,186	1,135	95.7%
TOTAL MIDDLE	7,842	5,676	72.4%	7,722	6,433	83.3%

Source: Alachua County Public Schools, 5 Year District Facilities Plan, 2007-08 and Florida Department of Education, COFTE Projections, 2007

Land Requirements No additional land is required to support the 5 year middle school plan.

Supporting Infrastructure No additional infrastructure is required to support the 5 year middle school plan.

Ancillary Facilities The current inventory of ancillary facilities (refer **Table PSFE 10**) is adequate to support the school system through the 2011-12 school year.

Table PSFE 28: Long Range District Facilities Program: Middle Schools						
Middle School Facility	5 Yr Program		10 Yr Program		20 Yr Program	
	Capacity Added	Budget	Capacity Added	Budget	Capacity Added	Budget
Westwood	0	$3,700,000				
Lincoln	0	$1,000,000				
Fort Clarke			264	$3,889,000		
Middle Expansion					500	$25,000,000
Total	**0**	**$4,700,000**	**264**	**$3,889,000**	**500**	**$25,000,000**
			20 Yr Program Total		**764**	**$33,589,000**
Land Needs	**0**		**0**		**0**	
			Total Land Needs		**0**	

Source: Alachua County Public Schools, 5 Year District Facilities Plan, 2007-08

TEN YEAR PROGRAM

No new middle schools or student stations are planned for the ten year program. (Refer to **Table PSFE 28**). **Map PSFE 19** illustrates the improvements required over the ten year planning period.

Land Requirements No new sites are required to accommodate the ten year middle school program

Supporting Infrastructure No additional infrastructure is required to support the ten year middle school plan.

Ancillary Facilities The current inventory of ancillary facilities (refer **Table PSFE 14**) is adequate to support the school system through the 2017-18 school year.

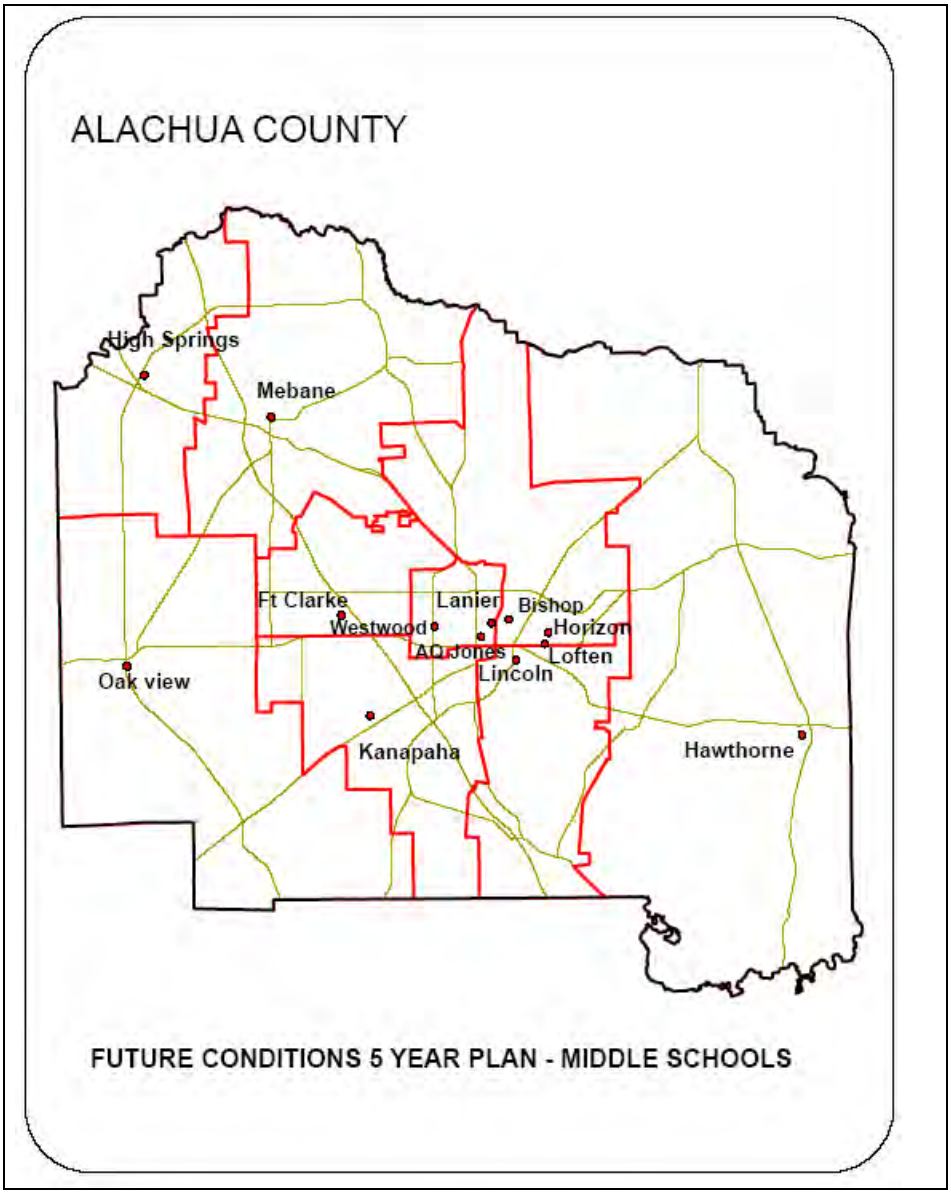
TWENTY YEAR PROGRAM

Approximately 500 additional student stations will be required by 2025. It is anticipated that this capacity will be provided by the expansion at selected middle schools located in the western portion of the County (Refer to **Table PSFE 28). Map PSFE 20** illustrates the improvements planned over a twenty year period.

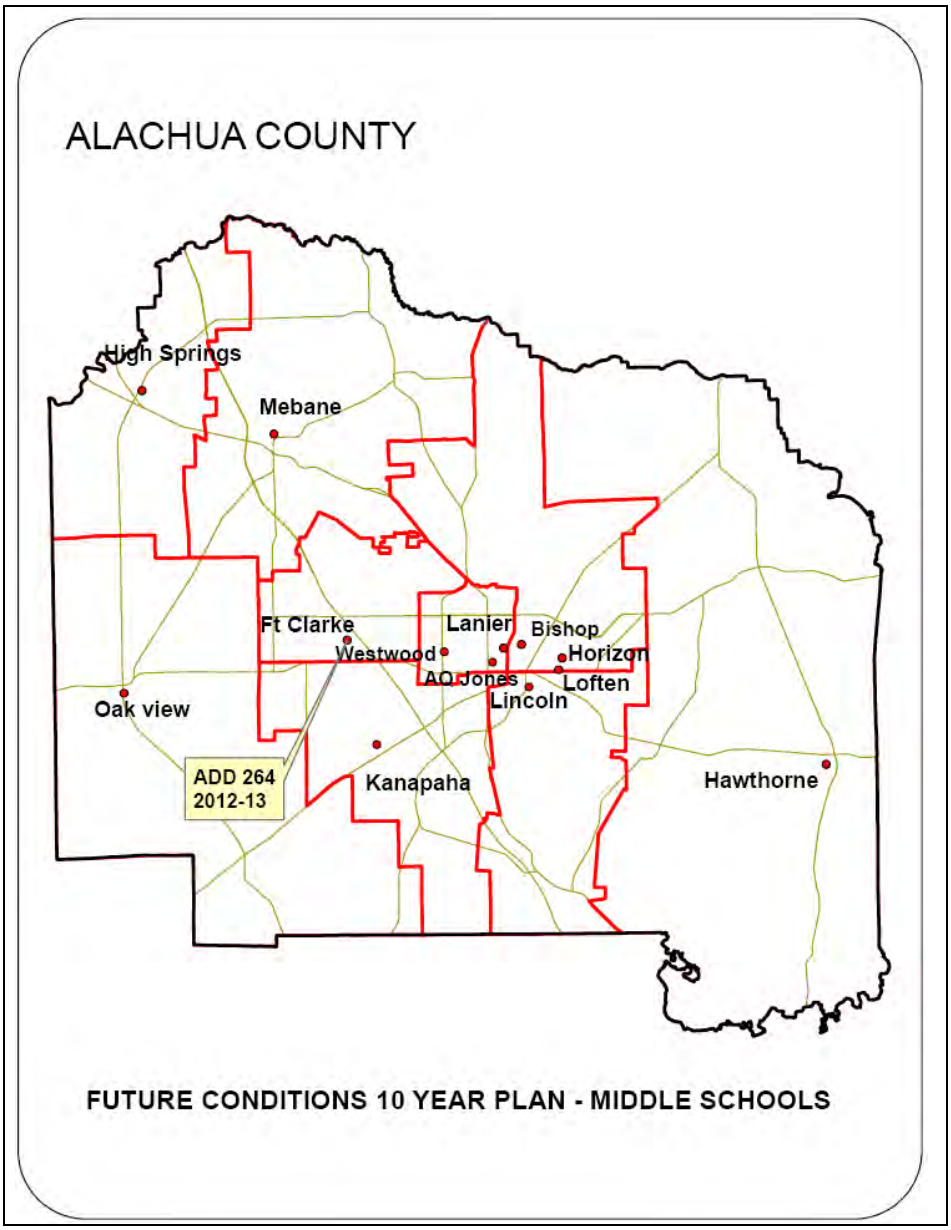
Land Requirements No new sites are required to accommodate the twenty year middle school program

Supporting Infrastructure No new infrastructure improvements are required to accommodate the twenty year middle school program

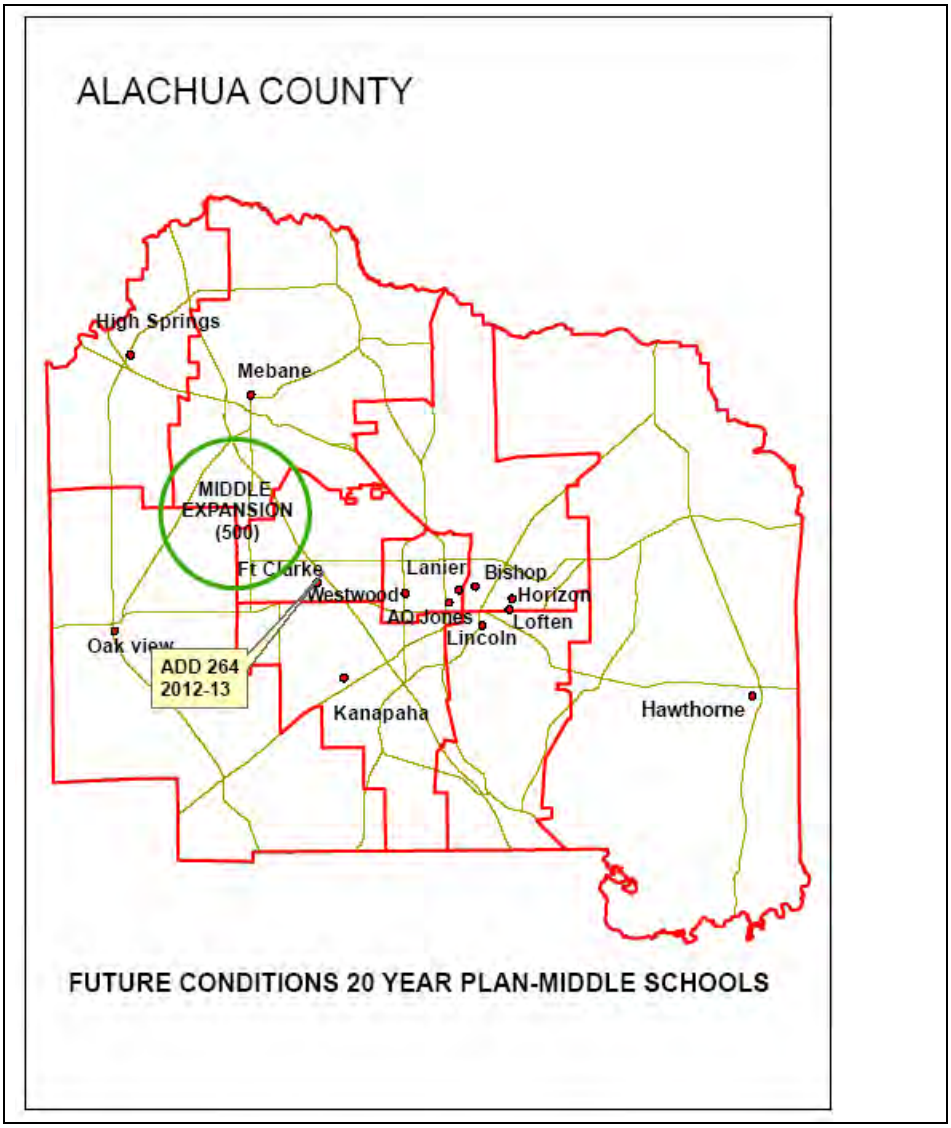
Ancillary Facilities The current inventory of ancillary facilities (refer **Table PSFE 14**) is adequate to support the school system through 2026.



Map PSFE 18: Middle Schools Future Conditions 5 Year Planning Period



Map PSFE 19: Middle Schools Future Conditions 10 Year Planning Period



Map PSFE 20: Middle Schools Future Conditions 20 Year Planning Period

ELEMENTARY SCHOOLS

Elementary School Capacity Planning Areas

Elementary School Capacity Planning Areas (SCPAs) coincide with Elementary School Concurrency Service Areas and reflect the following factors:
:

1. Community-based boundaries generally identified by municipal reserve and extraterritorial area created by the boundary adjustment act; and
2. The identification of recognizable geographic features such as major roadways and environmental features such as lakes and major wetland systems.

Elementary School Concurrency Service Areas

For the purpose of implementing school concurrency, concurrency service areas have been developed as illustrated by **Map PSFE 21**. These modified CSAs represent an adaptation of current high school attendance zones to reflect the following factors

1. Community-based boundaries generally identified by municipal reserve and extraterritorial area created by the boundary adjustment act;
2. The reduction of the effect of the "adjacency" rule; and
3. The identification of recognizable geographic features such as major roadways and environmental features such as lakes and major wetland systems.

Alachua County currently has twenty-four (24) elementary schools (refer to **Table PSFE 29**). Elementary capacity is also provided within three special schools. These schools provide permanent program capacity for 13,556 students. The 2007-08 enrollment is 11,831 representing a level of service of 87%. The LOS standard for elementary schools is 100% of permanent program capacity.

As shown by **Table PSFE 29,** five (5) elementary schools are currently operating at a level of service greater than 100%. As a result, the LOS standard of 100% is not satisfied in the High Springs CSA and Newberry CSA.

FIVE YEAR PLAN

Elementary schools present the most significant challenge for implementing the school concurrency program in Alachua County. The best available projections (COFTE) indicate that the High Springs, Newberry and West Urban concurrency service areas (CSAs) are deficient now and will not meet the level of service standard within the 5 year window unless elementary capacity can be added. The Northwest Gainesville, South Gainesville and Alachua CSAs will be deficient within the 10 year horizon.

A strategy advanced in August 2007 was based on the assumption that no new elementary capacity could be added during the first 5 years due to constraints imposed by the Department of Education. As a result, a ten year concurrency management program with tiered levels of service was recommended. This approach presumed that authorization to add the necessary capacity could be obtained during the 10 year window to meet the LOS standard of 100% of permanent program capacity.

In October 2007, the SBAC has received authorization from the Florida Department of Education to add 1,134 elementary student stations. To serve the geographic distribution of student enrollment and to advance the concept of community-based schools, the SBAC staff recommended that:

- new elementary schools be designed with core capacity and classroom capacity for 756 students;
- new elementary schools be constructed with full core capacity and classroom capacity for no less than 376 students.

The following actions are reflected by the capacity / enrollment information shown in Table PSFE 29. These would add capacity for 1,334 elementary students during the first five years, and would when coupled with modest operational changes such as attendance zone modifications, student assignment modifications and operational changes in the use of space within facilities, produce a "financially feasible" plan for meeting the adopted LOSS of 100% of permanent program capacity by 2011-12.

- Add capacity in Alachua Elementary school for 200 students (this improvement was previously approved and funded).
- Add one new elementary school with full core capacity and classroom capacity for 378 students within the High Springs CSA.
- Add one new elementary school with full core capacity and classroom capacity for 756 students within the West Urban CSA.
- Move the 5th grade within Newberry Elementary to Oak View Middle.
- During the latter part of the first five years (4th or 5th year), operational modifications may be required to maintain adequate capacity in the Northwest Gainesville CSA. Attendance boundary modifications that shift enrollment from Foster Elementary (Northwest Gainesville CSA) to Metcalfe Elementary and Rawlings Elementary (East Gainesville Elementary.

While the adoption of the strategy described above is "financially feasible" to meet the LOSS of 100% of permanent program capacity by 2011-12, an issue of timing remains to be addressed. The High Springs and Newberry CSAs are currently deficient and the West Urban CSA is projected to be deficient in 2008-09. The capacity provided by the new elementary schools planned for the High Springs CSA and the West Urban CSA will not be available until 2010-11 and 2011-12 respectively. This circumstance raises the potential that early development reviews will encounter concurrency deficiencies in the first two years of the program (new capacity is beyond the three year statutory window for planned capacity).

This potential for early development moratoria is counterproductive to the objectives of the program. It is recommended that an interim LOS standard be adopted for CSAs that are currently deficient as shown by the following table.

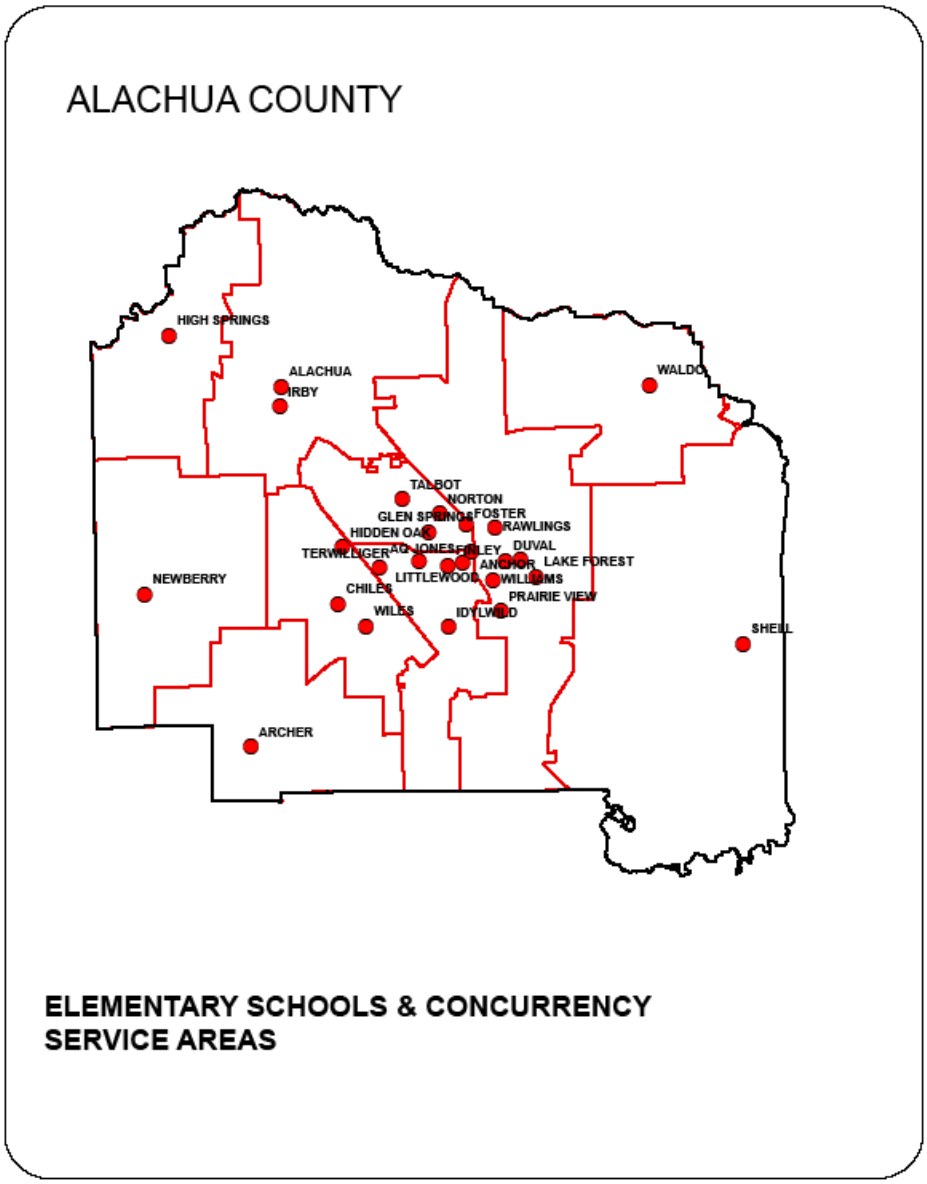
ALACHUA COUNTY ELEMENTARY SCHOOLS: LEVEL OF SERVICE STANDARD - % OF PERMANENT PROGRAM CAPACITY					
CSA	2007-08	2008-09	2009-10	2010-11	2011-12
ALACHUA CSA	100%	100%	100%	100%	100%
ARCHER CSA	100%	100%	100%	100%	100%
HAWTHORNE CSA	100%	100%	100%	100%	100%
HIGH SPRINGS CSA	120%	120%	120%	100%	100%
NEWBERRY CSA	115%	115%	100%	100%	100%
NORTHEAST GAINESVILLE CSA	100%	100%	100%	100%	100%
EAST GAINESVILLE CSA	100%	100%	100%	100%	100%
SOUTH GAINESVILLE CSA	100%	100%	100%	100%	100%
WALDO CSA	100%	100%	100%	100%	100%
WEST URBAN CSA	115%	115%	115%	115%	100%

Map PSFE 22 shows the location of elementary schools and the improvements planned by 2011-12.

Land Requirements Seventy-five acres of land is anticipated to be needed for the five year elementary school plan.

Supporting Infrastructure No infrastructure needs have been identified.

Ancillary Facilities The current inventory of ancillary facilities (refer Table PSFE 14) is adequate to support the school system through the 2011-12 school year.



Map PSFE 21: Elementary Schools & Concurrency Service Areas

Table PSFE 29: 5 Yr District Facilities Plan – Elementary Schools

School	2007-08			2011-12		
	Actual Program Capacity 2007-08	Actual COFTE Enrollment 2007-08	LOS Program Capacity (%)	Projected Program Capacity	Projected COFTE Enrollment	LOS Program Capacity (%)
Alachua CSA						
ALACHUA	525	462	88%	725	**508**	70%
IRBY	595	477	80%	595	**524**	88%
Special Schools (8%)	66	22	34%	66	**25**	37%
New Elementary K Alachua	0	0		0	**0**	
CSA TOTAL	1,186	961	81%	1,386	**1,057**	76%
Archer CSA						
ARCHER	429	321	75%	429	353	82%
Special Schools (2%)	16	6	34%	16	6	37%
CSA TOTAL	445	327	73%	445	359	81%
Hawthorne CSA						
SHELL	406	194	48%	406	213	52%
Special Schools (2%)	16	6	34%	16	6	37%
CSA TOTAL	422	200	47%	422	219	52%
High Springs CSA						
HIGH SPRINGS	544	608	112%	544	401	74%
Special Schools (5%)	41	14	34%	41	15	37%
New Elementary F High Springs	0	0		378	300	79%
CSA TOTAL	585	622	106%	963	715	74%
Newberry CSA						
NEWBERRY	507	594	117%	507	466	92%
OAK VIEW (5)	0	0		120	105	88%
Special Schools (5%)	41	15	37%	41	16	39%
New Elementary G Newberry	0	0	na	0	0	NA
CSA TOTAL	548	608	111%	668	586	88%
Northwest Gainesville CSA						
FOSTER	495	479	97%	495	**436**	98%
GLEN SPRINGS	475	464	98%	475	**509**	107%
NORTON	687	654	95%	687	**718**	105%
TALBOT	721	700	97%	721	**770**	107%
Special Schools (20%)	164	56	34%	164	62	37%
New Elementary I Northwest Gainesville	0	0		0	0	
CSA TOTAL	2,542	2,353	93%	2,542	2,495	98%

Table PSFE 29: 5 Yr District Facilities Plan – Elementary Schools (Continued)						
East Gainesville CSA						
DUVAL	492	468	95%	492	**514**	104%
LAKE FOREST	466	368	79%	466	**404**	87%
METCALFE	509	295	58%	509	**349**	64%
RAWLINGS	518	344	66%	518	**404**	73%
WILLIAMS	535	499	93%	535	**549**	103%
Special Schools (18%)	148	50	34%	148	55	37%
CSA TOTAL	2,668	2,024	76%	2,668	2,275	85%
South Gainesville CSA						
FINLEY	489	420	86%	489	**463**	94%
IDYLWILD	615	576	94%	615	**632**	103%
LITTLEWOOD	616	615	100%	616	**676**	110%
TERWILLIGER	615	507	82%	615	**556**	90%
Special Schools (18%)	148	50	34%	148	55	37%
New Elementary J South Gainesville	0	0		0	0	
CSA TOTAL	2,483	2,168	87%	2,483	2,383	96%
Waldo CSA						
WALDO	268	211	79%	268	232	86%
Special Schools (2%)	16	6	34%	16	6	37%
CSA TOTAL	284	217	76%	284	238	84%
West Urban CSA						
CHILES	761	799	105%	761	701	92%
HIDDEN OAK	743	819	110%	743	760	102%
WILES	724	677	94%	724	558	77%
Special Schools (20%)	164	56	34%	164	62	37%
New Elementary H West Urban	0	0		756	700	93%
CSA TOTAL	2,392	2,351	98%	3,148	2,781	88%
Districtwide						
TOTAL DISTRICT	13,556	11,831	87%	15,010	13,027	87%
Special Schools						
PRAIRIE VIEW	575	199	35%	575	218	38%
LANIER	179	30	17%	179	33	18%
AQ JONES	67	51	76%	67	56	84%
Special Schools Total	821	280	34%	821	307	37%

Source: Alachua County Public Schools, 5 Year District Facilities Plan, 2007-08

TEN YEAR PROGRAM

During the second five years, four (4) new elementary schools with full core capacity and classroom capacity for 378 students. These new schools would be located in the Newberry, Northwest Gainesville, South Gainesville and Alachua CSAs. Additional capacity for 88 students and 80 students would also be added at Newberry Elementary and Finley Elementary respectively.

These additions can be reasonably expected to maintain "financially feasibility" throughout the ten year horizon.

Table PSFE 30: Allocation of Districtwide Elementary School Capacity & Enrollment

CSA	Ratio
ALACHUA CSA	8%
ARCHER CSA	2%
HAWTHORNE CSA	2%
HIGH SPRINGS CSA	5%
NEWBERRY CSA	5%
NORTHWEST GAINESVILLE CSA	20%
EAST GAINESVILLE CSA	18%
SOUTH GAINESVILLE CSA	18%
WALDO CSA	2%
WEST URBAN CSA	20%

Land Requirements. Four (4) sites comprising an estimated size of 100 acres of land are required to accommodate the 10 year elementary school program.

Supporting Infrastructure. Infrastructure needs to support four (4) new elementary sites have not been determined.

Ancillary Facilities The current inventory of ancillary facilities (refer **Table PSFE 14**) is adequate to support the school system through the 2016-17 school year.

TWENTY YEAR PROGRAM

By 2026, as shown by **Table PSFE 31**, no additional elementary schools are planned for construction. **Map PSFE 24** indicates the improvements planned over the twenty year period.

Land Requirements No land is required to accommodate the 20 year elementary school program.

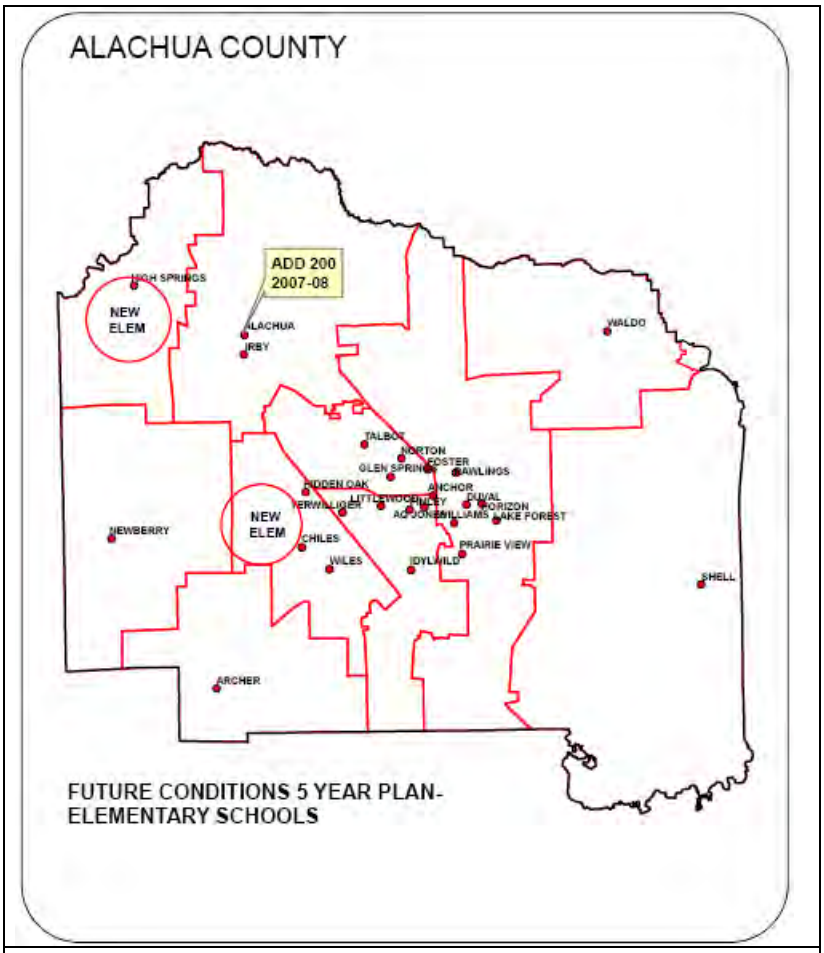
Supporting Infrastructure No additional infrastructure is required to accommodate the 20 year elementary school program.

Ancillary Facilities The current inventory of ancillary facilities (refer **Table PSFE 14**) is adequate to support the school system through 2025.

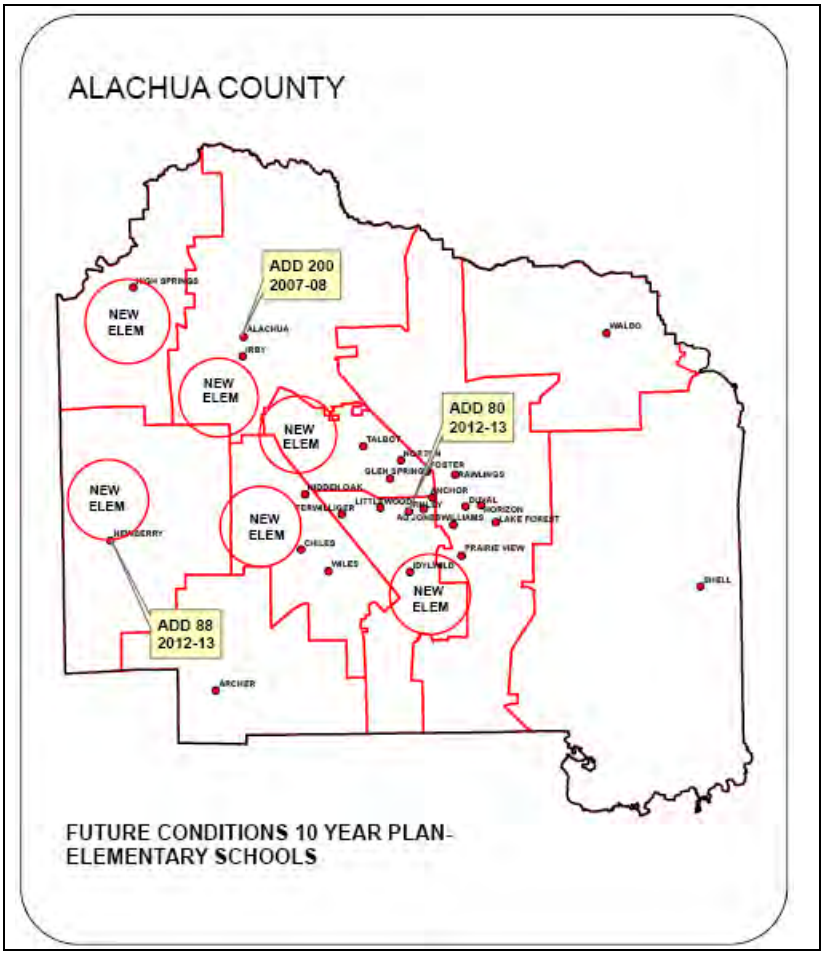
Table PSFE 31: Long Range District Facilities Program: Elementary Schools

Facility	5 Yr Program		10 Yr Program		20 Yr Program	
	Capacity Added	Cost (million)	Capacity Added	Cost (million)	Capacity Added	Cost (million)
ALACHUA	200	$ 6,977,000				
FINLEY			80	$ 2,261,000		
HIGH SPRINGS	0	$4,450,000				
NEWBERRY			88	$5,771,000		
RAWLINGS	0	$ 289,000				
SHELL	0	$1,285,000				
WALDO	0	$ 217,000				
WILLIAMS	0	$1,008,571				
NEW ELEM F	378	$24,000,000				
NEW ELEM G			378	$25,500,000		
NEW ELEM H	756	$33,000,000				
NEW ELEM I			378	$25,500,000		
NEW ELEM J			378	$25,500,000		
NEW ELEM K			378	$25,500,000		
Total	**1,334**	**$73,487,571**	**1,680**	**$107,771,000**	**0**	**$0**
			20 Yr Program Total		**2,636**	**$181,258,571**
Land Needs	**50**		**100**		**0**	
			Total Land Needs		**150**	

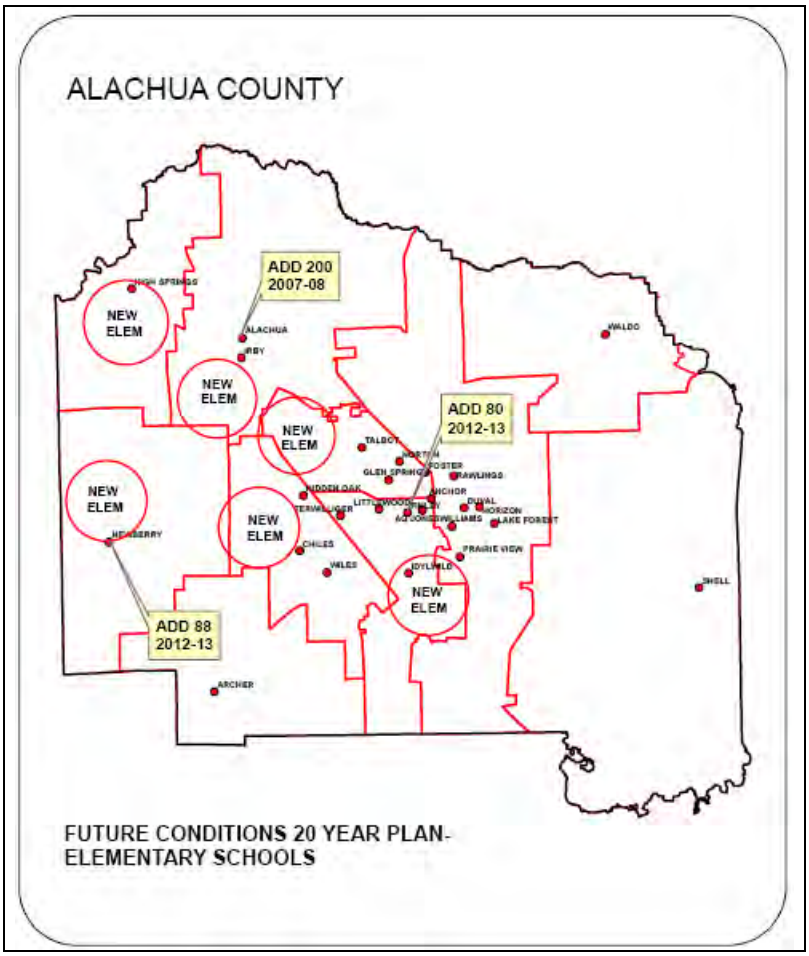
Source: Alachua County Public Schools, 5 Year District Facilities Plan, 2007-08



Map PSFE 22: Elementary Schools Future Conditions 5 Year Planning Period



Map PSFE 23: Elementary Schools Future Conditions 10 Year Planning Period



Map PSFE 24: Elementary Schools Future Conditions 20 Year Planning Period

Chapter 4: Definitions

Definitions:

1. Adequate school capacity - the circumstance where there is sufficient school capacity by school type, based on adopted Level of Service (LOS) standards, to accommodate the demand created by a proposed residential development.

2. Affected Jurisdictions – Local governments that are parties to the Interlocal Agreement for Public School Facilities Planning and are physically located within the same School Concurrency Service Area(s) as the area affected by a land use decision that may increase public school enrollment.

3. Alachua County Boundary Adjustment Act – The special act of the Florida Legislature addressing annexations and intergovernmental coordination on planning for annexations in Alachua County. [Codified at Chapter 225 of the Alachua County Code of Ordinances]

4. Capacity - "capacity" as defined in the FISH Manual.

5. Capacity Enhancement Agreement – An agreement between the School Board, affected jurisdictions and a private entity (land owner, developer, applicant, etc.) for the mitigation of school capacity deficiencies that are anticipated to result from a land use decision.

6. Existing school facilities - school facilities constructed and operational at the time a completed application for residential development is submitted to the County and Cities.

7. Final Subdivision or Plat / Final Site Plan – The stage in residential development where permits or development orders are approved authorizing actual construction of infrastructure, the recording of a final plat or the issuance of building permits.

8. FISH Manual - the document entitled "Florida Inventory of School Houses (FISH)," 2006 edition, and that is published by the Florida Department of Education, Office of Educational Facilities (hereinafter the "FISH Manual).

9. Land Use Decisions – future land use amendments, developments of regional impact, rezonings and other residential development approvals under the Land Development Code that precede the application of school concurrency and do not require a Certificate of School Concurrency.

10. Permanent FISH Capacity - capacity that is provided by "permanent buildings," as defined in the FISH Manual.

11. Permanent Program Capacity – capacity that is provided by —permanent buildings" as defined in the FISH Manual and modified by the SBAC to reflect measurable programmatic changes.

12. Planned school facilities - school facility capacity that will be in place or under actual construction within three (3) years after the issuance of final subdivision or site plan approval, pursuant to the School Board's adopted Five Year Facilities Work Program.

13. Preliminary Subdivision or Plat / Preliminary Site Plan – Any conceptual approval in residential that precedes the review of detailed engineering plans and/or the commencement of actual construction of infrastructure.

14. State Requirements for Educational Facilities – Standards established by the State of Florida for the design and construction of public educational facilities. [http://www.fldoe.org/edfacil/sref.asp]

15. Total school facilities - Existing school facilities and planned school facilities.

16. Utilization of capacity - current enrollment at the time of a completed application for residential development.

17. Work Program - the financially feasible School District's Five Year Facilities Work Program adopted pursuant to section 1013.35, F.S.

18. Measurable programmatic change - means a change to the operation of a school or the use of the school facility that has consistently and measurably modifies the capacity such as the use of classrooms for special education or other special purposes.

19. School Type - Elementary Schools are grades Pre-Kindergarten Exceptional Student Education (PK- ESE) through 5; Middle Schools are grades 6 through 8; and High School are grades 9 through 12.

School Board of Alachua County
Public School Facilities Element
Supplemental Dataset
December 2, 2008

Supplemental Dataset: Proposed School Concurrency Program with Updated Capacity / Enrollment Data

The Supplemental Dataset represents a "level of service" and "financial feasibility" analysis based on the 2008-09 Five Year District Facilities Plan adopted by the Alachua County School Board on October 7, 2008.

The Supplemental Dataset consists of 24 tables as follows:

High Schools / Concurrency Service Areas

Table High A1: Permanent Program Capacity by School
Table High A2: Enrollment by School
Table High A3: LOS Standard by School
Table High A4: Available Capacity by School

Table High B1: Permanent Program Capacity by Concurrency Service Area
Table High B2: Enrollment by Concurrency Service Area
Table High B3: LOS Standard by Concurrency Service Area
Table High B4: Available Capacity by Concurrency Service Area

Middle Schools/ Concurrency Service Areas

Table Middle A1: Permanent Program Capacity by School
Table Middle A2: Enrollment by School
Table Middle A3: LOS Standard by School
Table Middle A4: Available Capacity by School

Table Middle B1: Permanent Program Capacity by Concurrency Service Area
Table Middle B2: Enrollment by Concurrency Service Area

Table Middle B3: LOS Standard by Concurrency Service Area
Table Middle B4: Available Capacity by Concurrency Service Area

SCHOOL BOARD OF ALACHUA COUNTY
PUBLIC SCHOOL FACILITIES ELEMENT
SUPPLEMENTAL DATASET: HIGH SCHOOLS

Table High A1: Permanent Program Capacity by School										
	Permanent Program Capacity									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
BUCHHOLZ	1,969	1,969	1,969	1,969	1,969	1,969	1,969	1,969	1,969	1,969
EASTSIDE	1,951	1,951	1,951	1,951	1,951	1,951	1,951	1,951	1,951	1,951
GAINESVILLE	1,944	1,944	1,944	1,944	1,944	1,944	1,944	1,944	1,944	1,944
HAWTHORNE	535	535	535	535	535	535	535	535	535	535
LOFTEN	528	528	528	528	528	528	528	528	528	528
NEWBERRY	620	620	620	620	620	620	620	620	620	620
SANTA FE	1,075	1,325	1,325	1,325	1,325	1,325	1,325	1,325	1,325	1,325
AQ JONES	44	44	44	44	44	44	44	44	44	44
HORIZON	90	90	90	90	90	90	90	90	90	90
LANIER	146	146	146	146	146	146	146	146	146	146
TOTAL HIGH	**8,902**	**9,152**	**9,152**	**9,152**	**9,152**	**9,152**	**9,152**	**9,152**	**9,152**	**9,152**

SCHOOL BOARD OF ALACHUA COUNTY
PUBLIC SCHOOL FACILITIES ELEMENT
SUPPLEMENTAL DATASET: HIGH SCHOOLS

Table High A2: Enrollment by School										
	Enrollment									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
BUCHHOLZ	2,105	2,010	1,952	1,884	1,864	1,855	1,863	1,883	1,886	1,884
EASTSIDE	1,678	1,606	1,564	1,514	1,500	1,493	1,501	1,516	1,518	1,516
GAINESVILLE	1,752	1,675	1,629	1,575	1,558	1,551	1,559	1,576	1,578	1,575
HAWTHORNE	318	304	295	286	285	283	285	287	288	288
LOFTEN	182	172	165	157	152	151	151	153	154	153
NEWBERRY	528	514	509	502	506	504	506	511	512	511
SANTA FE	1,079	1,048	1,034	1,015	1,019	1,015	1,020	1,030	1,032	1,030
AQ JONES	36	35	34	34	35	35	35	35	35	36
HORIZON	74	75	77	80	84	84	85	86	86	85
LANIER	62	48	35	22	11	11	11	11	11	11
TOTAL HIGH	**7,814**	**7,485**	**7,295**	**7,069**	**7,015**	**6,982**	**7,017**	**7,088**	**7,100**	**7,089**
2008 COFTE	**7,814**	**7,485**	**7,295**	**7,069**	**7,015**	**6,982**	**7,017**	**7,088**	**7,100**	**7,089**

SCHOOL BOARD OF ALACHUA COUNTY
PUBLIC SCHOOL FACILITIES ELEMENT
SUPPLEMENTAL DATASET: HIGH SCHOOLS

Table High A3: LOS Standard by School										
	LOS									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
BUCHHOLZ	106.91%	102.08%	99.14%	95.68%	94.67%	94.23%	94.62%	95.63%	95.78%	95.67%
EASTSIDE	86.01%	82.31%	80.14%	77.60%	76.89%	76.51%	76.93%	77.71%	77.81%	77.70%
GAINESVILLE	90.12%	86.16%	83.79%	81.02%	80.16%	79.80%	80.21%	81.04%	81.17%	81.01%
HAWTHORNE	59.35%	56.75%	55.18%	53.46%	53.18%	52.91%	53.23%	53.70%	53.81%	53.74%
LOFTEN	34.47%	32.49%	31.19%	29.73%	28.75%	28.59%	28.68%	29.02%	29.08%	29.06%
NEWBERRY	85.20%	82.84%	82.12%	80.97%	81.57%	81.22%	81.68%	82.43%	82.60%	82.43%
SANTA FE	100.39%	79.09%	78.06%	76.60%	76.94%	76.61%	76.97%	77.75%	77.91%	77.75%
AQ JONES	80.93%	78.42%	77.60%	77.27%	79.98%	79.00%	79.77%	80.18%	80.35%	80.82%
HORIZON	82.43%	83.25%	85.91%	88.89%	93.84%	93.80%	94.71%	95.20%	95.40%	94.83%
LANIER	42.68%	33.09%	24.07%	15.07%	7.57%	7.59%	7.56%	7.59%	7.61%	7.65%
TOTAL HIGH	87.78%	81.79%	79.70%	77.24%	76.65%	76.29%	76.67%	77.45%	77.58%	77.45%

SCHOOL BOARD OF ALACHUA COUNTY
PUBLIC SCHOOL FACILITIES ELEMENT
SUPPLEMENTAL DATASET B: HIGH SCHOOLS

Table High A4: Available Capacity by School										
	Available Capacity									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
BUCHHOLZ	-136	-41	17	85	105	114	106	86	83	85
EASTSIDE	273	345	387	437	451	458	450	435	433	435
GAINESVILLE	192	269	315	369	386	393	385	368	366	369
HAWTHORNE	217	231	240	249	250	252	250	248	247	247
LOFTEN	346	356	363	371	376	377	377	375	374	375
NEWBERRY	92	106	111	118	114	116	114	109	108	109
SANTA FE	-4	277	291	310	306	310	305	295	293	295
AQ JONES	8	9	10	10	9	9	9	9	9	8
HORIZON	16	15	13	10	6	6	5	4	4	5
LANIER	84	98	111	124	135	135	135	135	135	135
TOTAL HIGH	1,088	1,667	1,857	2,083	2,137	2,170	2,135	2,064	2,052	2,063

SCHOOL BOARD OF ALACHUA COUNTY
PUBLIC SCHOOL FACILITIES ELEMENT
SUPPLEMENTAL DATASET: HIGH SCHOOLS

Table High B1: Permanent Program Capacity by Concurrency Service Area										
	Permanent Program Capacity									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
BUCHHOLZ	2,195	2,195	2,195	2,195	2,195	2,195	2,195	2,195	2,195	2,195
EASTSIDE	2,129	2,129	2,129	2,129	2,129	2,129	2,129	2,129	2,129	2,129
GAINESVILLE	2,138	2,138	2,138	2,138	2,138	2,138	2,138	2,138	2,138	2,138
HAWTHORNE	575	575	575	575	575	575	575	575	575	575
NEWBERRY	677	677	677	677	677	677	677	677	677	677
SANTA FE	1,188	1,438	1,438	1,438	1,438	1,438	1,438	1,438	1,438	1,438
TOTAL HIGH	**8,902**	**9,152**	**9,152**	**9,152**	**9,152**	**9,152**	**9,152**	**9,152**	**9,152**	**9,152**

Table High B2: Enrollment by Concurrency Service Area										
	Enrollment									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
BUCHHOLZ	2,204	2,102	2,039	1,966	1,943	1,934	1,942	1,963	1,966	1,964
EASTSIDE	1,756	1,678	1,632	1,578	1,562	1,555	1,563	1,579	1,581	1,579
GAINESVILLE	1,837	1,754	1,704	1,645	1,626	1,619	1,627	1,644	1,647	1,643
HAWTHORNE	335	320	311	301	299	297	299	302	302	302
NEWBERRY	553	537	531	523	525	523	526	531	532	531
SANTA FE	1,129	1,094	1,078	1,056	1,059	1,054	1,059	1,070	1,072	1,070
TOTAL HIGH	**7,814**	**7,485**	**7,295**	**7,069**	**7,015**	**6,982**	**7,017**	**7,088**	**7,100**	**7,089**

SCHOOL BOARD OF ALACHUA COUNTY
PUBLIC SCHOOL FACILITIES ELEMENT
SUPPLEMENTAL DATASET: HIGH SCHOOLS

Table High B3: LOS Standard by Concurrency Service Area										
	LOS									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
BUCHHOLZ	100.4%	95.8%	92.9%	89.6%	88.5%	88.1%	88.5%	89.4%	89.6%	89.4%
EASTSIDE	82.5%	78.8%	76.7%	74.1%	73.4%	73.0%	73.4%	74.2%	74.3%	74.2%
GAINESVILLE	85.9%	82.0%	79.7%	77.0%	76.1%	75.7%	76.1%	76.9%	77.0%	76.9%
HAWTHORNE	58.3%	55.6%	54.0%	52.3%	51.9%	51.6%	52.0%	52.4%	52.5%	52.5%
NEWBERRY	81.7%	79.3%	78.5%	77.2%	77.7%	77.3%	77.8%	78.5%	78.7%	78.5%
SANTA FE	95.0%	76.1%	75.0%	73.4%	73.6%	73.3%	73.7%	74.4%	74.6%	74.4%
TOTAL HIGH	**87.8%**	**81.8%**	**79.7%**	**77.2%**	**76.6%**	**76.3%**	**76.7%**	**77.5%**	**77.6%**	**77.5%**

Table High B4: Available Capacity by Concurrency Service Area										
	Enrollment									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
BUCHHOLZ	-9	93	156	229	252	261	253	232	229	232
EASTSIDE	373	450	497	550	567	574	566	550	548	550
GAINESVILLE	301	384	434	493	512	519	511	494	491	495
HAWTHORNE	240	255	265	275	277	278	276	274	273	274
NEWBERRY	124	140	146	154	151	153	150	146	144	146
SANTA FE	59	344	360	382	379	384	379	368	366	368
TOTAL HIGH	**1,088**	**1,667**	**1,857**	**2,083**	**2,137**	**2,170**	**2,135**	**2,064**	**2,052**	**2,063**

SCHOOL BOARD OF ALACHUA COUNTY
PUBLIC SCHOOL FACILITIES ELEMENT
SUPPLEMENTAL DATASET: MIDDLE SCHOOLS

Table Middle A1: Permanent Program Capacity by School										
	Permanent Program Capacity									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
BISHOP	1,108	1,108	1,108	1,108	1,108	1,108	1,108	1,108	1,108	1,108
FORT CLARKE	909	909	909	909	909	909	909	909	909	909
KANAPAHA	1,079	1,079	1,079	1,079	1,079	1,079	1,079	1,079	1,079	1,079
HAWTHORNE	131	131	131	131	131	131	131	131	131	131
HIGH SPRINGS	476	476	600	600	600	600	600	600	600	600
LINCOLN	1,053	1,053	1,053	1,053	1,053	1,053	1,053	1,053	1,053	1,053
MEBANE	779	779	779	779	779	779	779	779	779	779
OAK VIEW	699	699	699	699	699	699	699	699	699	699
WESTWOOD	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142	1,142
LOFTEN	0	0	0	0	0	0	0	0	0	0
AQ JONES	33	33	33	33	33	33	33	33	33	33
HORIZON	107	107	107	107	107	107	107	107	107	107
LANIER	84	84	84	84	84	84	84	84	84	84
TOTAL MIDDLE	**7,600**	**7,600**	**7,724**	**7,724**	**7,724**	**7,724**	**7,724**	**7,724**	**7,724**	**7,724**

SCHOOL BOARD OF ALACHUA COUNTY
PUBLIC SCHOOL FACILITIES ELEMENT
SUPPLEMENTAL DATASET: MIDDLE SCHOOLS

Table Middle A2: Enrollment by School										
	Enrollment									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
BISHOP	813	799	779	784	744	785	768	757	770	757
FORT CLARKE	885	862	833	831	780	823	805	794	809	793
KANAPAHA	916	887	852	845	788	832	813	802	817	802
HAWTHORNE	91	93	93	97	119	119	119	120	120	121
HIGH SPRINGS	330	328	324	330	558	334	326	322	329	568
LINCOLN	763	748	727	731	733	710	691	680	695	746
MEBANE	482	471	457	457	432	456	446	440	449	439
OAK VIEW	438	448	455	476	468	494	483	477	485	476
WESTWOOD	969	959	941	954	910	959	935	922	939	926
LOFTEN	0	0	0	0	0	0	0	0	0	0
AQ JONES	19	21	22	24	27	28	27	27	27	27
HORIZON	53	56	59	64	64	68	66	65	66	65
LANIER	13	12	11	10	10	10	10	10	10	10
TOTAL MIDDLE	**5,773**	**5,683**	**5,553**	**5,603**	**5,633**	**5,616**	**5,490**	**5,415**	**5,516**	**5,730**
2008 COFTE	**5,773**	**5,683**	**5,553**	**5,603**	**5,633**	**5,616**	**5,490**	**5,415**	**5,516**	**5,730**

SCHOOL BOARD OF ALACHUA COUNTY
PUBLIC SCHOOL FACILITIES ELEMENT
SUPPLEMENTAL DATASET: MIDDLE SCHOOLS

Table Middle A3: LOS Standard by School										
	LOS Standard									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
BISHOP	73.4%	72.1%	70.3%	70.8%	67.1%	70.8%	69.3%	68.3%	69.5%	68.3%
FORT CLARKE	97.3%	94.8%	91.6%	91.4%	85.8%	90.5%	88.5%	87.4%	89.0%	87.3%
KANAPAHA	84.9%	82.3%	79.0%	78.3%	73.0%	77.1%	75.4%	74.3%	75.7%	74.3%
HAWTHORNE	69.5%	70.7%	70.9%	74.0%	90.8%	90.8%	90.8%	91.6%	91.6%	92.4%
HIGH SPRINGS	69.4%	68.9%	53.9%	55.0%	93.0%	55.6%	54.4%	53.7%	54.8%	94.6%
LINCOLN	72.5%	71.0%	69.1%	69.4%	69.6%	67.4%	65.6%	64.6%	66.0%	70.8%
MEBANE	61.8%	60.4%	58.6%	58.7%	55.5%	58.5%	57.3%	56.5%	57.6%	56.4%
OAK VIEW	62.6%	64.1%	65.0%	68.0%	67.0%	70.6%	69.1%	68.2%	69.4%	68.1%
WESTWOOD	84.8%	84.0%	82.4%	83.5%	79.7%	84.0%	81.9%	80.7%	82.2%	81.1%
LOFTEN	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
AQ JONES	58.9%	62.7%	68.1%	73.4%	81.8%	84.3%	82.7%	80.4%	83.0%	83.2%
HORIZON	49.7%	52.5%	54.8%	59.4%	59.8%	63.1%	61.9%	60.6%	61.7%	60.8%
LANIER	15.8%	14.3%	12.8%	12.0%	11.3%	11.8%	11.6%	11.7%	11.9%	11.5%
TOTAL MIDDLE	**76.0%**	**74.8%**	**71.9%**	**72.5%**	**72.9%**	**72.7%**	**71.1%**	**70.1%**	**71.4%**	**74.2%**

SCHOOL BOARD OF ALACHUA COUNTY
PUBLIC SCHOOL FACILITIES ELEMENT
SUPPLEMENTAL DATASET: MIDDLE SCHOOLS

Table Middle A4: Available Capacity by School										
	Available Capacity									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
BISHOP	295	309	329	324	364	323	340	351	338	351
FORT CLARKE	24	47	76	78	129	86	104	115	100	116
KANAPAHA	163	192	227	234	291	247	266	277	262	277
HAWTHORNE	40	38	38	34	12	12	12	11	11	10
HIGH SPRINGS	146	148	276	270	42	266	274	278	271	32
LINCOLN	290	305	326	322	320	343	362	373	358	307
MEBANE	297	308	322	322	347	323	333	339	330	340
OAK VIEW	261	251	244	223	231	205	216	222	214	223
WESTWOOD	173	183	201	188	232	183	207	220	203	216
LOFTEN	0	0	0	0	0	0	0	0	0	0
AQ JONES	14	12	11	9	6	5	6	6	6	6
HORIZON	54	51	48	43	43	39	41	42	41	42
LANIER	71	72	73	74	74	74	74	74	74	74
TOTAL MIDDLE	**1,827**	**1,917**	**2,171**	**2,121**	**2,091**	**2,108**	**2,234**	**2,309**	**2,208**	**1,994**

SCHOOL BOARD OF ALACHUA COUNTY
PUBLIC SCHOOL FACILITIES ELEMENT
SUPPLEMENTAL DATASET: MIDDLE SCHOOLS

Table Middle B1: Permanent Program Capacity by Concurrency Service Area

	Permanent Program Capacity									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
BISHOP	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140	1,140
FORT CLARKE	944	944	944	944	944	944	944	944	944	944
KANAPAHA	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116
HAWTHORNE	135	135	135	135	135	135	135	135	135	135
HIGH SPRINGS	489	489	613	613	613	613	613	613	613	613
LINCOLN	1,083	1,083	1,083	1,083	1,083	1,083	1,083	1,083	1,083	1,083
MEBANE	798	798	798	798	798	798	798	798	798	798
OAK VIEW	716	716	716	716	716	716	716	716	716	716
WESTWOOD	1,180	1,180	1,180	1,180	1,180	1,180	1,180	1,180	1,180	1,180
TOTAL MIDDLE	**7,600**	**7,600**	**7,724**	**7,724**	**7,724**	**7,724**	**7,724**	**7,724**	**7,724**	**7,724**

Table Middle B2: Enrollment by Concurrency Service Area

	Enrollment									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
BISHOP	825	812	792	798	758	800	782	771	785	771
FORT CLARKE	898	876	847	846	796	839	821	780	825	809
KANAPAHA	930	902	868	861	804	849	830	788	834	818
HAWTHORNE	92	94	94	98	121	121	121	122	122	123
HIGH SPRINGS	335	333	329	336	564	340	332	328	335	574
LINCOLN	775	760	740	744	747	724	705	691	709	759
MEBANE	489	478	464	466	441	465	455	432	457	448
OAK VIEW	444	455	461	483	475	502	491	484	493	484
WESTWOOD	983	974	957	971	927	977	952	939	956	943
TOTAL MIDDLE	**5,773**	**5,683**	**5,553**	**5,603**	**5,633**	**5,616**	**5,490**	**5,335**	**5,516**	**5,730**

SCHOOL BOARD OF ALACHUA COUNTY
PUBLIC SCHOOL FACILITIES ELEMENT
SUPPLEMENTAL DATASET: MIDDLE SCHOOLS

Table Middle B3: LOS Standard by Concurrency Service Area

	LOS									
	2008-09	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**
BISHOP	72.4%	71.2%	69.5%	70.0%	66.5%	70.2%	68.6%	67.7%	68.9%	67.7%
FORT CLARKE	95.1%	92.8%	89.7%	89.6%	84.3%	88.9%	86.9%	82.6%	87.4%	85.7%
KANAPAHA	83.4%	80.9%	77.8%	77.2%	72.1%	76.1%	74.4%	70.6%	74.8%	73.3%
HAWTHORNE	68.7%	69.9%	70.1%	73.2%	89.6%	89.7%	89.7%	90.4%	90.4%	91.2%
HIGH SPRINGS	68.6%	68.1%	53.7%	54.8%	92.0%	55.5%	54.2%	53.5%	54.6%	93.5%
LINCOLN	71.5%	70.1%	68.3%	68.7%	68.9%	66.9%	65.1%	63.8%	65.4%	70.1%
MEBANE	61.3%	59.9%	58.2%	58.4%	55.2%	58.3%	57.0%	54.1%	57.3%	56.2%
OAK VIEW	62.1%	63.6%	64.5%	67.5%	66.4%	70.1%	68.6%	67.7%	68.9%	67.6%
WESTWOOD	83.3%	82.6%	81.1%	82.3%	78.6%	82.8%	80.7%	79.6%	81.1%	79.9%
TOTAL MIDDLE	**76.0%**	**74.8%**	**71.9%**	**72.5%**	**72.9%**	**72.7%**	**71.1%**	**69.1%**	**71.4%**	**74.2%**

Table Middle B4: Available Capacity by Concurrency Service Area

	Available Capacity									
	2008-09	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**	**2016-17**	**2017-18**
BISHOP	315	328	348	342	382	340	358	369	355	369
FORT CLARKE	46	68	97	98	148	105	123	164	119	135
KANAPAHA	185	214	248	255	311	267	285	328	282	297
HAWTHORNE	42	41	40	36	14	14	14	13	13	12
HIGH SPRINGS	154	156	284	277	49	273	281	285	278	40
LINCOLN	309	324	343	339	337	359	378	392	374	324
MEBANE	309	320	334	332	357	333	343	366	341	350
OAK VIEW	271	261	254	233	240	214	225	231	223	232
WESTWOOD	197	206	223	209	253	203	227	241	224	237
TOTAL MIDDLE	**1,827**	**1,917**	**2,171**	**2,121**	**2,091**	**2,108**	**2,234**	**2,389**	**2,208**	**1,994**

SCHOOL BOARD OF ALACHUA COUNTY
PUBLIC SCHOOL FACILITIES ELEMENT
SUPPLEMENTAL DATASET: ELEMENTARY SCHOOLS

Table Elem A1: Permanent Program Capacity by School										
	Permanent Program Capacity									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
ALACHUA	725	725	725	725	725	725	725	725	725	725
ARCHER	564	564	564	564	564	564	564	564	564	564
CHILES	761	761	761	761	761	761	761	761	761	761
DUVAL	492	492	492	492	492	492	492	492	492	492
FINLEY	489	489	489	489	489	489	489	489	489	489
FOSTER	498	498	498	498	498	498	498	498	498	498
GLEN SPRINGS	475	475	475	475	475	475	475	475	475	475
HIDDEN OAK	743	743	743	743	743	743	743	743	743	743
HIGH SPRINGS	544	544	420	420	420	420	420	420	420	420
IDYLWILD	615	615	615	615	615	615	615	615	615	615
IRBY	595	595	595	595	595	595	595	595	595	595
LAKE FOREST	660	660	660	660	660	660	660	660	660	660
LITTLEWOOD	685	685	685	685	685	685	685	685	685	685
METCALFE	585	585	585	585	585	585	585	585	585	585
NEWBERRY	515	515	515	515	515	515	515	515	515	515
NORTON	687	687	687	687	687	687	687	687	687	687
PRAIRIE VIEW	575	575	575	575	575	575	575	575	575	575
RAWLINGS	518	518	518	518	518	518	518	518	518	518
SHELL	406	406	406	406	406	406	406	406	406	406
TALBOT	721	721	721	721	721	721	721	721	721	721
TERWILLIGER	615	615	615	615	615	615	615	615	615	615
WALDO	268	268	268	268	268	268	268	268	268	268
WILES	724	724	724	724	724	724	724	724	724	724
WILLIAMS	535	535	535	535	535	535	535	535	535	535
LANIER	179	179	179	179	179	179	179	179	179	179
AQ JONES	67	67	67	67	67	67	67	67	67	67
New Elem F	0	0	378	378	378	378	378	378	378	378
New Elem G	0	0	0	756	756	756	756	756	756	756
New Elem H	0	0	0	0	0	0	0	0	0	0
TOTAL ELEM	**14,241**	**14,241**	**14,495**	**15,251**	**15,251**	**15,251**	**15,251**	**15,251**	**15,251**	**15,251**

SCHOOL BOARD OF ALACHUA COUNTY
PUBLIC SCHOOL FACILITIES ELEMENT
SUPPLEMENTAL DATASET: ELEMENTARY SCHOOLS

Table Elem A2: Enrollment by School

	Enrollment									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
ALACHUA	484	496	514	525	545	541	556	573	684	598
ARCHER	329	330	335	332	339	356	367	378	384	394
CHILES	797	737	685	619	578	512	535	560	573	598
DUVAL	464	461	463	455	462	458	472	486	494	507
FINLEY	423	413	408	395	395	392	403	414	421	433
FOSTER	482	489	501	502	523	519	534	550	558	574
GLEN SPRINGS	471	465	464	453	458	494	509	514	521	547
HIDDEN OAK	833	803	782	745	732	571	597	623	637	664
HIGH SPRINGS	602	598	605	0	0	358	374	390	398	415
IDYLWILD	598	622	653	669	710	704	725	747	759	779
IRBY	513	518	529	528	546	542	558	574	583	599
LAKE FOREST	387	399	416	423	445	441	454	467	474	488
LITTLEWOOD	637	641	652	649	668	682	704	725	736	755
METCALFE	307	299	294	286	284	282	290	298	303	312
NEWBERRY	592	560	535	504	481	444	460	476	485	501
NORTON	671	679	695	704	723	716	737	759	770	794
PRAIRIE VIEW	154	109	76	36	0	0	0	0	0	0
RAWLINGS	366	382	403	420	440	436	449	462	468	483
SHELL	201	204	208	210	215	213	220	226	229	236
TALBOT	691	664	645	619	601	675	693	714	725	747
TERWILLIGER	511	515	525	529	539	535	549	565	575	591
WALDO	219	226	234	240	248	246	254	260	264	272
WILES	688	695	709	716	733	627	648	670	682	705
WILLIAMS	511	511	518	519	526	522	537	552	561	578
LANIER	27	25	24	19	27	18	18	18	18	19
AQ JONES	53	53	54	54	53	53	54	55	56	58
New Elem F	0	0	0	200	204	300	300	300	300	300
New Elem G	0	0	0	600	600	700	700	700	700	700
New Elem H	0	0	0	0	0	0	0	0	0	0
TOTAL ELEM	**12,011**	**11,894**	**11,927**	**11,951**	**12,075**	**12,337**	**12,697**	**13,056**	**13,358**	**13,647**
2008 COFTE	**12,011**	**11,894**	**11,927**	**11,951**	**12,075**	**12,337**	**12,697**	**13,056**	**13,358**	**13,647**

SCHOOL BOARD OF ALACHUA COUNTY
ALACHUA COUNTY PUBLIC SCHOOL FACILITIES ELEMENT
SUPPLEMENTAL DATASET A: ELEMENTARY SCHOOLS

Table Elem A3: LOS Standard by School										
	LOS									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
ALACHUA	66.76%	68.41%	70.90%	72.41%	75.17%	74.58%	76.69%	79.03%	94.31%	82.48%
ARCHER	58.33%	58.51%	59.40%	58.87%	60.11%	63.12%	65.07%	67.02%	68.09%	69.86%
CHILES	104.73%	96.85%	90.01%	81.34%	75.95%	67.28%	70.30%	73.59%	75.30%	78.58%
DUVAL	94.31%	93.70%	94.11%	92.48%	93.90%	93.09%	95.93%	98.78%	100.41%	103.05%
FINLEY	86.50%	84.46%	83.44%	80.78%	80.78%	80.23%	82.50%	84.75%	86.09%	88.55%
FOSTER	96.79%	98.19%	100.60%	100.80%	105.02%	104.22%	107.23%	110.44%	112.05%	115.26%
GLEN SPRINGS	99.16%	97.89%	97.68%	95.37%	96.42%	104.00%	107.16%	108.21%	109.68%	115.16%
HIDDEN OAK	112.11%	108.08%	105.25%	100.27%	98.52%	76.85%	80.35%	83.85%	85.73%	89.37%
HIGH SPRINGS	110.66%	109.93%	144.05%	0.00%	0.00%	85.24%	89.05%	92.86%	94.76%	98.81%
IDYLWILD	97.24%	101.14%	106.18%	108.78%	115.45%	114.47%	117.89%	121.46%	123.41%	126.67%
IRBY	86.22%	87.06%	88.91%	88.74%	91.76%	91.04%	93.78%	96.47%	97.98%	100.67%
LAKE FOREST	58.64%	60.45%	63.03%	64.16%	67.42%	66.82%	68.79%	70.76%	71.82%	73.94%
LITTLEWOOD	92.99%	93.58%	95.18%	94.74%	97.52%	99.58%	102.77%	105.84%	107.45%	110.22%
METCALFE	52.48%	51.11%	50.26%	48.89%	48.55%	48.21%	49.57%	50.94%	51.79%	53.33%
NEWBERRY	114.95%	108.74%	103.88%	97.86%	93.40%	86.21%	89.32%	92.43%	94.17%	97.28%
NORTON	97.67%	98.84%	101.16%	102.47%	105.24%	104.22%	107.28%	110.48%	112.08%	115.57%
PRAIRIE VIEW	26.78%	18.96%	13.22%	6.26%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
RAWLINGS	70.66%	73.75%	77.80%	81.08%	84.94%	84.17%	86.68%	89.19%	90.35%	93.24%
SHELL	49.55%	50.25%	51.23%	51.72%	52.96%	52.49%	54.14%	55.61%	56.40%	58.13%
TALBOT	95.77%	92.09%	89.46%	85.85%	83.36%	93.64%	96.12%	99.03%	100.55%	103.61%
TERWILLIGER	83.09%	83.74%	85.37%	86.02%	87.64%	86.95%	89.27%	91.87%	93.50%	96.10%
WALDO	81.86%	84.33%	87.31%	89.55%	92.54%	91.78%	94.78%	96.98%	98.51%	101.49%
WILES	95.10%	95.99%	97.93%	98.90%	101.24%	86.60%	89.50%	92.54%	94.20%	97.38%
WILLIAMS	95.43%	95.51%	96.82%	97.01%	98.32%	97.57%	100.37%	103.18%	104.86%	108.04%
LANIER	15.25%	13.97%	13.63%	10.61%	15.08%	10.06%	10.06%	10.06%	10.06%	10.61%
AQ JONES	78.47%	79.10%	80.60%	80.60%	79.10%	79.10%	80.60%	82.09%	83.58%	86.57%
New Elem F	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
New Elem G	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
New Elem H	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
TOTAL ELEM	**84.34%**	**83.52%**	**82.29%**	**78.37%**	**79.18%**	**80.89%**	**83.26%**	**85.61%**	**87.59%**	**89.48%**

SCHOOL BOARD OF ALACHUA COUNTY
PUBLIC SCHOOL FACILITIES ELEMENT
SUPPLEMENTAL DATASET: ELEMENTARY SCHOOLS

Table Elem A4: Available Capacity by School										
	Available Capacity									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
ALACHUA	241	229	211	200	180	184	169	152	41	127
ARCHER	235	234	229	232	225	208	197	186	180	170
CHILES	78	138	190	142	183	249	226	201	188	163
DUVAL	28	31	29	37	30	34	20	6	-2	-15
FINLEY	66	76	81	94	94	97	86	75	68	56
FOSTER	16	9	-3	-4	-25	-21	-36	-52	-60	-76
GLEN SPRINGS	4	10	11	22	17	-19	-34	-39	-46	-72
HIDDEN OAK	21	51	72	-2	11	172	146	120	106	79
HIGH SPRINGS	51	55	-101	420	420	62	46	30	22	5
IDYLWILD	17	-7	-38	-54	-95	-89	-110	-132	-144	-164
IRBY	82	77	66	67	49	53	37	21	12	-4
LAKE FOREST	273	261	244	237	215	219	206	193	186	172
LITTLEWOOD	48	44	33	36	17	3	-19	-40	-51	-70
METCALFE	278	286	291	299	301	303	295	287	282	273
NEWBERRY	0	32	57	11	34	71	55	39	30	14
NORTON	16	8	-8	-17	-36	-29	-50	-72	-83	-107
PRAIRIE VIEW	421	466	499	539	575	575	575	575	575	575
RAWLINGS	152	136	115	98	78	82	69	56	50	35
SHELL	205	202	198	196	191	193	186	180	177	170
TALBOT	30	57	76	102	120	46	28	7	-4	-26
TERWILLIGER	104	100	90	86	76	80	66	50	40	24
WALDO	49	42	34	28	20	22	14	8	4	-4
WILES	144	138	124	8	-9	97	76	54	42	19
WILLIAMS	24	24	17	16	9	13	-2	-17	-26	-43
LANIER	152	154	155	160	152	161	161	161	161	160
AQ JONES	14	14	13	13	14	14	13	12	11	9
New Elem F	0	0	378	178	174	78	78	78	78	78
New Elem G	0	0	0	156	156	56	56	56	56	56
New Elem H	0	0	0	0	0	0	0	0	0	0
TOTAL ELEM	2,750	2,867	3,063	3,300	3,176	2,914	2,554	2,195	1,893	1,604

SCHOOL BOARD OF ALACHUA COUNTY
PUBLIC SCHOOL FACILITIES ELEMENT
SUPPLEMENTAL DATASET: ELEMENTARY SCHOOLS

Table Elem B1: Permanent Program Capacity by Concurrency Service Area										
	Permanent Program Capacity									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
ALACHUA	1,386	1,386	1,386	1,386	1,386	1,386	1,386	1,386	1,386	1,386
ARCHER	580	580	580	580	580	580	580	580	580	580
HAWTHORNE	422	422	422	422	422	422	422	422	422	422
HIGH SPRINGS	585	585	839	839	839	839	839	839	839	839
NEWBERRY	556	556	556	1,312	1,312	1,312	1,312	1,312	1,312	1,312
NW G'VILLE	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545	2,545
EAST G'VILLE	2,938	2,938	2,938	2,938	2,938	2,938	2,938	2,938	2,938	2,938
SOUTH G'VILLE	2,552	2,552	2,552	2,552	2,552	2,552	2,552	2,552	2,552	2,552
WALDO	284	284	284	284	284	284	284	284	284	284
WEST URBAN	2,380	2,380	2,380	2,380	2,380	2,380	2,380	2,380	2,380	2,380
ELEM TOTAL	**14,229**	**14,229**	**14,483**	**15,239**	**15,239**	**15,239**	**15,239**	**15,239**	**15,239**	**15,239**

Table Elem B2: Enrollment by Concurrency Service Area										
	Enrollment									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
ALACHUA	1,016	1,029	1,055	1,062	1,097	1,088	1,120	1,153	1,273	1,203
ARCHER	334	334	338	334	341	357	368	379	385	396
HAWTHORNE	206	208	211	212	217	215	221	227	230	238
HIGH SPRINGS	614	607	613	205	208	662	678	694	702	719
NEWBERRY	604	569	543	1,109	1,085	1,148	1,164	1,180	1,189	1,205
NW G'VILLE	2,361	2,334	2,336	2,300	2,321	2,418	2,487	2,552	2,589	2,677
EAST G'VILLE	2,077	2,086	2,122	2,123	2,171	2,152	2,215	2,278	2,313	2,382
SOUTH G'VILLE	2,211	2,225	2,266	2,262	2,326	2,326	2,394	2,465	2,504	2,572
WALDO	224	230	237	242	250	247	255	261	265	274
WEST URBAN	2,356	2,263	2,197	2,092	2,049	1,715	1,785	1,858	1,897	1,972
ELEM TOTAL	**12,002**	**11,884**	**11,918**	**11,942**	**12,065**	**12,327**	**12,688**	**13,046**	**13,348**	**13,637**

SCHOOL BOARD OF ALACHUA COUNTY
PUBLIC SCHOOL FACILITIES ELEMENT
SUPPLEMENTAL DATASET: ELEMENTARY SCHOOLS

Table Elem B3: LOS Standard by Concurrency Service Area										
	LOS									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
ALACHUA	73.3%	74.3%	76.2%	76.6%	79.2%	78.5%	80.8%	83.2%	91.8%	86.8%
ARCHER	57.5%	57.5%	58.2%	57.6%	58.7%	61.6%	63.5%	65.4%	66.4%	68.1%
HAWTHORNE	48.7%	49.2%	50.0%	50.2%	51.3%	50.8%	52.4%	53.8%	54.6%	56.2%
HIGH SPRINGS	104.9%	103.8%	73.0%	24.5%	24.8%	78.8%	80.8%	82.7%	83.6%	85.7%
NEWBERRY	108.6%	102.4%	97.6%	84.6%	82.7%	87.5%	88.7%	89.9%	90.6%	91.8%
NW G'VILLE	92.8%	91.7%	91.8%	90.4%	91.2%	95.0%	97.7%	100.3%	101.7%	105.2%
EAST G'VILLE	70.7%	71.0%	72.2%	72.3%	73.9%	73.2%	75.4%	77.5%	78.7%	81.1%
SOUTH G'VILLE	86.6%	87.2%	88.8%	88.6%	91.2%	91.2%	93.8%	96.6%	98.1%	100.8%
WALDO	78.8%	80.8%	83.4%	85.1%	87.8%	87.0%	89.8%	91.9%	93.3%	96.2%
WEST URBAN	99.0%	95.1%	92.3%	87.9%	86.1%	72.0%	75.0%	78.1%	79.7%	82.9%
ELEM TOTAL	**84.3%**	**83.5%**	**82.3%**	**78.4%**	**79.2%**	**80.9%**	**83.3%**	**85.6%**	**87.6%**	**89.5%**

Table Elem B4: Available Capacity by Concurrency Service Area										
	Available Capacity									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
ALACHUA	370	357	330	324	288	298	266	233	113	183
ARCHER	247	247	242	246	240	223	212	201	195	185
HAWTHORNE	217	215	211	210	206	208	201	195	192	185
HIGH SPRINGS	88	95	394	634	631	178	161	145	137	120
NEWBERRY	36	70	97	203	227	165	148	132	123	107
NW G'VILLE	184	211	209	245	224	127	58	-6	-44	-132
EAST G'VILLE	861	852	816	815	766	786	723	660	624	556
SOUTH G'VILLE	341	327	286	290	225	226	157	87	47	-20
WALDO	60	55	47	42	35	37	29	23	19	11
WEST URBAN	381	474	540	288	331	665	595	522	483	408
ELEM TOTAL	**2,785**	**2,902**	**3,173**	**3,297**	**3,173**	**2,912**	**2,551**	**2,193**	**1,891**	**1,602**

Recreation Element

GOAL 1

PROVIDE SUFFICIENT PARK ACREAGE, FACILITIES, AND RECREATION PROGRAMS EFFICIENTLY AND IN CLOSE PROXIMITY TO URBANIZED RESIDENTIAL AREAS.

Objective 1.1

The City shall maintain the minimum level of service (LOS) standards and the park design standards throughout the planning time frame.

Policies

1.1.1 The City shall maintain LOS standards adopted in Table 1 and the park design standards described in the Recreation Element.

1.1.2 The City shall maintain a computer inventory of all recreation and open space sites with actual or potential public access. This inventory shall include site acreages, facilities and condition of facilities, surveys of actual usage and the most recent inventory dates.

1.1.3 The City shall continue to use the criteria described by the "Land Acquisition" portion of the Recreation Element and use such criteria for prioritizing land acquisitions for parks. These criteria include:

- **Population Density**
  Parcels near high population densities;
- **Proximity to Existing Parks**
  Parcels that are remote from existing parks;
- **Access to Environmentally Significant Open Space**
  Parcels that improve public access to environmentally significant open space;
- **Trail Access**
  Parcels that are served by an existing or potential recreational trail;

Adopted by Ord. 000514, 3/4/02
Revised 5/17/12, Ord. 110608

- **Greenbelt Value**
  Parcels that would serve as a component in a greenbelt system;

- **Connectivity**
  Parcels useful in connecting or extending the size of existing parks or open spaces;

- **Multiple Use**
  Parcels able to provide active and passive forms of recreation, as well as conservation of natural resources;

- **Rarity and Diversity**
  Parcels that contain rare or diverse forms of environmental or historical features, or a combination of these features;

- **Ecosystem Preservation**
  Parcels necessary for preserving the integrity of an important ecosystem;

- **Cost**
  Parcels that are relatively low in acquisition and maintenance cost;

- **Willingness to Sell**
  Parcels with an owner willing to sell all or part of the rights to the parcel;

- **Development Pressure**
  Parcels that are likely to be developed in the near future;

- **Jurisdiction**
  Parcels within or near the boundaries of the City; and

- **Environmental Degradation**
  Parcels able to accommodate recreation without degrading environmentally significant features

1.1.4 The City shall continue to use the following criteria to rank recreation capital improvements within the Capital Improvements Element.

Degree of Deficiency

A. *Largest Absolute Deficiency*. Those areas with the highest acreage or facility deficiency are prioritized.

B. *Lowest Current Level of Service*. Those areas with the lowest current level of service are prioritized. Implicit in both "A" and "B" is the need to prioritize urban area facilities before quadrant facilities.

Proximity to Similar Facilities

Those dysfunctional or deficient facilities which are at least one mile from the same type facilities are prioritized. This distance can include hazard-oriented barriers such as major roadways, as well as geographical distance.

Program Dependency

Those dysfunctional or deficient facilities which are necessary for the provision of the largest number of needed recreation programs are prioritized. Includes pools, basketball courts and all parks.

Park Reclassification

Those dysfunctional or deficient facilities which enable the park to be reclassified to the next higher park type, in an instance where the higher park type is needed by the area, are prioritized.

Urban Area Deficiency

Urban area facilities that are deficient are prioritized. Urban area facilities include 50-meter pools, sports-complexes, and local nature parks.

Recent Park Acquisition

A new project at a park may be within the same area as another park of the same type. If this other park was acquired over the past three years, the new project is de-prioritized.

Objective 1.2

Establish mechanisms for the efficient design and maintenance of city-owned community, neighborhood, mini, sports-complex, and nature parks to maximize the enjoyment of such parks by park users.

Policies

1.2.1 Site plans shall be developed for proposed city-owned community, neighborhood, mini, sports-complex, and nature parks, in accordance with the park design standards described in the Recreation Element. Review criteria shall include safety, traffic circulation, emergency communication and service, conservation or restoration of natural features, desires expressed by park users and nearby property owners, minimization of operation and maintenance costs, facility hazard or obsolescence, durability, minimization of liability due to accident, and multiple-use potential. The review shall be in accordance with adopted procedures for public review and suggestions. The review shall result in the filing of a report to the City Commission describing the improvements called for by the review and the estimated cost of the improvements. The

City shall incorporate any approved capital improvements into the Capital Improvements Element for implementation.

1.2.2 The City shall seek to maintain all recreational facilities in at least "good" condition as defined in the "Condition of City Recreation Facilities" portion of the data and analysis for the Recreation Element. The City shall incorporate the capital improvements necessary to attain this standard into the 5-year Schedule of Capital Improvements for implementation.

1.2.3 New recreational facilities shall be constructed in accordance with standards described by the "Minimum Facility Design Standards" portion of the Recreation Element Data and Analysis Report.

Objective 1.3 **Eliminate conflicts and maximize coordination among service providers in the planning and management of recreation and open space within the urban area to maximize efficiency and equity in the provision and funding of recreation services.**

Policies

1.3.1 The City shall coordinate with the County on recreation planning and management services for the urban area.

1.3.2 To use a specific school facility for public recreational purposes, the City and SBAC shall first enter into an individual, facility-specific agreement.

1.3.3 The City shall seek the joint use of recreation facilities with other public providers such as the SBAC, Alachua County and the State of Florida, wherever possible, in order to minimize public investments needed to provide needed recreational facilities.

1.3.4 The City shall prepare contracts and cooperative agreements with semi-private and private entities to provide recreation facilities, maintenance and programs, particularly programs designed to meet the recreational needs of youth. Such agreements shall include private sponsorships, community service projects and establishment of a civilian conservation corps.

Objective 1.4 **Disposal or sale of city-owned land or facilities shall not be detrimental to important recreational needs.**

Policies

1.4.1 Prior to the disposal of non-recreational city-owned land or facilities, the City shall prepare a report that evaluates the potential use of such land or facilities for recreation, and whether such land or facilities are needed to maintain or enhance the standards described in Objective 1.1.

1.4.2 The City shall prepare a report for the City Manager recommending the disposal of, or adaptive reuse of recreation facilities or properties that are no longer serving recreational needs. Such a report shall be prepared on a case by case basis.

1.4.3 Proceeds from the disposal or sale of any city-owned recreation and park properties shall be used for recreation and park infrastructure enhancements and improvements.

The City shall continue to use a user fee system for City recreation programs and facilities that shall favor City residents and that shall not be an obstacle to low-income City residents. **Objective 1.5**

Policies

1.5.1 Except in the context of a City-County cooperative agreement, softball, swimming, and other fee-based recreation and nature park programs shall be designed, administered and priced so as to give preference to City residents over non-city residents.

1.5.2 Certain specialized recreation facilities and programs used by a relatively small proportion of recreation users, such as golf courses and water theme parks, shall be provided and generally offered on a fee-for-service basis aimed at financial self-sufficiency.

1.5.3 The City shall establish fee waiver reductions to ensure that lower income City residents/youth are not deprived of recreation services because of financial limitations.

Improve access to parks for all categories of users. **Objective 1.6**

Policies

1.6.1 Community parks shall have bicycle and pedestrian access meeting Traffic Engineering standards along all arterials that serve the parks, except where right-of-way does not exist along such arterials. When justified by transit demand estimates, each community park shall also be regularly served by the City bus system.

1.6.2 The City shall continue to utilize Land Development Regulations requiring the provision of public trails that pass through or are adjacent to new developments. In addition, the City shall continue to study the feasibility of using publicly owned (but undeveloped) dedicated road rights-of-way for recreational use.

1.6.3 Safe access to parks shall be incorporated into park construction and road improvement projects through City Land Development Regulations that minimize the need to use or cross major roads at grade.

1.6.4 All community and neighborhood parks shall continue to be designed to provide recreational facilities, programs, and access to the handicapped/disabled, elderly and other individuals with physical limitations.

Objective 1.7

The development of recreation programs for youth is the most important recreational priority. Given this, the City shall establish youth recreation programs sufficient to meet the unmet needs for such programs by city youth.

Policies

1.7.1 The City shall continue to coordinate with the University of Florida and SBAC, a recreational tutorial after-school program for elementary and middle school-aged city youth.

1.7.2 The City shall establish contracts and cooperative agreements, as described in Policy 1.3.5, for the improvement of youth recreation programs.

1.7.3 To meet the needs of pre-school and school-aged children, the City shall design programs that are designed to accommodate the typical work schedules of parents.

Objective 1.8

The City shall strive to provide funding to maintain or exceed the minimum level of service standards and create a sustainable economic base for recreation.

Policies

1.8.1. The City shall continue to coordinate with Alachua County in implementing the Countywide Recreation Master Plan.

1.8.2 The City shall continue to seek monies from a wide variety of funding sources including grants and joint public-private partnerships.

1.8.3 The City shall seek various funding sources including, but not limited to, general bond issues, recreation impact fees, utility fee transfers and recreation park tax districts. The City shall also consider alternative means of funding including, but not limited to, park donation boxes and park sponsorships.

GOAL 2

ESTABLISH A PARK AND OPEN SPACE SYSTEM WHICH ENSURES THE VISIBILITY OF, PRESERVATION OF, AND ACCESS TO ENVIRONMENTALLY SIGNIFICANT OPEN SPACES OF THE URBAN AREA.

Objective 2.1

A trail network, shall be established by the acquisition and development of proposed and existing parks in a manner that promotes the establishment of such a network. The trail network should include paved and unpaved trails along water bodies, utility corridors, and rail corridors that link environmentally significant natural areas, parks, neighborhoods, schools, shopping areas, cultural centers and job centers to each other and which provide safe and pleasant public access for all citizens, including seniors, children, and the disabled.

Policies

2.1.1 The City shall continue to use the criteria described in Policy 1.1.3 to prioritize sites that can be integrated into the trail network identified in Objective 2.1.

2.1.2 The City shall enforce Land Development Regulations and Comprehensive Plan policies that promote the establishment of the trail network described in Objective 2.1. Private developments falling within the network shall be required to promote the linear integrity of the network.

2.1.3 The City shall continue to develop public access trails or boardwalks along publicly owned segments of Hogtown Creek.

2.1.4 Where possible, provide barrier-free public access to all recreation and nature sites through the provision of handicapped parking and access.

2.1.5 Trailheads and associated facilities such as automobile and bicycle parking, comfort stations and handicapped facilities should be provided at strategic conjunctions of two or more greenways.

2.1.6 When acquiring lands for trails priority shall be given to parcels, which facilitate the connection of two or more trails.

Objective 2.2

Acquire, design and manage parks to preserve existing natural features and their functions as described by the "Environmental Management of Public Parks & Open Spaces" portion of the Conservation, Open Space and Groundwater Recharge Element.

Policies

2.2.1 The City shall continue to use the park acquisition criteria described in Policy 1.1.3 in order to place a high priority on restoring and preserving significant natural features.

2.2.2 The City shall continue to use policies based on the "Environmental Management of Public Parks & Open Spaces" portion of the Conservation, Open Space, and Groundwater Recharge Element in order to preserve the natural features of existing City parks.

2.2.3 The City shall continue to use Land Development Regulations based on the "Environmental Management of Public Parks & Open Spaces" portion of the Conservation, Open Space and Groundwater Recharge Element to maintain the integrity of parks by protecting existing parks from undesirable encroachments such as incompatible land uses, visual disamenities, and noise.

GOAL 3

PROVIDE FOR CITIZEN INPUT IN ORDER TO DETERMINE COMMUNITY DESIRES AND DEVISE SPECIFIC NEIGHBORHOOD-ORIENTED PLANS FOR RECREATION.

Objective 3.1

Develop programs that increase citizen awareness of urban area natural features and parks and that obtain citizen input on current and future recreational needs.

Policies

3.1.1 The City shall continue to conduct ongoing communication of recreation information to the community through publications, presentations, workshops and media exposure.

3.1.2 City staff shall submit an annual report to the City Commission prior to the annual update of the capital improvements program. The report shall assess progress toward implementation of this Element and make recommendations for the coming fiscal year.

Objective 3.2

Develop recreation plans consistent with neighborhood desires throughout the City.

Policies

3.2.1 The City shall develop recreation plans that meet the needs and desires of neighborhood residents. Upon approval by the City Commission, the findings of the Parks, Recreation and Cultural Affairs Master Plan shall be incorporated in the Recreation Element.

3.2.2 The Department of Parks, Recreation and Cultural Affairs shall continue to use two-way communication tools including park user surveys, design charrettes and public hearings to design parks and programs meeting the needs of park users.

Table 1: Service Level Standards for Parks

Park[2]	Adopted LOS Standard	Existing LOS[1]
Local Nature/Conservation	6.00 acres	15.71 acres
Community Park	2.00 acres	2.13 acres
Neighborhood Park	0.80 acres	1.33 acres
Total Acres Per 1000	8.80 acres	19.73 acres

[1]Existing LOS is based on 2011 City population estimate and available facilities.

[2]Park standards are in acres per 1,000 people.

Source: City of Gainesville, Planning and Development Services and the Department of Parks, Recreation and Cultural Affairs, 2011.

Park Design and Function Standards

Mini-Parks

Small recreation areas within relatively high-density residential areas. Include benches, child play areas, shade trees, and picnic facilities. Size is one-quarter acre to five acres. Service radius is 1/4 mile. Access is by local streets, with facilities for pedestrians and bicycles. An example is Roper Park, located in the 400 block of N.E. 2nd Street. There is no LOS standard for this park type.

Neighborhood Parks

Moderately-sized recreation areas located to provide convenient access (no more than 1/2 mile) from neighborhoods served. Include tennis courts, racquetball courts, shade trees, picnic facilities, child play areas, and a limited number of soccer and baseball fields. Size ranges from 5 to 20 acres, although the presence of certain types of facilities may classify certain sites less than 5 acres as neighborhood parks. (These smaller sites must provide at least two facilities of different types from the following list: basketball courts, tennis courts, racquetball courts, baseball/softball fields, gymnasium or recreation center, and soccer fields.) Service radius is 1/2 mile. Access is by local streets, with facilities for pedestrians and bicycles. An example is Woodlawn Park.

Community Parks

"Intensive-use," activity-based recreation areas which serve an entire geographic quadrant. Include a wide range and large concentration of facilities: lighted tennis courts, racquetball courts, soccer and baseball fields, a swimming pool, off-street parking, playgrounds, and picnic facilities. Sites 20 acres or larger are classified as "undeveloped" if the site does not contain at least two different types of these facilities. If LOS standards require community park acres, but the quadrant is not deficient in any of these facilities, the following facilities may be substituted: basketball courts, tennis courts, or racquetball courts. Size ranges from 20 to 100 acres, although certain types of facilities may classify certain sites less than 20 acres as community parks. (Parks between 10-20 acres can be classified as a community park if at least two different types of the following facilities are provided: baseball/softball fields, swimming pool, gymnasium, recreation center, and/or soccer or football fields.) Service radius is $1^{1}/_{2}$ miles. Access is by collector or arterial streets, with facilities for pedestrians, bicycles, autos, and buses. An example is Albert "Ray" Massey Westside Park.

Sports Complex Parks

"Intensive-use" recreation areas which provide a concentration of facilities for leagues and tournaments. One or more of the following facilities are necessary but not necessarily sufficient to classify a site as a "sports complex": (1) at least four adult-size or youth-size baseball/softball fields; (2) at least six regulation-size soccer fields; (3) a professional or semi-professional sports stadium; (4) a combination of at least one gymnasium, four tennis courts, and four racquetball courts; and/or (5) a region-serving water theme park. Size ranges from 15 to 100 acres. Service radius is urban area-wide. Access is by arterial streets, with facilities for bicycles, autos, and buses. There are no examples in Gainesville as of November 2011.

Local Nature Parks

Moderately-sized, resource-based parks that offer physical or visual access to environmentally significant open spaces. Such parks include trails, benches, picnic facilities, boardwalks, and exhibits. Size is generally less than 100 acres. (All resource-based parks owned by the city or county are designated local nature parks, regardless of size.) Service radius is urban area-wide. Access is variable. Motorized vehicles are prohibited from pedestrian/bicycle corridors. Examples are Morningside Nature Center and Bivens Arm Nature Parks. Public properties containing environmentally significant features that have not been developed to accommodate passive recreation are known as "conservation areas."

Linear Corridors

Provide a recreational travel corridor for such users as bicyclists, hikers, horseback riders, canoeists, and joggers. Typically, a narrow strip of land developed along a creek, or along a utility or abandoned railroad right-of-way. Often link parks, schools, commercial or residential areas, and natural features to each other. While staging areas typically provide auto parking, the corridors themselves allow only non-motorized travel. Examples are the Gainesville-to-Hawthorne Rail Trail. Service radius is urban area-wide.

Special-Use Parks

Provide unique or unusual facilities for specialized recreational users. Support facilities dependent on the primary purpose of the park. An example is the Thomas Center. There is no LOS standard for this park type.

SOURCE: City of Gainesville, Department of Community Development, June 1990, April 2000.

RECREATION ELEMENT

DATA AND ANALYSIS REPORT

INTRODUCTION

Over the past few decades, sociologists have predicted an increase in leisure time available to individuals. Some studies, however, have shown that there has been a substantial decline in available leisure time. Many people (particularly women) seem to be working longer hours than ever before. Moreover, our highly mobile society and associated sprawling development patterns have increased the amount of time spent on daily travel.

With the *quantity* of leisure time declining, citizens can be expected to seek improvement in the *quality* of their leisure time, and access to leisure activities that are less time-consuming. As a result, there is an increased need for high-quality, easily accessible recreation at the local level. Also, improving public recreation at the local level makes recreation more affordable because it minimizes transportation costs.

Communities are beginning to realize that adequate, well-planned open space and recreational opportunities can have far-reaching implications for future growth. Such communities are:

* Increasing the attractiveness of higher urban densities and thereby encouraging more compact and efficient urban growth patterns;

* Providing the sorts of amenities many industries and business firms require for their employees, and thereby attracting high-quality economic development;

* Helping to define the urban area with green spaces, while at the same time protecting environmental qualities and features.

As local, close-to-home recreation increases in importance, so too does the need for far-sighted recreation planning. The Gainesville urban area population is projected to grow relatively rapidly in the coming decades. The value of the land in developing areas will increase as land becomes scarcer and public improvements make land more attractive for development. Increased land values will increase the cost of public acquisition of land for recreation and open space purposes. To minimize the costs of growth, acquisition of public land must precede private development pressures.

Since the mid-1970's, however, City expenditures for recreational land, facilities, and programs have been extremely low relative to total City expenditures, and in comparison to similar cities. (See Figures 2 and 3 later in this Report for city comparisons.) Few improvements have been made in existing parks and very few major new facilities have been built despite continuing population growth.

OTHER CONSIDERATIONS

This Element recognizes both the value and the limitations of traditional, quantitative recreation facility standards (e.g., the number of tennis courts needed per 1,000 people). Standards are useful in ensuring that recreational facilities are equitably and comprehensively provided throughout the community. Total reliance on such

standards, however, may lead to inflexibility, a suppression of creative approaches to recreation, and a tendency to ignore important community, neighborhood, and individual recreational needs.

To address these limitations, the Element gives some attention to how people behave when offered various types of recreational opportunities. For example, a neighborhood park or a significant environmental feature may be difficult to enjoy due to a lack of citizen awareness, barriers such as busy roads, or remoteness from population centers. By considering the importance of citizen behavior, the Element stresses *public access* as the key to improving recreational opportunities.

PUBLIC ACCESS

The Key to Improving Recreational Opportunities

Access is essential to any successful recreation program.

Improving public access includes:

* Improving the visibility of, preservation of, and access to the environmentally significant open spaces of the urban area.

* Efficiently providing adequate amounts of park acreage and facilities in close proximity to urbanized residential areas.

* Increasing the amount of citizen input in order to determine neighborhood desires and devise neighborhood-based recreation plans.

PUBLIC ACCESS

To Environmentally Significant Open Space

There will be little public support for an ambitious open space acquisition program unless the public is given adequate access—either visual or physical—to the acquired open spaces. Typically, large and environmentally significant open spaces feature only small spurs or vistas to provide this access. Such limited access frequently leaves people feeling intimidated, bored, or alienated from the open space. Often, a more desirable alternative is to develop deeply penetrating trail corridors which are as near to the attractive features of the open space as possible, yet designed to minimize potential adverse impacts.

Ideal opportunities for trails include abandoned railroad and utility rights-of-way, flood channels, and other corridors which provide quiet, non-motorized recreation and transportation connections between important community locations. Trails link environmentally significant open space and parks to each other and to residential areas. Both forms of linkages are necessary to maximize access. One way in which the Recreation Element encourages this type of open space access is through its call for the development of "local nature parks" and "linear corridors."

Development of Recreational Trails

As demonstrated in Map 1, there exist numerous radial and circumscribing trails which provide a "window of opportunity" for the development of an interconnected system of open space and trails throughout the urban area. These trails show enormous potential for development as recreational and open space access routes, since they pass through and connect several significant open spaces and existing city, county, and state parks.

Recreational trails, or "linear corridors", are fingers of greenspace which penetrate and crisscross the residential areas of the city. They offer convenient physical and visual access to the significant open spaces of the city. As such, they help connect people to the natural environment and thereby provide important community needs such as environmental education and appreciation. A regionally important example is the Gainesville-to-Hawthorne "Rail Trail." An inventory of significant corridors with recreational potential can be found in the "Linear Corridors and Linkages" section of this Report.

Abandoned railroad rights-of-way can provide significant recreational access for residents. Presently, there are several abandoned railroad segments throughout Alachua County. These segments can serve as non-motorized linkages to such locations as Paynes Prairie, Sweetwater Branch, Boulware Springs, the City of Hawthorne, Tumblin Creek, the University of Florida campus, Little Hatchet Creek, Northside Park, and several destinations outside of the county. Such trails would serve as the connecting strands of an "emerald necklace."

Emerald Necklace

Gainesville's recreation and open space lands have traditionally been fragmented. There has been no unifying theme or symbol giving the city an attractive image in comparison to other cities. An "emerald necklace" can serve that purpose (see Map 2).

The Emerald Necklace is a concept which envisions an open space system encircling the Gainesville urban area. It consists of more than 30,000 acres of natural beauty made up of interconnecting "gems." These gems contain attributes of scenic, environmental, historic, and geologic significance. Each gem is a parcel of greater than 100 acres which is either publicly owned, or privately owned and undeveloped, and in low-intensity zoning categories. The gems are traversed by, or in close proximity to trails. As pointed out above, these trails show great potential for the development of community delineation.

The Necklace is similar to, but in some ways different from a more traditional greenbelt configuration. Both serve to define an urban area with greenspaces and agricultural land. Both provide urban residents with easy

access to significant open spaces. And both are useful in preserving the ecological, scenic, recreational, and municipal values embodied by a greenbelt network. The Emerald Necklace, though, is distinct in the sense that it is an integrated system of greenspace "islands" (or gems), rather than an unbroken swath of parks and farms surrounding the city. Despite this distinction, it should be noted that a Necklace and a greenbelt are not mutually exclusive. A Gainesville Necklace could serve as a component of the larger greenbelt system.

Why an Emerald Necklace?

The rationale for adopting the concept of the Emerald Necklace is based on several important factors:

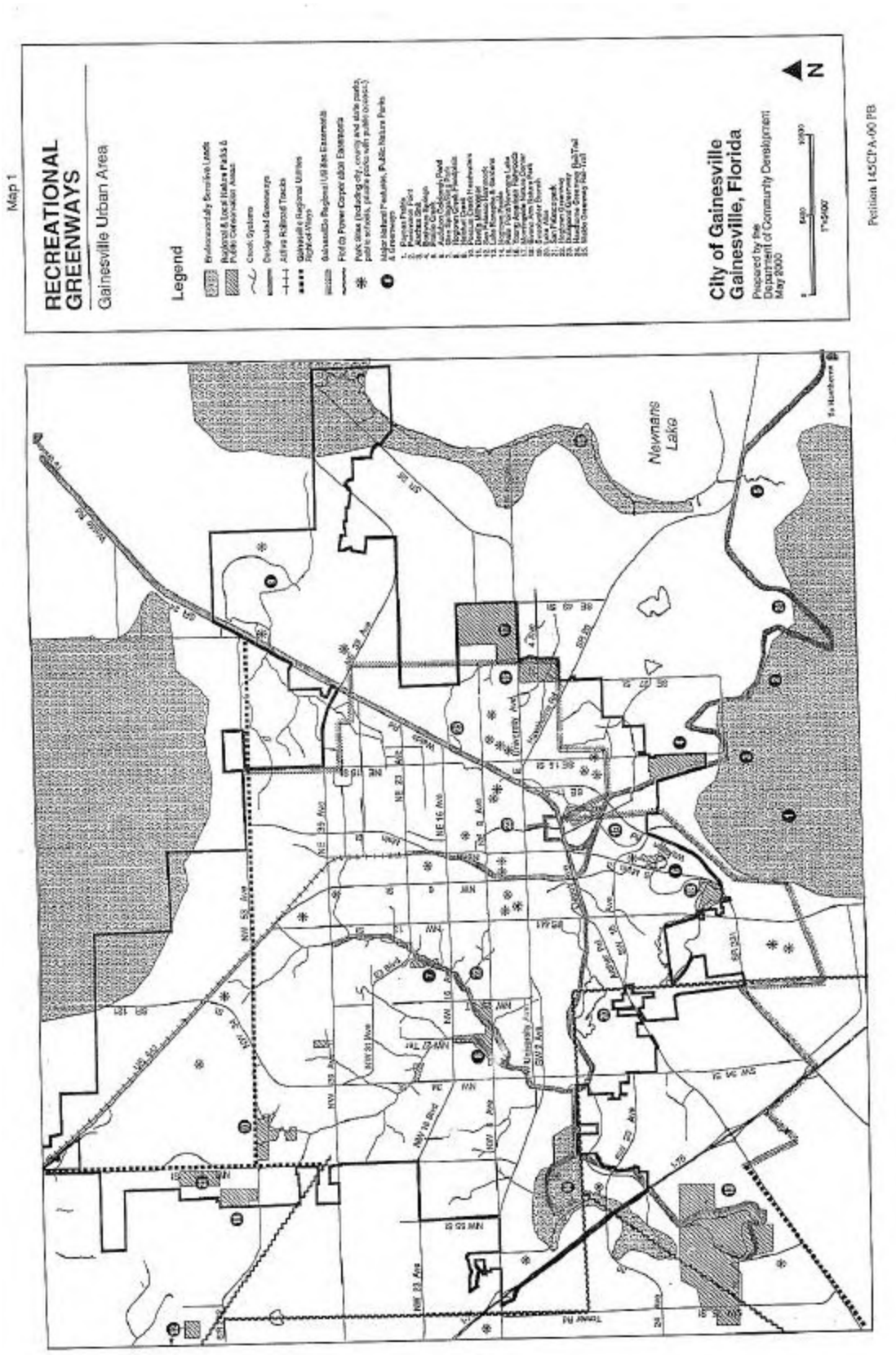
* **Growth Management**. Urban sprawl results in traffic congestion, and large increases in the amount of money needed for public service and infrastructure improvements such as roads, sewers, fire, and schools. Sprawl can also lead to a lack of community cohesiveness and identity, among other problems. An emerald necklace could serve as a physical and symbolic line which can help define the limits of urban development.

* **Integration**. Currently, the parks of the Gainesville urban area suffer from a lack of "relatedness" to each other. An emerald necklace can unify many of the parks into a system of gems strung together by recreational trails.

* **Identity**. The urban area is somewhat limited in its ability to attract new businesses and industries, many of which seek favorable market proximity, access to materials, education, transportation, and a high quality of life. Gainesville's advantage in relation to other communities is due primarily to the presence of the university and natural amenities. Emphasizing these amenities with a unique and attractive park system could promote both economic vitality and community pride.

* **Ecosystems**. As is the case in most developed and developing areas, human encroachment into, and fragmentation of, natural habitat areas are threatening the viability of critically important ecosystems. Without an interconnection and preservation of "habitat islands", these ecosystems are not likely to remain viable over the long-term.

* **Access**. Private development, urban sprawl, and the proliferation of congested, high-speed roads reduce public access to our parks and significant open spaces. A non-motorized corridor system improves the safety and attractiveness of parks. Increased access generates an increased awareness of these sites. Increased public awareness can promote concern for the preservation of natural sites and spark interest in park development.


Map 1
RECREATIONAL GREENWAYS
Gainesville Urban Area
Legend
Hydrologically Sensitive Lands
Regional & Local Nature Parks & Public Conservation Areas
Creek Systems
Developed Greenways
Active Railroad Tracks
Gainesville Regional Utilities Right-of-Ways
Gainesville Regional Utilities Easements
Florida Power Corporation Easements
Park sites (including city, county and state parks, parks w/schools, private parks with public access)
Major Natural Features, Public Nature Parks and Preserves
1. Paynes Prairie
2. Hogtown Creek Headwaters
3. Possum Creek Headwaters
4. Depot Park
5. Sweetwater Branch
6. Lake Alice
7. Lake Wauburg
8. Hogtown Creek Greenway
9. Boulware Springs
10. Bivens Arm Nature Park
11. Kanapaha Botanical Gardens
12. Lake Kanapaha
13. Morningside Nature Center
14. Lake Forest Creek
15. Possum Creek Greenway
16. Possum Creek Bike Trail
17. Waldo Greenway Bike Trail
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
May 2000
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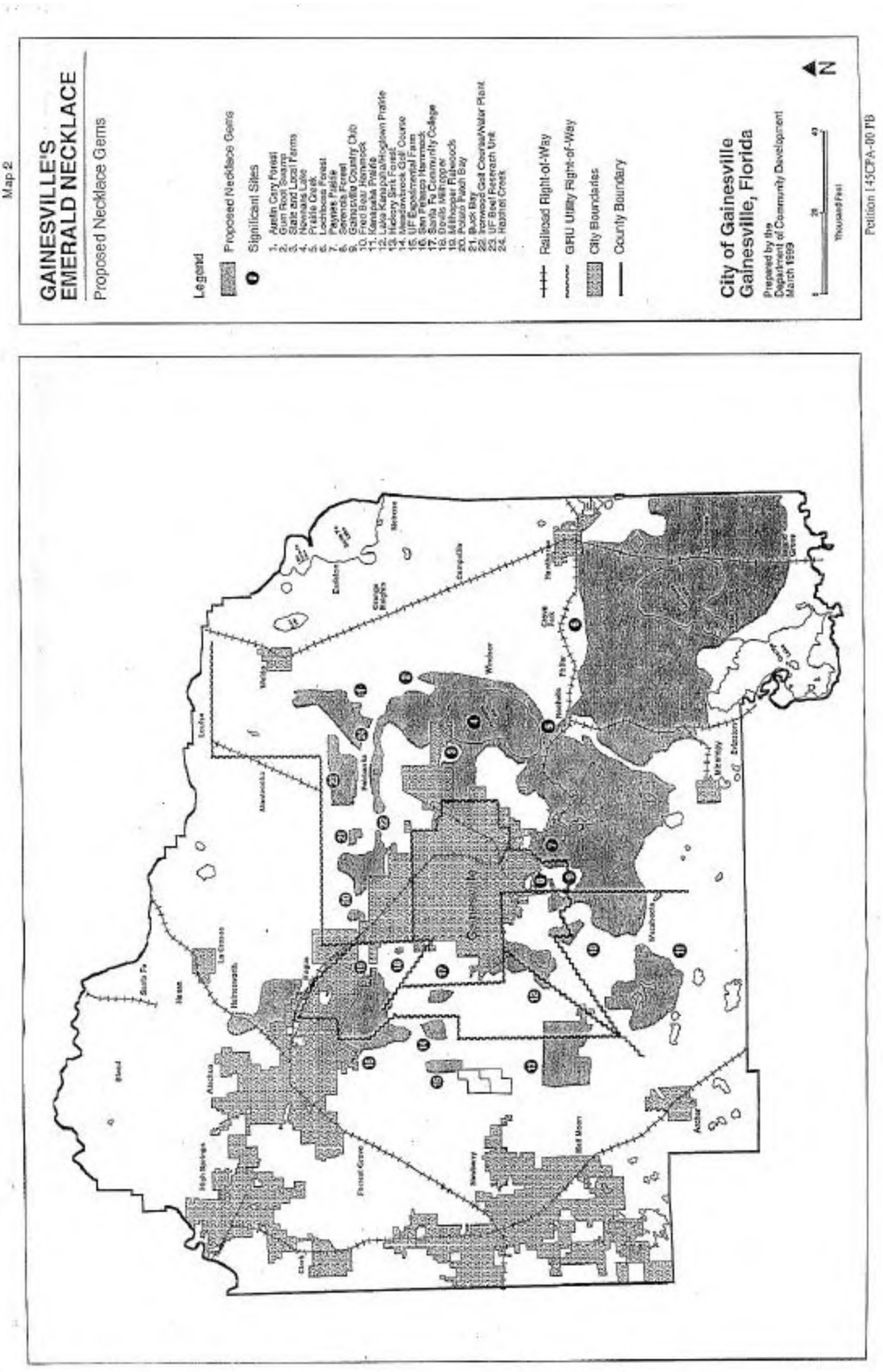
Newnans Lake
Petition 145CPA-00 PB

Map 2


GAINESVILLE'S
EMERALD NECKLACE
Proposed Necklace Gems
Legend
Proposed Necklace Gems
Significant Sites
1. Austin Cary Forest
2. Grant Road Swamp
3. Sweetwater Farms
4. Newnans Lake
5. Prairie Creek
6. Lochloosa Forest
7. Paynes Prairie
8. Serenola Forest
9. Gainesville Country Club
10. Fred Bear Hammock
11. Kanapaha Prairie
12. Lake Kanapaha/Hogtown Prairie
13. Hickory Sink Forest
14. Meadowbrook Golf Course
15. UF Experimental Farm
16. San Felasco Hammock
17. Santa Fe Community College
18. Devils Millhopper
19. Millhopper Flatwoods
20. Potato Patch Bay
21. Buck Bay
22. Ironwood Golf Course/Water Plant
23. UF Beef Research Unit
24. Hatchet Creek
Railroad Right-of-Way
GRU Utility Right-of-Way
City Boundaries
County Boundary
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
March 1999
Thousand Feet
N
Petition 145CPA-00 PB

The Emerald Necklace is a unifying concept for the City's park and open space plan. While the vast majority of Necklace gems are outside of city limits, there are steps the City can take to implement the Necklace concept. For example, utility rights-of-way within the city could be improved to facilitate recreational access to gems, and the City could continue to improve abandoned railroad rights-of-way. In conjunction with such improvements, the City could acquire and develop park acreage along city trails. These linear parcels, staging areas, and rights-of-way would then improve the connectivity of the city to Necklace gems. As shown below, the criteria governing purchases of park acreage are designed, in part, to prioritize acquisition of these linear connectors.

With the cooperation of Alachua County, the Emerald Necklace could be further enhanced through joint City-County efforts to purchase (and when appropriate, develop) gems and linear connectors. The County also possesses land regulation authority useful in protecting features of the Emerald Necklace.

Creating an Emerald Necklace

Gainesville is already largely surrounded by an Emerald Necklace outside of its city limits. Gems such as Newnans Lake, Paynes Prairie, San Felasco Hammock, and Lake Kanapaha will retain their status as publicly accessible open spaces for the foreseeable future. Newnans Lake is managed as a "Fish Management Area" by the Florida Game and Fresh Water Fish Commission. San Felasco Hammock and Paynes Prairie are two of 16 state preserves found in Florida. The state preserves are designated in order to maintain representative samples of the exceptional natural conditions found at the sites. Other large and environmentally significant areas such as Gum Root Swamp, Prairie Creek, Kanapaha Prairie, and Buck Bay are privately owned but not yet developed.

Land Acquisition

While it is unlikely that the City and County will be able to purchase all of the privately owned gems of the Emerald Necklace, there will be instances when tracts of land should be evaluated for public acquisition. A computerized land evaluation database was prepared for this Element. The database catalogued and ranked parcels of land according to a series of criteria. These criteria were to be used to determine the public park value of parcels. The criteria, which were never formally adopted, are more fully explained in the Appendix, include population density, proximity to existing parks, trail access, greenbelt value, connectivity, multiple use, rarity and diversity, ecosystem preservation, cost, development pressure, jurisdiction, and environmental degradation.

The database would catalog and rank undeveloped or vacant parcels found throughout the county. Parcels would be assessed for their value in accommodating "activity-based" recreation and, in a separate ranking, for their value in conserving significant environmental resources (or accommodating "resource-based" recreation). Both rankings are used to assess the value of parcels for facilities such as neighborhood and community parks, and the value of the larger open spaces that are part of the Emerald Necklace.

In addition to land purchases, acquisition efforts should include:

* Acquisition of conservation, scenic, trail, or recreational easements; and

* Land dedications by private individuals.

Of the parcels that are environmentally significant according to the "resource-based" ranking, those that cannot be acquired should be evaluated to determine whether non-acquisition management incentive strategies are appropriate. For the City, these strategies can include:

* Implementation of a "transfer of development rights" program. Under such a program, the City and County would cooperate in setting up Necklace/Greenbelt "sending" zones and urban "receiving" zones;

* Adoption of policies encouraging compact urban development, such as incentives for higher residential densities within city limits; and

* Adoption of more stringent land use regulations for areas designated as both environmentally significant and as Necklace gems in this Element.

PUBLIC ACCESS

To Recreational Facilities

In addition to providing access to environmentally significant open space, the City needs to provide access to a broad range of recreational facilities. Instead of the natural features of "passive" parks, "active" parks offer human-built facilities such as racquetball courts and ballfields.

More so than with passive parks, improving public access to active recreational facilities is linked to adopted "level-of-service" (LOS) standards. These standards call for the provision of a certain number of facilities for a certain number of people, and designing these facilities in ways that are attractive to those most likely to use them. The Recreation Element achieves this by:

* Encouraging the efficient concentration of certain "significant" (regionally attractive) facilities to improve the attractiveness of those facilities to organized leagues, and to minimize maintenance costs. Assigning other facilities to quadrants, on the other hand, assures the equitable distribution of such facilities among neighborhoods. (See the "Urban Area vs. Quadrant Facilities" section for a discussion of these planning areas);

* Counting existing facilities only to the extent that they are publicly accessible. For the purpose of establishing levels of service, this Element generally avoids counting private facilities. - Facilities at

county schools are only partially counted. (See "Park Inventory Methodology" section for further explanation);

* Establishing policies encouraging the development of recreational corridors; and

* Establishing policies encouraging the development of desirable, flexible, and accessible recreation programs, particularly for youth.

Park and Facility Standards

Standards are necessary to help assess the present condition of recreation resources in a community. They also establish policy guidelines, which help a community plan and provide for future recreational opportunities in an efficient and effective way. The standards used for parks and facilities in Gainesville are generally based upon state or federal standards.[1] These standards were modified using information unique to Gainesville, such as facility use data, climate, natural and human-built resources, information from the Recreation & Parks Department and City policy-makers, age cohort characteristics, citizen input, fiscal concerns, private facilities, park users living outside of city limits, and urban development trends.

Both qualitative and quantitative forms of capital facility standards are used. The qualitative standards describe the essential and optional design requirements for each of the park types sought by the City. The quantitative standards describe how many acres of parks and how many of various types of facilities are needed for a given number of people.[2]

Park Design Standards

Planning for recreation and open space requires the use of design standards for the sites at which facilities are (or will be) located. There are seven different types of sites: (1) Mini-Park; (2) Neighborhood Park; (3) Community Park; (4) Sports Complex Park; (5) Local Nature Park; (6) Linear Corridor; and (7) Special Use Park. Each type of park is briefly described below, with standards for size, equipment, and general design indicated.

[1] Florida Department of Natural Resources. 1987. Outdoor Recreation in Florida - 1987. Tallahassee, Florida. Florida Department of Community Affairs. 1987. Recreation and Open Space Element (Model Element). Tallahassee, Florida. National Recreation and Park Association. 1983. Recreation, Park, and Open Space Standards and Guidelines. Washington, D.C.

[2] Note that there is some overlap between these two forms of standards.

Park Design and Function Standards

Mini-Parks

Small recreation areas within relatively high-density residential areas. Include benches, child play areas, shade trees, and picnic facilities. Size is one-quarter acre to five acres. Service radius is 1/4 mile. Access is by local streets, with facilities for pedestrians and bicycles. An example is Roper Park, located in the 400 block of N.E. 2nd Street. There is no LOS standard for this park type.

Neighborhood Parks

Moderately sized recreation areas located to provide convenient access (no more than 1/2 mile) from neighborhoods served. Include tennis courts, racquetball courts, shade trees, picnic facilities, child play areas, and a limited number of soccer and baseball fields. Size ranges from 5 to 20 acres, although the presence of certain types of facilities may classify certain sites less than 5 acres as neighborhood parks. (These smaller sites must provide at least two facilities of different types from the following list: basketball courts, tennis courts, racquetball courts, baseball/softball fields, gymnasium or recreation center, and soccer fields.) Service radius is 1/2 mile. Access is by local streets, with facilities for pedestrians and bicycles. An example is Woodland Park.

Community Parks

"Intensive-use", activity-based recreation areas which serve an entire geographic quadrant. Include a wide range and large concentration of facilities: lighted tennis courts, racquetball courts, soccer and baseball fields, a swimming pool, off-street parking, playgrounds, and picnic facilities. Sites 20 acres or larger are classified as "undeveloped" if the site does not contain at least two different types of these facilities. If LOS standards require community park acres, but the quadrant is not deficient in any of these facilities, the following facilities may be substituted: basketball courts, tennis courts, or racquetball courts. Size ranges from 20 to 100 acres, although certain types of facilities may classify certain sites less than 20 acres as

Community parks. (Parks between 10-20 acres can be classified as a community park if at least two different types of the following facilities are provided: baseball/softball fields, swimming pool, gymnasium, recreation center, and/or soccer or football fields.) Service radius is 1 1/2 miles. Access is by collector or arterial streets, with facilities for pedestrians, bicycles, autos, and buses. An example is Westside Park.

Sports Complex Parks

"Intensive-use" recreation areas which provide a concentration of facilities for leagues and tournaments. One or more of the following facilities are necessary but not necessarily sufficient to classify a site as a "sports complex": (1) at least four adult-size or youth-size baseball/softball fields; (2) at least six

regulation-size soccer fields; (3) a professional or semi-professional sports stadium; (4) a combination of at least one gymnasium, four tennis courts, and four racquetball courts; and/or (5) a region-serving water theme park. Size ranges from 15 to 100 acres. Service radius is urban area-wide. Access is by arterial streets, with facilities for bicycles, autos, and buses. There are no examples in Gainesville as of May 2000, although the City had acquired acreage adjacent to Boulware Springs that was planned to be developed as a sports complex.

Local Nature Parks

Moderately sized, resource-based parks which offer physical or visual access to environmentally significant open spaces. Such parks include trails, benches, picnic facilities, boardwalks, and exhibits. Size is generally less than 100 acres. (All resource-based parks owned by the city or county are designated local nature parks, regardless of size.) Service radius is urban area-wide. Access is variable. Motorized vehicles are prohibited from pedestrian/bicycle corridors. Examples are Morningside and Bivens Arm Nature Parks. Public properties containing environmentally significant features that have not been developed to accommodate passive recreation are known as "conservation areas."

Linear Corridors

Provide a recreational travel corridor ~~for~~ such users as bicyclists, hikers, horseback riders, canoeists, and joggers. Typically a narrow strip of land developed along a creek, or along a utility or abandoned railroad right-of-way. Often link parks, schools, commercial or residential areas, and natural features to each other. While staging areas typically provide auto parking, the corridors themselves allow only non-motorized travel. Examples are the Gainesville-to-Hawthorne Rail Trail, and the Depot Avenue Rail Trail. Service radius is urban area-wide.

Special-Use Parks

Provide unique or unusual facilities for specialized recreational users. Support facilities dependent on the primary purpose of the park. An example is the Thomas Center. There is no LOS standard for this park type.

SOURCE: City of Gainesville, Department of Community Development, June 1990, April 2000.

Service Level Standards

In addition to the use of design standards for parks and facilities, quantitative standards are necessary to describe how many parks and facilities are needed based on the existing and projected urban area-population. According to the *Park, Recreation, Open Space and Greenway Guidelines*, a publication of the National Recreation and Park Association, 1996, for the past 30 years it was standard practice to adopt uniform national land standards for facilities such as 10 acres per 1000 population. This type of standard was held to be the ideal that every community should strive for in order to have a quality park and recreation system.

However, for many communities achieving this type of standard was practically impossible. A standard for parks and recreation cannot be universal since comparing cities, even when they seem to be similar to each other, is generally tricky. The national guidelines were found to reflect professional judgment, and not the specific needs of a community.

A revised approach to park and recreation standards has recently emerged, where the level of service standards are based on customer needs rather than an arbitrary standard such as number of tennis courts per 50,000 people. The methodology for determining the LOS is needs based, facilities-driven, and land measured. The LOS is stated in acres per 1000 people but it reflects the instances of use of activity areas and the facilities that are necessary to satisfy the actual demand. The spaces and facilities that are needed to meet the actual community recreation demands are identified; then the minimum amount of park land needed to accommodate the specific facilities is calculated, as well as the space needed for unprogrammed recreation activities. This reflects first-hand knowledge of the community and how residents actually use the facilities.

There are eight steps involved in determining the LOS:

1. Determine the *Park Classifications* for which the LOS will apply.
2. Determine the *Recreation Activity Menu* (RAM) for each park classification. The RAM is the list of all the facilities that go into each park classification and for which a specific amount of space will be needed. The RAM determines the facility space requirements of the LOS formula.
3. Determine *Open Space Size Standards* for each park classification for which LOS standards will apply. These are the minimum acreage's needed for facilities to support the activity menus for each park classification. The acreage should reflect not only sufficient acreage for the facilities but also sufficient acreage in passive and undeveloped open space for quality design of the park.
4. Determine the *present supply* of the recreation activity choices.
5. Determine the *expressed demand* for these recreation activity choices
6. Determine the *minimum population service requirements* for these recreation activity choices.
7. Determine the *individual LOS* for each park class.
8. Determine the *total LOS* for the entire park and recreation system.

This type of analysis can be used for the entire park and recreation system or smaller areas such as neighborhoods or census statistical areas. The LOS indicates the minimum amount of park land and recreation facilities necessary to meet the recreation demand as determined by the analysis of actual demand. Although the LOS is stated in acres per 1,000 people, it is based on the idea that land does not meet demand by itself. The LOS combines the instances of actual use of recreational facilities and activity areas, the facilities needed to meet the recreation demand, and the minimum land necessary to provide those same recreation spaces and facilities.

Until such time as it is feasible to enact this type of LOS analysis, it is necessary to adopt LOS standards that are reasonably attainable by the community. Rule 9J-5 specifies that in adopting LOS standards for recreation, the City is setting legal measures that are to direct capital expenditures for land and facilities needed to maintain a certain provision of facilities. The recommended LOS standards are shown in Table 1.

Table 1. Service Level Standards for Parks and Facilities

FACILITY	2000 LOS STANDARD	CURRENT LOS[1]
Swim Pool (50 M)	1 per 85,000	1 per 50,702
Swim Pool (25 Yd)	1 per 75,000	1 per 33,802
Softball Field (adult)	1 per 14,000	1 per 8,450
Soccer Field	1 per 11,000	1 per 7,800
Trail/Linear Corridor/Greenway	1 mi per 4,500	1 mi per 3,900
Basketball Court	1 per 4,500	1 per 4,507
Tennis Court	1 per 6,000	1 per 4,609
Racquetball Court	1 per 12,000	1 per 7,243
Equipped play area	1 per 10,000	1 per 3,900

PARK[2]	2000 LOS STANDARD	CURRENT LOS
Local Nature/Conserv	6.00 ac	17.02 acres
Sports Complex	0.50 ac	1.01 acres
Community Park	2.00 ac	2.27 acres
Neighborhood Park	0.80 ac	1.51 acres
Total Acres Per 1000	9.30 ac	11.01 acres

NOTES:

[1]Current LOS is based on 1999 City population and facilities.

[2]Park standards are in acres per 1,000 people.

SOURCE: City of Gainesville, Department of Community Development. May 2000.

Existing Facilities and Determination of Deficiencies

Over 100 recreation sites are currently located within Gainesville and the surrounding urban area. Of these, 46 are city-owned parks. Table 3 contains an acreage and facility inventory for each site. Table 9 shows currently undeveloped or underdeveloped parks.

When considering facility deficiencies, note that this Element offers some flexibility in meeting identified deficiencies. Refer to the "Facility Substitution" section for more information.

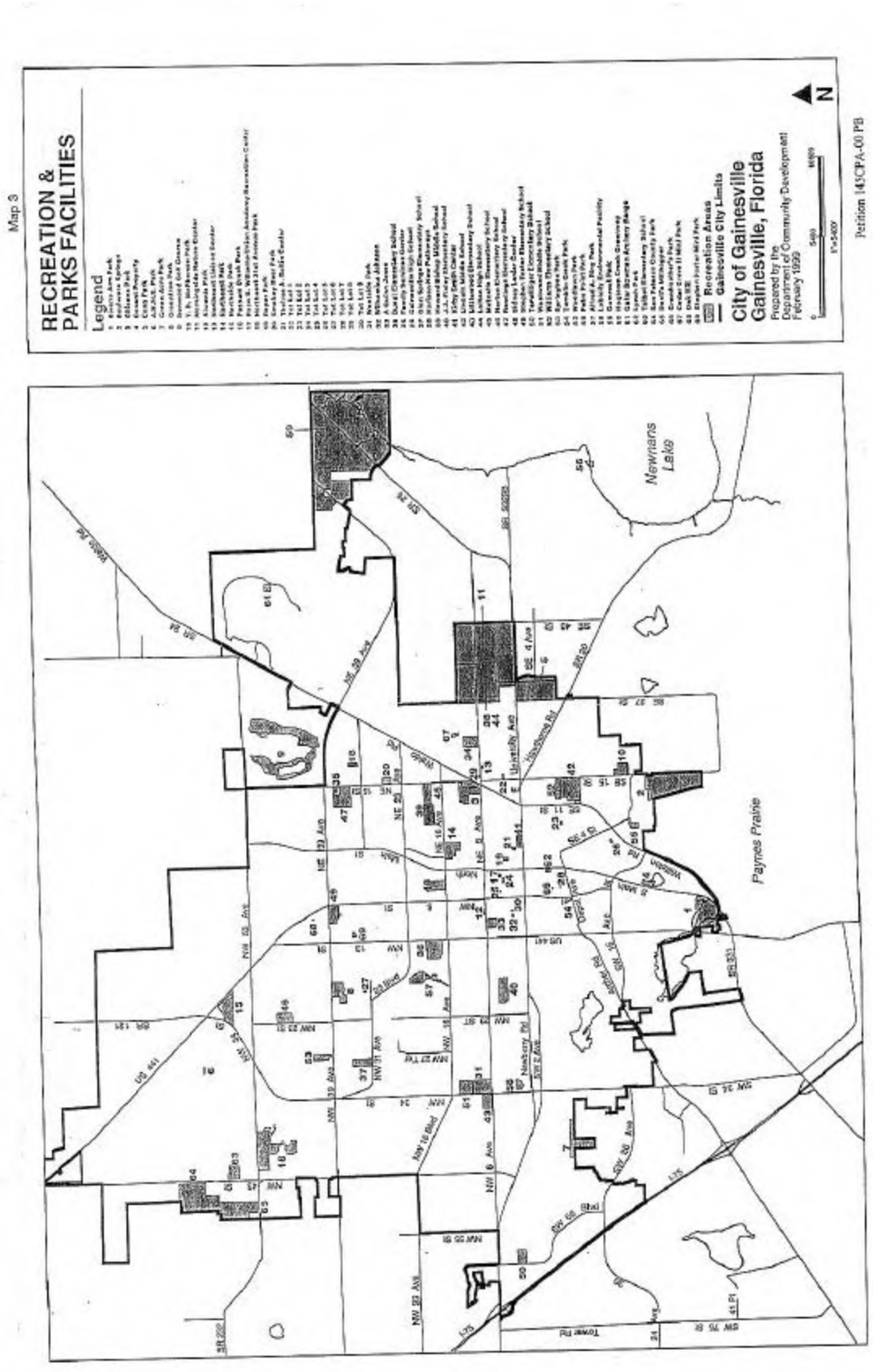
Proposed Locations of New Community Parks

The locations and service areas for community parks are shown in Map 4. The following criteria can be used to determine the need for new community parks:

* A new park is necessary for every 30 to 100 acres of community park deficiency for the year 2010;

* The proposed locations seek to minimize overlap with the service radii of existing community parks; and

* The proposed locations seek to maximize service area coverage to existing residential developments which are not currently served by a community park.


Map 3
RECREATION & PARKS FACILITIES
Legend
Recreation Areas
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
February 1999
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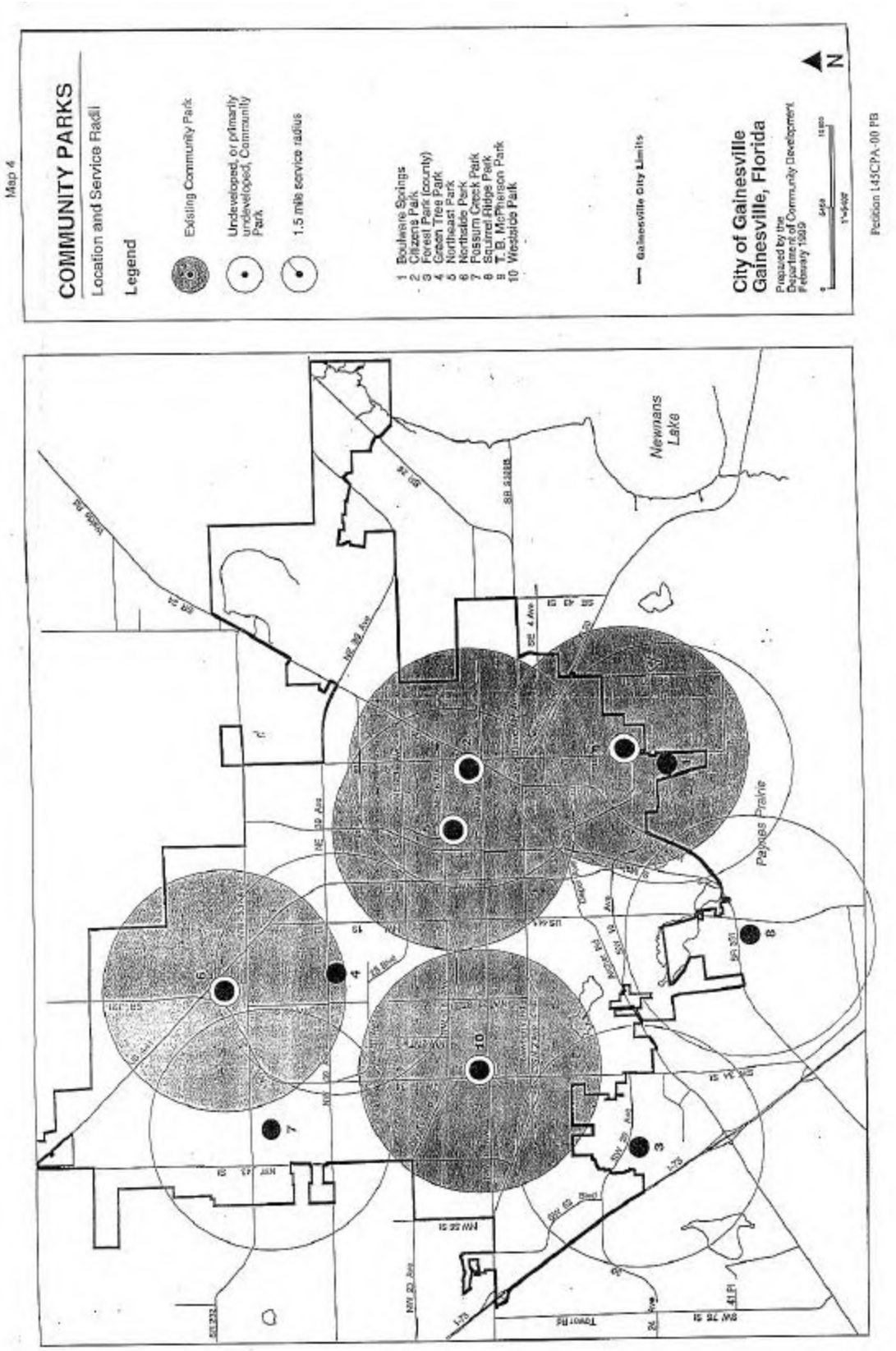
Newnans Lake
Paynes Prairie
Petition 145CPA-00 PB


Map 4
COMMUNITY PARKS
Location and Service Radii
Legend
Existing Community Park
Undeveloped, or primarily undeveloped, Community Park
1.5 mile service radius
1 Boulware Springs
2 Citizens Park
3 Forest Park (county)
4 Green Tree Park
5 Northeast Park
6 Northside Park
7 Possum Creek Park
8 Squirrel Ridge Park
9 T. B. McPherson Park
10 Westside Park
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development February 1999
N
Newmans Lake
Paynes Prairie
Petition 145CPA-00 PB

Proposed Locations of New Neighborhood Parks

The locations and service areas for existing neighborhood parks are shown in Map 5. The following criteria can be used to select proposed locations for neighborhood parks:

* A new park is necessary for every 5 to 20 acres of neighborhood park deficiency for the year 2010;

* The proposed locations seek to minimize overlap with the service radii of existing neighborhood parks; and

* The proposed locations seek to maximize service area coverage to existing residential developments which are not currently served by a neighborhood park.

As with other parks, actual neighborhood park locations will depend on availability and the cost of land, access, compatibility with surrounding land uses, and other relevant factors.

Recreation Programs

Recreational programs cannot be implemented without the appropriate facilities. As a consequence, available facilities will largely determine programs offered. Of the two, facilities are usually the subject of long-range planning because they represent capital expenditures as well as fixed physical resources. Long-range planning for programs is seldom attempted because recreational preferences often change and programming should remain responsive to trends in recreational demand and usage. Provided that facilities, funding and interest are present, programs can change from year to year. Nevertheless, it is clear that planning for facilities involves assumptions about programs. If softball fields are built rather than basketball courts, programming will have to emphasize softball. This situation highlights the importance of making facilities as flexible as possible (as discussed elsewhere in this Element).

In spite of the need to be responsive to changing preferences, programming should be guided by general principles that will guarantee a basic level of service is provided to all citizens and, insofar as possible, the special needs of certain groups are met. These principles include:

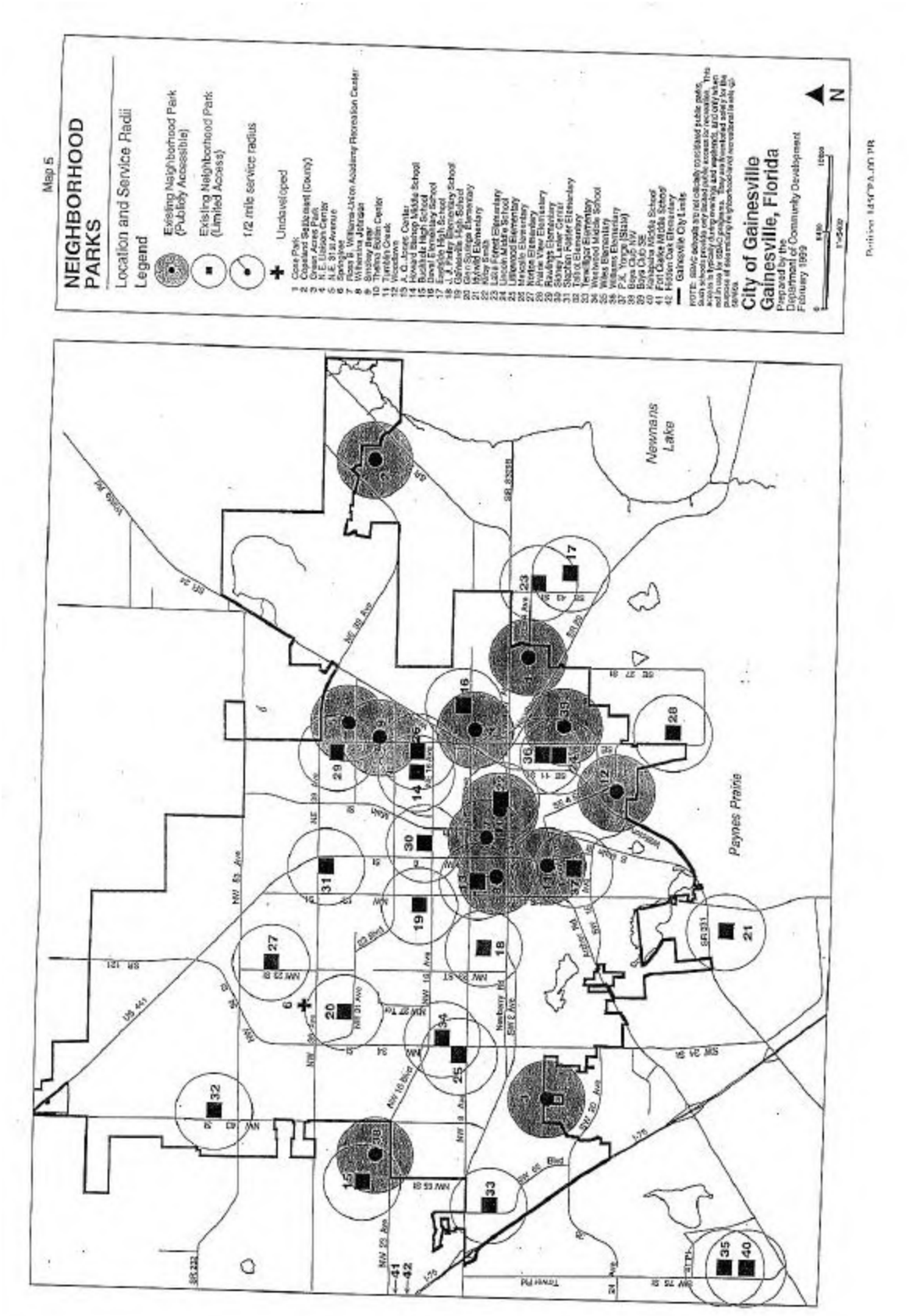
* Meeting the needs of all age groups, skill levels, and income levels, while attempting to serve the largest possible number of city residents. In particular, the development of programs for city youth shall be given the highest priority.

* Designing, administering and pricing programs so as to give preference to the needs of city residents over non-city residents.

* Not funding the programs or facilities of other agencies and groups to the detriment of the city's own recreation and open space programs or facilities.

* Enhancing environmentally significant open space access and appreciation, transportation access (especially non-motorized), and maintenance of parks.

* Expanding volunteer assistance, where appropriate, in the area of programs.


Map 5
NEIGHBORHOOD PARKS
Location and Service Radii
Legend
Existing Neighborhood Park (Publicly Accessible)
Existing Neighborhood Park (Limited Access)
1/2 mile service radius
Undeveloped
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
February 1999
N
Newnans Lake
Paynes Prairie

PUBLIC ACCESS

To The Decision-Making Process Through Neighborhood-Based Recreation Plans

Applying identical facility standards to all parts of a community may lead to inappropriate assessments of needs for certain neighborhoods. Age and socioeconomic differences among neighborhoods often result in differences in facility preferences. For example, a neighborhood may prefer 4 tennis courts rather than 2 tennis courts and 2 basketball courts. Ideally, local standards should be tailored to the desires of specific neighborhoods through the use of surveys or questionnaires. Such tailoring, however, is often costly and short-lived due to changing desires. Instead, this Element recommends that a multi-pronged citizen input framework be used to assess differences in needs. This framework includes:

* Holding public hearings on the plans for developing parks to seek input from citizens on facilities needed in their neighborhoods;

* Undertaking mail-outs of recreational questionnaires to neighborhood leaders; and

* Establishing a Planning Division liaison to incorporate suggestions from the Recreation and Neighborhood Advisory Boards into the recreational needs assessment process.

As suggested above, it is important that neighborhoods be given the opportunity to request recreational facilities that differ from those called for by level-of-service standards. A problem associated with this type of flexibility, however, is that residents of some neighborhoods may select facilities that are significantly more (or significantly less) costly than those provided to other neighborhoods. To guard against a disproportionate allocation of facilities, residents of a neighborhood should be given the opportunity to select facilities and parks that differ from those provided citywide as long as those facilities are similar in cost and character to those provided to other neighborhoods in the city.

Park and Facility Substitution

To better accommodate neighborhood preferences, this Element allows substitution between different types of parks and facilities.[4] Instead of a neighborhood park, a neighborhood can request one of the following:

* Nature Center/Park
* Botanical or Vegetable Garden
* Recreation/Cultural Center
* Mini-Park

[4] Refer to "Park and Facility Substitution" section for more information about substitutions.

Substitution is also allowed between the following facilities:[5]

* Basketball Courts
* Tennis Courts
* Racquetball Courts
* Interpretive Pavilion
* Picnic Area
* Volleyball Courts
* Recreation Center
* Boardwalk Trail (1/2 mile)
* Mulched Trail (1 mile)
* Picnic/Pavilion/Playground

As indicated above, one possible approach to resolving or avoiding the problem of neighborhood-facility mismatches would be to hold neighborhood public meetings to determine the most appropriate "mix" of recreational facilities--in particular, a mix from the "interchangeable" facilities listed above. At these meetings, neighborhoods would work with City staff to devise individualized neighborhood or city quadrant plans.

Another area in which citizen input is important is in the development of recreation programs. Programs, by their nature, are flexible enough to be quickly modified as a result of ongoing citizen input. The following general principles should be adhered to:

* The City shall consider the specific needs and desires of particular neighborhoods.

* Programming shall be planned so as to allow enough flexibility to respond rapidly to changing recreational needs.

* Increased attention shall be devoted to two-way communication of recreational information through the use of surveys and a "hot line."

* Programs shall be monitored in order to evaluate their usefulness and popularity.

* The City shall consider the typical work schedules of parents in designing programs to meet the year-round recreational needs of pre-school and school-age children.

Monitoring, Reevaluation, and Public Input

Monitoring and periodic reevaluation of the Recreation Element are necessary to maintain the timeliness, relevance and accuracy of the Element as the community's desires, resources and population change. Public input is crucial in these activities.

State statutes mandate an annual update of the Capital Improvements Element and reevaluation of the entire Comprehensive Plan every five years. The City should use the following procedures in completing the mandated updates:

[5] Ibid.

* Prior to consideration of the annual Capital Improvements Program (CIP), an update of the inventory and "facility condition" assessment of recreation and open space facilities and programs shall be completed. This update should include surveys of park users, and be coordinated by the Recreation & Parks Department. An annual report on progress made in plan implementation shall be submitted by the Public Recreation Board (with staff assistance rendered by the Recreation & Parks Department) to the City Commission for consideration in conjunction with the annual CIP.

* The five-year update will require a thorough review of the entire Recreation Element, and should include a survey or other means to assess user patterns and preferences. While the annual review will be the responsibility of the Recreation & Parks Department and the Public Recreation Board, Planning Division staff and the Plan Board will oversee the five-year update, with assistance and input from the Recreation & Parks Department and other interested parties.

DATA

INVENTORY OF PARKS AND FACILITIES

Inventory Table for Public Parks and Facilities Within the Urban Area

An inventory of recreational parks, sites, and facilities is shown in Table 2 and Map 3. Refer to "Park Inventory Methodology" section for further information regarding inventory methodology.

EXPLANATION OF COLUMN HEADINGS FOR PARK INVENTORY

GEN. TYPE: general type of park. The park can be resource- or activity-based. See Definitions for explanation.

SPECIFIC TYPE: one of seven specific park classifications. "Community-U" designates "Community-Undeveloped" sites and indicates that parks do not meet the minimum thresholds of facilities specified in the park design standards. "Conservation" indicates that the site is a potential local nature park but is not developed to accommodate passive recreation.

OWNERSHIP: owner or operator of the park. "SBAC" designates School Board of Alachua County schools. "SBAC-P" designates parks for which there is a cooperative use agreement between the SBAC and the City or County. "WMD" designates water management district.

SIZE: total acreage of the park. For SBAC schools, this includes only acreage designated as "Open Space" on the Gainesville 1980-2000 Comprehensive Plan Land Use map or areas containing recreational facilities, or both, as shown on aerial maps.

ACTIVE: total "active" acreage at the park. See Recreation Element Data Collection and Analysis Report for definition of "active acreage."

PASSIVE: total "passive" acreage at the park. See Recreation Element Data Collection and Analysis Report for definition of "passive acreage."

LAND: land area of park in acres. Does not include submerged acreage. Can include areas within 10-year flood channel or 100-year floodplain.

WATER: acreage of the park submerged for at least nine months out of the year.

BASKETBALL HOOPS: number of basketball hoops at the park. Also known as "multi-purpose courts." Indoor basketball facilities operated by the SBAC are not counted unless there is a cooperative use agreement with the City or County. In some instances, basketball and tennis courts may overlap each other. When overlap occurs, the inventory counts the court for both basketball and tennis.

RACQUETBALL: number of racquetball courts at the park (includes all outdoor, three- or four-walled courts).

HARDBALL: number of youth baseball fields at the park. Youth fields feature outfield fences that are no more than 275 feet from home plate.

SOFTBALL: number of adult baseball/softball fields at the park. Adult fields feature outdoor fences that are no less than 275 feet from home plate. In some instances, softball and soccer fields may overlap each other. When overlay occurs, the inventory counts the field for both softball and soccer.

SOCCER: number of soccer fields at the park. Also known as "multi-purpose" fields. Football, rugby, and lacrosse fields are also counted as soccer fields. In some instances, softball and soccer fields may overlap each other. When overlap occurs, the inventory counts the field for both softball and soccer.

POOL: length of swimming pool, in meters.

PLAYGROUND: number of playgrounds at the park.

PICNIC TABLES: total number of picnic tables at the park.

TRAIL MILES: length of trail (walking, jogging, hiking, etc.) in miles. This classification does not include running tracks at SBAC schools or sidewalks which run contiguously and parallel to roads. Trail must be designed predominantly for recreation in order to qualify as an inventoried recreational trail.

RESTROOMS: are there restrooms at the park? (Yes/No). This classification does not include SBAC restrooms.

REC CENTER: is there a recreation center at the park? (Yes/No).

Table 2. Gainesville Area Parks

Park	Address	Type of Park	Owner	Acres	Active	Passive	Land	Water	Basketball Hoops	Tennis	Racquetball	Hardball	Softball	Soccer	Pool	Gym	Playground	Picnic Tables	Trail Miles	Restrooms	Rec.Center
Boulware Springs	3500 Blk. SE 15th St.	Community-U	City	103.3	67.30	35.00	103.30	0.00										4		●	
Citizen	1400 NE 8th Ave	Community	City	31.0	31.00	0.00	31.00	0.00	6					3	50M			3		●	●
Forest Park	SW 20th Ave&SW 43rd St.	Community-U	County	24.7	24.70	0.00	24.70	0.00						2							
Greentree	1900 NW 39th Ave.	Community-U	City	21.0	21.00	0.00	21.00	0.00	2			1	1				●	5		●	
Kanapaha Park	4000 blk SW 75th St	Community-U	County	23.0	23.00	0.00	23.00	0.00	1			1		2			●		0.75		
Northeast	501 NE 16th Ave.	Community	City	23.2	23.20	0.00	23.20	0.00		4	4	2	1	1			●	8	2.5	●	
Northside	NW 34th St. & US 441	Community-U	City	34.5	34.50	0.00	34.50	0.00		4	4						●	3		●	
Possum Creek	4000 blk NW 53 Ave	Community-U	City	80.0	40.00	40.00	80.00	0.00													
Squirrel Ridge	Williston Rd & SW 17th Te	Community-U	County	16.8	16.80	0.00	16.80	0.00						1			●				
T.B. McPherson	1717 SE 15th St.	Community	City	15.0	15.00	0.00	15.00	0.00	4	4	2		2		25 yd		●	15		●	●
Westside	1001 NW 34 St	Community	City	28.3	28.30	0.00	28.30	0.00	4	8	4	1	2		50M		●	16	1.5	●	●
Audubon Colclough	Williston Rd. Annex	Local Nature	Private	38.0	0.00	38.00	28.40	11.60											1		
Bivens Arm Nature	3650 S. Main St.	Local Nature	City	56.0	0.00	56.00	14.00	42.00										4	1	●	
Kanapaha Botanical	4625 SW 63rd Blvd.	Local Nature	County	62.0	0.00	62.00	62.00	0.00										4	3	●	
Lake Alice	Museum Rd. - U of F	Local Nature	State	120.0	0.00	120.00	10.00	110.00										3	0.5		
Loblolly Env Educ Fac	3300 blk NW 5th Ave	Local Nature	City	108.0	0.00	108.00	108.00	0.00										1		●	●
Morningside Nature	3540 E. University Ave.	Local Nature	City	277.8	0.00	277.59	277.59	0.00										23	7	●	
Ring Park	2000 NW 16 Ave	Local Nature	City	19.3	0.00	19.26	19.26	0.00										12	1	●	
San Felasco County Park	NW 43rd St, N. of 53rd Av	Local Nature	County	194.0	0.00	194.00	194.00	0.00									●				
Colclough Nature Park	2600 S. Main Street	Conservation	City	8.0	0.00	4.96	3.46	1.50													
Gum Root Swamp	6000 blk NE 39th Ave	Conservation	City	741.0	0.00	741.00	631.00	110.00											1		
HG #1	2400 NW 8th Ave	Conservation	City	113.7	0.00	113.69	113.69	0.00													
HG #2	2219 NW 34th St	Conservation	City	11.2	0.00	11.21	11.21	0.00													
HG #3	5200 NW 2nd Ave	Conservation	City	16.3	0.00	16.31	16.31	0.00													
HG #4 (Driggers)	N.W. 29th Rd (1500-blk)	Conservation	City	6.0	0.00	6.00	6.00	0.00													
Hatchet Creek	SR 24 S of NE 49th Rd.	Conservation	City	6.0	0.00	6.00	6.00	0.00													
Kanap. Addition (Davis et al)	East of Kanap. Gardens	Conservation	City	20.5	0.00	20.50	20.50	0.00													
Lake Kanapaha	4625 SW 63 Blvd	Conservation	County	453.4	0.00	453.37	150.00	303.37													
Palm Point	Newnan's Lake	Conservation	City	16.1	0.00	4.59	4.59	11.51													
Sugarfoot Hammock	S.W. 20th Ave (6200-blk)	Conservation	City	333.0	0.00	333.00	333.00	0.00													
Terwilliger Pond	400 SW 62nd St.	Conservation	City	24.0	0.00	24.00	20.00	4.00													
Sweetwater/Matheson G-way	NE Boulevard	Linear	City	1 m	1 m	0.00	1 m	0.00											1		
G-ville-Hawthorne RailTrail	Boulware Spgs/Paynes Pr	Linear	State	17 m	17 m	0.00	17 m	0.00											17		
Waldo Rail Trail	Waldo Road	Linear	State	6 m	6 m	0.00	6 m	0.00											6		
A.N.N.E.	6244 N.W. 28th Terr.	Mini	City	0.9	0.91	0.00	0.91	0.00	2								●	3			
Grandmother's	405 SW 5th Ave	Mini	City	0.3	0.30	0.00	0.30	0.00													

10/5/00

SOURCE: City of Gainesville, Department of Community Development

Table 2. Gainesville Area Parks

Park	Address	Type of Park	Owner	Acres	Active	Passive	Land	Water	Basketball Hoops	Tennis	Racquetball	Hardball	Softball	Soccer	Pool	Gym	Playground	Picnic Tables	Trail Miles	Restrooms	Rec Center
Kiwanis	NW 6th St & 4th Ave	Mini	City	2.3	2.30	0.00	2.30	0.00													
Lynch	450 S. Main St	Mini	City	1.4	1.40	0.00	1.40	0.00									•	12			
Mini Park #01	NE 15th St. & 4th Ave.	Mini	City	1.0	1.02	0.00	1.02	0.00										3			
Mini Park #02	SE 9th St. & 8th Ave.	Mini	City	0.5	0.50	0.00	0.50	0.00	2								•	1			
Mini Park #03	510 NW 2nd St.	Mini	City	1.0	1.00	0.00	1.00	0.00									•	3			
Mini Park #04	424 NW 6th Ave.	Mini	City	0.2	0.18	0.00	0.18	0.00									•				
Mini Park #05	1352 SE 2nd St	Mini	City	0.6	0.60	0.00	0.60	0.00									•				
Mini Park #06	NW 31st Pl & 20th St.	Mini	City	0.4	0.40	0.00	0.40	0.00	2								•	1			
Mini Park #07	316 SW 7th Pl.	Mini	City	0.2	0.20	0.00	0.20	0.00									•				
Mini Park #08	NE 8th Ave. & 15th Terr.	Mini	Private	0.2	0.15	0.00	0.15	0.00									•				
Mini Park #09	820 NW 4th Ave	Mini	City	0.1	0.13	0.00	0.13	0.00									•				
Mini Park #10	1110 NE 36th St.	Mini	City	0.4	0.49	0.00	0.49	0.00	2												
Mini Park #11	1461 NE 8th St.	Mini	City	1.3	0.00	0.00	1.30	0.00													
Mini Park #12	2445 NE 12 Ave	Mini	City	0.5	0.50	0.00	0.50	0.00													
Oak Hill	NW 9th St. & NW 42nd Av	Mini	City	0.3	0.27	0.00	0.27	0.00													
Roper Park	NE 2nd St. & NE 4th Ave.	Mini	City	1.5	1.50	0.00	1.50	0.00									•	4			
S.Foster Mini Park	3339 NW 12th St	Mini	Private	1.4	1.41	0.00	1.41	0.00									•	3	0.21		
Cone	2601 E. University Ave.	Neighb	City	99.0	26.00	62.00	90.00	0.00	4			1					•	4		•	
Copeland Settlement	NE 27th Ave & 70th St.	Neighb	County	5.0	5.00	0.00	5.00	0.00	1			1					•	14			
Green Acres	SW 6th Pl. & 40th St.	Neighb	City	37.0	20.03	17.00	37.03	0.00													
NE Liaison Center	1701 NE 8th Ave.	Neighb	City	0.5	0.53	0.00	0.53	0.00	2											•	•
NE 31st Avenue	NE 31st Ave. & 17th Terr.	Neighb	City	1.4	1.40	0.00	1.40	0.00	4	2							•				
NW #1	2720 NW 38th Ave	Neighb	City	42.0	42.00	0.00	42.00	0.00													
Rosa Williams	524 NW 1st St. & 6th Ave.	Neighb	City	0.9	0.90	0.00	0.90	0.00	4								•				•
Sharmie Filar / W. Johnson C	321 NW 10th Street	Neighb	City	0.7	0.73	0.00	0.73	0.00	1								•	4		•	•
Smokey Bear	2600 NE 15th St.	Neighb	City	4.5	4.50	0.00	4.50	0.00									•	6			
Springtree	2800 NW 39th Ave	Neighb	City	12.0	12.00	0.00	12.00	0.00									•				
Thelma Boltin Center	516 NE 2nd Ave.	Neighb	City	1.0	1.02	0.00	1.02	0.00										4		•	•
Tumblin Creek	SW 6th St. & Depot Ave.	Neighb	City	4.2	4.18	0.00	4.18	0.00	4								•	8	1.5		
WA #1	900 blk SE 5th Ave	Neighb	City	3.8	3.00	0.80	3.80	0.00													
Woodland	1900 SE 4th St.	Neighb	City	5.3	5.31	0.00	5.31	0.00	4			1		1			•	4		•	
AQ Jones Center	1108 NW 7th Ave.	Neighb	SBAC	4.4	4.41	0.00	4.41	0.00	4			1		1			•				
Bishop Middle Sch	1901 NE 9th St.	Neighb	SBAC	8.0	8.00	0.00	8.00	0.00	4			1		1		•	•				
Buchholz High	5510 NW 27th Ave.	Neighb	SBAC	17.8	17.80	0.00	17.80	0.00				2		1		•					
Duval Elementary	2109 NE 4th Ave.	Neighb	SBAC	8.2	8.20	0.00	8.20	0.00	4			1					•				
East Side High	1201 SE 45th Terr.	Neighb	SBAC	29.0	29.00	0.00	29.00	0.00		2		2		1		•					
Finley Elementary	1912 NW 9th Ave.	Neighb	SBAC	17.0	17.00	0.00	17.00	0.00	4			1		1			•				
Ft. Clarke Middle Sch	9301 NW 23rd Ave.	Neighb	SBAC	14.1	14.11	0.00	14.11	0.00	2	2		1				•					

10/5/00

SOURCE: City of Gainesville, Department of Community Development

Table 2. Gainesville Area Parks

Park	Address	Type of Park	Owner	Acres	Active	Passive	Land	Water	Basketball Hoops	Tennis	Racquetball	Hardball	Softball	Soccer	Pool	Gym	Playground	Picnic Tables	Trail Miles	Restrooms	Rec Center
Gainesville High	1900 NW 13th St.	Neigh'd	SBAC	8.1	8.06	0.00	8.06	0.00				2		1		●					
Glen Springs Elementary	2626 NW 31st Ave	Neigh'd	SBAC	8.8	8.80	0.00	8.80	0.00	1			1					●				
Hidden Oak Elementary	9205 NW 23rd Ave	Neigh'd	SBAC	7.0	5.00	2.00	7.00	0.00	4								●	12			
Idylwild Elementary	4601 SW 20th Terr.	Neigh'd	SBAC	11.7	11.69	0.00	11.69	0.00	1	1							●				
Kanapaha Middle Sch	5005 SW 75th St.	Neigh'd	SBAC							1		1	1	2		●					
Kirby Smith	619 E. University Ave.	Neigh'd	SBAC	4.0	4.00	0.00	4.00	0.00	2								●				
Lake Forest Elementary	427 SE 43rd St.	Neigh'd	SBAC	11.8	11.80	0.00	11.80	0.00	1	?	?	1					●				
Lincoln/Williams	1001 SE 12th St.	Neigh'd	SBAC-P	28.7	28.70	0.00	28.70	0.00		1		1	1	8		●	●	3			
Littlewood Elementary	812 NW 34th St.	Neigh'd	SBAC	7.0	7.00	0.00	7.00	0.00	4					1			●				
Metcalfe Elementary	1905 NE 12th St.	Neigh'd	SBAC	9.7	9.70	0.00	9.70	0.00	2			1		1			●				
Norton Elementary	2200 NW 45th Ave.	Neigh'd	SBAC	4.5	4.50	0.00	4.50	0.00	2								●				
Prairie View Elem.	1801 SE 32nd Place	Neigh'd	SBAC	11.0	11.00	0.00	11.00	0.00	1	1		1					●				
Rawlings Elementary	3600 NE 15th St.	Neigh'd	SBAC	16.0	16.00	0.00	16.00	0.00	2	1							●				
Sidney Lanier Center	312 NW 16th Ave.	Neigh'd	SBAC	7.3	7.30	0.00	7.30	0.00	2			1					●				
Stephen Foster Elementary	3800 NW 6th St.	Neigh'd	SBAC	9.8	9.80	0.00	9.80	0.00	2	1		1		1			●				
Talbot Elementary	5701 NW 43rd St.	Neigh'd	SBAC	6.6	6.57	0.00	6.57	0.00	2					1			●				
Terwilliger Elementary	301 NW 62nd St.	Neigh'd	SBAC	7.7	7.73	0.00	7.73	0.00	2								●				
Westwood Middle School	3215 NW 15th Ave.	Neigh'd	SBAC	8.0	8.00	0.00	8.00	0.00	4			2		1		●	●				
Wiles Elementary	4601 SW 75th St.	Neigh'd	SBAC	6.9	6.92	0.00	6.92	0.00	4					1			●				
Williams Elementary	1245 SE 7th Ave.	Neigh'd	SBAC	3.8	3.80	0.00	3.80	0.00	4			1					●				
Yonge (P.K.)	1080 SW 11th Ave.	Neigh'd	State	12.7	12.70	0.00	12.70	0.00	2	2		1		1		●	●				
Boys Club NW	2700 NW 51st St.	Neigh'd	Private	15.0	15.00	0.00	15.00	0.00	5	2		3		.1		●	●	3	0.75	●	
Boys Club SE	1100 SE 17th Drive	Neigh'd	Private	6.2	6.26	0.00	6.26	0.00	6					1		●					
Girls Club	2101 NW 39th Ave.	Neigh'd	Private	5.2	5.20	0.00	5.20	0.00					1	1		●	●	8		●	●
Devil's Millhopper	4732 NW 53rd Ave.	Regional	State	259.0	0.00	259.00	259.00	0.00										6	0.5	●	
Paynes Prairie	US 441 & SR 121	Regional	State	19728.2	0.00	19728.20	19353.61	374.58									●	23	15	●	
Prairie Creek Park	7200 SE Hawthorne Rd	Regional	WMD	202.5	0.00	202.50	202.50	0.00													
San Felasco Hammock	c/o Devil's Millhopper	Regional	State	6010.5	0.00	6010.46	6010.46	0.00											1.25		
Archery Range	Off State Rd. 24 - Airport	Special	City	100.0	100.00	0.00	100.00	0.00										1		●	
Community Plaza	101 E. University Ave.	Special	City	1.2	1.21	0.00	1.21	0.00												●	
Gainesville Golf	7300 SW 35th Way	Special	Private	140.0	140.00	0.00	140.00	0.00		2					21M					●	●
Ironwood Golf Club	2100 NE 39th Ave.	Special	City	122.0	122.00	0.00	122.00	0.00												●	●
Newnan's Lake	SR 20-Boat Launch	Special	County	6339.7	6339.68	0.00	11.68	6328.00									●	16		●	
Santa Fe C.C.	3000 NW 83rd St.	Special	State	20.0	20.00	0.00	20.00	0.00	1	8	8	1	2 1	1		●			4	●	
Thomas Center Gardens	306 NE 6 th Ave	Special	City	6.2	6.20	0.00	6.20	0.00												●	
University of Florida	University of Florida	Special	State	238.0	238.00	0.00	238.00	0.00	5	~~49~~ 32	~~39~~ 15		14 4	~~15~~ 8	16M	●		?	2.5	●	●

NOTE: SBAC schools are not officially considered public parks. Such schools provide only limited public access for recreation. This access is typically during evenings and weekends, and only when not in use for SBAC programs. They are inventoried solely for the purpose of determining neighborhood-level recreational levels-of-service.

10/24/00

SOURCE: City of Gainesville, Department of Community Development

Linear Corridors and Linkages, Recreational Trails

Linear corridors are non-motorized recreational travel routes, which generally follow utility or abandoned railroad rights-of-way. The utility corridors fall into two categories: (1) those that are utility easements granted to Gainesville Regional Utilities (GRU) or a private utility company, and (2) those that are rights-of-way owned in fee by GRU (see Map 1). In order to permit recreational use, an additional trail easement would need to be obtained from property owners in the case of utility easements. Rights-of-way, on the other hand, would require that the City Commission grant an additional trail dedication that would allow recreational trail use. In either case, an evaluation of the physical constraints of the corridor and possible concerns by nearby property owners would need to be conducted prior to such recreational development.

Another potentially significant category of recreational corridors is dedicated (but undeveloped) road rights-of-way. There are several of these publicly owned "paper street" segments throughout the city, and their locations often offer exciting opportunities for new recreational trails. The City has conducted an inventory of these segments and could prepare a feasibility study describing the potential recreational use of each segment.

Two of the ten corridor segments described below are abandoned railroad rights-of-way. Both have been acquired and developed for public trail use. In addition to these two segments, there are numerous railroad corridors in Alachua County that are either actively being used as railroads, have been sold to private interests, or are abandoned. When abandoned railroad segments are sold to private interests, they become either difficult or impossible to reconstruct for recreational use. Because of this, the City needs to be in a position to negotiate quickly to acquire segments that are abandoned or may be abandoned in the future. There are three primary methods, which can help the City ensure that desirable abandonments are acquired by the public:

* The City should maintain a rail segment inventory which describes the attributes and status of each segment, and therefore enables the City to maintain an on-going assessment of segments.

* In conjunction with the inventory above, the City should be familiar with and follow procedures necessary to invoke the federal "Public Use Condition" regulation in instances where a rail segment may be abandoned. This regulation requires the Interstate Commerce Commission (ICC) to give public agencies exclusive negotiating privileges before a rail segment can be sold on the open market.

* The City should support federal legislation, which would have the ICC require that railroad abandonments be "railbanked." Railbanking would hold abandoned corridors for future rail needs, and allow them to be used as recreational trails in the interim.

Presently, there are ten corridors within the urban area which potentially qualify as recreational corridors, although only two have been developed for recreation:

1. Hawthorne Rail Trail
2. Waldo Rail Trail
3. Duckpond
4. Hogtown

5. Alachua (N.W. 6th Street) Rail
6. East Gainesville Utility
7. West Gainesville Utility
8. Parker Road Utility
9. Hogtown Utility
10. North Gainesville Utility

There are three types of linkages provided by these corridors. A DIRECT LINK is one where the right-of-way either traverses, runs adjacent to, or terminates at a location of interest. A BICYCLE LINK is one where the right-of-way passes within 3,000 feet of a location of interest and currently provides on-road or off-road bicycle access meeting state standards. A PEDESTRIAN LINK is one where the right-of-way passes within 1,000 feet of a location of interest and currently provides sidewalk access which does not cross a major roadway. A POTENTIAL LINK is one where the right-of-way passes within 3,000 feet of a location of interest but does not currently provide bicycle or pedestrian facilities as specified above. This category also includes active rail lines or abandoned rail lines which have been sold to private interests.

The following is an inventory of the "locations of interest" that can be linked if the corridors are developed for public trail use:

SOUTHEAST QUADRANT

The Hawthorne Rail Trail provides the following linkages:

DIRECT LINK:
* Boulware Springs
* Paynes Prairie, Alachua Sink, and Persimmon Point
* Prairie Creek
* Sweetwater Branch
* The cities of Rochelle, Grove City, and Hawthorne
* Destinations to the northeast, southwest, and northwest portions of Alachua County and North Central Florida.

BICYCLE (B) OR PEDESTRIAN (P) LINK
* Woodland Park (P)

POTENTIAL LINK:
* Newnans Lake
* T.B. McPherson Park
* Mini-Park #5
* Prairie View Elementary School
* Audubon Colclough Park
* Calf Pond Creek
* Lochloosa Wildlife Management Area
* The cities of Micanopy and Lowell
* River Styx and Orange Lake
* Lake Wauburg

* Tuscawilla Lake
* Waldo Rail Trail

The East Gainesville Utility Corridor provides the following linkages:

DIRECT LINK
* Paynes Prairie
* Sweetwater Branch
* Calf Pond Creek
* Lincoln/Williams School
* Young American Park
* Morningside Nature Center
* Rawlings School
* Williams School

BICYCLE (B) OR PEDESTRIAN (P) LINK:
None

POTENTIAL LINK:
* County Fairgrounds
* Gainesville Housing Authority

SOUTHWEST QUADRANT

The Hogtown/Parker Road Utility Corridors provide the following linkages:

DIRECT LINK:
* Tumblin Creek
* P.K. Yonge School
* University of Florida campus
* Forest Park
* Lake Kanapaha

BICYCLE (B) OR PEDESTRIAN (P) LINK:
None

POTENTIAL LINK:
* Lake Alice
* Wiles, Kimball Elementary School
* Idylwild School

NORTHEAST QUADRANT

The Waldo Rail Trail provides the following linkages:

DIRECT LINK:

* County Fairgrounds
* Little Hatchet Creek and Hatchet Creek Park
* University of Florida campus
* The cities of Waldo and Fairbanks

BICYCLE (B) OR PEDESTRIAN (P) LINK:

* Archery Range (B)

POTENTIAL LINK:

* Lynch Memorial Gardens
* Mini-Park #1, 2, and 8
* The Liaison Center
* Citizen's Park
* The Municipal Airport
* Tumblin Creek Park
* Hawthorne Rail Trail

The Duckpond Corridor provides the following linkages:

DIRECT LINK:

* Duckpond
* Kirby Smith
* Thelma Boltin Recreation Center
* Matheson Historical Center and Botanical Gardens
* Public Library
* Downtown Post Office

BICYCLE (B) OR PEDESTRIAN (P) LINK:

* Northeast Park (B)
* Thomas Center (P)
* Roper Park (P)
* City Hall (P)
* Sun Center, Hippodrome, and Downtown Gainesville (P)

POTENTIAL LINK:

* Lynch Memorial Gardens
* Hawthorne Rail Trail

NORTHWEST QUADRANT

The Hogtown Trail provides the following linkages:

DIRECT LINK:

* Hogtown Creek System
* Possum Creek Park
* Westside Park
* Loblolly Environmental Education Center
* Ring Park
* Green Acre Park
* Hogtown/Sugarfoot Prairie
* Lake Kanapaha & Botanical Gardens
* Forest Park

* Terwilliger Pond

BICYCLE (B) OR PEDESTRIAN (P) LINK:

* Gainesville High School (P)
* Westwood School (P)
* Littlewood School (P)

POTENTIAL LINK:

* Waldo Rail Trail
* Hawthorne Rail Trail

The Alachua (N.W. 6th Street) Trail provides the following linkages:

DIRECT LINK:

* Springstead Creek
* Hogtown Creek
* Potato Patch Bay
* The cities of Alachua, Jacksonville, Bell, High Springs, Starke, and LaCrosse
* Santa Fe Community College, Downtown Center

BICYCLE (B) OR PEDESTRIAN (P) LINK:

* Mini-Park #4 (P)
* Sidney Lanier School (P)

POTENTIAL LINK:

* Northside Park
* Mini-Park #9
* Sharmie Ffar Park
* Rosa Williams
* A. Quinn Jones School
* Kiwanis Park
* Northeast Park
* Stephen Foster School
* A.N.N.E. Park
* Oak Hill Park
* O'leno State Park, Poe Springs, and the Santa Fe River

The Parker Road/North Gainesville Utility Corridors provide the following linkages:

DIRECT LINK:

None

BICYCLE (B) OR PEDESTRIAN (P) LINK:

None

POTENTIAL LINK:

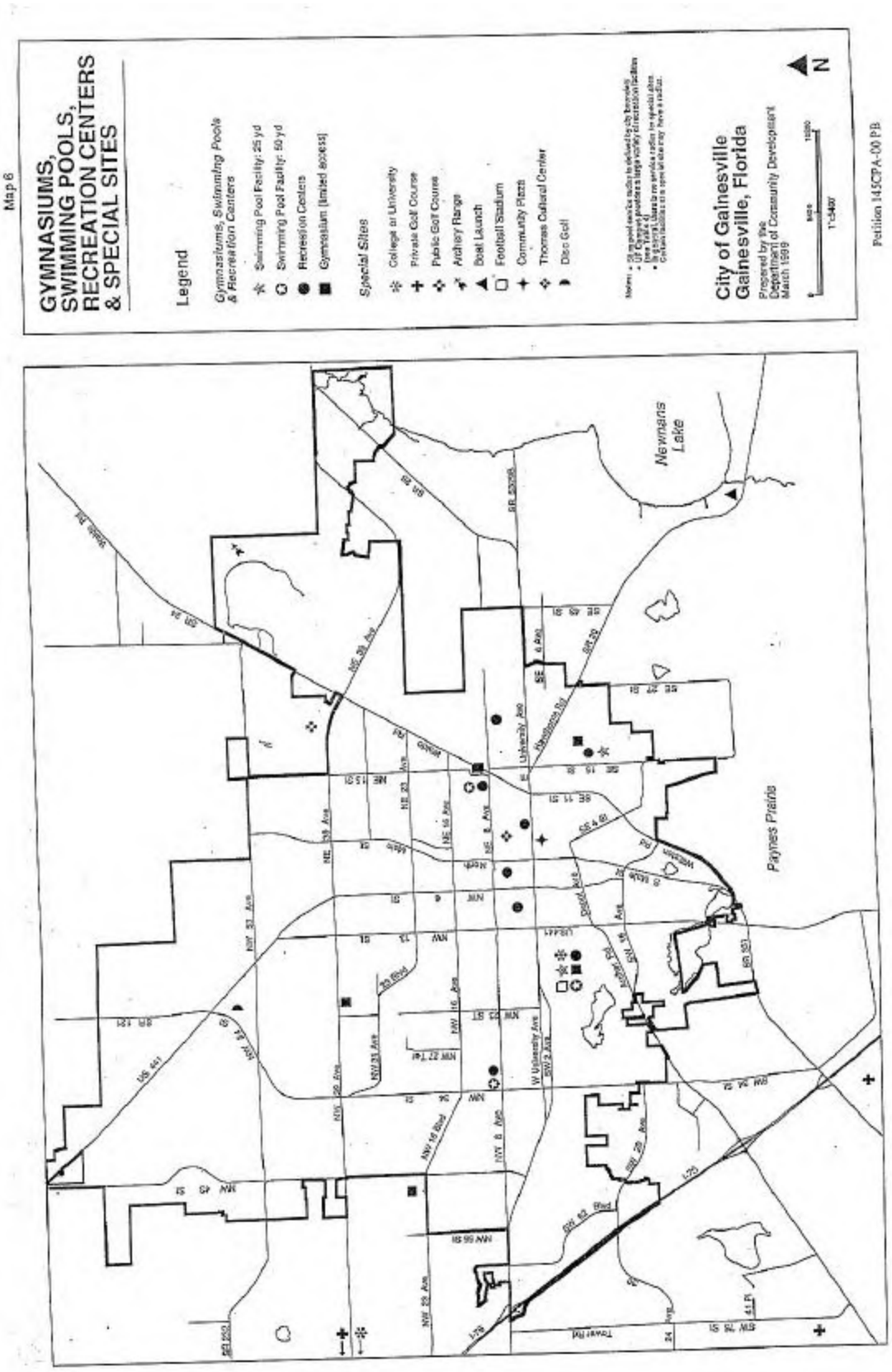
* Possum Creek Park
* Northside Park

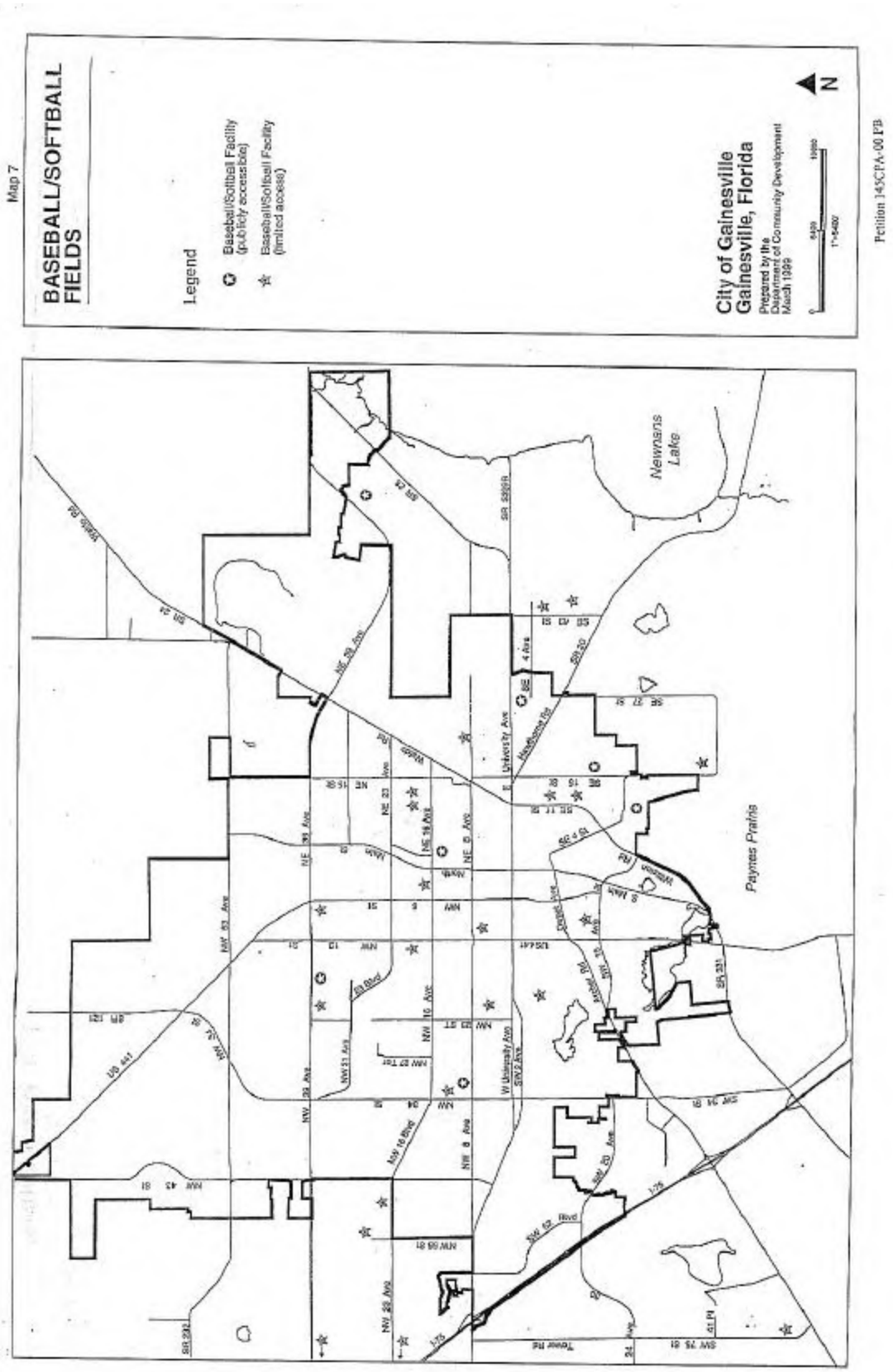
Segments that have already been sold to private interests include:

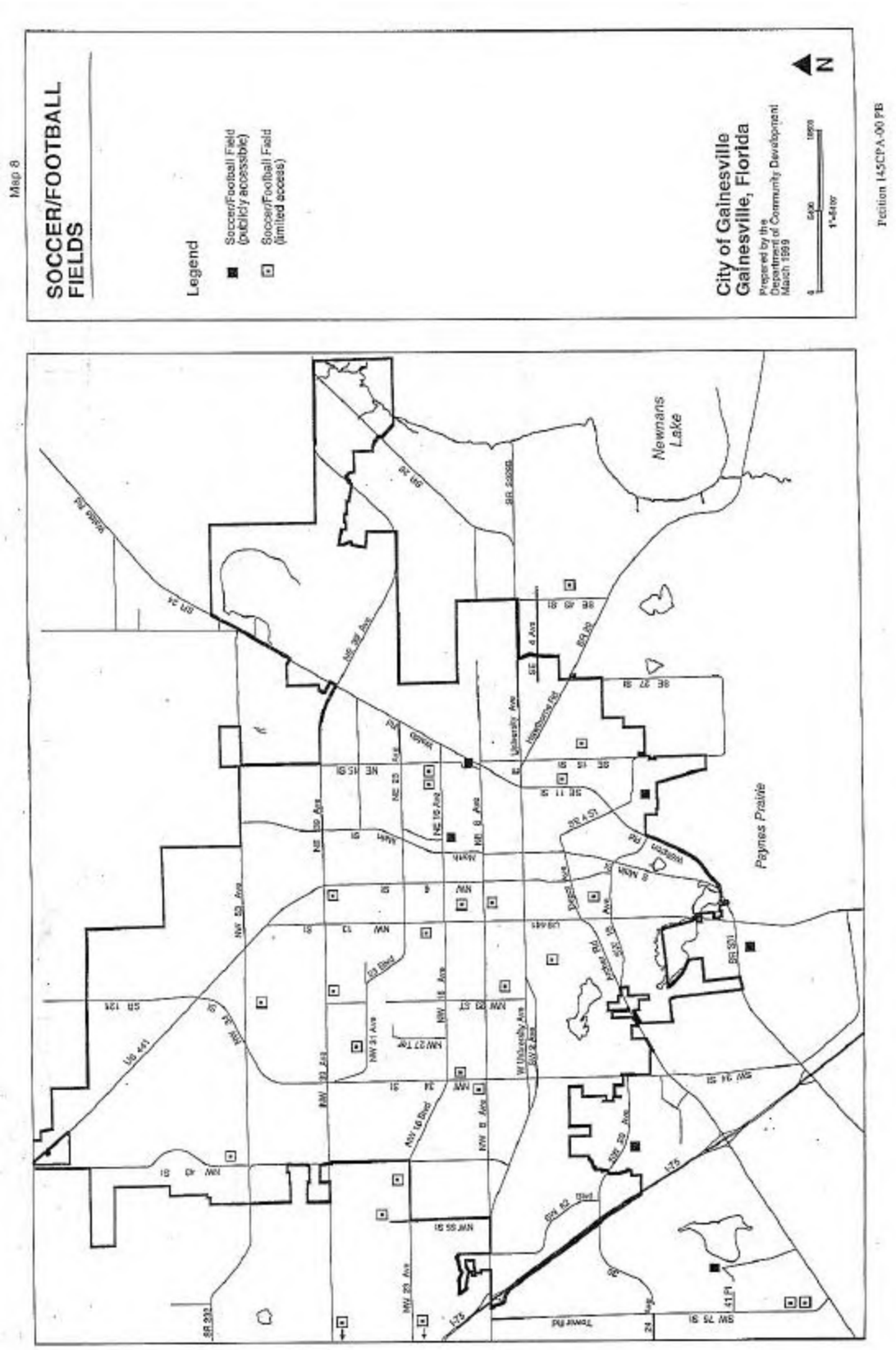
* Gainesville to Cedar Key
* Buda to Burnetts Lake
* Rochelle to Micanopy
* High Springs to Burnetts Lake
* Mattox to Burnetts Lake

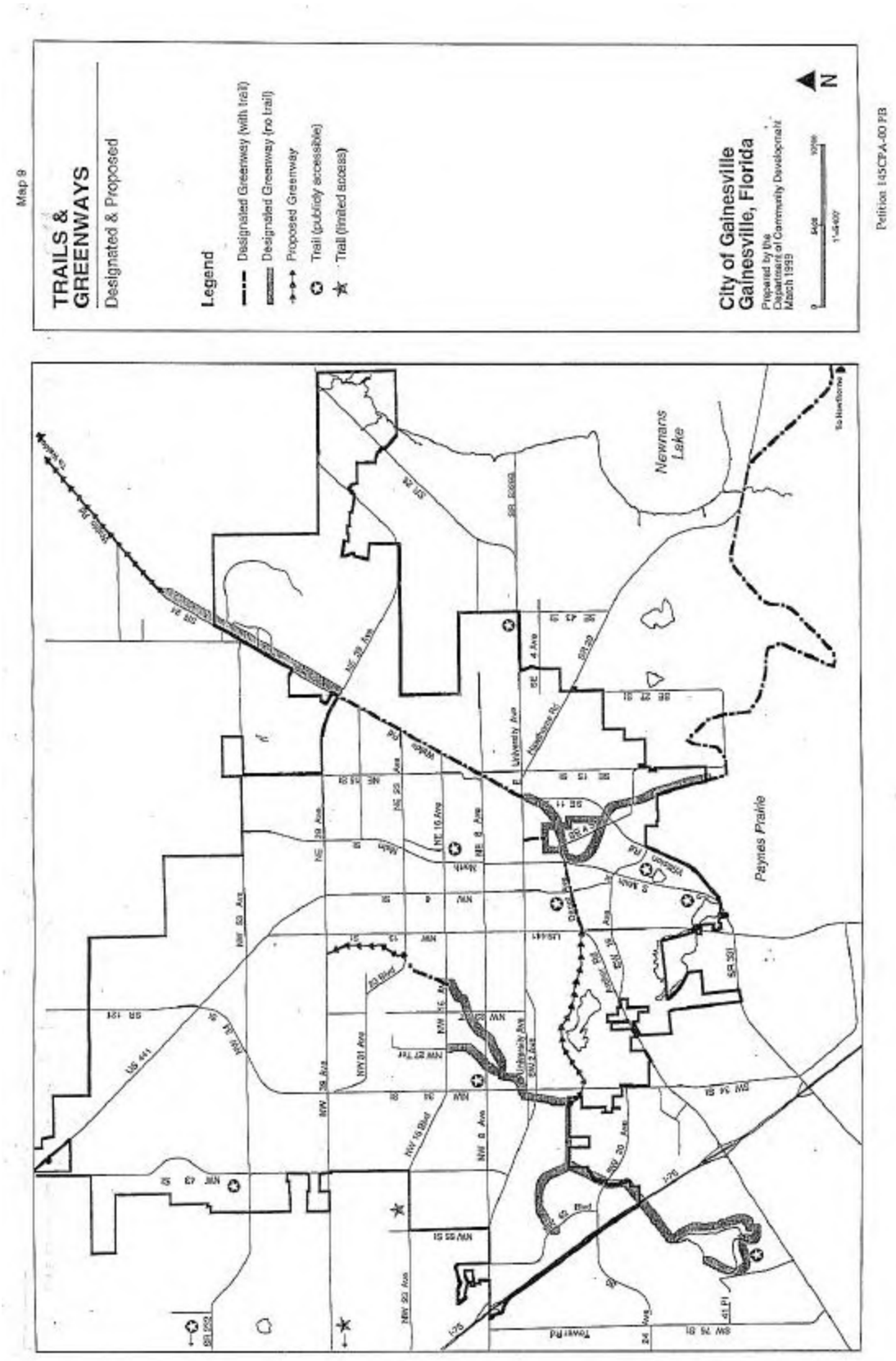
Facility Locations and Service Radii

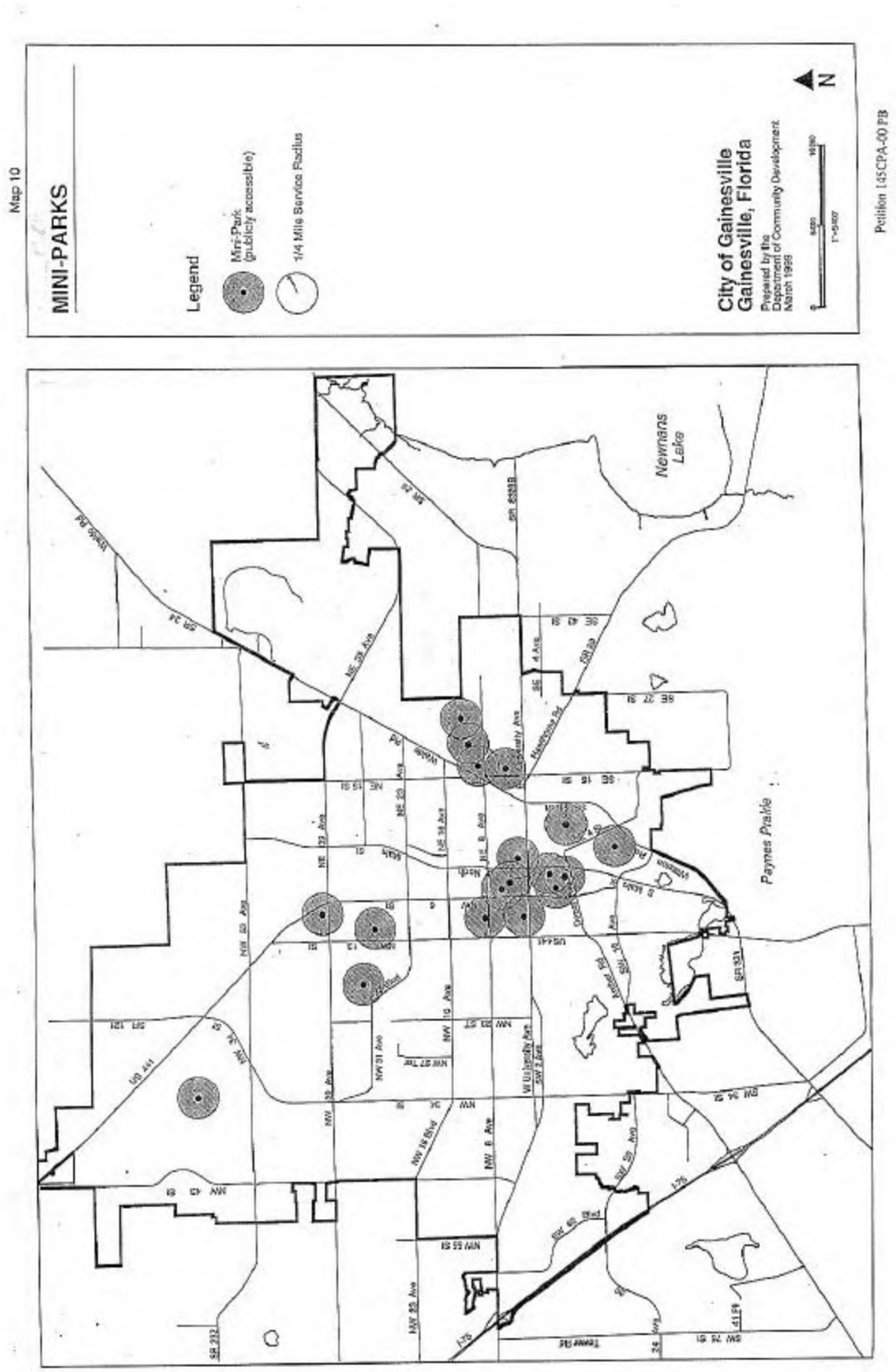
Maps 6-12 show the location and service radii for each of the facilities found at the various parks. In addition to showing the location of existing facilities, these maps are used to determine where new facilities should be located. (In general, new facilities should be located so as to minimize overlap with the service radius of existing facilities of that type.)

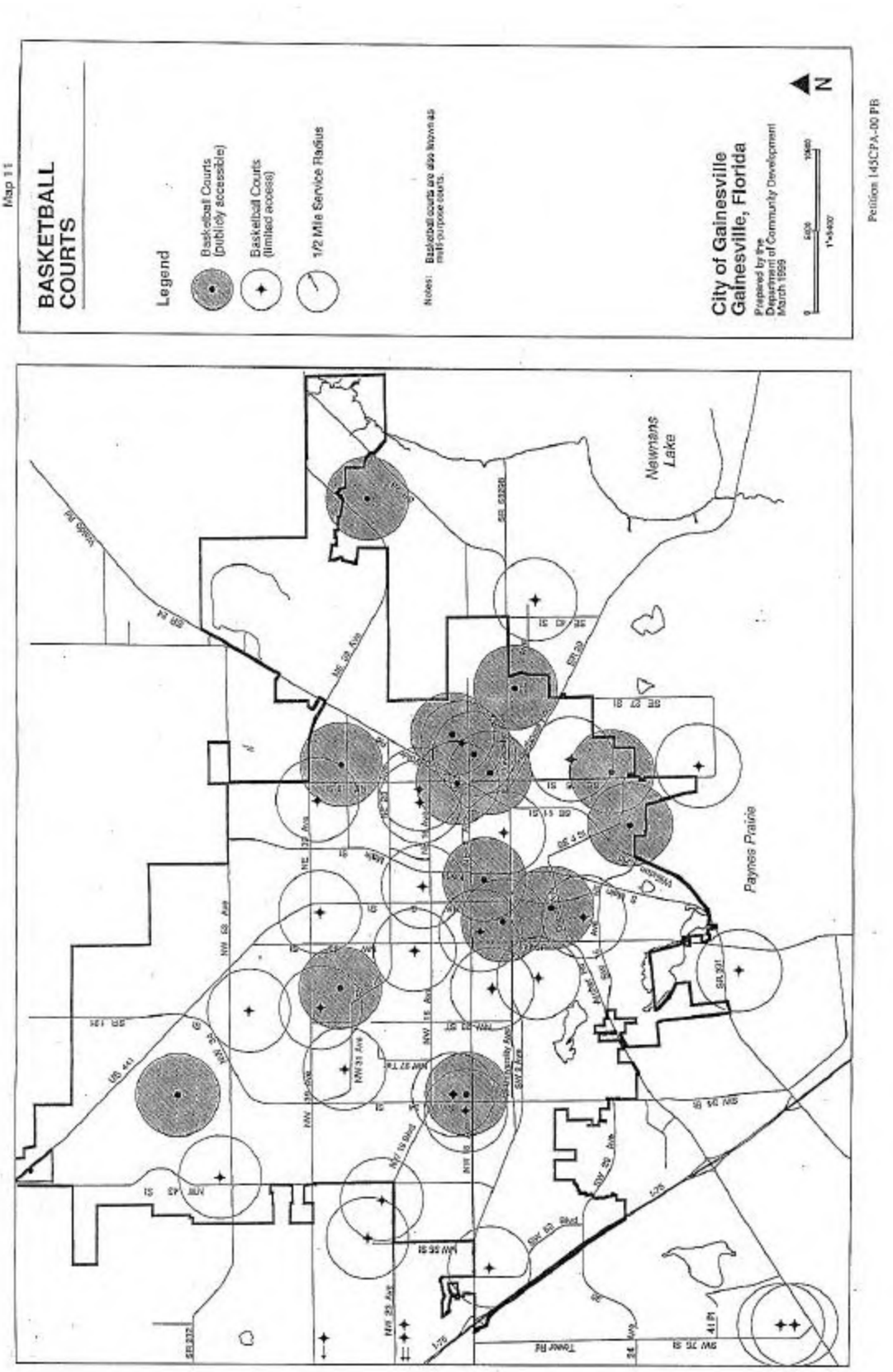

Map 8
GYMNASIUMS, SWIMMING POOLS, RECREATION CENTERS & SPECIAL SITES
Legend
Gymnasiums, Swimming Pools & Recreation Centers
Swimming Pool Facility: 25 yd
Swimming Pool Facility: 50 yd
Recreation Centers
Gymnasium (limited access)
Special Sites
College or University
Private Golf Course
Public Golf Course
Archery Range
Boat Launch
Football Stadium
Community Plaza
Thomas Cultural Center
Disc Golf
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
March 1999
N
Newnans Lake
Paynes Prairie
Petition 145CPA-00 PB

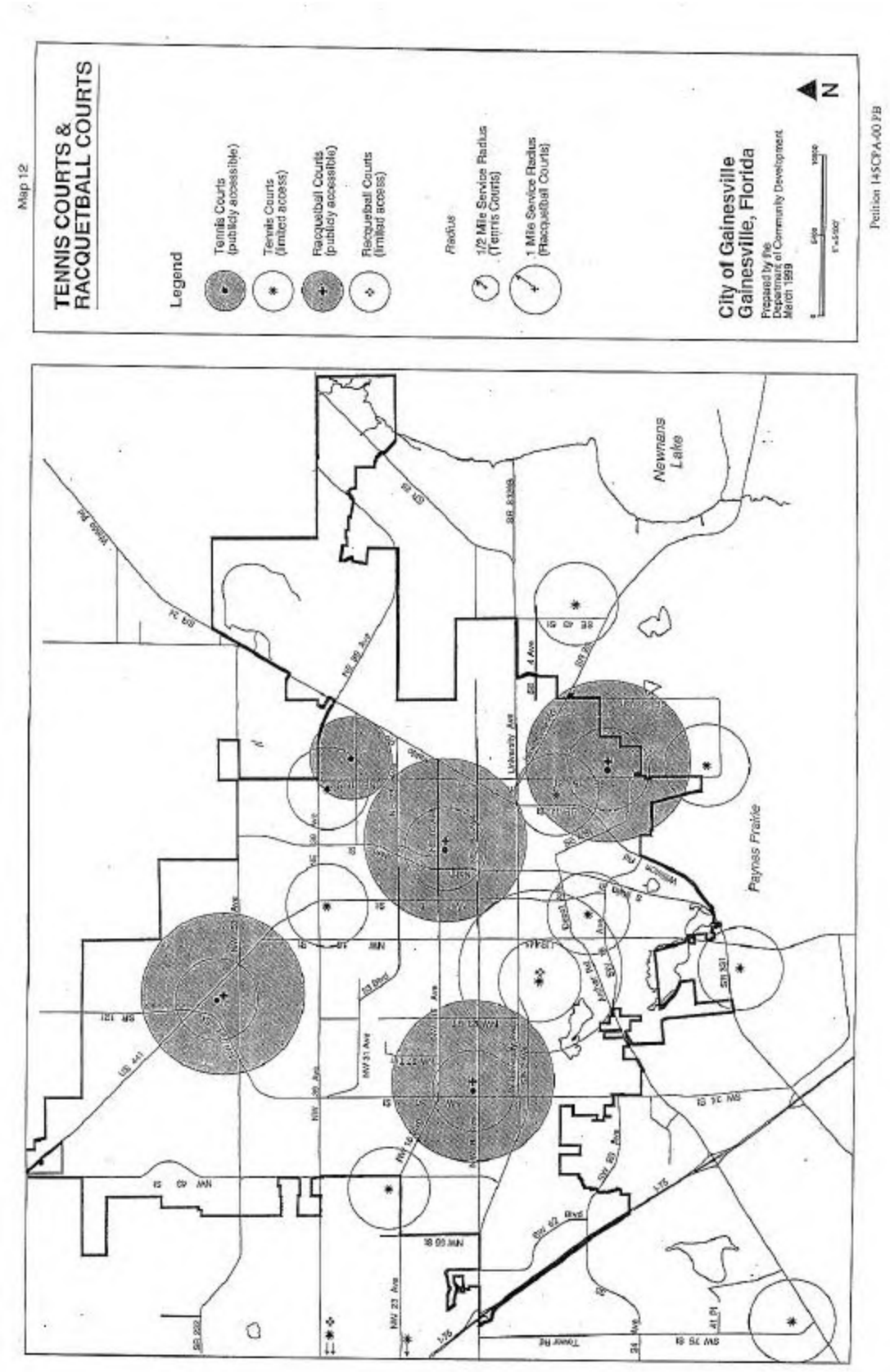

Map 7
BASEBALL/SOFTBALL FIELDS
Legend
Baseball/Softball Facility (publicly accessible)
Baseball/Softball Facility (limited access)
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development March 1999
N
Newnans Lake
Paynes Prairie
Petition 145CPA-00 PB


Map 8
SOCCER/FOOTBALL FIELDS
Legend
Soccer/Football Field (publicly accessible)
Soccer/Football Field (limited access)
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development March 1999
N
Newnans Lake
Paynes Prairie
Petition 145CPA-00 PB


Map 9
TRAILS & GREENWAYS
Designated & Proposed
Legend
Designated Greenway (with trail)
Designated Greenway (no trail)
Proposed Greenway
Trail (publicly accessible)
Trail (limited access)
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development March 1999
N
Newnans Lake
Paynes Prairie
Petition 145CPA-00 PB


Map 10
MINI-PARKS
Legend
Mini-Park (publicly accessible)
1/4 Mile Service Radius
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
March 1998
N
Newnans Lake
Paynes Prairie
Petition 145CPA-00 PB


Map 11
BASKETBALL COURTS
Legend
Basketball Courts (publicly accessible)
Basketball Courts (limited access)
1/2 Mile Service Radius
Notes: Basketball courts are also known as multi-purpose courts.
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development March 1999
0
5280
10560
1"=5280'
N
Petition 145CPA-00 PB
Newnans Lake
Paynes Prairie


Map 12
TENNIS COURTS &
RACQUETBALL COURTS
Legend
Tennis Courts (publicly accessible)
Tennis Courts (limited access)
Racquetball Courts (publicly accessible)
Racquetball Courts (limited access)
Radius
1/2 Mile Service Radius (Tennis Courts)
1 Mile Service Radius (Racquetball Courts)
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
March 1999
N
Petition 145CPA-00 PB
Newnans Lake
Paynes Prairie

Inventory of Private Recreational Facilities

Private parks and facilities are privately owned and restrict public access through use of seasonal or yearly membership fees or residence requirements. Table 3 provides a list of privately owned recreational facilities in the Gainesville urban area.

Table 3. Private Recreational Facilities in the Gainesville Urban Area

Establishment	Facilities
Gainesville Golf & Country Club 7300 SW 35th Way.	Golf, Tennis
Meadowbrook Golf Club 3200 NW 98th St	Golf
Haile Plantation Golf & Country Club 9905 SW 44th Ave.	Golf
West End Golf Course SR 26 & NW 127th St.	Golf
Putt-Putt Golf & Games 3535 SW 34th St.	Miniature Golf
Alley Katz Corner 3705 SW 42nd Ave.	Bowling,
Palm Lanes 2606 NE Waldo Rd.	Bowling
D B Racquet Club 5100 NW 53rd Ave.	Tennis, Swimming, Racquetball
Three Hundred Club 3715 NW 12th Ave.	Tennis, Swimming
Skate Station 751 NE 34th Place	Skating Rink
Kate's Restaurant And Fish Camp 6518 SE Hawthorne Rd.	Fishing, Canoeing
Downtown Athletic Club 101 SE 2nd Pl.	Health Club
Fit For Life Fitness Center	

618 NW 60th St.	Health Club
Florida Karate Center SW 2nd Ave.	Health Club
Gainesville Gym 203 NW 6th St.	Health Club
Fitness Connection For Women 2441 NW 43rd Ave.	Health Club
G-ville Health & Fitness Center 4820 Newberry Rd.	Health Club
Gainesville Shim Shin-Do Institute of Self Defense Inc. 602 NW 75th St	Health Club
Gold's Gym Aerobics & Fitness 7230 W. University Ave.	Health Club
Jazzercise Fitness Center 3723 Newberry Rd.	Health Club
Orion Fitness 3441 W. University Ave.	Health Club
University Gym 536 SW 2nd Ave.	Health Club
Power Plant 7230 W. University Ave.	Health Club
Knights of Columbus 1303 NE 23rd Ave.	Swimming
YMCA of Gainesville 5201 NW 34th St.	Swimming, Playgrounds, Ballfields, Picnic, Gym, Rec Center
Boys Club NW 2700 NW 51st St.	Ballfields, Basketball, Tennis, Gym
Boys Club SE 1100 SE 17th Dr.	Ballfields, Basketball, Gym
Diamond Sports 4000 SW 122nd St.	Ballfields
Girls Club 2101 NW 39th Ave.	Ballfields, Gym, Rec Center
Glidewell Stables 8301 NE Waldo Rd.	Horse Riding

Greathouse Farm/Equestrian Center 11004 SW 67th St.	Horse Riding
Moon Lake Stud 3005 NW 63rd St.	Horse Riding
Rockin' L Farms 7410 NW 131st St.	Horse Riding
Williamson Farm 1900 NW 98th St.	Horse Riding

SOURCE: City of Gainesville, Department of Community Development, March 1999.

ANALYSIS

ANALYSIS

Planning Areas

Recreational facilities are assigned to one of two planning areas:

* **Gainesville Urban Area**

* **Quadrant**

"Urban Area" facilities and parks are those which, because they are few and so popular, are able to attract users from throughout the urban area. "Quadrant" facilities and parks are more widely dispersed, but tend to attract users from only a relatively small service radius (e.g., one or several neighborhoods).

Both of these geographic areas constitute service radii. Each radius is then used to calculate facility and park deficiencies. The more traditional service radius concept, which plots a circular radius around facilities, is retained as a device to determine the appropriate location of new facilities.

Map 13 shows the boundaries of the Gainesville City limits. The map also shows the four quadrants.

* Southeast Quadrant
* Northeast Quadrant
* Northwest Quadrant
* Southwest Quadrant

The Central City District (CCD) and the University of Florida receive somewhat different treatment within the Element. The CCD population, because of its central location, is not incorporated in "quadrant-level" recreation analysis, as it is assumed that the small number of residents have equal and adequate access to all quadrants. However, facilities and parks within the CCD are assigned to appropriate quadrants based on street address.

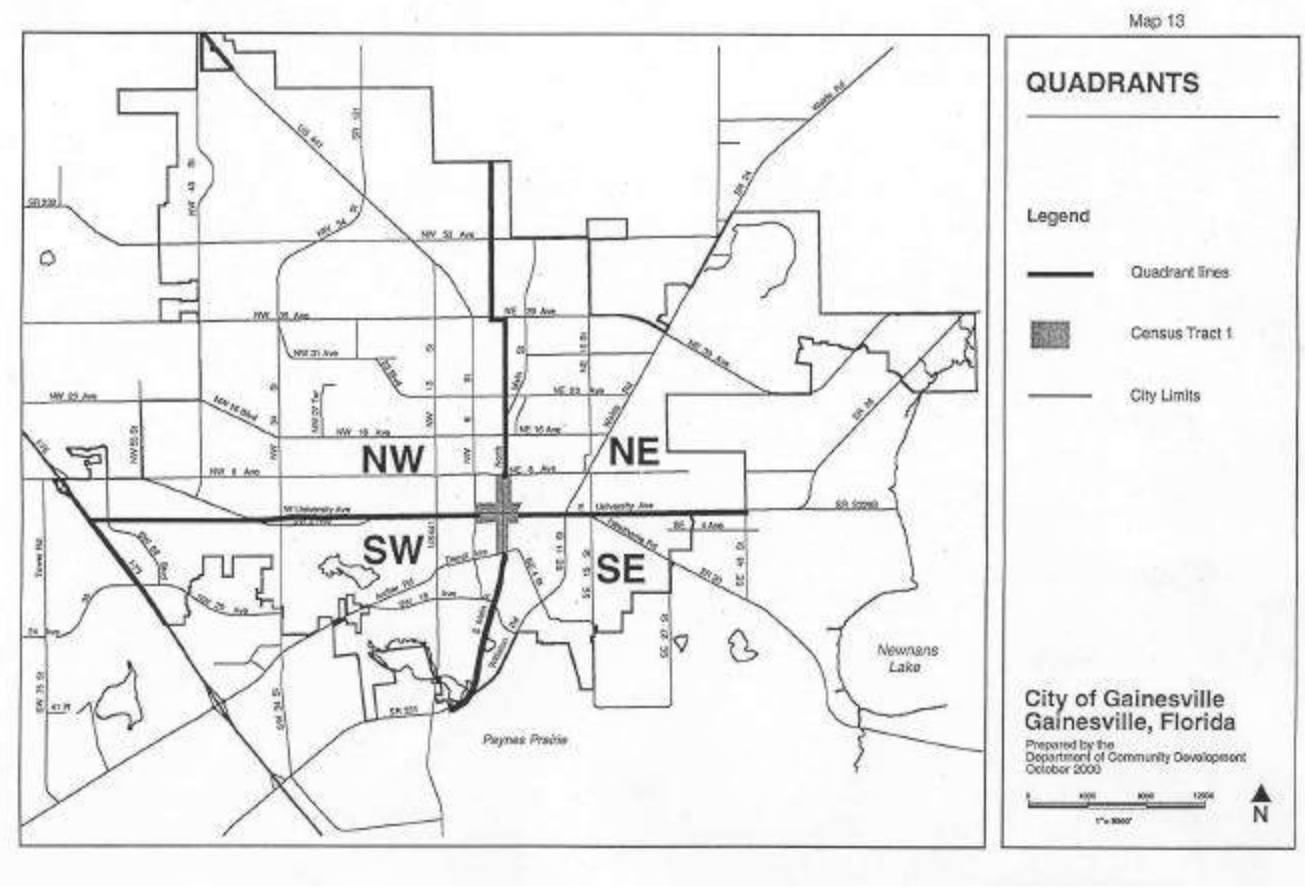
The area made up entirely of the campus of the University of Florida, will be treated in a manner similar to the CCD. Individuals living on campus shall not be counted in quadrant or urban area-wide population totals. This treatment is based upon the following assumptions:

* The University is not amenable to City or County recreation/open space planning.

* The University offers a wide range of recreation/open space amenities which often exceed the quantity, quality and diversity enjoyed by non-student residents and residents not employed by the University.

* The University adequately provides for the recreation/open space needs of on-campus residents.

Map 13 Quadrants



* A large percentage of on-campus residents do not have sufficient transportation access to freely utilize many urban area facilities such as local nature parks, regional nature parks, sports complexes, and quadrant-level facilities.

However, Lake Alice on the University of Florida campus is considered a publicly accessible local nature park. (This facility would be classified as a regional nature park if there were more adequate public access.) The acreage of the Lake Alice site is therefore included in quadrant and urban area-wide park acreage calculations.

Level of Service Standards for Recreation

In addition to the level-of-service standards used to calculate deficiencies and surpluses, the following policies should be adhered to:

* Both the sports-complex park and local nature park can be overlays to other park types.

* All baseball fields, soccer fields, basketball courts, and tennis courts should be lighted when appropriate.

* Existing facilities should be in no worse than "poor" condition.

* Regionally significant rail-trails (at least 5 miles in length) and quadrant facilities built at a sports-complex can be used to satisfy deficiencies for any of the four quadrants, regardless of the quadrant within which the complex or trail is built.

The following assumptions were made in developing level-of-service standards for facilities and parks:

* The adopted standards are considered minimum standards, rather than ideal standards.

Active Urban Area Parks and Facilities

There is no existing and developed sports-complex park in the urban area. The 67.3 active acres at - Boulware Springs, however, are assumed to be suitable for the development of a sports-complex.

Urban Area Passive Parks and the Emerald Necklace

There is a substantial amount of regional park acreage in the Gainesville urban area. Much of this acreage is either not developed for public use or provides only limited access. One of the principal functions of the

"Emerald Necklace" would be to provide better access between these large regional parks (or "gems") and other areas.

There was no local nature park classification in the 1980 Comprehensive Plan. The local nature park is primarily designed to provide and improve public access to environmentally significant open space. Presently, there are seven publicly accessible sites which, because they are developed to accommodate passive recreation, qualify for this classification. Those that are not developed for recreation are designated as public conservation areas.

"Linear corridors," which are a special type of trail, can be considered the connecting strands of the Emerald Necklace since they often link the gems of the Necklace. Many radiate like "spokes" from the interior of the city (see Map 1). The corridors can provide transportation and recreational opportunities for non-motorized transportation modes such as walking, jogging, and bicycling. They can also provide for some degree of wildlife corridor access, where feasible. Through the use of features such as abandoned railroad rights-of-way, utility rights-of-way, and creek beds, corridors can link several active and passive parks. As a long-range objective, corridors should be developed to provide connections between residential, commercial, and industrial locations in a manner similar to the city's road network.

Southeast Quadrant

The southeast quadrant is the smallest of the four quadrants. Because of the relatively low population, and the presence of T.B. McPherson Park and Lincoln/Williams school, there are adequate recreational facilities available. However, many facilities need repair, and the facilities are probably too widely dispersed. This is of particular concern since socioeconomically depressed areas such as the southeast quadrant experience public facility inadequacies much more acutely than more affluent areas, where residents may have better access to private and semi-private recreational opportunities and non-local facilities.

In addition to repair and replacement of facilities, efforts to meet recreational needs within this quadrant should include an increase in staffing for facilities in combination with initiatives designed to encourage participation in recreational activities. Again, such measures are important as a result of the unique socioeconomic status of the quadrant. Table 4 inventories recreational facilities in the southeast quadrant, and shows projected deficiencies and surpluses.

Southwest Quadrant

The southwest quadrant is unique among the four quadrants in that it contains both the University of Florida campus and a large concentration of student apartment complexes. These complexes typically provide various types of on-site recreational facilities for use by apartment residents.

There are no community parks within the city portion of this quadrant, and there is only one - community park (Forest Park) in the unincorporated area. Table 5 inventories recreational facilities in the southwest quadrant, and shows projected deficiencies and surpluses. The southwest quadrant contains the University of Florida

campus and a relatively large number of student apartment complexes. Both the campus and several complexes contain various outdoor recreational facilities used by on-campus students and residents of the off-campus complexes. These facilities often include swimming pools.
A 1986 Department of Community Development study examined 51 student apartment complexes in the southwest quadrant and found that 60 percent provided an on-site swimming pool. Another study conducted by Alachua County in 1990 found 41 swimming pools provided by apartment complexes in the unincorporated urban area of southwest Gainesville. Current apartment developments in the area indicate that pools continue to be a featured amenity. For these reasons, it can be assumed that the swimming pool needs of quadrant residents will be met for the foreseeable future.

The University, because of its recreational facilities and large greenspaces, provides students and some residents of the southwest many of the amenities found at a community park. The campus contains a 100+-acre local nature park (Lake Alice), 5 basketball courts, 32 tennis courts, 15 racquetball courts, four softball fields, 8 soccer fields, an outdoor swimming pool, and several picnic and trail facilities. For these reasons, it can be assumed that the community park needs of quadrant residents will be met for the foreseeable future.

Table 4. Southeast Quadrant - Inventory

Park	Type	Owner	Acres	Active	Passive	Land	Water	Baseball/ Softball	Soccer	25yd Pool	Trails	Bkball Hoops	Tennis	R-ball
CITY LOCATION														
Boulware Springs	Community-U	City	103.30	67.30	36.00	103.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Community Plaza	Special	City	1.21	1.21	0.00	1.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hawthorne Rail Trail	Linear	State	17 mi	17 mi	0.00	17 mi	0.00	0.00	0.00	0.00	3.70	0.00	0.00	0.00
Lincoln/Williams	Neigh'd	SBAC-P	28.70	28.70	0.00	28.70	0.00	2.00	5.00	0.00	0.00	0.00	1.00	0.00
Lynch	Mini	City	1.40	1.40	0.00	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mini Park #02	Mini	City	0.50	0.50	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mini Park #05	Mini	City	0.60	0.60	0.00	0.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WA #1	Neigh'd	City	3.80	3.00	0.80	3.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
T.B. McPherson	Community	City	15.00	15.00	0.00	15.00	0.00	2.00	0.00	1.00	0.00	4.00	4.00	2.00
Williams Elementary	Neigh'd	SBAC	3.80	3.80	0.00	3.80	0.00	1.00	0.00	0.00	0.00	4.00	0.00	0.00
Woodland	Neigh'd	City	5.31	5.31	0.00	5.31	0.00	1.00	1.00	0.00	0.00	4.00	0.00	0.00
COUNTY LOCATION														
Paynes Prairie	Regional	State	19728.20	0.00	19728.20	19353.61	374.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Prairie Creek Park	Regional	WMD	202.50	0.00	202.50	202.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Prairie View Elem.	Neigh'd	SBAC	5.50	5.50	0.00	5.50	0.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00
TOTALS:			20099.82	132.32	19967.50	19725.23	374.56	7.00	6.00	1.00	3.70	13.00	6.00	2.00

Community Park Total	82.30
Neighborhood Park Total	46.31

* SBAC schools are not officially considered public parks. Such schools provide only limited public access for recreation. This access is typically during evenings & weekends, and only when not in use for SBAC programs. They are inventoried solely for the purpose of determing neighborhood-level recreational levels-of-service.

Rec.xls4(SEQUAD)

SOURCE: City of Gainesville, Department of Community Development, September 2000.

Revised: 10/5/00

Table 5. Southwest Quadrant - Inventory

Park	Type	Owner	Acres	Active	Passive	Land	Water	Baseball/ Softball	Soccer	25yd Pool	Trails	Bkthall Hoops	Tennis	R-ball
CITY LOCATION														
Audubon Coldiough	L. Nature	Private	38.00	0.00	38.00	26.40	11.60	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Bivens Arm Nature	L. Nature	City	55.00	0.00	55.00	14.00	42.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Coldiough Nature Park	Conservation	City	4.96	0.00	4.96	3.46	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Green Acres	Neigh'd	City	37.03	20.03	17.00	37.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Alice	L. Nature	State	120.00	0.00	120.00	10.00	110.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00
Mini Park #07	Mini	City	0.20	0.20	0.00	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Tumblin Creek	Neigh'd	City	4.18	4.18	0.00	4.18	0.00	0.00	0.00	0.00	1.50	4.00	0.00	0.00
University of Florida	Special	State	355.70	282.30	73.40	355.70	0.00	4.00	8.00	0.00	2.50	5.00	32.00	15.00
Yonge (P.K.)	Neigh'd	State	12.70	12.70	0.00	12.70	0.00	1.00	1.00	0.00	0.00	2.00	2.00	0.00
COUNTY LOCATION														
Forest Park	Community-U	County	24.70	24.70	0.00	24.70	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00
Gainesville Golf	Special	Private	140.00	140.00	0.00	140.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00
Idylwild Elementary	Neigh'd	SBAC	11.70	11.70	0.00	11.70	0.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00
Kanap. Addition (Davis,et al)	Conservation	City	20.50	0.00	20.50	20.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kanapaha Botanical	L. Nature	County	62.00	0.00	62.00	62.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00
Kanapaha Park	Community-U	County	23.00	23.00	0.00	23.00	0.00	1.00	2.00	0.00	0.00	1.00	0.00	0.00
Lake Kanapaha	Conservation	County	453.37	0.00	453.37	150.00	303.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Squirrel Ridge	Community	County	16.80	16.80	0.00	16.80	0.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Sugarfoot Hammock	Conservation	City	333.00	0.00	333.00	333.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wiles Elementary	Neigh'd	SBAC	6.92	6.92	0.00	6.92	0.00	0.00	1.00	0.00	0.00	4.00	0.00	0.00
TOTALS:			1720.76	542.53	1178.23	1252.29	468.47	6.00	15.00	0.00	9.50	17.00	37.00	15.00

Community Park	64.50
Neighborhood Park	72.53

* SBAC schools are not officially considered public parks. Such schools provide only limited public access for recreation. This access is typically during evenings & weekends, and only when not in use for SBAC programs. They are inventoried solely for the purpose of determing neighborhood-level recreational levels-of-service.

Rec.xls4(SWQUAD)

SOURCE: City of Gainesville, Department of Community Development, September 2000.

Revised: 10/5/00

Northwest Quadrant

The northwest quadrant is the most affluent of the four quadrants, and contains the largest residential population and acreage. Table 6 inventories recreational facilities in the northwest quadrant. The quadrant contains the "ecological backbone" of the community; namely, the Hogtown Creek system. - Public access along this creek corridor has increased due to the acquisition and development of Ring Park. When combined with the efforts to protect or acquire properties throughout the Hogtown and other creek systems, the City is well on its way to developing an interconnected trail network for public access and ecological enhancement in this quadrant and others.

On March 17, 1998, a charter amendment was approved by City voters that would not allow paving of the Hogtown Creek Greenway. Because of confusion concerning the language in the amendment, it has been suggested that the proposal could actually prevent the City from doing any paving in the Hogtown Creek Watershed, including roads, sidewalks, tennis courts or basketball courts. The Hogtown Creek Watershed generally includes the entire western half of Gainesville, including the currently vacant Possum Creek Park. This increases the difficulty in improving recreation levels of service, particularly in the northwest quadrant.

Because most of the growth in the community is occurring in the western half of the City, there is more pressure on the recreation facilities that currently exist in the area, such as Westside Park. The ability to develop Possum Creek Park would ease some of the pressure and improve levels of service in the area.

Table 6. Northwest Quadrant - Inventory

Park	Type	Owner	Acres	Active	Passive	Land	Water	Baseball/ Softball	Soccer	25yd Pool	Trails	Bktball Hoops	Tennis	R-ball
CITY LOCATION														
A.N.N.E.	Mini	City	0.91	0.91	0.00	0.91	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00
AQ Jones Sch	Neigh'd	SBAC	4.41	4.41	0.00	4.41	0.00	1.00	1.00	0.00	0.00	4.00	0.00	0.00
Finley Elementary	Neigh'd	SBAC	17.00	17.00	0.00	17.00	0.00	1.00	1.00	0.00	0.00	4.00	0.00	0.00
Gainesville High	Neigh'd	SBAC	8.10	8.10	0.00	8.10	0.00	2.00	1.00	0.00	0.00	0.00	0.00	0.00
Glen Springs Elementary	Neigh'd	SBAC	8.80	8.80	0.00	8.80	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Green Tree	Community-U	City	21.00	21.00	0.00	21.00	0.00	2.00	0.00	0.00	0.00	2.00	0.00	0.00
HG#2	Conservation	City	11.21	0.00	11.21	11.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hogtown Creek Greenway	Conservation	City	484.00	0.00	484.00	484.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kiwanis	Mini	City	2.30	2.30	0.00	2.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Littlewood Elementary	Neigh'd	SBAC	7.00	7.00	0.00	7.00	0.00	0.00	1.00	0.00	0.00	4.00	0.00	0.00
Loblolly Env Educ Fac	Local Nature	City	108.00	0.00	108.00	108.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mini Park #03	Mini	City	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mini Park #04	Mini	City	0.18	0.18	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mini Park #06	Mini	City	0.40	0.40	0.00	0.40	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00
Mini Park #09	Mini	City	0.13	0.13	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
~~NW #4~~ Springtree	Neigh'd	City	4.00	4.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Northside	Community-U	City	34.50	34.50	0.00	34.50	0.00	0.00	0.00	0.00	0.00	0.00	4.00	4.00
Norton Elementary	Neigh'd	SBAC	4.50	4.50	0.00	4.50	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00
Oak Hill	Mini	City	0.27	0.27	0.00	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Possum Creek	Community-U	City	80.00	40.00	40.00	80.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ring Park	L. Nature	City	19.26	0.00	19.26	19.26	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Rosa Williams	Neigh'd	City	0.90	0.90	0.00	0.90	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00
Sharmie Ffar Park	Neigh'd	City	0.73	0.73	0.00	0.73	0.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Sidney Lanier Center	Neigh'd	SBAC	7.30	7.30	0.00	7.30	0.00	1.00	0.00	0.00	0.00	2.00	0.00	0.00
Stephen Foster Elementar	Neigh'd	SBAC	9.80	9.80	0.00	9.80	0.00	1.00	1.00	0.00	0.00	2.00	1.00	0.00
Stephen Foster Mini	Mini	Private	1.41	1.41	0.00	1.41	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00
Terwilliger Elementary	Neigh'd	SBAC	7.70	7.70	0.00	7.70	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00
Terwilliger Pond	Conservation	County	24.00	0.00	24.00	20.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Westside	Community	City	26.30	26.30	0.00	26.30	0.00	3.00	0.00	1.00	1.50	4.00	8.00	4.00
Westwood Middle Sch	Neigh'd	SBAC	8.00	8.00	0.00	8.00	0.00	2.00	1.00	0.00	0.00	4.00	0.00	0.00

Rec.xls4(NWQUAD)

SOURCE: City of Gainesville, Department of Community Development, September 2000.

Revised: 10/5/00

Table 6. Northwest Quadrant - Inventory

Park	Type	Owner	Acres	Active	Passive	Land	Water	Baseball/ Softball	Soccer	25yd Pool	Trails	Bktball Hoops	Tennis	R-ball
COUNTY LOCATION														
Buchholz High	Neigh'd	SBAC	17.60	17.60	0.00	17.60	0.00	2.00	1.00	0.00	0.00	0.00	0.00	0.00
Devil's Millhopper	Regional	State	259.00	0.00	259.00	259.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00
Ft. Clarke Middle Sch	Neigh'd	SBAC	14.10	14.10	0.00	14.10	0.00	1.00	0.00	0.00	0.00	2.00	2.00	0.00
Hidden Oak Elementary	Neigh'd	SBAC	7.00	7.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00
San Felasco Hammock	Regional	State	6010.46	0.00	6010.46	6010.46	0.00	0.00	0.00	0.00	1.25	0.00	0.00	0.00
Santa Fe CC	Special	State	20.00	20.00	0.00	20.00	0.00	2.00	1.00	0.00	4.00	1.00	8.00	5.00
Talbot Elementary	Neigh'd	SBAC	6.90	6.90	0.00	0.00	0.00	0.00	1.00	0.00	0.00	2.00	0.00	0.00
TOTALS:			7237.87	261.94	6955.93	7233.87	4.00	19.00	9.00	1.00	6.75	49.00	23.00	16.00
	Community Park					121.80								
	Neighborhood Park					133.54								

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Rec.xls4(NWQUAD)

SOURCE: City of Gainesville, Department of Community Development, September 2000.

Revised: 10/5/00

Northeast Quadrant

Because of the existence of several schools, as well as the Young American, Northeast, Morningside, and Copeland Settlement parks, there is a surplus of several quadrant facilities (see Table 7).

Allocating Deficiencies to Planning Areas

After raw park and facility deficiencies are calculated for each planning area, such deficiencies must be allocated to projects. Projects include: (a) generalized areas where new park acreage must be acquired to correct acreage deficiencies (and in most cases, deficient facilities that are to be built at the new park site); and (b) existing parks with excess acreage available and suitable for the building of deficient facilities.

Table 7. Northeast Quadrant - Inventory

Park	Type	Owner	Acres	Active	Passive	Land	Water	Baseball/ Softball	Soccer	25yd Pool	Trails	Bkball Hoops	Tennis	R-ball
CITY LOCATION			100.00	100.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Archery Range	Special	City	8.00	8.00	0.00	8.00	0.00	1.00	1.00	0.00	0.00	4.00	0.00	0.00
Bishop Middle Sch	Neighb'd	SBAC	31.00	31.00	0.00	31.00	0.00	3.00	3.00	1.00	0.00	0.00	0.00	0.00
Citizen	Community	City	90.00	28.00	62.00	90.00	0.00	1.00	0.00	0.00	0.00	4.00	0.00	0.00
Cone	Neighb'd	City	8.20	8.20	0.00	8.20	0.00	1.00	0.00	0.00	0.00	4.00	0.00	0.00
Duval Elementary	Neighb'd	SBAC	741.00	0.00	741.00	631.00	110.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Gum Root Swamp	Conservation	City	6.00	0.00	6.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hatchet Creek	Conservation	City	4.00	4.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00
Kirby Smith	Neighb'd	SBAC	9.70	9.70	0.00	9.70	0.00	1.00	1.00	0.00	0.00	2.00	0.00	0.00
Metcalfe Elementary	Neighb'd	SBAC	1.02	1.02	0.00	1.02	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00
Mini Park #01	Mini	City	0.15	0.15	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mini Park #08	Mini	Private	0.26	0.26	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mini Park #10	Mini	City	1.10	1.10	0.00	1.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mini Park #11 Cedar Grove	Mini	City	0.50	0.50	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mini Park #12	Mini	City	277.59	0.00	277.59	277.59	0.00	0.00	0.00	0.00	7.00	0.00	0.00	0.00
Morningside Nature	Local Nature	City	0.53	0.53	0.00	0.53	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00
NE Lisbon Center	Neighb'd	City	1.40	1.40	0.00	1.40	0.00	0.00	0.00	0.00	0.00	4.00	2.00	0.00
NE 31st Avenue	Community	City	23.20	23.20	0.00	23.20	0.00	3.00	1.00	0.00	2.50	0.00	4.00	4.00
Northeast	Community	City	16.10	0.00	16.10	4.59	11.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Palm Point	Conservation	City	18.00	18.00	0.00	18.00	0.00	0.00	0.00	0.00	0.00	2.00	1.00	0.00
Rawlings Elementary	Neighb'd	SBAC	1.50	1.50	0.00	1.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Roper Open Space	Mini	City	4.50	4.50	0.00	4.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Smokey Bear	Neighb'd	City	1 mi	1 mi	0.00	1 mi	0.00	0.00	0.00	0.00	1.00	0.00	0.00	0.00
Sweetwater/Math Sway	Linear	City	1.02	1.02	0.00	1.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thelma Boltin Center	Neighb'd	City	6.20	6.20	0.00	6.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thomas Center Gardens	Special	City	8 mi	8 mi	0.00	8 mi	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00
Waldo Rail Trail	Linear	State												

Rec.xls4(NEQUAD) SOURCE: City of Gainesville, Department of Community Development, September 2000. Revised: 10/5/00

Petition 145CPA-00 PB

Table 7. Northeast Quadrant - Inventory

Park	Type	Owner	Acres	Active	Passive	Land	Water	Baseball/ Softball	Soccer	25yd Pool	Trails	Bkball Hoops	Tennis	R-ball
COUNTY LOCATION														
Copeland Settlement	Neighb	County	5.00	5.00	0.00	5.00	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
East Side High	Neighb	SBAC	29.00	29.00	0.00	29.00	0.00	2.00	1.00	0.00	0.00	0.00	2.00	0.00
Ironwood Golf Club	Special	City	122.00	122.00	0.00	122.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lake Forest Elementary	Neighb	SBAC	11.80	11.80	0.00	11.80	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Newman's Lake	Special	County	6339.68	6339.68	0.00	11.68	6328.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS:			7858.44	6755.75	1102.69	1408.93	6449.51	11.00	7.00	1.00	19.50	30.00	9.00	4.00
		Community Park				64.20								
		Neighborhood Park				129.15								

NOTES:

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SOURCE: City of Gainesville, Department of Community Development, September 2000.

Revised: 10/5/00

Rec.xls4(NEQUAD)

Petition 145CPA-00 PB

When allocating deficiencies to projects, it is important to minimize service radius overlap from existing parks and facilities. Also, allocations should: (a) avoid locating parks and facilities on land not suitable for particular types of parks or facilities; (b) avoid locating parks and facilities in locations that are separated from neighborhoods by barriers such as major roads; and (c) avoid locating parks and facilities without the prior consent of adjacent residents and landowners. See also the "Supplemental Park and Facility Design Considerations" section.

Prioritizing Improvements for the CIP

After deficiencies of parks, facilities, and programs are calculated, a plan should be proposed to correct those deficiencies. Since the City is generally not able to finance all deficiencies in the upcoming fiscal budget cycle, a prioritized capital improvements program (CIP) is needed to phase in recreation improvements over a longer period of time (usually 5-6 years). The following criteria are used to prioritize park and facility deficiencies:

Degree of Deficiency: (A) **Largest Absolute Deficiency**. Those areas with the highest acreage or facility deficiency are prioritized.

(B) **Lowest Current Level of Service**. Those areas with the lowest current level of service are prioritized. Implicit in both "A" and "B" is the need to prioritize urban area facilities before quadrant facilities.

Proximity to Similar Facilities: Those dysfunctional or deficient facilities which are at least one mile from the same type facilities are prioritized. This distance can include hazard-oriented barriers such as major roadways, as well as geographical distance.

Program Dependency: Those dysfunctional or deficient facilities which are necessary for the provision of the largest number of needed recreation programs are prioritized. Includes pools, basketball courts and all parks.

Park Reclassification: Those dysfunctional or deficient facilities which enable the park to be reclassified to the next higher park type, in an instance where the higher park type is needed, are prioritized.

Urban Area Deficiency: Urban area facilities that are deficient are prioritized. Urban area facilities include 50-meter pools, sports-complexes, and local nature parks.

Recent Park Acquisition: A new project at a park may be within the same area as another park of the same type. If this other park was acquired over the past three years, the new project is de-prioritized.

SCORING

Criterion	**Points**
1. Degree of Deficiency	
* Largest Absolute Deficiency	1
* Lowest Current Level of Service	1
2. Proximity to Similar Facilities	1
3. Program Dependency	2
4. Park Reclassification	1
5. Urban Area Deficiency	4
6. Recent Park Acquisition	-5

Each facility deficiency is assigned to a project (either an existing park or a to-be-acquired park). Each park and facility deficiency is then scored using the criteria and scoring system described above. Projects, which contain facilities with high scores, are given a higher priority than those with lower scores. For projects in which the highest scoring facility receive the same score, that project with the highest sum total score for all deficient facilities is given the higher priority. If projects remain tied in score after such summation, the following criteria shall be used to prioritize (in decreasing order of importance):

* AREAS WHERE THE CITY ENCOURAGES REDEVELOPMENT
* HIGH RESIDENTIAL DENSITY
* LONG-STANDING DEFICIENCY
* REVENUE-GENERATING POTENTIAL FOR THE CITY
* PROXIMITY TO ACTIVITY CENTER
* HIGH RECREATIONAL MULTIPLE-USE POTENTIAL

Those projects, which are ranked most highly by the criteria, are phased in over the first few years of the CIP.

Example

Project #1

Deficient Facility	Points
Soccer Field	9
Tennis Court	2
TOTAL	11

Project #2

Deficient Facility	Points
Swimming Pool	7
Softball Field	6
TOTAL	13

Project #3

Deficient Facility	Points
Soccer Field	7
Basketball Court	5
TOTAL	12

Of the three projects in the above example, Project #1 is given the highest priority even though the other two projects receive more total points. Such a ranking is due to the soccer field, which is the facility with the highest score of any of the facilities listed for the three projects. Project #2 is given a higher priority than Project #3, even though the highest scoring facility for each project has received the same score (7 points). Such a ranking is due to the higher total score received by Project #2 (13 points) than by Project #3 (12 points).

Park and Facility Substitution

It is possible that a LOS standard for a recreational facility will result in facility deficiencies in certain ~~areas~~, which do not have vacant land sufficient to accommodate such a facility. For example, a quadrant may need 15 acres of neighborhood park, 3 tennis courts and 2 racquetball courts. However, this hypothetical quadrant may contain an insufficient amount of vacant land to accommodate a new neighborhood park.

In addition, socioeconomic and age differences between neighborhoods often mean differences in recreational facility preferences between neighborhoods. For example, a neighborhood may prefer 4 tennis courts, rather than the 2 tennis courts and 2 basketball courts called for by the LOS standards (or they may prefer a passive park rather than an active park).
Both of the above problems indicate a need for a mechanism to increase the flexibility of LOS standards without abandoning the benefits of such quantitative standards. There are two broad areas of flexibility:

PARK SUBSTITUTION
Used when needed park land is unavailable in a neighborhood, or when residents prefer a type of park other than a neighborhood park.

FACILITY SUBSTITUTION
Used when a determination is made that residents of one or several neighborhoods prefer recreational facility improvements that differ from what is called for by LOS standards.

Park Substitution
In certain neighborhoods, a determination may be made that the area does not contain acreage suitable and available for a new neighborhood park.

In the event that a neighborhood does not contain suitable and available land for a new neighborhood park, or when residents desire another park type, the following alternatives are considered sufficient to meet neighborhood park acreage needs within the area:

* **Nature Center**
  One center for every 10 acres of neighborhood park.

* **Recreation (or Cultural) Center**
  One center for every 10 acres of neighborhood park and 16 facility units (see below for discussion of units).

* **Mini-Park**
  1.5 acres of mini-park for every acre of neighborhood park.

* **Botanical (or Vegetable) Garden**
  1.5 acres of garden for every acre of neighborhood park deficiency.

* **Local Nature Park**
  One acre of nature park for every acre of neighborhood park deficiency. However, nature park must contain at least one acre of land outside of floodprone areas and suitable for development as determined by the City Manager or designee.

Facility Substitution

There are instances where LOS standards will indicate a deficiency for certain recreational facilities, yet the quadrant may not have the acreage or desire by its population to accommodate the new facilities. These are instances where:

* The neighborhood does not have enough unused space at existing parks to accommodate facility deficiencies, yet meets park acreage standards;

* The neighborhood does not have suitable and available vacant acreage to acquire for siting the new facilities; or

* One or several neighborhoods to be served by a new neighborhood park express a desire to be served by facilities other than those called for by the Recreation Element.

The following alternatives are considered sufficient to meet facility deficiencies within a quadrant:

* The construction of the needed facility at an SBAC school within the deficient quadrant, and appropriate joint-use agreements secured by the City from SBAC;

* Developing a joint agreement between the City and SBAC for increased public access to existing school facilities within the deficient quadrant; or

* Basketball, tennis and racquetball court deficiencies exchanged for different facilities (for example, two volleyball courts may be preferred over 2 tennis courts). Neighborhoods can also request a different mix of these three facilities. (For example, 2 tennis courts and 2 racquetball courts may be preferred over 4 basketball courts.)

For neighborhoods seeking different types or mixes of facilities not called for by the Recreation Element, the list of facilities below can be substituted. Each facility is assigned a "substitution unit" based on the relative cost to build the facility. (One unit is worth approximately $25,000.)

Facility	**Substitution Units**
Basketball Court	0.5
Tennis Court	1.0
Racquetball Court	1.0
Volleyball Court	0.2
Picnic/Pavilion/Playground	0.8
Mulched Trail (1 mile)	0.2
Interpretive Pavilion	1.0
Recreation Center	20.0
Boardwalk Trail (1/2 mile)	4.8
Picnic Area	0.4

Condition of City Recreation Facilities

The City of Gainesville uses six classifications to define the condition of facilities:

"E" Excellent. New or original.

"G" Good. May show signs of use; otherwise close to excellent.

"F" Fair. Shows definite signs of use, but no repairs are needed.

"P" Poor. In use, but minor repairs will make item more useable; or not in use, but needs minor repair.

"M" Major Repair. Major repairs are needed. It is not now usable, but is repairable.

"N" Not Repairable. Disposal is recommended for facilities in this condition.

These classifications are part of the City recreational facility inventory, and are used to determine when facilities require repair. The Gainesville Recreation Element requires that City facilities be maintained in at least "poor" condition. An annual assessment of facility conditions is required prior to adoption of the annual CIP.

An inventory of the condition of city-owned facilities is shown in Table 8.

Table 8. Condition of City Recreation Facilities

Park	Address	Type of Park	Bsktball		Tennis		R-ball		Hardball		Softball		Soccer		Pool		Playgrd		Picnic		Trail		RestRm		Rec		Lighted		Inventory
				Cdn		Cdn		Cdn		Cdn		Cdn		Cdn		Cdn		Cdn		Cdn		Cdn		Cdn		Cdn		Cdn	
Bauware Springs	3650 Blk. SE 15th St.	Community-U	0		0		0		0		0		0		0		0		4	E	0		Y	E	0		Y	G	10/29/90
Citizen	1490 NE 8th Ave	Community	0		0		0		0		0		3	F	50	G	0		3	F	0		Y	G	0		Y	G	9/3/86
Ocean Tree	1910 NW 39th Ave.	Community-U	0		0		0		0		1	G	0		0		1	F	8	P	0		Y	F	0		Y	G	9/24/86
Northeast	400 NE 16th Ave.	Community	0		4	E	4	F	2	F	1	F	1	F	0		1	F	8	G	2.5	G	Y	G	0		Y	G	9/3/86
Northside	NW 34th St & US 441	Community-U			4	?	4	?									1	?	3	?			Y	?			Y	?	10/29/90
Possum Creek	4090 blk NW 53 Ave	Community-U	0		0		0		0		0		0		0		0		0		0		N		0		N		1/14/87
T.B. McPherson	1717 SE 16th St.	Community	4	F	4	F	0		0		2	F	0		25	E	1	E	15	E	0		Y	F	1	E	Y	G	10/29/90
Westside	1001 NW 34 St	Community	1	G	8	F	4	F	1	G	2	F	0		10	G	1	F	16	G	1.5	F	Y	F	1	E	Y	G	9/15/86
Bivens Arm Nature	3650 S. Main St.	Local Nature	0		0		0		0		0		0		0		0		4	E	1.5	E	Y	E	0		Y	G	9/3/86
Loblolly Env Educ Facility	3390 blk NW 8th Ave	Local Nature	0		0		0		0		0		0		0		0		1	?	0		Y	?	1	?	N		
Morningside Nature	3540 E. University Ave.	Local Nature	0		0		0		0		0		0		0		0		23	E	8	E	Y	G	0		N		9/5/86
Ring Park	2000 NW 16th Ave	Local Nature	0		0		0		0		0		0		0		0		12	E	0.5	E	N		0		N		10/29/90
Calclough Nature Park	2600 S. Main Street	Conservation	0		0		0		0		0		0		0		0		0		0		N		0		N		10/2/90
Gum Root Swamp	1300 Block	Conservation	0		0		0		0		0		0		0		0		0		0		N		0		N		9/5/86
HG #1	2400 NW 8th Ave	Conservation	0		0		0		0		0		0		0		0		0		0		N		0		N		12/22/87
HG #2	2219 NW 34th St	Conservation	0		0		0		0		0		0		0		0		0		0		N		0		N		6/13/88
HG #3	5200 NW 2nd Ave	conservation	0		0		0		0		0		0		0		0		0		0		N		0		N		9/29/88
Hatchet Creek	SR 24 S of NE 40th Rd.	Conservation	0		0		0		0		0		0		0		0		0		0		N		0		N		9/22/86
Palm Point	Newnan's Lake	Conservation	0		0		0		0		0		0		0		0		0		0		N		0		N		6/30/88
SweetwaterMath Gwy	NE Boulevard	Greenway	0		0		0		0		0		0		0		0		0		1	N.A.	N		0		N		8/23/90
Hogtown Ck Greenway	Hogtown Creek	Greenway	0		0		0		0		0		0		0		0		0		0		N		0		N		2/17/95
Depot Rail-Trail	Depot Ave	Greenway	0		0		0		0		0		0		0		0		0		1	E/N.A.	N		0		N		3/17/95
Waldo Rail-Trail	Waldo Road	Greenway	0		0		0		0		0		0		0		0		0		1	E	N		0		N		2/17/95
A.N.N.E.	6244 N.W. 28th Terr.	Mini	1	G	0		0		0		0		0		0		1	G	3	G	0		N		0		N		8/31/88
Grandmother's	405 SW 3th Ave	Mini	0		0		0		0		0		0		0		0		0		0		N		0		N		
Kiwanis	NW 6th St & 8th Ave	Mini	0		0		0		0		0		0		0		1	F	12	F	0		N		0		N		9/3/86
Lynch Mem Garden	456 S. Main St.	Mini	0		0		0		0		0		0		0		0		3	G	0		N		0		N		9/3/86
Mini Park #01	NE 15th St. & 4th Ave.	Mini	2	G	0		0		0		0		0		0		1	P	0		0		N		0		N		9/5/86
Mini Park #02	SE 4th St. & 8th Ave.	Mini	0		0		0		0		0		0		0		1	P	3	P	0		N		0		N		7/15/86
Mini Park #03	510 NW 2nd St.	Mini	0		0		0		0		0		0		0		1	F	3	F	0		N		0		N		9/3/86
Mini Park #04	424 NW 6th Ave	Mini	0		0		0		0		0		0		0		1	F	0		0		N		0		N		9/3/86
Mini Park #05	1352 SE 2nd St	Mini	0		0		0		0		0		0		0		1	F	0		0		N		0		N		7/15/86
Mini Park #06	NW 31st Pl & 20th St.	Mini	1	F	0		0		0		0		0		0		1	F	1	P	0		N		0		N		8/24/86
Mini Park #07	320 SW 7th Pl	Mini	0		0		0		0		0		0		0		1	F	0		0		N		0		N		9/3/86
Mini Park #09	820 NW 4th Ave	Mini	0		0		0		0		0		0		0		1	F	0		0		N		0		N		9/3/86
Mini Park #10	1110 NE 25th St.	Mini	2	F	0		0		0		0		0		0		0		0		0		N		0		N		9/5/86
Mini Park #11	1101 NE 21 St.	Mini	0		0		0		0		0		0		0		0		0		0		N		0		N		7/20/88
Mini Park #12	2446 NE 12 Ave	Mini	0		0		0		0		0		0		0		0		0		0		N		0		N		10/25/89

SOURCE: City of Gainesville, Department of Community Development, March 1991.

Petition 145CPA-00 PB

Table 8. Condition of City Recreation Facilities

Park		Address	Type of Park	Bsktball	Cdn	Tennis	Cdn	R-ball	Cdn	Hardball	Cdn	Softball	Cdn	Soccer	Cdn	Pool	Cdn	Playgrd	Cdn	Picnic	Cdn	Trail	Cdn	ResRm	Cdn	Rec	Cdn	Lighted	Cdn	Inventory
Oak Hill		NW 9th St. & NW 42nd Ave	Mini	0		0		0		0		0		0		0		0		0		0		N		0		N		9/24/86
Roper Open Space		NE 2nd St. & NE 4th Ave.	Mini	0		0		0		0		0		0		0		0		4	G	0		N		0		N		9/3/86
Green Acres		SW 6th Pl. & 40th St.	Neighb	0		0		0		0		0		0		0		0		0		0		N		0		N		10/29/90
NE Liaison Center		1701 NE 8th Ave.	Neighb	2	G	0		0		0		0		0		0		0		0		0		Y	G	1	G	N		10/29/90
NE 31st Avenue		NE 31st Ave. & 17th Terr.	Neighb	2	F	2	F	0		0		0		0		0		1	G	0		0		N		0		N		9/3/86
NW #1		2730 NW 39th Ave	Neighb	0		0		0		0		0		0		0		0		0		0		N		0		N		7/20/88
Rosa Williams		624 NW 1st St. & 6th Ave.	Neighb	4	F	0		0		0		0		0		0		1	F	0		0		N		1	E	Y	E	10/29/90
Shamrock Flair Park		321 NW 10th Street	Neighb	1	G	0		0		0		0		0		0		1	G	4	G	0		Y	G	1	G	N		10/29/90
Smokey Bear		2690 NE 15th St.	Neighb	0		0		0		0		0		0		0		1	F	6	F	0		N		0		N		9/3/86
Thelma Bolin Center		516 NE 2nd Ave.	Neighb	0		0		0		0		0		0		0		0		4	G	0		Y	F	1	G	N		9/3/86
Tumblin Creek		SW 6th St. & Depot Ave.	Neighb	4	F	0		0		0		0		0		0		1	G	8	G	1.5	G	N		0		Y	G	9/3/86
WA #1		500 blk SE 5th Ave	Neighb	0		0		0		0		0		0		0		0		0		0		N		0		N		
Woodlawn		1900 SE 4th St.	Neighb	4	F	0		0		1	P	0		1	P	0		1	P	4	G	0		N		0		Y	G	7/15/88
Cone		2601 E. University Ave.	Neighb	4	P	0		0		1	G	0		0		0		1	P	7	P	0		N		0		Y	G	9/5/86
Archery Range		Off State Rd. 24 - Airport	Special	0		0		0		0		0		0		0		0		1	F	0		Y	M	0		N		9/5/86
Community Plaza		101 E. University Ave.	Special	0		0		0		0		0		0		0		0		0		0		Y	G	0		Y	G	9/5/86
Thomas Center Cultrl		306 NE 6 th Ave	Special	0		0		0		0		0		0		0		0		0		0		Y	G	0		N		9/3/86

Key:

"E" = Excellent. New or original; cannot be improved upon.

"G" = Good. May show signs of use; otherwise close to excellent.

"F" = Fair. Shows definite signs of use, but no repairs are needed.

"P" = Poor. In use, but minor repairs will make item more useable; or not in use, but needs minor repair.

"M" = Major Repair. Major repairs are needed. It is not now usable, but is repairable.

"N" = Not Repairable. Disposal is recommended for facilities in this condition.

SOURCE: City of Gainesville, Department of Community Development, March 1991.

Petition 145CPA-00 PB

Undeveloped Parks

There are several city-, county-, or state-owned park properties within the Gainesville urban area that are largely or wholly undeveloped. For many of these properties, there are no plans for recreational improvements. This list shows the current status of undeveloped city park properties.

Table 9. Undeveloped/Underdeveloped City Parks

PARK	PARK TYPE	OWNER	STATUS
1. Palm Point	Local Nature**	City	City Plan
2. Hatchet Creek	Local Nature**	City	None
3. Possum Creek	Community	City	None
4. Clear Lake	Local Nature**	City	None
6. Boulware Springs	Community/Special	City	Complete
7. Waldo Road Rail	Linear Corridor	State	Complete
8. Greentree	Community	City	None
9. Conant (Colclough Pond)	Local Nature**	City	None
10. Green Acre	Neighborhood	City	None
11. Hogtown Greenway (8th Ave)	Local Nature**	City	None
12. Lake Kanapaha	Community/Regional	County	None
13. Hawthorne Rail	Linear Corridor	State	Complete
14. San Felasco - County	Regional	County	None
15. N.W. 34th St. Floodplain	Local Nature**	City	None
16. Springtree	Neighborhood	City	None

** These properties are classified as public "conservation areas" unless or until they are developed to accommodate passive recreation, in which case they will be classified as "local nature parks".

SOURCE: City of Gainesville, Department of Community Development. March 1999.

FUNDING AND DESIGNING THE PROJECTS IDENTIFIED BY THE ELEMENT

Introduction

From 1990 through 1998, the Alachua County/Gainesville metropolitan statistical area has experienced a growth rate of 16.4 percent. As this growth continues, revenues in excess of what has been allocated for recreation capital improvements over the past several years will be required to meet the recreational needs identified in this Element.

In order for the City to build new facilities, existing and creative financing mechanisms will have to be used more effectively. Mechanisms (existing or potential) include general fund allocations, impact fees, user fees, and taxes earmarked for recreation and trusts. General fund and private expenditure are discussed below.

Funding of Facilities by the Public Sector

In recent years, the Recreation & Parks Department has relied almost entirely upon general fund expenditures to cover its capital and operating expenses. This has resulted in severe constraints on the City's ability to build new facilities, and to operate and maintain existing facilities. Not surprisingly, Figures 1 and 2 reveal that Gainesville's recreation expenditures are lower than those of comparable cities, according to a study completed by Florida State University and the state Department of Environmental Protection's Division of Parks and Recreation, 1997.

Recreational opportunities are critical to the quality of life of urban residents. Expanding general fund appropriations for recreation is one important way to improve the quality of life. This expansion should be based on appropriations found in comparable cities.

There are three broad categories of expenditures for implementation of the Recreation Element:

* Programs, Maintenance, and Administration
* Development of New Facilities
* Acquisition of Recreation and Open Space Land

Revising the apportionment of expenditures among the three categories presents a dilemma. Communities such as Gainesville, which are experiencing pressure to develop land for private use, are acting prudently if land acquisition is emphasized to the extent possible. This is because it is much less expensive for a community to acquire recreation and open space early in its development—before urban fringe and infill development significantly increases the cost of such acquisition.

Although the acquisition of recreation and open space lands is very important, the development of facilities at existing parks is also important. Continued underdevelopment of existing facilities could dampen public enthusiasm for acquisition of additional recreation and open space lands.

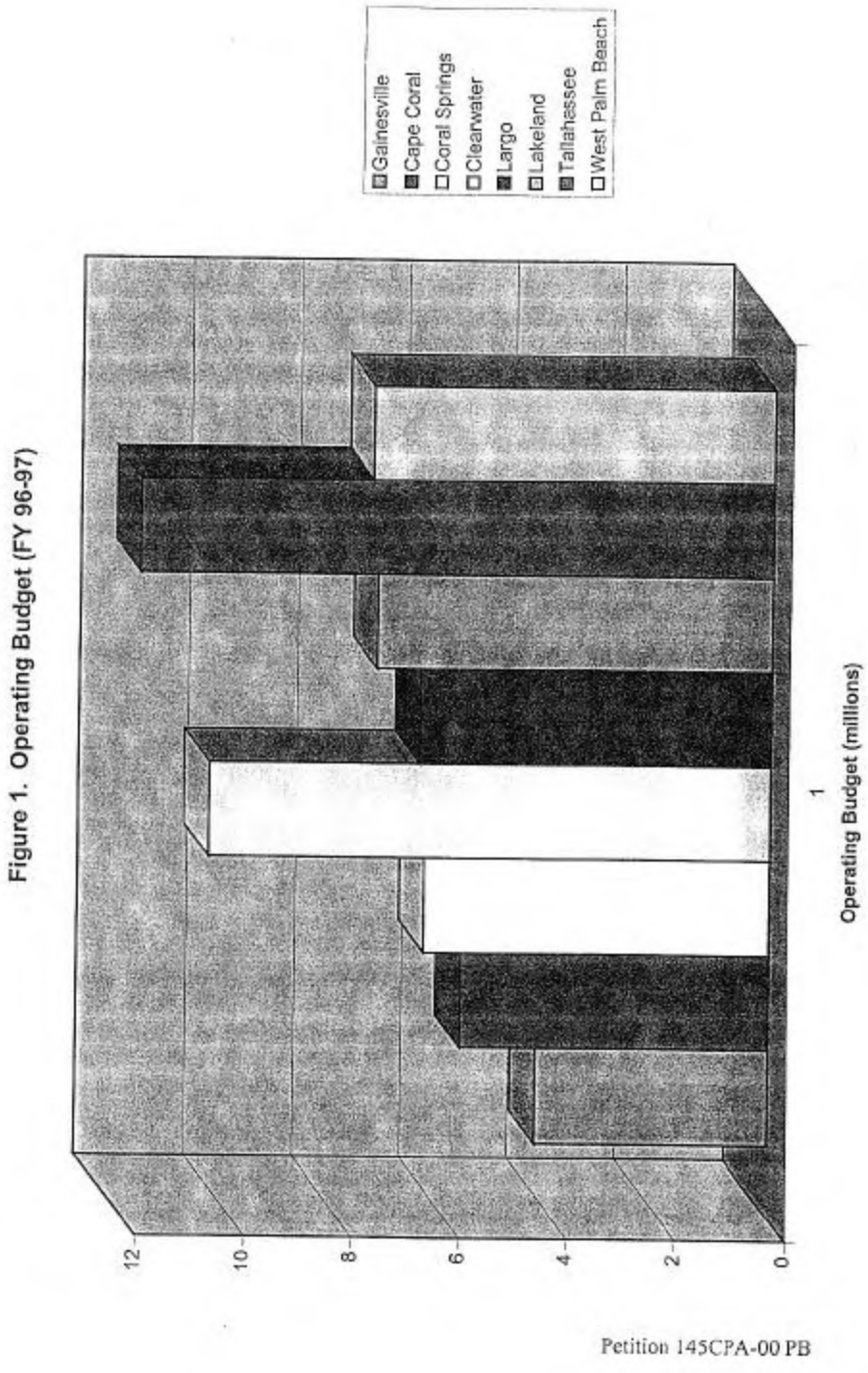

Figure 1. Operating Budget (FY 96-97)

Petition 145CPA-00 PB

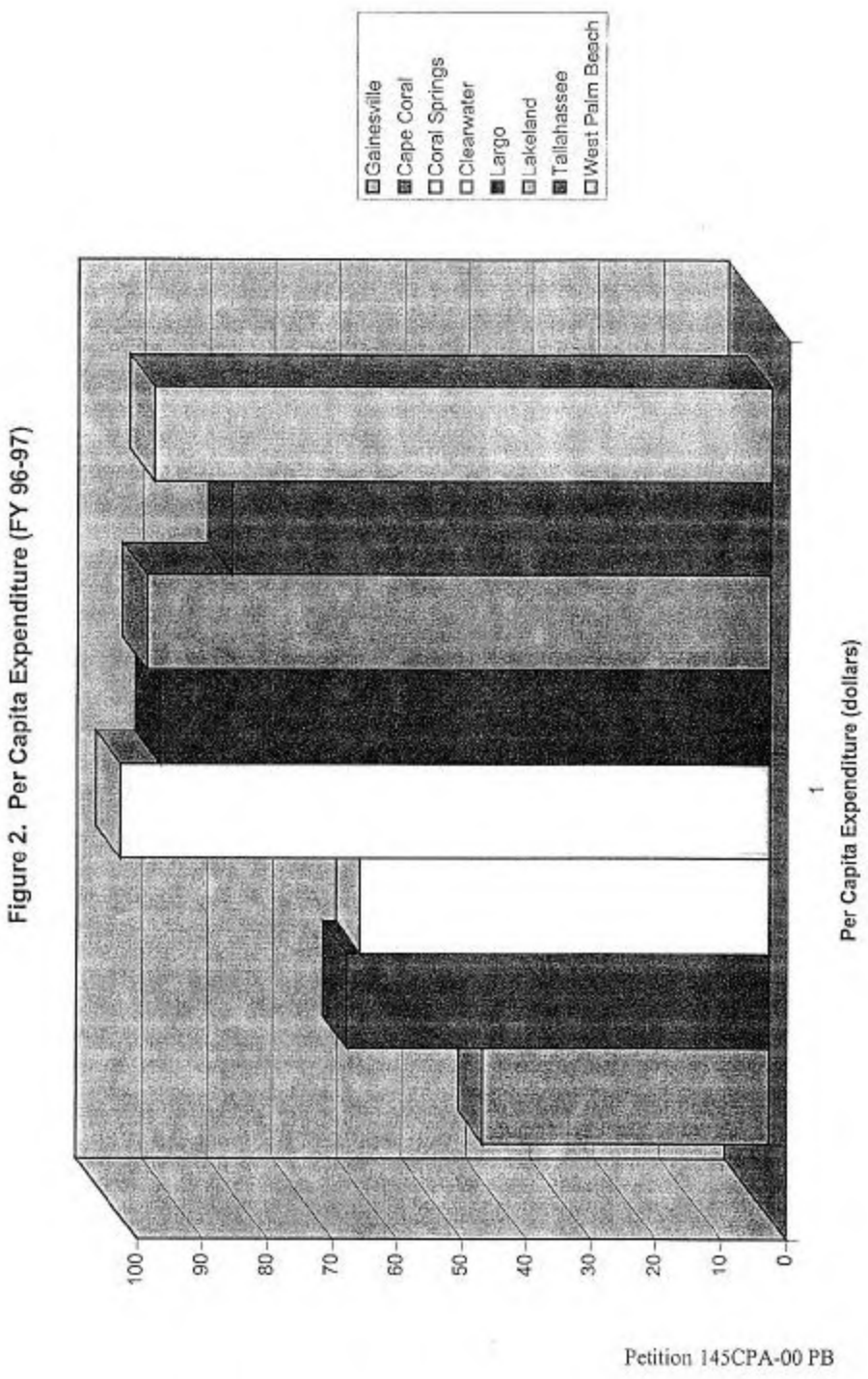

Figure 2. Per Capita Expenditure (FY 96-97)

Petition 145CPA-00 PB

The question of facilities versus park acquisition was highlighted in a 1985 survey of city residents which found that:

* "purchasing land for the protection of environmentally sensitive areas" or "recreation facilities"; and

* the city "recreation facilities are inadequate"

were two of the most important areas of citizen concern. There was an unusually high level of agreement among residents on these two issues. The survey also found a significant increase from 1981 to 1985 in the number of residents who felt recreational facilities were inadequate.[1]

-Minimum Facility Design Standards

The purpose of minimum requirements for recreational facilities is twofold: First, the requirements ensure residents that the new facilities proposed for construction will meet minimum requirements for such factors as facility size and quality. In addition, such requirements ensure that in instances where a private developer is required to build new recreational facilities (or voluntarily chooses to build such facilities), the new facilities will be designed and built in accordance with city recreational objectives.

Table 10 contains the minimum design standards for recreational facilities called for by the Recreation Element. Note that "LOS Facility" refers to those facilities that are mandated through the Recreation Element by LOS standards, and that "Substitute Facility" refers to those facilities that can substitute for neighborhood park, basketball court, tennis court, or racquetball court deficiencies (see "Park and Facility Substitution" section for more information). Note also that these are minimum requirements, rather than ideal requirements. In many instances, the quality of facility design and construction will exceed these proposed requirements.

Supplemental Park and Facility Design Considerations

The following are additional considerations when designing and constructing a park or recreational facility in Gainesville. These considerations are recommended, but are not mandatory:

Adaptive Reuse

Facilities should be designed to permit a change in use of the facility if the activity that the facility accommodates declines in popularity.

TABLE 10. MINIMUM REQUIREMENTS FOR RECREATION FACILITIES

LOS FACILITY	MINIMUM DIMENSIONS	RECOMMENDED MATERIALS	FLEXIBILITY	COMMENTS
Softball Field	Outfield fences at least 275' from home plate. Backstop 25' from home plate.	Fencing should be galvanized steel chain link.	Should also accomodate youth baseball, women's softball.	Infield should be skinned. Consider accomodating football, rugby, lacrosse.
Soccer Field	150' x 300' play area. 195' x 330' total area.	Frames for goals. (mobile aluminum)	Should accommodate football, rugby, lacrosse.	Must be graded for level surface and storm runoff. Consider accommodating softball.
Swimming Pool (25M & 50M)	27 sq. ft. of water surface area per swimmer. Ratio of 2:1 deck vs. water.	Concrete and granite.	Should accommodate water slide, handicapped swimmers.	Consider accommodating diving boards.
Basketball Court	42' x 37' play surface per half court. 3' clearance on all sides.	Concrete or asphalt surface.	Should accomodate volleyball, badminton, roller-skating.	Consider accommodating tennis, shuffleboard.
Tennis Court	27' x 78' single & 36' x 78' double. 12' clearance on sides. 21' clearance on ends.	Concrete or asphalt surface.	N/A	Consider accomodating basketball, racquetball, shuffleboard, volleyball.
Racquetball Court	20' x 34' play area. 20' overhead clearance. At least 3 walls.	Concrete surface.	Should accomodate handball.	Consider observation platform for 4-wall courts.
Trail	3' width for walking trail. 8' width for bicycle trail.	Variable. Depends on activity to be accommodated. Typically permeable or semi-permeable surfaces such as mulch or limerock.	Should accomodate strollers and wheelchairs.	Consider accommodating walking, jogging, bicycling, horseback riding. Provide access for long-term repairs.
Gymnasium	Basketball Courts 94' x 50' with 10' unobstructed area around court.	Concrete block wall.	Should accomodate aerobics, dance, jogging, bleachers, basketball, gymnastics, badminton, volleyball.	Consider accommodating weight training, offices. Should contain restrooms, game room for pool and table tennis, concessions, spectator seating. Floor should be suitable for dancing.

Petition 145CPA-00 PB

LOS FACILITY	MINIMUM DIMENSIONS	RECOMMENDED MATERIALS	FLEXIBILITY	COMMENTS
Botanical/Vegetable Garden (substitute facility)	One-quarter acre of arable land.	Irrigation equipment for continuous watering.	N/A	Should contain soil suitable for a wide range of plants & located for large amounts of sunlight. Consider storage facility for tools, equipment, and greenhouse facilities for germination or severe weather conditions.
Nature Center (substitute facility)	1500 sq. ft. of floor area with office, storage and restroom space.	Rough-cut wood interior or natural materials.	Wall space for exhibits, cases, displays.	Interpretive information concerning natural environment. Information about immediate vicinity preferred.
Recreation Center (substitute facility)	Enclosed building with 3000 sq. ft. of floor area.	Concrete/brick block.	Should accomodate meetings, dance, aerobics, table games, small concerts, arts and crafts, kitchen.	Consider providing restrooms.
Volleyball (substitute facility)	30' x 60' & 6' clearance on all sides.	Sand, wood chips, asphalt, concrete, natural soil, sand-clay, clay-gravel.	Should accomodate badminton.	Soft surface preferred.
Picnic/Pavilion/ Playground (substitute facility)	4000 sq. ft. playlot, 6 picnic tables, 1 pavilion large enough for 1 table. 1/2 acre picnic area.	Concrete or PT wood for tables.	Should accomodate retrofitting by new playground equipment.	Consider using sand or wood chip surface. Incorporate passive/ natural design techniques if possible.
Picnic Area	20' x 36' Pavilion, 6 tables, 2 grills	Concrete Pad. Concrete or PT wood for tables.		Consider using sand or wood chip surface. Incorporate passive/ natural design techniques if possible.
Interpretive Pavilion (substitute facility)	500 sq. ft. of floor area.	Rough-cut wood interior or natural materials.	Wall space for exhibits, cases, displays.	Interpretive information concerning natural environment. Information about immediate vicinity preferred.

Source: City of Gainesville, Department of Community Development, October, 1990.
File: "CIP Proj". FW2

Petition 145CPA-00 PB

Flexibility

When feasible, facilities should allow multiple activities. For example, softball fields should be able to accommodate soccer fields, and tennis courts should be able to accommodate basketball courts, when appropriate.

Safety

Sites should be designed so as to minimize or eliminate the need for pedestrians or bicyclists to cross major roads.

Access

Sites should be designed so that non-auto access is both safe and convenient. Modes to consider: pedestrian, bicycle, equestrian, bus, para-transit, mopeds, elderly, and handicapped.

Free-Form

Consider the development of "free-form" activity areas which feature minimal facilities, and play areas and meeting places at the human scale. Such facilities encourage creativity.

Maintenance

Maximize the use of highly durable, easy-to-maintain facilities, which do not require large amounts of energy or maintenance for operation.

Vegetation

Maintain vegetation (especially tree cover) whenever possible. Dusty, excessively paved, or shade-less parks are not inviting, especially on hot summer days. The site should, to the extent possible, be designed so as to minimize disturbance of the natural environment. Native vegetation is encouraged, as is xeriscaping.

Drainage

Minimize the use of impervious surfaces. When feasible, use pervious surface alternatives.

Noise and Visual Quality

Noise and visual intrusions should be minimized or mitigated when designing passive recreation areas.

Awareness

Maximize visual and physical access to important natural, historic, and cultural features of a site when such access will not significantly degrade the features. Consider using the feature(s) to give the park its own unique identity.

Linkages

Consider linking the site to other recreation sites and residential areas through the use of linear corridors and other non-auto connectors. It is especially important to investigate linkages to "rail trails" and other regionally significant corridors.

Signs

Park entrance signs should be designed both to maximize visibility to those passing by the site, and to be in harmony with the natural surroundings.

Age Flexibility

Parks should be designed to accommodate activities for all age groups.

Lighting

To maximize use of facilities and improve safety, lighting for facilities should be provided where appropriate. Nearby residential areas should be protected from spillover (nuisance) lighting.

Public Information

Consider using information centers, such as kiosks, which are designed for both public information and public input. Also, consider public hearings to give neighborhoods a chance to offer park design suggestions.

Special Facilities

Consider developing facilities, such as boardwalks or pavilions, which are not required by the level-of-service standards.

Service Radius

Before selecting facilities for a site, check the service radius maps of the Recreation Element to avoid providing a facility that the residential area may already have access to.

Passive Acreage

As a rule of thumb, landscaped or natural acreage for passive activity is recommended at a ratio of roughly one-acre for passive use to two acres for active use to maintain a "park-like" atmosphere at activity-based parks.

Critical Mass

There is a "critical mass" of facilities at which attractiveness to league play, attractiveness to remote users, and ability to charge a fee is reached. This clustering of the same facility at one park (i.e. four tennis courts at a park, rather than one) is most important for such facilities as tennis courts, racquetball courts, softball or baseball fields, soccer fields, and basketball courts. In general, the critical mass would be a cluster of four or more of these facilities at a park site.

Provision of Facilities by the Private Sector

If a proposed development will lower the level of service for recreational facilities and the City was unable to construct facilities to prevent this lowering of service, the Recreation Element permits the private developer to provide facilities or fees as a condition for the issuance of a development permit. The Element was structured so that by 1997 a proposed development need only concern itself with recreational deficiencies within its own planning area. For example, a proposal in northeast Gainesville would need to avoid lowering levels of service in two areas:

* Urban Area
* Northeast Quadrant.

Any existing deficiencies in the other quadrants would not be relevant to the proposal.

The following alternatives are available to a developer who would lower existing levels of service for recreation:

* A per-dwelling-unit impact fee paid by the developer to fully or partially finance the cost of providing recreational facilities sufficient to avoid lowering levels of service;

* On-site or off-site provision of recreational acreage and facilities by the developer. The developer is credited for all or part of the acreage and facilities provided, depending on the degree of public access and City approval of facility quality and design.

In addition, the Recreation Element should call for the use of mandatory subdivision exactions or dedications for neighborhood parkland or trails. Such an exaction or dedication would obligate the City to establish land development regulations, which require land or fees as a condition for final plat approval.

Countywide Recreation Master Plan

Alachua County is in the process of hiring a consultant to develop a recreation master plan. It will identify existing active and passive recreational facilities and programs throughout Alachua County, determine what the current and future recreational deficiencies are and recommend economically sustainable plans to meet the identified current and future recreational needs. The plan will include all recreation providers in the County including the municipalities, the state, and commercial, private, not-for-profit and other organizations.

RECREATION LIABILITY MANAGEMENT

During the past decade, the United States has experienced a continuing liability insurance crisis that has had a profound impact on how products and services are offered. Not surprisingly, many cities have responded to this crisis by becoming much more conservative in the range of recreational services that they provide to their residents. Park hours have been shortened, the freedom of park users to partake in various activities has been curtailed, and the range of facilities offered has declined—all in an effort to reduce the liability (risk) that the city carries in the area of recreational opportunities.

Unfortunately, public demand for various recreational activities is, at most, only moderately related to the risk of participating in such activities. As a result, cities are often unable to afford to provide for highly popular activities (such as skateboarding) even though the capital outlay is minimal. Those wishing to pursue such activities are forced to either provide their own facilities, hope that a private firm will provide for them, or recreate illegally.

Court cases involving liability suits indicate that service provider responsibilities are much stricter than - they once were. Some of the multi-million dollar awards have been based upon the failure of government employees to warn adequately or to instruct properly. It is the responsibility of the local government to provide the proper instruction and warning for staff and recreational users. It is absolutely essential that participants: (1) receive full information regarding the proper manner in which to engage in activities; (2) understand how to participate safely within their individual physical and emotional capabilities and skill level; and (3) be told of the likelihood of accidents resulting in injury or even death. Inadequate instructions have been alleged in suits for injuries resulting from a basketball drill, a speed test in a gymnasium, and gymnastics.

Some service providers have tried to reduce their liability by using waivers and releases, but in most cases these forms are of no value in a court of law. One problem is that minors cannot sign contracts, and therefore cannot execute valid waivers. When properly written for certain adventurous activities such as white-water rafting, however, waivers have been held valid.

The courts have traditionally recognized four basic defenses against liability suits involving accidents in park and recreation areas: (1) immunity from suit; (2) assumption of risk; (3) contributory negligence; and (4) due care. The first three defenses have not held up in the courts in most cases. The fourth—due care—is the most effective preventive strategy and the strongest defense against charges of negligence. The phrase "due care"

implies a professional standard of care. This standard of care, though, cannot be defined in an itemized list of steps to follow in planning, developing and operating a park.

If an accident leads to a liability suit, however, there are several management practices that courts typically examine to determine whether proper consideration was given to the safety of recreational facility users. Many of these are cited as policies in the "Goals, Objectives and Policies" section of this Element. These practices are discussed below:

Liability Management

Abating Inherent Hazards
An inherent hazard is a natural feature of the environment that is potentially dangerous (deep pools of water, rockslides, dead trees, poisonous snakes or other dangerous wildlife). Municipalities can in this case choose to (a) remove the hazard; (b) limit public access, set up safety barriers, or use lifeguards and guides; or (c) provide clear and adequate warning to park visitors.

The City should inventory all natural features of its passive parks, and determine both the potential for injury and steps necessary to minimize or eliminate the possibility of such injury.

Conforming with Standards Set by a Sports League or Competition-Sanctioning Organization
It is generally advised that official layout and development criteria for each sport facility be carefully followed.

The City should review any existing guidelines used for designing facilities such as softball fields, and determine whether such guidelines are up-to-date and approved by regional or national organizations.

Complying with Public Safety Codes and Regulations.
The municipality should be aware of changing standards. Standards change in response to technological advances. In some instances, such documents as the U.S. Consumer Product Safety Commission manual ("General Guidelines for New and Existing Playgrounds") have been used in liability suits against municipalities.

This Element recommends that when repairing or replacing dysfunctional recreational facilities, priority should in part be given to those facilities that represent a safety hazard. In addition, the selection process for new facilities should give consideration to those facilities least likely to represent a safety hazard, either in regard to its normal operation or any hazard due to facility deterioration over time.

Providing Facilities for Emergencies
Park and recreation areas should have emergency facilities designated for circulation, communication, first aid, emergency dispatch and fire-fighting.

The City should inventory its recreation areas to determine whether adequate circulation, communication, first aid, emergency dispatch and fire-fighting capabilities exist.

In addition to these recommended risk management practices, two policies for personnel training and responsibilities are advised:

(1) Designation of a Park Safety Officer.
(2) Providing Safety Training for Staff.

Several states have enacted legislation which provides public agencies with limited immunity for injuries occurring while using recreational facilities. Virginia and Kansas have statutes which require a plaintiff to allege

gross negligence or willful or wanton misconduct, rather than mere negligence, to sustain a claim for an injury sustained while using public recreational facilities. An example of this is Section 75-6104(n) of the Kansas Tort Claims Act, which states that:

> **A government entity or employee acting within the scope of the employee's employment shall not be liable for damages resulting from: (n) any claim for injuries resulting from the use of any public property intended or permitted to be used as a park playground or open space area for recreational purposes, unless the government entity or employee therefore is guilty of gross and wanton negligence proximately causing such injury.**

In 1999, the Florida Legislature passed a bill that limits the liability of municipalities that choose to provide facilities for skateboarding, inline skating and freestyle bicycle riding activities. Section 316.0085, Florida Statutes, expands sovereign immunity on public property for such purposes. The intent of the bill is to encourage local governments to make land available for these types of activities. Exemptions to sovereign immunity include cases where the governmental entity fails to warn of a dangerous condition of which the participant has no notice, cases of gross negligence by the governmental entity and cases where the governmental entity fails to obtain written consent of the parents of a child under age 17 and allows them to participate, unless the participation occurred in violation of posted rules governing the hours of authorized operation of the designated area. The City is currently planning to provide skateboard facilities at 5 city parks, due in some measure to the reduced liability as well as advocacy efforts of the local skateboarding community.

Additional Recommendations

Where feasible and advisable, the City should:

(1) Follow the four recommended risk management practices related to planning and developing parks and recreation.

(2) Follow the General Guidelines for New and Existing Playgrounds (U.S. Consumer Product Safety Commission).

(3) Start a program to monitor potential safety problems through staff and citizen input.

(4) Prioritize facility repair or enhancement when failure to do so would result in a significant liability risk to the City.

(5) Work with the County School Board to facilitate the most efficient and effective implementation of liability policies.

ROLE OF THE PRIVATE SECTOR

Included among the many suggestions for reducing the influence and cost of government has been a call for the "privatization" of services. Privatization can include a range of alternatives such as tax incentives, subsidies, vouchers, volunteers and contracting.

Contracting is the most common form of private service delivery. These are instances where the municipality draws up a formal agreement with a private firm to provide specified services. The municipality pays the firm and monitors the performance of the firm thereafter.

In contrast, many municipalities use "franchising", wherein a firm is granted permission to deliver a service to a particular group of municipal residents, and instead of being paid, the firm collects revenue from residents using the service. Because of this, franchising will only function when there are easily identifiable users. A current example of this in Gainesville is the "Youth Soccer, Inc." firm, which provides a program for soccer players in the city. In the past, the City Recreation Department had been in contact with a Colorado-based firm, which develops municipal softball complexes. The firm builds the complex and then provides staff, programming, and public relations for seven-year period. After the seven years, the municipality assumes ownership of the complex, thus offering a substantial cost savings to both the municipality and softball users seeking such facilities.

Advocates of privatization point out that firms can offer capital facilities and services more cheaply than the municipality, and that smaller firms, because of their size, can change more quickly in response to service or capital needs.

On the other hand, it has been pointed out that firms are prone to seeking profits at the expense of the public good, that firms may discriminate against individuals or groups, or that the municipality may find out after contracting with a firm that the service could have been more cheaply provided by the local government. Privatization may also result in a reduction in municipal flexibility to respond to new service needs.

To summarize, the arguments supporting privatization of services are as follows:

* Firms may be able to reduce the cost of service delivery below the level at which the municipality could provide such service;

* Some firms, such as the softball organization, provide some or all of the capital outlays that would ordinarily be provided by the municipality;

* Some firms, because of their smaller size or expertise, are able to more quickly adjust or initiate programs than a municipality; and

* Privatized recreational activities reduce the effort that the municipality needs to devote to planning and operation of such activities.

Some of the arguments against privatization of services include:

* There are instances in which the municipality can provide the service for a lower rate than private firms, yet not realize this until citizen complaints lead to an exploration of municipal alternatives;

* Private firms are more likely to seek increased profits at the expense of service quantity or quality;

* Private firms are more likely to engage in illegal activities in their attempt to secure lucrative contracts and increase their profits;

* Private firms are more likely to discriminate against certain groups or individuals;

* Contracts reduce the flexibility that a municipality needs in instances where community service needs have changed quickly and substantially;

* If privatization results in decreased salaries or layoffs for municipal employees, strong opposition by municipal employees may be expressed; and

* Private organizations care generally not covered by the "Sunshine Law" and are therefore less open to public scrutiny.

This Element recommends that recreational privatization of services be limited to the more "unique" activities, such as softball or baseball complexes, park beautification, and skateboarding. The following safeguards should also be adhered to:

* The City shall reserve the right to regulate and monitor the level and quality of services provided, and set limits on the costs charged users;

* The City shall only seek privatization in situations where a thorough study has revealed that cost savings or other benefits will be significant;

* Contracts shall be written to allow adequate flexibility by minimizing the length of contractual periods when appropriate, as well as other techniques which reduce the obligation of the City to remain committed to the restrictions of the contract; and

* The City shall consider and resolve any negative effects of privatization on city employees.

Recommendation

* The City should consider a revision of subdivision regulations in order to require dedication of land for parks or trail easements.

* Regulations for the development of multi-family housing should include requirements for the provision of recreational facilities and programs.

* The City should more fully study both the impact of private recreational facilities on recreational deficiencies, and what guidelines are necessary in instances where the City would be obligated to assume responsibility for previously private facilities.

COORDINATION OF CITY-COUNTY RECREATION PLANNING

There are currently two public agencies responsible for the planning and operation of recreation and open space in the Gainesville urban area. Such a situation can lead to inefficient and ineffective provision of services.

Approximately one-third of the urban area population lives within the unincorporated area outside of city limits. Recreational facility and program development has not kept pace with the growth of this population. Without an adequate recreation program, these residents are usually obligated to use city facilities. As a result, city taxpayers are subsidizing the use of recreational facilities by non-city residents.

There are four broad categories of alternatives: (1) compel the County government to devote a greater portion of its budget to recreation and open space within the unincorporated urban area; (2) significantly increase user fees for unincorporated residents using city recreational services (or prohibit such residents from using city facilities); (3) consolidate the planning and operation of recreational services under one agency by establishing a single park taxing district for the urban area; and (4) annex the entire urban area into the city. These alternatives are discussed as follows:

(1) Compelling the County government to devote a greater portion of its budget to recreation and open space in the unincorporated area would probably be the result of political pressure from unincorporated area residents. This pressure would, however, be unlikely as long as most residents are able to conveniently and inexpensively use city recreational services. Moreover, there are few effective ways for the City to unilaterally restrict recreational service access to city residents only.

(2) Increasing user fees for unincorporated residents using city services (or prohibiting their use by such residents) would be one way in which the City could reduce the use of city recreational services by unincorporated residents. However, it is often extremely difficult to differentiate between city and non-city residents in order to assess a higher fee to non-city residents, or prohibit use. Even when differentiation can be made, there are only a small number of recreational services for which a fee could feasibly be charged, or prohibitions on use enacted.

(3) Consolidating the planning and operation of recreational services in the urban area through a single urban area park taxing district offers several advantages over the above two alternatives. Potential duplication of service is significantly reduced, as is the tax burden to be borne by city residents. Planning and operation is enhanced due to the more comprehensive area to be considered when devising strategies and long-range plans. In planning for recreation facilities and services, administrators would be able to take into consideration the unincorporated population currently using city facilities without being concerned about tax inequities.

(4) Gainesville, through the Alachua County Boundary Adjustment Act, has been given increased authority to annex unincorporated urban areas outside city limits. Annexation would clearly unify the planning and development of recreation within the urban area. Annexed areas would be within the city taxing district, and thus tax inequities would be removed. While annexation is the preferred alternative, potential service provision constraints or citizen opposition to annexation may limit the extent of annexation.

COORDINATION WITH THE SCHOOL BOARD

It is recommended that cooperation between the City and the School Board of Alachua County (SBAC) be extended in the area of recreation facility agreements, and that this expanded cooperation be based upon maintenance agreements and a satisfactory resolution (through inter-local agreement or other mechanism) of the added liability that will be borne by the SBAC.

For the construction, maintenance, and use of SBAC facilities, a policy of contractual agreements should be implemented. However, a drawback to establishing contractual agreements is that such agreements are difficult to adjust in the face of frequently changing school policies or programs. Therefore, devising non-contractual agreements on a school-by-school basis for recreational programs (in contrast to agreements concerning school facilities) will provide the flexibility necessary to adjust for the variations between schools.

Use of School Board Facilities

It is clear that improved coordination between the City and the School Board is needed. In the past, the City has included school acreage and facilities in analyzing the need for parks and recreation facilities. However, school facilities are certainly not fully available for City programs and the problems of coordinating with the

School Board have been complicated by liability issues. Nevertheless, school sites are used by the public for recreation purposes, and it is unlikely that the City will be able to afford to meet any adequate standards for recreation facilities and programs without including school facilities in the inventory of available community resources.

MINI-PARK PROBLEMS

The City has long recognized that several of its classified mini-parks are not functioning properly. This dysfunction has been attributed to the inadequate size of some sites, inappropriate or unsafe site location, lack of sufficient population density or population of children near the site, excessive vandalism at the site, lack of funding for site maintenance, and insufficient site facilities. In response to these problems, the City Recreation Department has recommended that City maintenance of such "problem" parks be phased out. This Element recommends that the following steps be taken to address this issue:

* Conduct an inventory of all mini-parks, which will be used to help determine whether the present mini-park locations are appropriate. If a location is inappropriate, steps should be taken to convert the site to a non-recreational public use, or passive neighborhood landscaping or open space.

* Those mini-parks which are deemed to be of inadequate size should be assessed as to whether there is a potential for expansion. Future mini-parks would be at least 0.5 acre in size, unless the location is within an unusually dense residential or commercial area.

* New mini-parks should not be established unless there is a clearly demonstrated need.

* In instances where the mini-park facilities suffer from vandalism, it is recommended that a two-pronged approach be taken (unless the park is inappropriately located, in which case it should be converted to a non-recreational public use):

    (a) The site should be assessed to determine what steps need to be taken to increase the popularity and defensibility of the site (using such measures as enhanced visibility, design, and facilities); and

    (b) The site facilities should be replaced if a more durable substitute is available, and removed if such an option is not available.

* In order to enhance mini-parks, park-type furniture and fixtures should be provided in such a way as to develop a focal point or park identity. This focal point would serve to promote the park as an attractive gathering place where people could sit and visit. In addition, consideration should be given to the use of certain portions of mini-parks as ornamental or vegetable gardens, where appropriate.

* Mini-parks that are not amenable to any of the above considerations should be considered for possible sale and conversion to private management. Money from such sales should be used solely for recreational purposes within the community.

* Funding should be provided in order to establish at least one paid position which would carry the responsibility of maintaining all mini-parks which remain in public ownership.

* Effort should be devoted toward working with the residents of neighborhoods containing mini-parks in order to determine the best possible use of the parks. This could entail the use of public workshops designed to develop a park plan aimed at meeting the needs of nearby residents.

* Small, unused city properties should be evaluated by the City for use as "satellite ecological education centers." The satellite system would educate citizens about the various urban ecological communities in Gainesville, would require low operation and maintenance costs, and could contribute to the ecological health of nearby neighborhoods.

The Recreation and Parks Department is currently conducting an environmental assessment of mini-parks of 2 acres or more. The land will be evaluated for biological value, environmental features and environmental sensitivity. Each parcel will be assigned values with separate pocket park criteria and environmental park criteria. Those parcels with a certain environmental value may be classified as open green space while those parcels without those environmental features may be considered suitable for the development of pocket parks.

RESULTS OF A SURVEY ABOUT FAMILY-FRIENDLY CITIES

A survey of more than 300 local government officials and community leaders was conducted by the National League of Cities (NLC) at the Your City's Families (YCF) Conference in Los Angeles, CA in September of 1997. The question asked concerned what these officials believe are the characteristics of a family-friendly city. Education, community safety and recreation were the characteristics of a family-friendly city most often cited by survey respondents. Almost 40 percent of all respondents said that a family-friendly community would have rich and varied recreational opportunities. There would be an array of outdoor and indoor facilities including parks, open space and swimming pools. There would be a variety of programs for all ages and segments of the community, as well as activities aimed towards families. Special events such as concerts, fairs, celebrations, and festivals for families would be numerous. Entertainment opportunities and nearby outdoor recreation such as bike trails, hiking, and ball parks would also be important to many of the respondents.[6]

[6] Nation's Cities Weekly, July 13, 1998, page 9.

PARK INVENTORY METHODOLOGY

Overview of Park Access as an Inventory Criterion

All public or private land set aside for aesthetic, recreational, educational, historic, environmental or cultural use can potentially be considered a public park. In Gainesville, such parks contribute to the inventory of public recreation only if they provide some form of public access. Also, only outdoor parks and facilities are inventoried. Exceptions to this rule are facilities such as public gymnasiums or recreation centers.

Publicly owned properties that contain environmentally significant features but are not yet developed to accommodate passive recreation are classified as "public conservation areas." These properties are considered parks (either regional or local nature parks) only if they are developed to accommodate passive recreation.

"Semi-public" and private parks, which are privately owned and allow access only on a restricted or fee basis, are generally not included in the inventory of public recreation facilities.

Inventory of School Facilities and Acreage

Another form of "semi-public" park is a School Board of Alachua County (SBAC) site. SBAC schools are frequently used by Gainesville residents, even though the school is not officially classified as a public park. However, public access is limited when school children are using facilities for school programs, and since the School Board is concerned about increased liability and maintenance when schools are used by non-students, SBAC schools contribute only partially to the public recreation inventory:

The question of how to incorporate School Board facilities into the planning analysis for recreation has posed problems for decades. There has yet to emerge a clear solution to this issue. Reasons to accept inclusion are: (1) Urban areas may be constrained for land or funds available for recreation, and cooperative agreements with schools may reduce the need to build new facilities; (2) many schools provide outdoor facilities not used by the school, particularly at night or in the summer; (3) county schools are built with public monies (from several levels) that provide some justification for public recreational access and (4) almost all outdoor basketball courts at SBAC schools were built with City of Gainesville monies.

Reasons to exclude school facilities are: (1) Schools may acquire additional liability with increased public accessibility; (2) programs that include school facilities for public use are often too optimistic about the degree of access, and thus underestimate facility deficiencies; and (3) many school facilities are inherently less available for public use owing to school-related use of those facilities.

This Element takes the position that an intermediate approach is appropriate. This approach includes the following:

* Private schools are completely excluded from the recreation inventory and analysis of deficiencies. This is justified primarily by the fact that such facilities cannot be planned or developed by the public sector, nor can the public sector exert much influence in the shaping of private membership or "use-of-facility" rules and regulations.

* Schools owned by the state are also excluded, except for the University of Florida, Santa Fe Community College, and P.K. Yonge, which possess such a significant range of recreational facilities that some form of use by several individuals not related to the schools is inevitable. State schools other than these three are excluded because of the minimal public access allowed by the state.

Without the cooperation of the SBAC, the City would find it much more difficult (or impossible) to meet recreational needs. Primarily, the City gains use of the gymnasiums and ballfields. There is only one City-operated gymnasium (the Martin Luther King Multi-Purpose Center), and use of school gyms is either on a limited basis or too unreliable to offer the City much of an opportunity to run recreation programs. In regard to ballfields, the City gains use of about 13 SBAC ballfields for its spring baseball program, which supplements the two City-owned league fields. Reciprocally, the City offers pools, fields, tennis courts, and racquetball courts for use by the SBAC.

The following SBAC recreation facilities have been financed by the City of Gainesville:

School	**Facility**
Jones (A.Q.)	* Basketball Court Lights * Baseball Softball Field * Restrooms * Playground * Parking Lot & Landscaping
Duval	* Basketball Court Lights * Baseball/Softball Field Lights * Restrooms
Littlewood	* Basketball Court Lights * Baseball/Softball Field
Metcalfe	* Basketball Court Lights * Baseball/Softball Field
Sidney Lanier	* Basketball Court * Baseball/Softball Field
J.J. Finley	* Basketball Court * Baseball/Softball Field
Stephen Foster	* Basketball Court * Baseball/Softball Field

Rawlings	* Basketball Court * Baseball/Softball Field
Lincoln/Williams	* Basketball Court * 2 Baseball/Softball Fields (one lighted) * Playground & Landscaping * Restroom
Howard Bishop	* Basketball Courts
Westwood	* Baseball/Softball Field
Kirby Smith	* Basketball Court

Inventory of State Parks

Because public access is integral to the Recreation Element, careful consideration must be given to the inventory of certain state parks. Careful consideration is necessary because certain types of state parks are more difficult to access and are less oriented toward recreation than municipal or county parks.

In the Gainesville urban area, state parks are mostly large in size and offer passive forms of recreation. The Recreation Element classifies them as regional nature parks. Only those that are wholly or predominantly inside the Gainesville urban area are inventoried. Only land designated for (or developed for) public recreation is counted toward meeting recreational needs. (Substantial state park acreage is designated for conservation, which largely excludes public access.) Lake and conservation acreage is not counted.

Gainesville contains railroad abandonments (linear corridors) owned by the state. These corridors are counted as city trails up to the urban area boundary.

Active vs. Passive Acreage

Each park is classified as "active" (activity-based) or "passive" (resource-based). Active parks are those that are primarily dependent upon recreational facilities like ballfields or tennis courts for their attractiveness. Passive parks depend primarily on natural resources such as a lake, creek or forest for their attractiveness.

For recently acquired and yet to be acquired parkland, a distinction is made as to the amount of park acreage that is passive and active. Passive acreage includes areas that are inappropriate for development, such as floodprone areas or areas containing other significant environmental features. Active acres include areas that

are appropriate for development, such as non-floodprone areas or areas not containing significant environmental features.

Passive acres contained by, or adjacent to active parks are double-counted as both acreage for active parks and acreage for regional or local nature parks. Parks are to be classified as active parks if the predominant use of the site is or will be for active recreation, and if there is sufficient active acreage (i.e., at least one acre for a mini-park, 5 acres for a neighborhood, 20 acres for a community park, and 15 acres for a sports-complex park). Active facilities are swimming pools, multi-purpose fields, softball fields, multi-purpose courts, tennis courts, racquetball courts, recreation centers, and gymnasiums. If any of these facilities are found at a park, that park is classified as active.

Passive public properties are classified as either regional nature parks, local nature parks, or conservation areas, depending upon their size (local nature parks are city- or county-owned and generally less than 100 acres), ownership (state- or water management district-owned parks are classified as regional), and whether they are developed to accommodate passive recreation (undeveloped local nature parks are classified as conservation areas).

Park and Facility Inventory Updates

Parks are to be inventoried at least every five years. This inventory includes: (a) an address of the park; (b) information about the type of park, the ownership and size; (c) a tabulation of all facilities that are affected by city recreation standards, including facility conditions; (d) the zoning and land use designations of the park; (e) when the park was established; and (f) when the park was last inventoried.

Special Inventory Requirements for Recreational Facilities

There are special requirements for inventorying certain recreational facilities:

Basketball Courts:	Each hoop is inventoried. Also known as a "multi-purpose" court.
Hardball Fields:	Also known as youth baseball fields. Fences are less than 275 feet from home plate.
Softball Fields:	Also known as adult/youth fields. Fences are greater than 275 feet from home plate.
Soccer Fields:	Also known as "multi-purpose" fields. Inventoried fields do not necessarily contain permanent goals. Fields may also accommodate activities such as football or rugby.

Swimming Pools:	May be either 25 yards or 50 meters in length.
Trails:	May allow jogging, bicycling, hiking or similar non-motorized travel. Track facilities at schools are not included.
Sports-Complex and Local Nature Parks:	Acreage may be double-counted as other park types. For example, an undeveloped 100-acre park could contain 50 acres of land suitable (and planned) for active recreation and 50 acres of passive land. Such a park will be counted in the park inventory as 100 acres of community park and 50 acres of local nature park.

DEFINITIONS

ACCESS, PUBLIC: permission, liberty, or ability to enter, approach, use, or pass to and from certain properties, which is shared by all members of the community.

ACCESS, LIMITED: private, school, or non-recreation oriented public properties which inhibit access by all or some members of the community due to: (a) concern for liability; (b) limited hours; (c) poor transportation access; (d) discrimination due to sex, race, or religion; (f) lack of student status; or (e) inability to pay.

ACTIVITY-BASED RECREATION (also known as CAPITAL-BASED RECREATION or ACTIVE RECREATION): any recreation activity that is primarily dependent on human-built facilities (e.g., a ballfield, tennis court, or swimming pool) rather than the natural environment (e.g., a prairie, forest, creek, or lake) of the recreation site. The attractiveness of activity-based parks is primarily based on the human-built recreational facilities at the site, rather than the natural environment of the site.

CONDITION OF FACILITY:

EXCELLENT: new, original; cannot be improved upon.
GOOD: may show signs of use; otherwise close to excellent.
FAIR: shows definite signs of use, but no repairs are needed.
POOR: in use, but minor repairs will make item more useable; or not in use, but needs minor repair.
MAJOR REPAIR: major repairs needed. Not now usable, but is repairable.
NOT REPAIRABLE: recommending disposal of items in this condition.

ENVIRONMENTALLY SIGNIFICANT OPEN SPACE (or FEATURES): as defined by the COS Element, consists of relatively natural creeks, lakes, wetlands; threatened and endangered species habitat; significant uplands; major groundwater recharge areas; the municipal wellfield; and adjacent land essential for the viability of such open space or features.

LEISURE: any portion of an individual's time which is pleasurable and not occupied by the pursuit of essential or compulsory activities.

OPEN SPACE: any vegetated or surface water area set aside for recreation, public gathering, aesthetics, buffering, urban definition, protection of public health and safety, preservation of ecosystem functions, or a combination of these features.

PASSIVE RECREATION: see RESOURCE-BASED RECREATION.

PRIVATE PARK OR FACILITY: a park or facility that is privately owned and restricts public access through such practices as imposition of relatively costly seasonal or yearly membership fees, or through requiring residence at a residential development associated with the park or facility.

PUBLIC PARK OR FACILITY: a park or facility that is publicly owned or leased on a long-term basis, or is privately owned and allows relatively unrestricted public access.

RECREATION: any voluntary use of leisure time which provides entertainment or relaxation either in an outdoor setting, or in an indoor setting at a recreation site.

RECREATION SITE OR PARK: any public or private land set aside for aesthetic, recreational, educational, historic, environmental, or cultural use which allows some form of public recreational access as defined by "SEMI-PUBLIC PARK OR FACILITY" and "PUBLIC PARK OR FACILITY." For the purposes of calculating level-of-service deficiencies described in this Element, this definition does not include indoor passive recreation such as museums and art galleries, or indoor, privately owned recreation sites.

RESOURCE-BASED RECREATION (also known as PASSIVE RECREATION): any recreation activity, such as boating, nature study, picnicking, or hiking, that is primarily dependent on the passive enjoyment of the natural environment. The attractiveness of resource-based parks is primarily based on the natural environment of the site. Any human-built facilities at the site are designed only to enhance the enjoyment of, or otherwise promote the preservation of, the natural environment of the site.

SEMI-PUBLIC PARK OR FACILITY: a recreational park or facility that is privately owned and allows public use, but only on a relatively restricted or fee basis. Also, any public school.

SERVICE RADIUS: the distance from a park or facility which forms an outer boundary within which a majority of the users of that park or facility would be willing and able to travel to that park or facility.

URBAN AREA-WIDE PARK OR FACILITY: a facility that is sufficiently attractive to draw people from throughout the urban area.

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APPENDIX

PARCEL RANKING SYSTEM

DRAFT

A Ranking System for Recreational and Conservation Land Parcels

The procedure followed by local governments to purchase vacant parcels for recreational or environmental purposes has traditionally suffered from insufficient analysis. The process typically begins when parcels are offered to the government by developers, realtors, environmentalists, elected officials, or neighborhood organizations. Usually, these parcels are then evaluated by considering the development constraints, location or environmental values of the parcel. Unfortunately, this procedure can overlook several important factors which play a role in assessing the value of a parcel. For example, does the parcel fit into a community scheme for recreation and open space? More importantly, are there other available parcels that are more valuable as parks or open space?

To better answer these questions, and therefore improve the procedure for acquiring new park sites, a computerized land ranking system can be used to evaluate vacant parcels. This system , developed by Gainesville Planning Staff, citizens, and University of Florida academicians, catalogues vacant parcels and evaluates them with a series of 15 criteria. The criteria are designed and weighted to evaluate a parcel in two ways:

1. For the value of the parcel in comparison to other parcels; and
2. For the value of the parcel in supporting "active" recreation and "passive" recreation.

By using the same criteria for each parcel assessment, and awarding points based upon how well the parcels satisfy the criteria, the system is able to compare the value of a parcel to previously evaluated parcels.

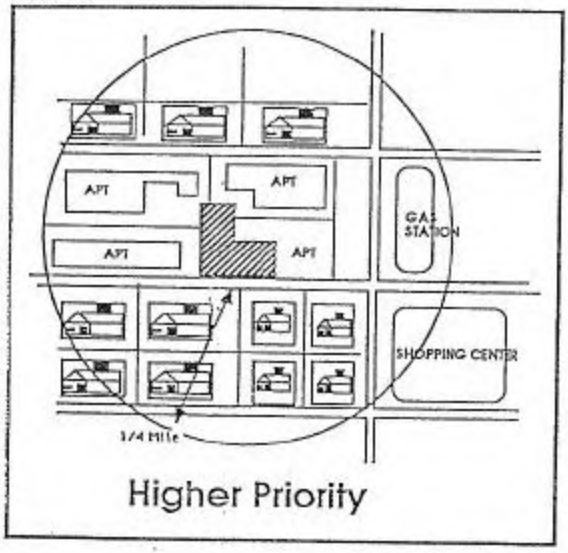
In addition, since there is no clear consensus about whether a community should acquire land based on recreational or environmental values, the system ranks parcels for BOTH categories (the active and the passive rankings). It is then up to the decision-makers to determine whether recreational or environmental values should take precedence.

PARCEL RANKING SYSTEM

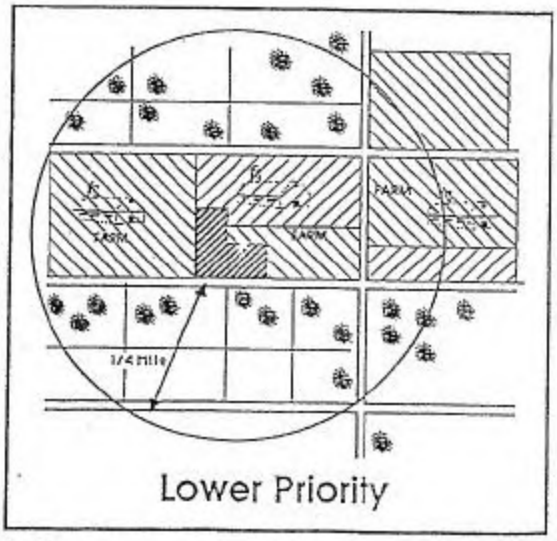
The Criteria

1. Density

"What is the current and expected population or development density of the area where the site is located?"



Justification
A site in close proximity to high-density commercial or residential areas provides more convenient access to a larger number of park users, and increases the visibility of the site.



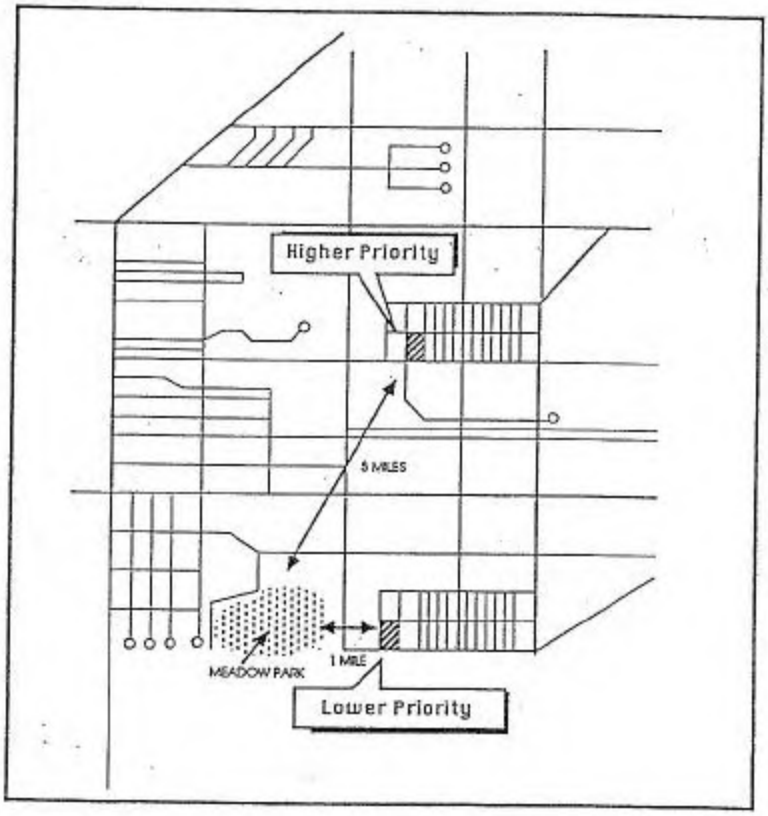
A-2

Petition 145CPA-00 PB

PARCEL RANKING SYSTEM

2. Proximity

"What is the proximity of the site to other public parks and open spaces?"

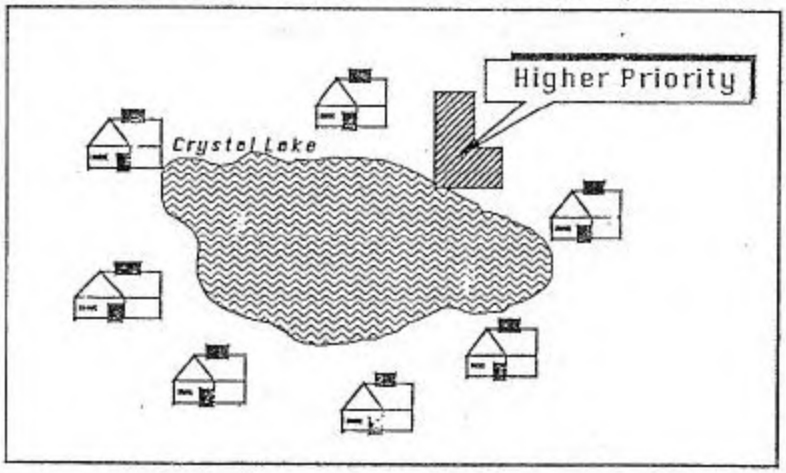


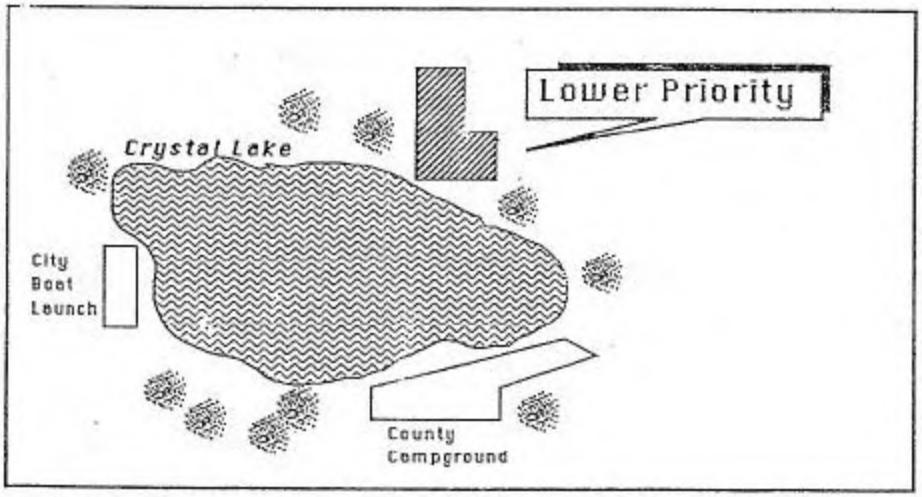
Justification
Sites that are relatively remote from existing parks enhance the dispersal (and therefore accessibility) of parks. "Active"parks that are too closely spaced may suffer from underuse. "Passive" sites are weighted neutrally for this criterion, since proximity to existing passive parks is often preferable.

PARCEL RANKING SYSTEM

3. Resource Access

"Does the site provide access to a natural resource with limited public access?"





Justification

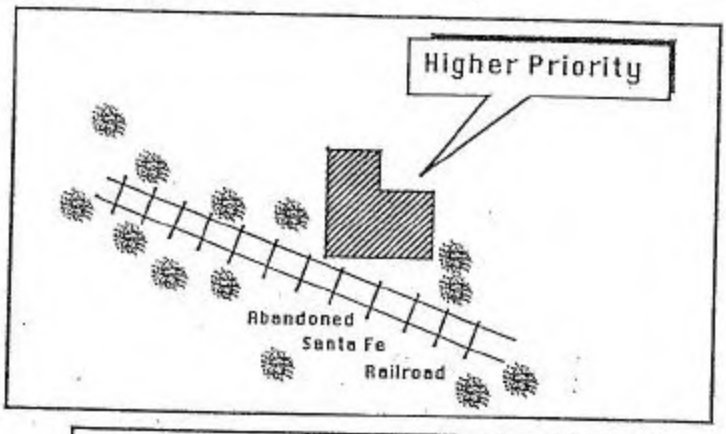
Many environmentally significant resources are not accessible or visible to citizens. As a result, it is likely that many citizens will be unaware of such resources, become apathetic about such resources, become frustrated by their inability to visit such resources, and possibly be less able to understand the value of such resources. Therefore, those sites which contain (or are near) resources that offer limited public access are more valuable.

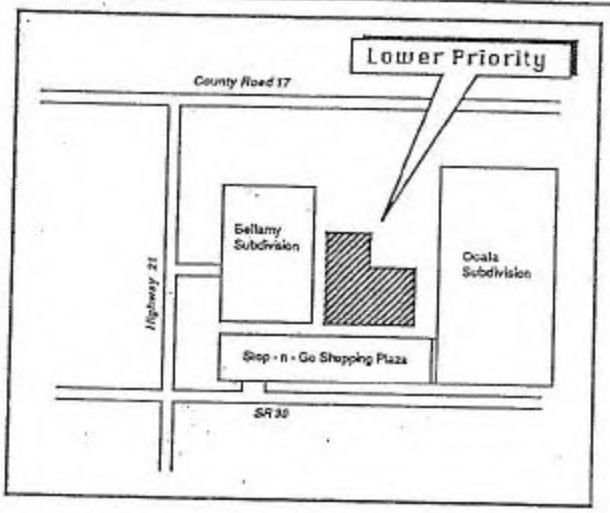
A-4 Petition 145CPA-00 PB

PARCEL RANKING SYSTEM

4. Trail Access

"Is the site serviced by an existing or potential abandoned railroad or utility easement right-of-way corridor, or existing recreational trail?"





Justification

Alachua County contains several rail and utility right-of -way easements which are generally wide enough to accommodate some forms of recreational travel (bicycling, hiking, jogging), as well as provide a limited form of wildlife corridor capability. Because several rail rights-of-way are now abandoned and being purchased by the public, their potential usefulness as public travel corridors is significant. Such corridors are capable of providing pleasurable, safe, and non-motorized transportation to locations that are now only accessible by auto, if at all. Sites near these corridors would then be valuable "staging" areas, rest areas, or scenic vistas for trail users.

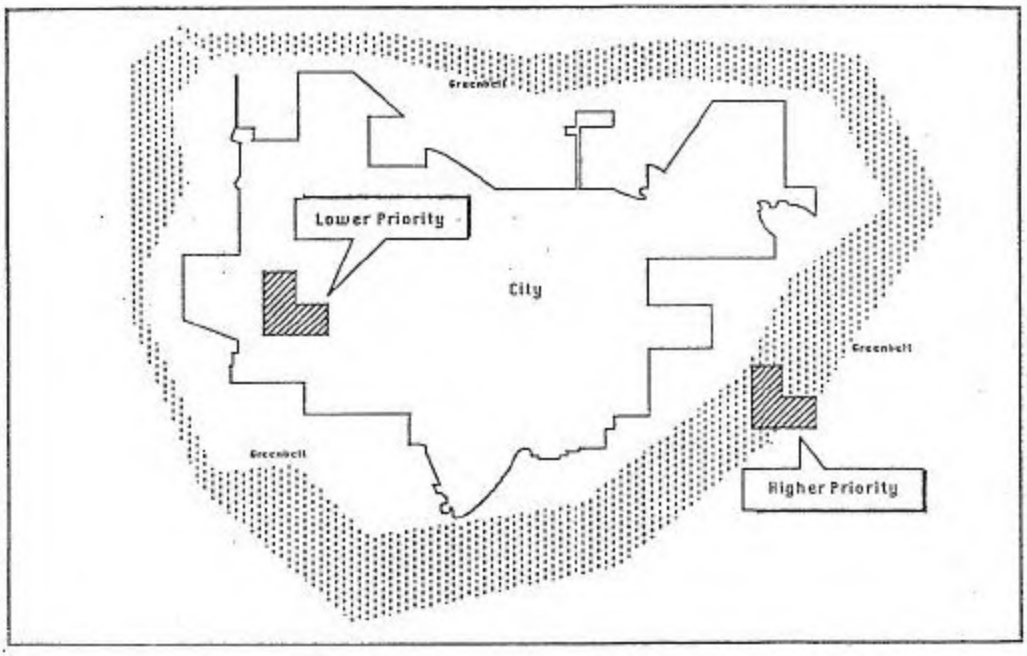
A-5

Petition 145CPA-00 PB

PARCEL RANKING SYSTEM

5. Greenbelt

"Would the site be relatively useful as a component in a greenbelt network?"



Justification
Sites that "fill in the gaps" of an urban-defining greenbelt are more valuable than those unable to serve this purpose. Greenbelts are useful in (1) controlling urban sprawl;(2) Integrating city parks into a network (such as an "emerald necklace"); (3) improving community image;(4) improving the viability of wildlife areas; and (5) improving access to the large "islands" of recreation and conservation lands surrounding the community.

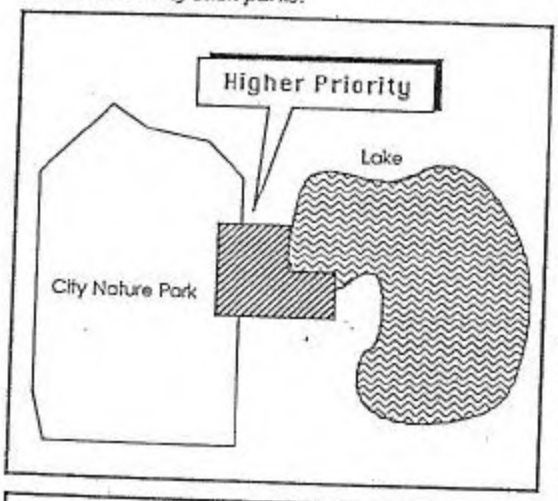
A- 6

Petition 145CPA-00 PB

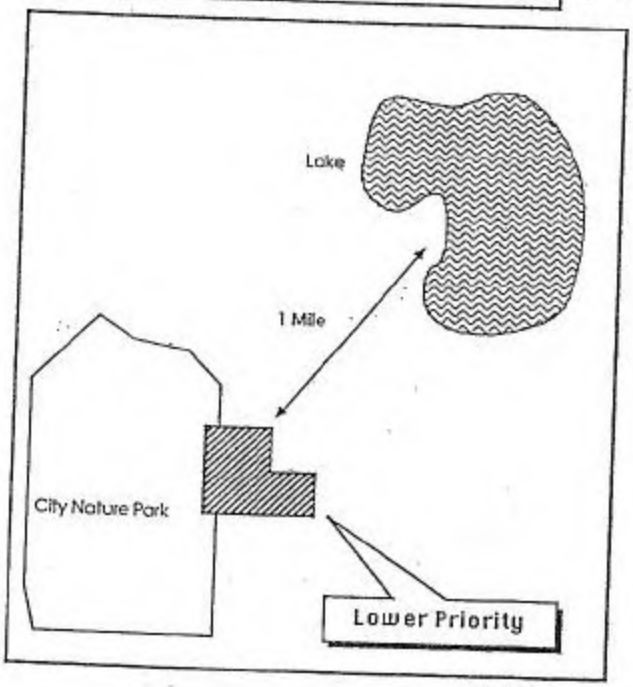
PARCEL RANKING SYSTEM

6. Connectivity

"Does the site provide a physical linkage between two or more existing public parks or open spaces, or extend the size of such parks?"



Justification
Sites that are adjacent to, or are in close proximity to existing parks act synergistically to improve the recreational and ecological value of both sites. For example, if an existing park is enlarged, a greater range of recreational activities can be accommodated, and existing ecological attributes are more easily preserved. Also, connections between parks serve to improve the accessibility to such parks.



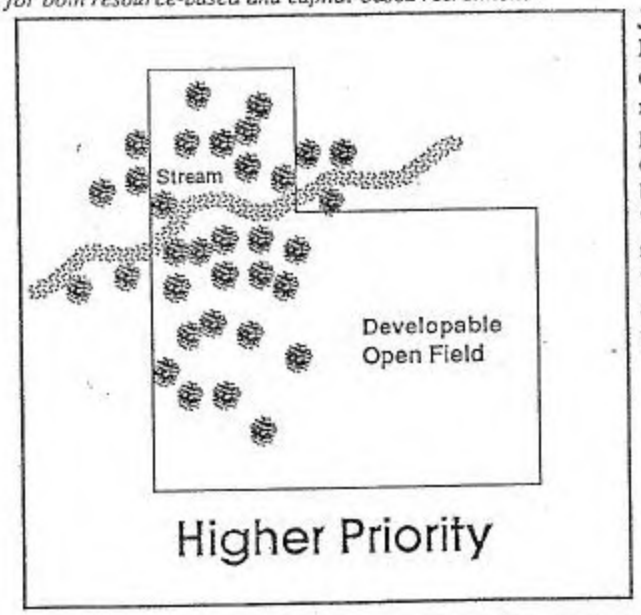
A-7

Petition 145CPA-00 PB

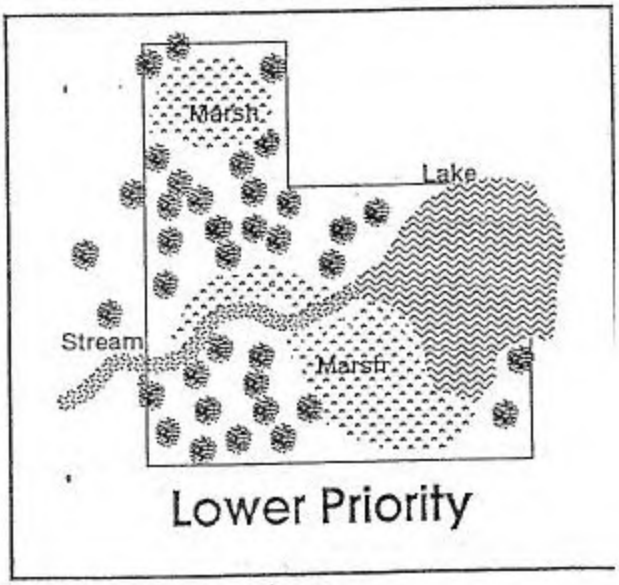
PARCEL RANKING SYSTEM

7. Multi-Uses

"Is the site suitable for both resource-based and capital-based recreation?"



Justification
It is usually less costly for a community to acquire park acreage that offers a range of both "active" and "passive" forms of recreation, rather than buying several "single-use" parcels.



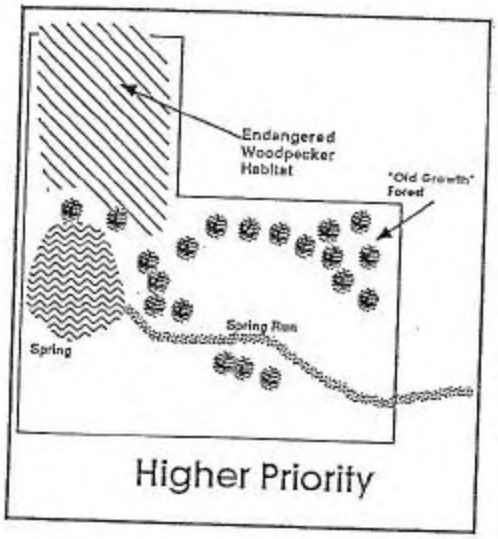
A– 8

Petition 145CPA-00 PB

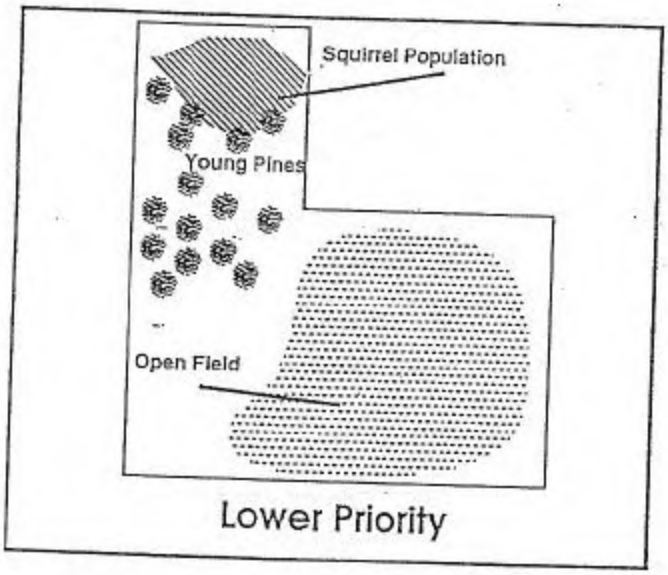
PARCEL RANKING SYSTEM

8. Rarity

"How unique is/are the natural attributes of the site?"



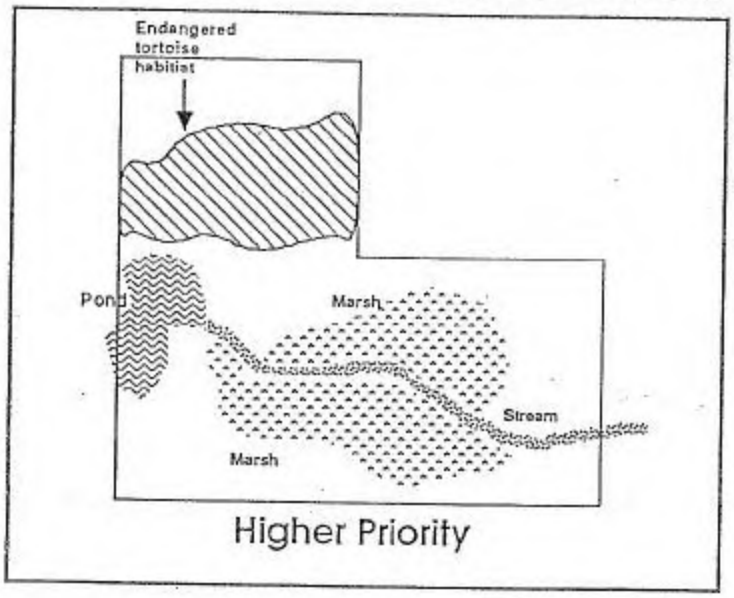
Justification
Sites which contain rare or significant natural attributes are valued more highly than those that contain more common attributes. Significant resources found on a site are generally more likely to be protected if purchased and managed by a public agency.



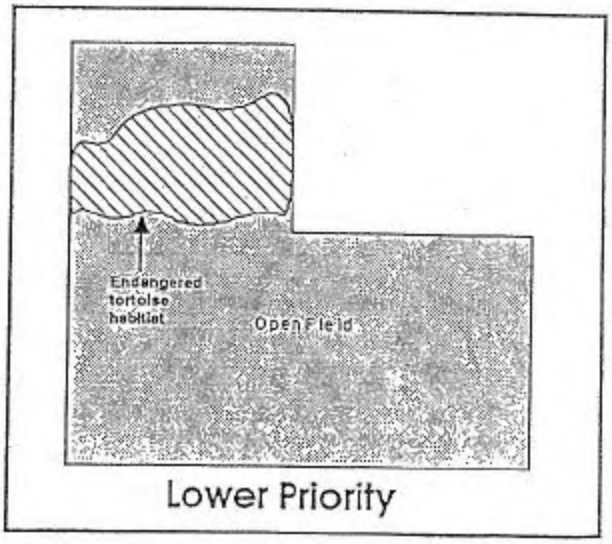
PARCEL RANKING SYSTEM

9. Diversity

"How much diversity does the site possess in regard to natural attributes?"



Justification
Sites with a relatively high degree of natural species diveristy generally demonstrate high ecological "quality". Sites that are relatively diverse are often more interesting, aesthetically pleasing, and likely to possess ecological communities that are able to resist extinction.



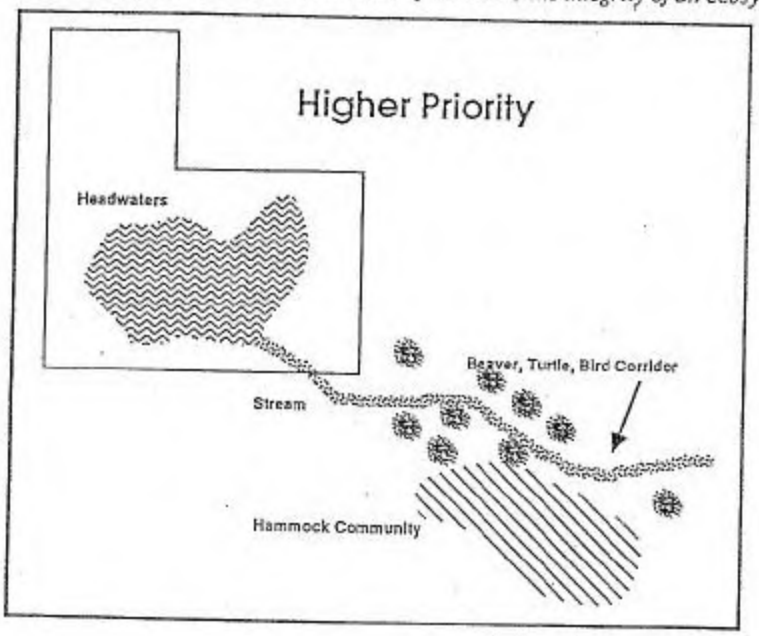
A-10

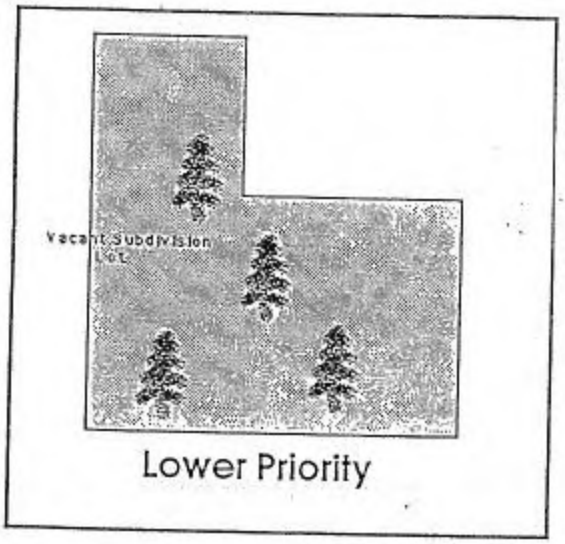
Petition 145CPA-00 PB

PARCEL RANKING SYSTEM

10. Ecosystem

"How critical are the natural attributes of the site to the integrity of an ecosystem?"





Justification
Sites which contain significant natural attributes are valued highly since public acquisition and management would improve the likelihood of these attributes being protected. The attributes identified by this criterion are, when functioning properly, able to sustain regionally significant ecosystems.

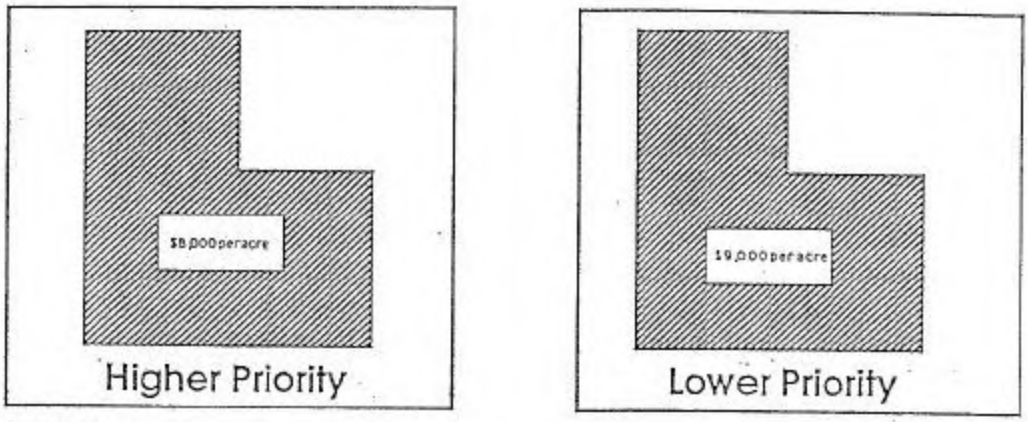
A-11

Petition 145CPA-00 PB

PARCEL RANKING SYSTEM

11. Cost

"What is the per acre cost to acquire the site?"

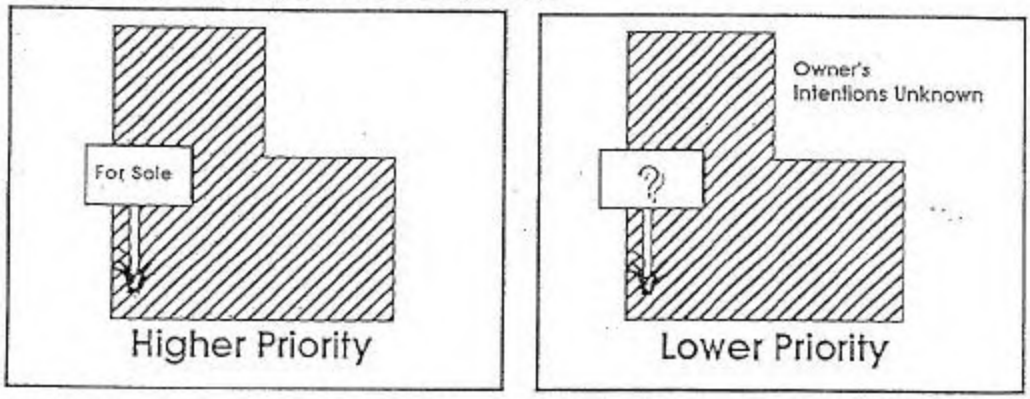


Justification

Due to budget constraints, local governments are limited in their ability to purchase sites. Therefore, in order to maximize the number of sites a community can purchase, those sites which are relatively inexpensive are valued most highly by this criterion.

12. Availability

"Is the site owner relatively interested in selling the site?"



Justification

Sites that are officially for sale are often those which carry the most agreeable and flexible terms for acquisition. Conversely, owners unwilling to sell are likely to be uncompromising and may seek an unreasonably high price for the parcel.

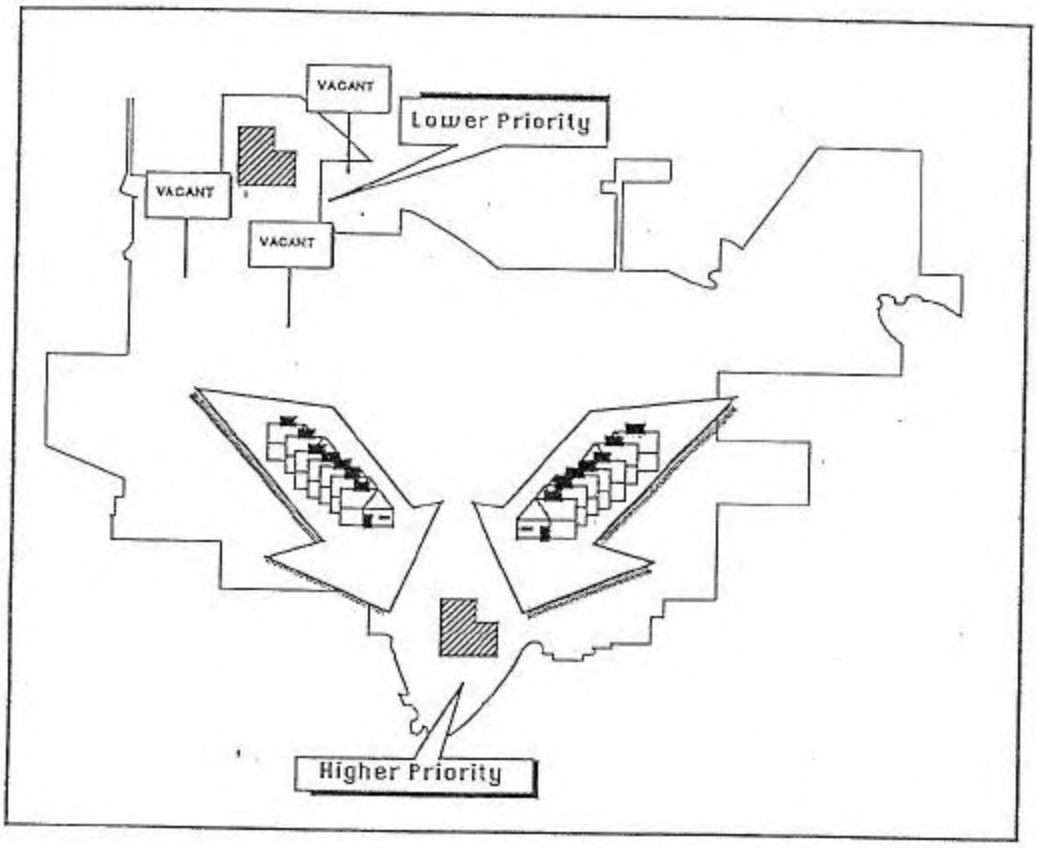
A-12

Petition 145CPA-00 PB

PARCEL RANKING SYSTEM

13. Pressure

"When is the site likely to be developed?"



Justification

Sites that are in the path of residential, commercial , or industrial development are more likely to be developed in the near future. Sites likely to be developed in the near future must be prioritized for acquisition in order for the public to avoid losing any recreational or environmental attributes of the site.

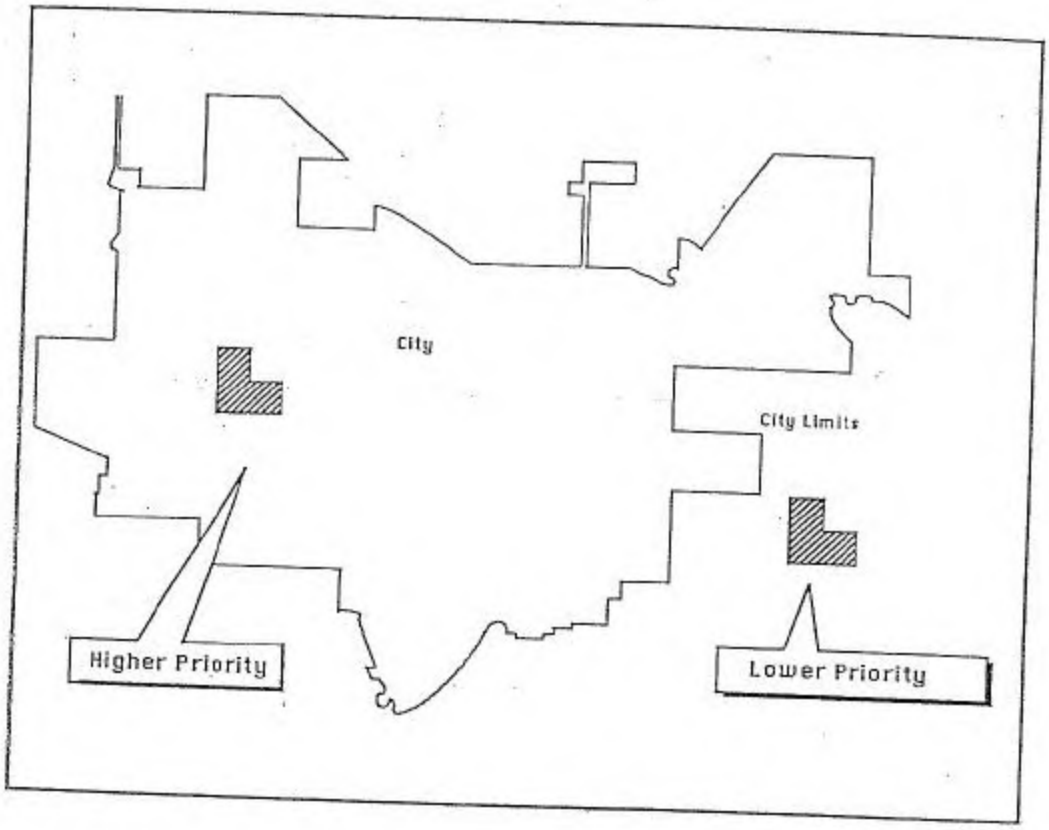
A-13

Petition 145CPA-00 PB

PARCEL RANKING SYSTEM

14. Jurisdiction

"Is the site within or near city limits?"



Justification
Sites that fall within the city limits offer greater management control and flexibility of use for the city, since city regulatory codes apply to lands within city limits. In addition, sites that are within or near city limits are more accessible to city residents.

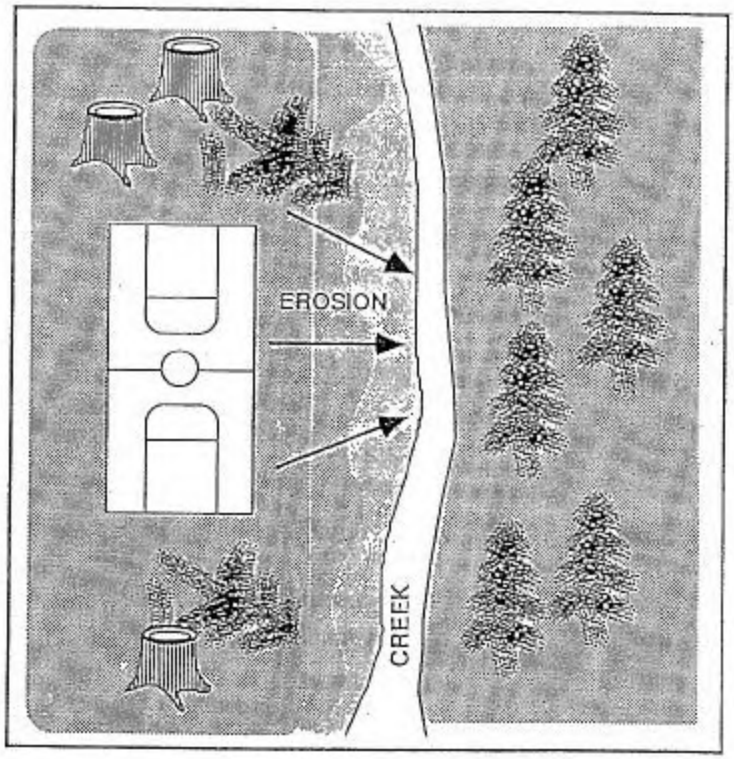
A-14

Petition 145CPA-00 PB

PARCEL RANKING SYSTEM

15. Environmental Degradation

"Will development of the site for active recreation result in significant degradation of important environmental features?"



Justification

Certain sites contain important environmental features. However, building facilities such as tennis or basketball courts at the site can damage these features by causing erosion, removing large areas of vegetation, disturbing wildlife, and other harmful impacts. Since some sites are generally unable to accommodate active recreation without damaging natural features, it is necessary to lower the value of the site when ranking it for "active" recreation. The "passive" ranking is unaffected by this criterion.

A-15

Petition 145CPA-00 PB

Goals, Objectives & Policies

Solid Waste Element

PROVIDE FOR THE MANAGEMENT OF SOLID AND HAZARDOUS WASTES IN A MANNER WHICH ASSURES PUBLIC HEALTH AND SAFETY, PROTECTS ENVIRONMENTAL RESOURCES, AND CONSERVES ENERGY.

GOAL 1

By 2020, reduce by 75% the amount of solid waste that would have been disposed of in the absence of landfill diversion practices such as recycling, reuse and composting. The City shall establish a goal of recycling recyclable solid waste at a rate of 40% by December 31, 2012; 50% by December 31, 2014; 60% by December 31, 2016; 70% by December 31, 2018; and 75% by December 31, 2020.

Objective 1.1

Policies

1.1.1 The City shall minimize the amount of solid waste that must be disposed of in a landfill. In order of priority, minimization shall be attained by (1) source reduction of waste; (2) re-use; (3) recycling; (4) composting; and (5) landfilling.

1.1.2 The City shall continue to utilize procurement procedures that follow State and federal guidelines in terms of the paper purchasing policy by purchasing paper with a minimum of 25% post-consumer recycled content.

1.1.3 By 2015, the City shall certify that at least 12% of all city households are backyard composting their food and yard wastes.

1.1.4 The City shall encourage citizens to use re-usable tote bags for groceries and other retail shopping through the distribution of approximately 5,000 "Curbside Manners" brochures between 2010 and 2020.

1.1.5 By 2015, 98% of all multi-family residential and commercial properties shall participate in a recycling program.

Revised 7/24/00, Ord 990216
Revised 1/19/12, Ord 110171

1.1.6 The City shall continue to require new multi-family, commercial, and institutional developments to include recycling receptacles or have provisions for access to off-site recycling facilities. Recycling receptacles shall also be placed at public parks, the airport, and other places of public assembly.

1.1.7 The City shall encourage the State to allow only food and beverage containers that are recyclable, returnable, or degradable through the distribution of approximately 5,000 "Curbside Manners" brochures between 2010 and 2020.

1.1.8 The City shall maintain at least a 75% set out rate for the residential curbside recycling program.

1.1.9 The City will continue to expand the two-bin program to encourage separation of paper recyclables from plastic, metals and glass throughout the mandatory collection area of the city.

Objective 1.2

Prevent the disposal of hazardous waste that would cause significant degradation of the environment. Coordinate with hazardous materials service providers to increase the capacity of hazardous materials management facilities.

Policies

1.2.1 The City shall enforce illegal dumping laws. Such enforcement shall include efforts to clean up existing illegal dump sites, and develop or revise ordinances to increase the feasibility of prosecuting illegal dumpers.

1.2.2 Through coordination with the County and other waste material handlers, the City will continue to participate in a periodic, convenient special waste collection program for difficult-to-dispose-of waste such as tires, used oil, batteries, and asbestos, and will utilize the Household Hazardous Waste Center to promote increased reuse and recycling by the general public.

1.2.3 The City shall continue to coordinate with the Florida Departments of Transportation and Environmental Protection regarding the transportation of hazardous wastes within city limits.

1.2.4 The City shall continue to coordinate with the Alachua County Department of Environmental Protection, which requires submission of a hazardous materials management plan as a contingency for all development approvals for sites where hazardous materials may be handled.

Revised 7/24/00, Ord 990216
Revised 1/19/12, Ord 110171

Conduct ongoing education campaigns to maintain citizen awareness of proper solid and hazardous waste management practices.

Objective 1.3

Policies

1.3.1 The City shall continue to receive and publicize an annual report prepared by Alachua County, as set forth by Sec. 403.706(7), F.S., describing trends in the county solid waste management program, including, at a minimum, amounts by type of waste, amount and type of waste recycled, and percent of the population participating in recycling.

1.3.2 The City, in cooperation with Alachua County, shall continue to sponsor solid and hazardous waste education programs for school students and interested citizens.

1.3.3 The City shall continue to provide information to the local legislative delegation to support State and federal initiatives that encourage source reduction, re-use, recycling, and composting, and discourage use of difficult-to-recycle paper such as "slick" or "glossy" paper and "junk" mail.

1.3.4 The City shall continue to follow the provisions of the source reduction and recycling procurement policy that is intended to increase the recycled content of products purchased and used by the City, reduce waste in the manufacture and use of products purchased and used by the City, and encourage businesses that promote recycling to locate within the Gainesville area.

Establish a level of service (LOS) standard for the disposal of solid waste generated by current and future City waste generators.

Objective 1.4

Policies

1.4.1 The following LOS standard for disposal and collection capacity shall be established: 0.655 tons of solid waste per capita per year disposed (3.6 pounds of solid waste per capita per day disposed). The City shall continue to maintain contracts with solid waste haulers and landfill operators that require replacement and purchase of collection trucks necessary to collect 1.07 tons of solid waste per capita per year (5.9 pounds per capita per day).

1.4.2 The City shall continue to ensure that waste tonnages being generated within city limits are being accurately monitored by requiring monthly reporting of solid waste tonnages being delivered to disposal facilities as required by Section 403.706(18), F.S. Monthly tonnages shall also be reported for recyclables (including yard trash).

Revised 7/24/00, Ord 990216
Revised 1/19/12, Ord 110171

Objective 1.5

The City shall coordinate with solid waste management facility providers for future increases in disposal capacity needed to maintain adequate disposal service levels throughout the 10-year planning period.

Policies

1.5.1 In accordance with the "Interlocal Agreement for Solid Waste Management Services Between Alachua County and The City of Gainesville, Florida", Alachua County shall develop and maintain solid waste management facilities as necessary for the receipt, processing and/or disposal of all acceptable waste from within city limits. The City shall continue to abide by an interlocal agreement with the solid waste management facility provider(s) (currently Alachua County), effective December 21, 1998, that ensures that disposal capacity is available for the disposal of 3.6 pounds of solid waste per capita per day by City waste generators. This shall include, but not be necessarily limited to, all residential, commercial, industrial, governmental, and institutional waste. The agreement shall remain in effect until December 31, 2018. Upon mutual agreement of the parties, the agreement may be renewed for additional five-year periods.

1.5.2 If the solid waste management facility provider(s) is, at some future date, unable to provide disposal capacity and landfill space for city waste generators, the City shall increase the rate of citywide re-use, composting and recycling, prepare a report investigating the feasibility of resource recovery [waste-to-energy], and prohibit all development until the City can provide landfill service consistent with the LOS standard or contract with a landfill service provider to dispose of the waste.

Solid Waste Element
Data and Analysis Report

INTRODUCTION

Even though Gainesville and Alachua County have made great progress since the days of indiscriminate burning and dumping of garbage, there is still much to be done in order to efficiently and safely manage solid waste. While landfilling now includes the use of liners (to protect groundwater from contaminants in leachate), and other forms of air, litter, and water pollution control techniques, there are several additional strategies that should be used to properly manage waste.

Strategies are needed, for example, to address the rate of waste generation, which is leading to significant increases in the cost of acquiring land for landfill space. Increasingly sophisticated environmental safeguards needed to protect the environment from landfill wastes are also leading to large increases in landfill costs. Illegal dumping of wastes continues to be a major problem, particularly when such dumping occurs in creeks, lakes, and wetlands. In the past, the issue of hazardous waste management has received a great deal of attention as an important problem.

How can the City extend the life of county landfills or other landfills used for disposal of its solid waste? How can the composition of wastes delivered to the landfills be managed so as to more effectively protect the environment from hazardous wastes? What strategies are available to decrease the amount of solid waste that must be landfilled? This Report looks at the current status of solid and hazardous waste management in Gainesville and Alachua County, and proposes strategies designed to answer questions such as these.

HISTORY OF SOLID WASTE MANAGEMENT

In 1964, the City of Gainesville, Alachua County, and the State Board of Health were cooperating under an agreement which established a "Mosquito Control District".[1] The District operated a landfill near the runways of the Gainesville Municipal Airport. At that time, this landfill was accepting household and commercial refuse. Also at this time, the City operated a dump for combustible refuse near the South Main Street Wastewater Treatment Plant. A third landfill, also operated by the City and located on Archer Road (five miles from downtown Gainesville), accepted junk vehicles, large logs, and other items not considered suitable for the airport landfill.

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[1] Florida State Board of Health. 1965. *A Report of an Environmental Health Survey of Gainesville Florida, April 19-30, 1965*.

In 1964, there were 13 on-site incinerators within city limits (six of which were on the University of Florida campus). The University used a combination of incineration and an on-campus dump to dispose of refuse in 1964. Also in 1964, Gainesville residents passed a $100,000 bond issue for the purchase of future landfill sites.

There were at least 16 on-site incinerators identified within city limits in 1973, six of which were on the university campus.[2]

By 1973, the City was using 29 "packer" garbage trucks to collect residential and commercial solid waste. All solid waste collected by the City was disposed of at the Northeast Sanitary Landfill (opened January 1973) near Fairbanks.[3] The Archer Road Dump was closed in August 1972, and the old Airport Landfill was closed in January 1973.

At that time, the University maintained a fleet of campus garbage trucks which transported campus solid waste to a transfer station at the south side of campus near Lake Alice. University trailers were used to transport this waste to the Northeast Landfill. There was also a sanitary landfill on campus for non-putrescible, non-domestic waste.

In 1978, the City was contracted with Browning-Ferris Industries (BFI) for the collection of residential and commercial solid waste.[4] The Northeast Landfill was continuing to receive all of the solid waste from the City, although three newly opened landfills (the Northwest Landfill west of Alachua, the Southeast Landfill near Grove Park, and the Southwest [S.W.] Landfill west of Archer) were beginning to receive waste from Gainesville.

In 1983, the Northeast, Northwest, and Southeast landfills were no longer open. Only the S.W. Landfill, operated by Alachua County, was receiving residential and commercial solid waste.[5] Gainesville's waste was being collected by BFI.

In 1989, the City began a citywide residential curbside recycling program for glass, newspapers, cans, yard waste, and certain types of plastic. This program was contracted to BFI. The City continued to dispose of all of its residential and commercial solid waste at the S.W. Landfill up until December 1998. At that time the Alachua County transfer station became fully operational, while the S.W. Landfill officially closed.

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[2] Page V-9, Ibid.

[3] Environmental Science and Engineering, Inc. 1973. *Solid Waste Management, 1973. Phase I*. For: North Central Florida Regional Planning Council.

[4] Alachua County Pollution Control District. 1978. *Alachua County Pollution Control District Annual Report, 1977-1978*.

[5] Alachua County Planning and Development Department. 1984. *Alachua County Comprehensive Plan: Solid Waste Element, 1984*.

Organization, Jurisdiction, Authority, and Regulation

Alachua County is authorized, through the County Charter, to regulate solid waste collection and disposal throughout the county. The County has delegated to the City the authority for collection within city limits. Alachua County remains exclusively responsible for the disposal of all solid waste within the county, in accordance with state law (Sec. 403.706 [1], FS).

Alachua County owns and operates a solid waste transfer station, located north of the airport at 5115 N.E. 63rd Avenue. The S.W. Landfill officially closed on December 19, 1998, although a drop-off center where residents can bring up to five bags of garbage per visit will remain in operation at that location on the same schedule as the four rural collection centers in the county. There is currently one privately owned and operated construction and demolition debris landfill within the county.[6] This private landfill is also regulated by Alachua County.

The City has an interlocal agreement with the County for solid waste disposal. This agreement stipulates that the City is committed to deliver residentially and commercially collected solid waste collected by the City's franchised haulers to the County's designated facilities for solid waste management. (A copy of the agreement can be found on page A-14 in the Appendix.)

The City is responsible for the billing and collection of solid waste fees from residential customers within city limits.

Predominant Types of Land Uses Served by Solid Waste Facilities

There are three categories of existing land uses being served by county solid waste facilities: (1) land uses within the city; (2) land uses outside of city limits but within the county, including the small cities; and (3) land uses on the University of Florida Campus.

As shown in Table 1 of the Future Land Use Data and Analysis Report (1991 Comprehensive Plan), and excluding the University of Florida campus acreage (about 1,836 acres), approximately 40 percent of the acreage within city limits consists of residential land use, approximately 23 percent consists of public service land use, approximately 17 percent consists of unimproved land, and approximately 8 percent consists of business land use.

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[6] Conversation with Sally Palmi, Alachua County Solid Waste Coordinator, January 1999.

Predominant land uses on the University of Florida campus are educational (50 percent), recreational (30 percent), and conservation (19 percent).[7]

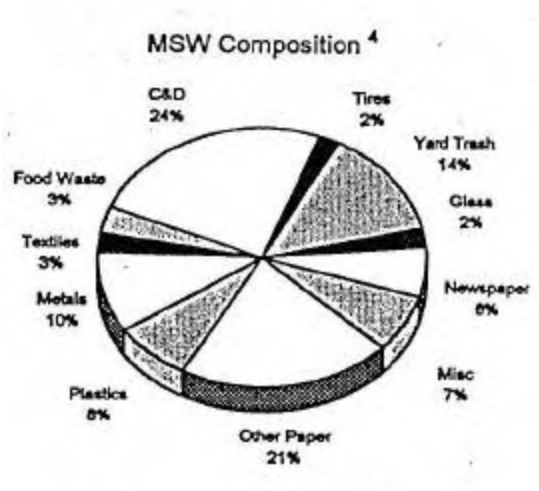
EXISTING SYSTEM

Composition of Solid Waste

Based on Alachua County averages, it is estimated that less than half of all solid waste delivered to the S.W. Landfill by the City in 1996 was composed of paper, yard waste, glass, and food (Figure 1). While plastics represent only 8 percent of the total, by weight, studies suggest that plastics represent up to 32 percent by volume.[8] Since 1960, plastics, paper, rubber, leather, textiles (cloth), and yard waste have shown the most significant increases in proportionate share of the total solid waste composition.[9]

Note that of the materials comprising the solid waste stream, the proportion representing yard waste varies most significantly throughout any given year. Whereas the yearly average is 15 percent of the waste stream, the proportion representing yard waste rises to upwards of 40 percent at certain times of the year when yard landscaping is at its peak (mostly in the spring and summer).

Figure 1



[7] University of Florida Master Plan Amendment: March 1, 1999. "Land Use Changes."

[8] U.S. Environmental Protection Agency. "A Plastics Packaging Primer." RE:Sources. Environmental Action, July/August.

[9] Concern, Inc. 1988. "Waste: Choices for Communities". Washington, D.C.

Source: FDEP, 4/14/98

Collection of Solid Waste

Currently, the City contracts with Boone/Waste Management[10] to provide mandatory residential solid waste collection services within city limits. Residential service includes all single-family homes, multi-family units of four or fewer units under common ownership, and individual mobile homes. Residential collection is once per week.
Any franchised hauler may provide commercial solid waste collection service. Collection service is offered on an as-needed basis. Boone/Waste Management is not under contract with the City to collect commercial construction or demolition debris or clean debris. Boone/Waste Management collected approximately 40 percent of the waste hauled from the University of Florida campus in 1998. The University hauled the remainder.

Construction and demolition debris (C & D) is hauled to private C & D landfills by individuals, construction contractors, the University campus, and city and county public works departments. Often, such hauling is by contract with Boone/Waste Management. Due to recent amendments to Florida Department of Environmental Protection requirements for C&D landfills, specific permits with more stringent regulations are now required. Many operators did not want to comply with the new regulations and applied for permits only for the storage and disposal of 'clean debris,' which is inert waste such as uncontaminated concrete, brick, glass and ceramics. The transfer station does not accept C&D waste. Because there is only one current legal C&D landfill, the County will evaluate options for C&D disposal if it appears that there may be insufficient capacity at the private C&D facilities to meet the demand.[11]

Boone/Waste Management provides all labor, insurance, supervision, machinery and equipment, plant building, trucks and other tools, equipment, and accessories necessary to fulfill the obligations of the residential and commercial solid waste collection contract with the City. As of 1999, the Boone/Waste Management fleet includes one 25-cubic-yard vehicle, four 34-cubic-yard vehicles, and four 40-cubic-yard vehicle for residential service within the city limits. These vehicles carry a one-person crew. The fleet includes seven 30-cubic-yard vehicles for curbside recycling within city limits. There is also one 40-cubic-yard vehicle for commercial

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[10] Alachua County Solid and Hazardous Waste Public Information Committee. Solid and Hazardous Waste News, Volume X, November 1998.

[11] Conversation with Sally Palmi, Alachua County Solid Waste Coordinator, and Evaluation and Appraisal Report on Solid Waste Element of Alachua County Comprehensive Plan: 1991-2011, September 28, 1998.

service for City pickup only, where the City pays the hauler per cubic yard. Ten other vehicles haul commercial solid waste in the City and the County, based on the location of the client business. Both the recycle and commercial vehicles carry a one-person crew.[12]

All residential and non-residential waste collected within the City by Boone/Waste Management is delivered to the transfer station. However, an unknown amount of construction and demolition debris collected from within the city is delivered to the Florence Construction and Demolition Debris Landfill. Refer to "Other Construction and Demolition Debris" section for further information about the Renfroe Landfill.

Boone/Waste Management is not under contract with the City to collect residential special waste (except white goods and household furniture), hazardous waste, infectious waste, biohazardous waste, biological waste, or sludge.

Businesses handling hazardous materials are responsible for commercial hazardous waste management in accordance with state and federal regulations. In addition, such handlers must comply with the county Hazardous Materials Management Code which, among other things, requires stringent monitoring, reporting, and site design procedures. Household hazardous waste is currently collected by the four rural collection centers and the temporary collection center at the S.W. Landfill. These staffed facilities accept relatively low-hazard wastes such as used oil and paints. Conditionally exempt small quantity generators (CESQGs) can dispose of hazardous waste at the new Household Hazardous Waste Collection Center (HHWCC), located at the Leveda Brown Environmental Park/Transfer Station. Households can also drop off their wastes at the HHWCC. Refer also to "Hazardous Waste" section for hazardous waste management.

Biohazardous waste in Gainesville is generated by hospitals, clinics, offices of doctors, and medical labs. The four Gainesville hospitals currently either incinerate biohazardous (infectious) waste or have it shipped out of the county for disposal. Hazardous (chemical) waste is shipped out of state. Radioactive waste is allowed to decay, with the remaining residue incinerated or shipped out of state. Refer to the "Biohazardous Waste" section for further information.

The University of Florida collects its own waste from the campus using four 34-cubic-yard collection vehicles. Waste is collected from residence halls, married student housing, fraternities, sororities, Tanglewood apartments, and P.K. Yonge Laboratory school. Boone/Waste Management collects campus construction waste and waste from the university hospital system.

Collection of Recyclables

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[12] Conversation with Sean Pugh of Boone/Waste Management, February 1999.

The City began a pilot curbside recycling program (which included 6,500 homes) in October 1987. Based on the success of that program, the City began a citywide program (22,000 homes) in May 1989. Through this program, Boone/Waste Management is contracted to collect newspaper, glass, aluminum and metal cans, polyethylene terephthalate (PETE) and high-density polyethylene (HDPE) bottles from all single-family homes and multi-family dwelling units of less than five units within the same building as defined in Section 5.45 of the General and Technical Specifications For Solid Waste, Recycling and Yard Trash Collections Within the City of Gainesville and County of Alachua, March 10, 1999. The collection of polyvinyl chloride (plastic #3) became effective on October 1, 1999. The collection of such recyclables is at least once per week. The location of current recyclables collection programs is shown in Map 2 in the Appendix.

Boone/Waste Management is responsible for marketing the collected recyclables or otherwise ensuring the reuse of recyclables. Local centers that collect and market recyclables are shown in Map 2 in the Appendix.

Based on a contracted formula, Boone/Waste Management and the City share in the revenues generated from the sale of recyclables.

In addition to the residential program, the City had a six-month pilot program in 1990 for the collection of recyclables at 22 downtown commercial establishments. The pilot program, which also included 24 urban area apartment complexes, evaluated the feasibility of incorporating non-single-family residential recyclers into the citywide recycling program. This led to a mandatory commercial recycling provision that was added to the solid waste ordinance and implemented on January 1, 1997. Under the new law, all businesses are required to recycle office paper and corrugated cardboard, and apartments are required to recycle newspapers and metal cans.

The City of Gainesville and Alachua County have launched a joint two-bin pilot project. In October 1998, households in selected neighborhoods received an orange bin to accompany the regular blue recycling bin. The residents are asked to put all paper products in the orange bin while the traditional "Big Blue" will collect cans, plastic containers, glass, empty spray cans and household batteries. The main reasons for the second bin is to provide more capacity for recyclable items, reduce contamination of the product, and facilitate sorting, and keep paper products dry and in place by stacking "Big Blue" on top of the orange bin. The program will be evaluated in 1999 to determine
whether it should expand throughout the mandatory collection areas of the City and the County.[13]

[13] Alachua County Solid and Hazardous Waste Public Information Committee. Solid and Hazardous Waste News, Volume X, November 1998.

The City and the University, in cooperation with the former Southern Bell telephone company (now BellSouth), conducted a first-ever-citywide collection of old telephone books in 1989. This collection netted approximately 36 tons of phone books for recycling.

The University has its own recycling program to comply with state recycling requirements. The University has recycled paper, aluminum and bi-metal cans, yard waste, sludge, scrap metal, and concrete/masonry since 1990. Plastic and glass recycling was expected to begin in late 1990, but plastic was dropped from the program several months later. Additional items that are currently being recycled include fluorescent light fixtures, wooden pallets, construction lumber, cotton goods, oil filters, used motor oil and anti-freeze.

Collection of Yard Trash

As a part of the citywide recyclables program started in May 1989, Boone/Waste Management is under contract with the City to collect all yard trash from single-family homes and multi-family units of fewer than five units per building. Collection is at least once per week. Pickup is curbside.

Boone/Waste Management is responsible for ensuring that the yard trash collected is reused in composting, mulch, fuel, or other reuse operation. Currently, yard trash is delivered to Watson's farm in Gilchrist County.

Trends in Solid Waste, Recyclables, and Yard Trash Collection

As shown in Figure 2, the total amount of solid waste delivered to the S.W. Landfill from all waste generators (including the City) has steadily increased over the past two years, and the amount of solid waste delivered to waste management facilities is projected to steadily increase throughout the 2000-2010 planning period. This stability despite recent population growth has been attributed largely to: (1) the diversion of waste away from the S.W. Landfill as a result of the rising tipping fee at the Landfill; (2) the availability of a Class III landfill (as defined under *Landfill* in Definitions section of the Appendix) and several private construction and demolition debris (C&D) disposal facilities; and (3) increased recycling rates.[14] As shown in Figure 3, the tipping fee had risen substantially in recent years, until a recent reduction due to lower costs related to the closing of the S.W. Landfill. Current fees are expected to remain stable.[15]

The relatively stable rate of waste generation since 1997, indicates a steady increase in waste delivered to the transfer station, an increase primarily due to the increase in county population

[14] CH2M-Hill. 1989 and June 1991. "Financial Evaluation of the Solid Waste Disposal System." Gainesville, Florida.

[15] Norm Thomas, Alachua County Public Works Department, February 1999.

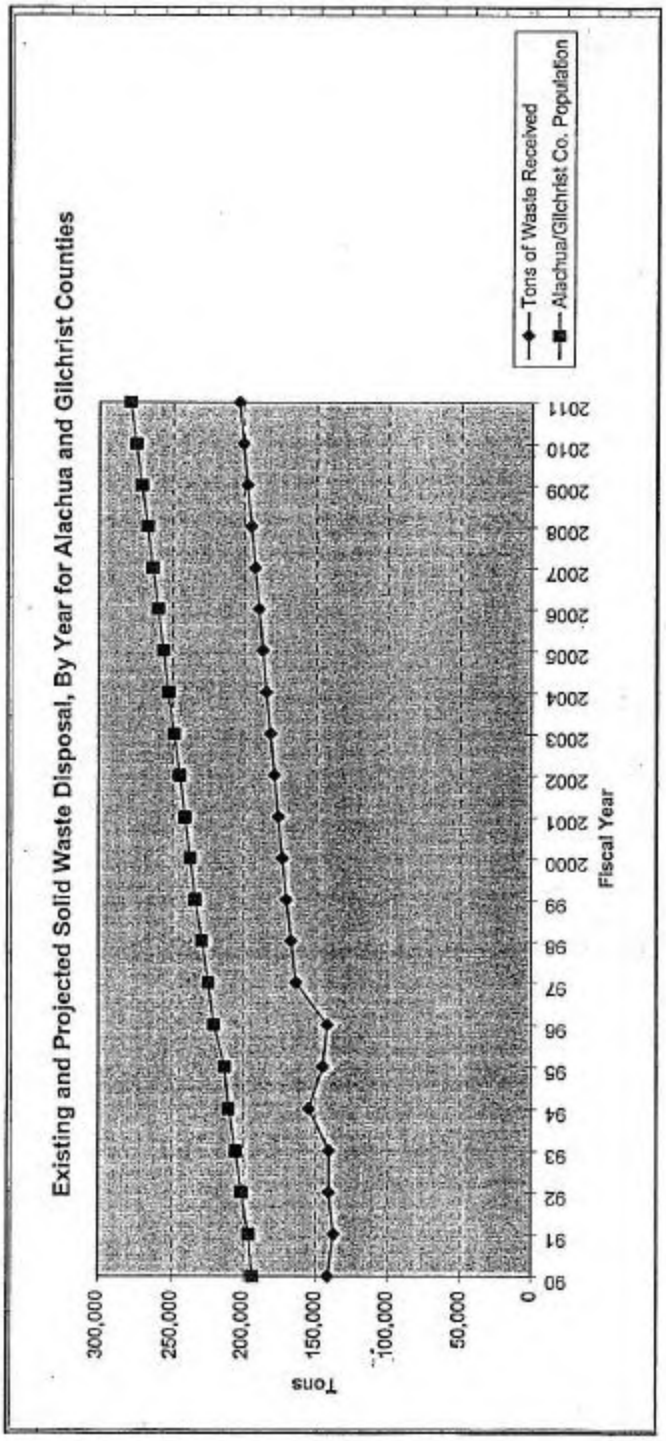
over the ten-year period (Figure 2). Note also that the amount of waste delivered to the transfer station does not represent all landfilled waste generated within Gainesville city limits. According to the county Department of Public Works, an unknown quantity of construction and demolition debris is currently delivered to public and private construction and demolition debris landfills.

In fiscal year 1997-1998, the UF campus delivered 10,428.57 tons of garbage, and construction and other debris, to the S.W. Landfill. Of this total, 8,139.75 tons was Class I waste and 2,288.82 tons was construction and demolition debris, not including outside contractors working on campus, who have their own contracts with private haulers for disposal of their construction and demolition debris. Approximately 78 percent of the refuse at UF is Class I waste while approximately 22 percent is Class III waste. The Class III waste is delivered to the Florence landfill. It is expected that campus waste tonnages delivered to county disposal facilities will continue to increase due to increases in the number of students enrolled at the university. The tonnage increases would be higher were it not for the growth in the amount of recyclables diverted and overall waste reduction. This tonnage increase will probably level off over the five-year planning time horizon as the rate of recycling approaches an expected peak rate of 40 percent and as UF enrollment stabilizes.

Based on experiences in other communities, recycling rates are expected to steadily increase over time (at least over the next few years) as more households learn about recycling and begin to more fully incorporate recycling practices into day-to-day household activity.

Solid Waste Element
Data and Analysis

Figure 2

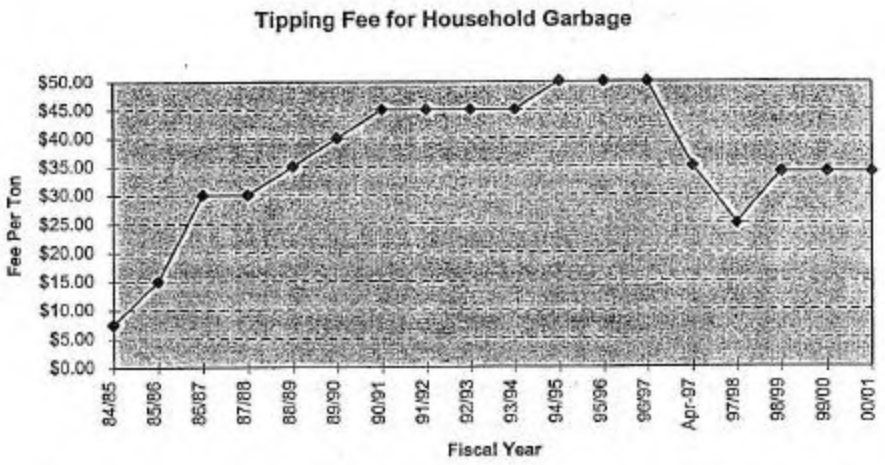


Alachua County Department of Public Works, September 1998.

Figure 3

Solid Waste Element
Data and Analysis

Figure 3



Fiscal Year	Fee Per Ton
1984-85	$7.50
1985-86	$15.00
1986-87	$30.00
1987-88	$30.00
1988-89	$35.00
1989-90	$40.00
1990-91	$45.00
1991-92	$45.00
1992-93	$45.00
1993-94	$45.00
1994-95	$50.00
1995-96	$50.00
1996-97	$50.00
April 1997	$35.00
1997-98	$25.00
1998-99	$34.00
1999-00	$34.00*
2000-01	$34.00*

*Estimated

SOURCE:

Norm Thomas, Alachua County Public Works Department, February 1999.

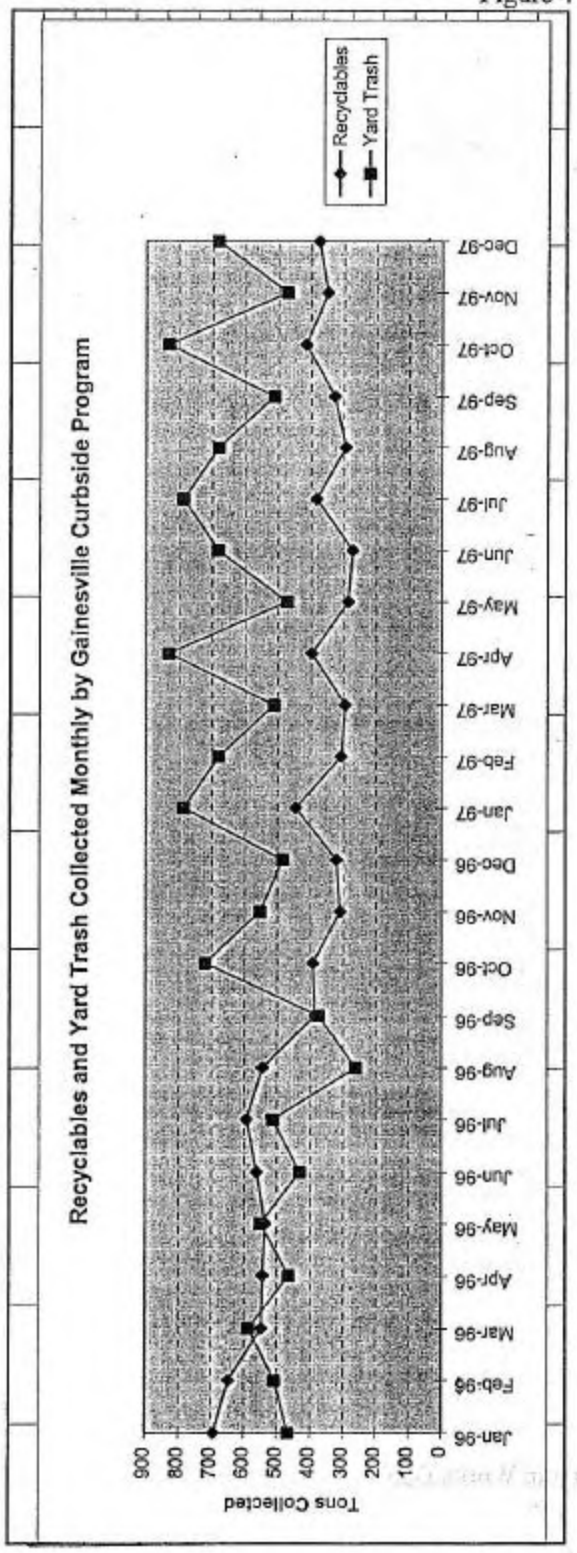
Fiscal Year	Fee Per Ton
1984-85	$7.50
1985-86	$15.00
1986-87	$30.00
1987-88	$30.00
1988-89	$35.00
1989-90	$40.00
1990-91	$45.00
1991-92	$45.00
1992-93	$45.00
1993-94	$45.00
1994-95	$50.00
1995-96	$50.00
1996-97	$50.00
April 1997	$35.00
1997-98	$25.00
1998-99	$34.00
1999-00	$34.00*
2000-01	$34.00*

*Estimated

SOURCE:

Norm Thomas, Alachua County Public Works Department, February 1999.

Figure 4



Source: City of Gainesville Solid Waste Division, 1999

According to the City of Gainesville Solid Waste Division, in calendar year 1997, the approximately 23,000 city households participating in the curbside recycling program averaged 82.3 pounds of recyclables and yard trash per month per household, or 987.76 pounds per year. At this rate, the citywide curbside recycling program was annually diverting over 10,000 tons of waste from the Landfill. With a $25 per ton tipping fee in fiscal year 1997-98, this diversion avoided approximately $293,518 in landfill tipping fees annually. In addition, based on average weekly, monthly and annual garbage, recyclable, and yard trash figures, this was an overall recycling level of 39 percent for the residential portion of the total solid waste generation within city limits. Note also that yard waste currently represents approximately one-half, by weight, of all curbside recyclables being collected (see Figure 7 in the Appendix).

For solid waste, recyclables, and yard trash, city collection rates are expected to vary seasonally. For solid waste and recyclables, peak tonnages are expected during the fall and spring (when the University of Florida is in full session), and in January (just after the December holiday season). For yard trash, peak tonnages are typically in the spring and summer, when maximum yard maintenance activity occurs.

The UF campus recycling program currently collects approximately 6,000 tons of collected recyclables per year (or 35 percent of the waste stream). The campus solid waste coordinator has a target of 6,000 tons per year (a 38 percent recycling rate), which is expected to be near the maximum attainable recycling rate with the current recycling system. Yard waste currently represents approximately 40-45 percent, by weight, of all collected recyclables, and paper is approximately 38 percent of the total.[16]

Disposal of Solid Waste

The vast majority of solid waste generated within city limits and collected for disposal is delivered to the transfer station. A relatively small and unknown quantity of solid waste destined for disposal is not sent to the transfer station. Such waste is (1) delivered to public and private construction and demolition debris landfills; (2) taken to rural collection centers; (3) incinerated by the UF Health Center, UF Veterinary School, and the VA Medical Center, after which the ash is hauled to a location outside of Alachua County; or (4) illegally dumped. (See Map 1 in Appendix. For more information regarding ash disposal, refer to the "Biohazardous Waste" section.)

CAPACITY ANALYSIS

Major Generators

[18] Al Krause, Ibid.

The major generators of solid waste using the transfer station for disposal include residents, institutions and businesses of:

* City of Gainesville
* Unincorporated Alachua County
* University of Florida campus
* City of Alachua
* City of Hawthorne
* City of LaCrosse
* City of Micanopy
* City of Archer
* City of Newberry
* City of High Springs
* City of Waldo
* Gilchrist County

Solid waste generation by land use type for Alachua County is estimated as follows:[17]

Residential = 50 percent of the total waste stream
Commercial/Industrial = 25 percent
Institutional = 12 percent
Special = 13 percent

It was estimated in 1997 that the City of Gainesville accounted for approximately 45 percent of the waste stream being disposed of at the Southwest Landfill.[18]

Projected Waste Generated by the City, Level-of-Service Standards, and Remaining Disposal Capacity

It is estimated that 195,758 tons of solid waste was generated countywide in fiscal year 1996-97.[19] By using the estimate of the waste proportion from the city (45 percent of the waste stream being disposed of at the S.W. Landfill), it is estimated that 88,091 tons of solid waste was generated within the city in 1996-97 (see Table 1). This represents 4.8 pounds per person per day. By factoring in a 38.85 percent recycling rate, the net city waste delivered to the S.W. Landfill in 1996-97 was 53,868 tons (Table 1).

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[17] Camp, Dresser and McKee. 1987. North Central Florida Comprehensive Regional Solid Waste Management Master Plan, Ibid.

[18] Text File Report on Legislative file number 970356, Interlocal Agreement with Alachua County for Solid Waste Disposal, September 8, 1997.

[19] Alachua County Public Works Department, September 1998.

Table 1 projects that 114,481 tons of Class I solid waste and recyclables will be generated within the city by 2005. The City therefore maintains the following level-of-service for solid waste collection:

SOLID WASTE COLLECTION RATE

Solid Waste and Recyclables From Within City in 2005 = 114,481 tons

Projected City Population in 2005 = 106,856

= 1.07 tons/capita/year

= 5.9 lbs./capita/day

The frequency and provision of solid waste collection for both residential and non-residential generators shall be sufficient to ensure public health and safety, protection of environmental features, and energy conservation, and shall be provided in such a manner as to discourage urban sprawl.

SOLID WASTE DISPOSAL RATE

Waste From Within City in 2005 After Recycling = 70,005 tons

Projected City Population in 2005 = 106,856

= 0.655 tons/capita/year

= 3.6 lbs./capita/day

Table 1. Gainesville Solid Waste Generation Projections

Fiscal Year	Population	Total Waste (Tons)	Tons/Capita	Recycled (Tons)	Net Waste (Tons)
1997	99,870	88,091	0.882	34,223	53,868
1998	100,315	101,622	1.01	39,480	62,142
1999	101,405	103,723	1.02	40,296	63,427
2000	101,498	105,869	1.04	41,130	64,739
2001	102,548	107,536	1.05	41,778	65,758
2002	103,608	109,230	1.05	42,436	66,794
2003	104,680	110,953	1.06	43,105	67,848
2004	105,762	112,703	1.06	43,785	68,918
2005	106,856	114,482	1.07	44,476	70,006
2006	108,145	116,083	1.07	45,098	70,985
2007	109,451	117,708	1.07	45,730	71,978

2008	110,772	119,355	1.08	46,369	72,986
2009	112,109	121,027	1.08	47,019	74,008
2010	113,458	122,723	1.08	47,678	75,045

NOTES:

- Population estimates from the Gainesville Dept. of Community Development. Estimates for the years 2000 and 2005 are based on the projections of the Shimberg Center for Affordable Housing. After 2005, the projections are based on the City's percentage share of the total Alachua County population at the year 2005.
- Per capita waste generation for FY 1997 based on estimated total solid waste generated in FY 1997 (45% of 195,758 tons = 88,091 tons). Rate assumed to remain constant over planning horizon.
- Projected recycling rate is 38.85 percent for the entire projection period.
- Total waste for 1997 is the waste originating from within Gainesville city limits and is estimated at 45 percent of the waste stream being disposed of at the County solid waste management facility.
- All waste figures are in tons.

SOLID WASTE DISPOSAL: LEVEL-OF-SERVICE STANDARD

For the City to establish a level-of-service standard for solid waste disposal, an interlocal agreement between the City and Alachua County has been negotiated to ensure disposal capacity for existing and future development within the City over the 10-year planning horizon. The agreement requires the County to allocate and maintain sufficient Class I and Class III solid waste capacity to accommodate the following Class I and Class III solid waste disposal level of service standard:

0.656 tons/capita/year (3.59 lbs./capita/day)

Note that this per capita disposal rate is less than the rate estimated by the County[20] to apply countywide. Although there is a higher per capita amount of commercial, industrial, and institutional square footage within Gainesville city limits than outside of city limits, the City in recent years experienced a steady decline in it's share of the total county population. Also, the amount of recycling in the City is approaching 40 percent, further reducing the amount of waste that requires disposal. The City will continue to maintain a solid waste concurrency mechanism to ensure that new development within city limits is concurrent with the adopted level of service standard for Class I solid waste disposal. The Solid Waste LOS will have to be changed both

[20] Solid Waste Element of the Alachua County Comprehensive Plan (adopted October 1991).

in applicable Goals, Objectives and Policies of the Comprehensive Plan and in applicable provisions of the Land Development Code. Refer to page A-12 in the Appendix for the text of the current interlocal agreement between Gainesville and Alachua County.

Southwest Landfill Facility Performance

As described in the "Facility Performance" section of the Alachua County Comprehensive Plan,[21] the S.W. Landfill provided solid waste management services since 1982, and provided sufficient capacity to accommodate all Class I and Class III wastes generated within the county prior to its closing. The Landfill officially closed on December 19, 1998, and the transfer station became fully operational on December 21, 1998.

Problems and Opportunities Associated with Solid Waste Facilities Replacement, Expansion, and New Facility Siting

As described in the "Analysis of Problems and Opportunities Associated with Landfill Facility Needs" section of the Alachua County Comprehensive Plan,[22] the County contracts with CH2M-Hill to monitor both operating and closed county sanitary landfills. The monitoring program has detected evidence of contamination in certain monitoring wells at the S.W. Landfill and the closed Northeast and Northwest Landfills. The closed Southeast landfill, on the other hand, has shown no violations of state or federal standards. As a result of the contamination at the S.W. Landfill, the County entered into a consent agreement with The Florida Department of Environmental Protection (FDEP) as described in the "Impact of Southwest Landfill on Environmental Features" section below. A contamination report was prepared by CH2M-Hill for the Northeast Landfill. Assessment of the site contamination is continuing. In 1993, a pesticide was found in groundwater at the NW landfill. The site was remediated and in 1994 the source of the contamination was removed.[23]

Future Needs

In anticipation of the need to close the S.W. Landfill in 1998, in 1989 Alachua County established a landfill site selection committee. This committee was charged with identifying an environmentally and economically suitable site containing 1,440 acres able to accommodate 50-

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[21] Ibid.

[22] Ibid.

[23] Evaluation and Appraisal Report on Solid Waste Element of Alachua County Comprehensive Plan: 1991-2011, September 28, 1998.

to-100 years of landfill needs.[24] As described in the "New Landfill Siting" section of the Alachua County Comprehensive Plan[25], this committee (and a second committee formed later) has used landfill siting criteria to identify areas most suited to a new facility. The criteria include consideration of transportation efficiencies, environmental protection, protection of public health, avoidance of major population centers, and sufficient parcel size. The process resulted in the identification of two favorable sites located in the northeast section of the county.

The Alachua County Future Land Use Map was amended in 1995 to designate an area for a solid waste management facility. The Florida Department of Community Affairs Notice of Intent to Find This Amendment in Compliance was challenged, and pursuant to a settlement of the challenge, a committee chosen by the Board of County Commissioners initiated a Request for Proposal process for alternatives to a landfill. In response to the RFP, a proposal was submitted by Waste Management, Inc. to construct a transfer station and dispose of the solid waste in another county. In December 1996, the County Commissioners directed staff to proceed with the option as outlined in the proposal. The County has a ten-year contract for disposal with the New River Association with options for renewal every five years. Renewal is contingent upon New River acquiring additional acreage for landfilling operations. The County did purchase one of the two identified sites deemed favorable by the landfill selection process. Site Echo will remain in reserve as a possible future landfill site.[26] The transfer station became fully operational on December 21, 1998.

The following alternatives are available to the County and City if at some point in the future the County and City would like to consider different waste management alternatives:

* **Transfer to Other Counties**

  This was the option chosen by Alachua County. It required an interlocal agreement between Alachua County and an outside governmental association with available Class I landfill capacity sufficient to accommodate county solid waste until Alachua County is able to re-establish landfill space within the county. Unless a landfill site is chosen within the County in the future, the transfer alternative must be adopted. This is because none of the other alternatives described below are currently able to divert 100 percent of the generated solid waste from landfills.

  Advantages

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[24] Conversation with Jim Abbott, Alachua County Dept. of Public Works, March 9, 1990.

[25] Solid Waste Element of the Alachua County Comprehensive Plan (adopted October 1991).

[26] E.A.R. on Solid Waste Element of Alachua County Comprehensive Plan: 1991-2011, September 28, 1998.

* Relatively high public acceptance by the sending community.

* Can be implemented relatively rapidly and at relatively low cost.

* Such remote landfilling would reduce the potential for environmental harm within Alachua County.

Disadvantages

* Relatively low public acceptance by the receiving community and therefore may not be politically feasible.

* Would reduce local control over waste management and planning.

* Would create disincentives for minimizing hazardous waste and waste quantities.

* **Increased Re-use, Composting, Recycling**

This would require the County and City to institute programs and regulations, which would increase the level of re-use, composting, and recycling beyond the rate attained at the time of landfill capacity. Since it is not currently feasible to divert 100 percent of generated solid waste from landfills with these techniques, some form of landfilling would still be required. Note that this alternative should be implemented in conjunction with any of the other alternatives chosen.

Advantages

* Relatively high public acceptance.

* Can be implemented relatively rapidly and at relatively low cost.

* Environmentally benign or beneficial.

Disadvantages

* Amount of waste potentially recyclable may be small.

* May require the City to use significantly higher levels of financial or legal coercion (or both) to compel citizens to increase the rate of recycling.

* **Resource Recovery and Refuse-Derived Fuel**

This alternative would require the County to establish a facility to collect and salvage valuable materials from the Gainesville waste stream, and convert a portion of the stream to usable fuel to be sold for energy generation.

Advantages

* Higher public acceptance than mass-burn because of potential for salvage and less toxic air emissions. (Salvaging can remove materials which are toxic when burned.)

* Can be used by utility companies, which mix the fuel with coal to produce energy.

* Can produce income from salvaged materials and energy.

Disadvantages

* Fuel cost or quality (or both) may not be acceptable to the receiving utility.

* High initial capital cost and on-going operation and maintenance cost.

* Re-use, source reduction, composting, and recycling may be discouraged to increase the feasibility of resource recovery.

* **Mass-Burn Incineration**

This would require the County to establish a facility to incinerate a portion of Gainesville's waste stream.

Advantages

* Disease vectors such as rats and insects are destroyed.

Disadvantages

* Ash and air emissions may cause significant environmental and public health degradation.

* High initial capital cost and on-going operation and maintenance cost.

* Re-use, source reduction, composting, and recycling may be discouraged to increase the feasibility of mass-burn.

Because the disadvantages are so significant, mass-burn incineration is not a viable alternative.

Environmental Impact of Southwest Landfill

The primary impact of the recently closed S.W. Landfill on environmental features is the leachate from the decomposition of materials in the Landfill. Leaching is the extraction or flushing out of dissolved or suspended materials within the landfill by water or other liquids as they percolate downward through the landfill. Landfill leachate typically contains a variety of materials hazardous to water quality, including heavy metals and volatile organic compounds, which must be prevented from reaching the groundwater.

To minimize leachate contamination, the cell at the S.W. Landfill had a composite liner system, a dual collection system for both stormwater and leachate, and an on-site treatment plant for heavy metal precipitation. After treatment, the leachate was hauled by truck to a transfer facility where it was metered into the wastewater system for final treatment at the Kanapaha Wastewater Treatment Plant. The County Office of Waste Management and the University of Florida Environmental Engineering Department cooperated to conduct studies of the chemistry of the leachate from the Landfill, and the effects of the leachate on the environment.[27]

Studies of the S.W. Landfill conducted by CH2M-Hill since 1985 have shown evidence of contamination exceeding safe drinking water standards in certain monitoring wells. The County signed a consent order issued by the Florida Department of Environmental Regulation (FDEP) in 1986 for the S.W. Landfill. The order requires the County to take remedial actions such as installation of a liner and leachate treatment facility for new Class I disposal cells, covers for closed disposal areas, and the purchase of off-site property.[28]

See the "Hazardous Waste" section for more information about the S.W. Landfill and hazardous waste management strategies.

Environmental concerns related to the new transfer station are limited to nuisance factors such as noise, odors, and heavy truck traffic. The adjacent land is currently vacant, with the Gainesville Regional Airport the nearest use.

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[27] Solid Waste Element of the Alachua County Comprehensive Plan (adopted October 1991).

[28] Ibid.

Impact on Residential Curbside Garbage Fee

The residential curbside garbage fee will probably be increased in future years to cover potential incremental increases in the disposal tipping fee and increases in transportation costs. Any increased tipping fee would likely be a consequence of:

* An increase in the cost to operate and maintain the existing county solid waste system;
* The diversion of County commercial waste from the transfer station.

In part, an increased tipping fee might be needed to offset the effect of waste tonnages being diverted from the transfer station. This diversion (by recycling and the use of other transfer and/or landfill facilities) decreases the amount of revenue collected by the transfer station, which necessitates a tipping fee increase to maintain the existing revenue stream.

As shown previously in Figure 3, the tipping fee for residential waste at the transfer station is currently $34 per ton. Tipping fees in Florida counties ranged from $23 per ton in Manatee and Palm Beach Counties, to $92 per ton in Monroe County. [29]

The residential curbside garbage fee for the city is largely determined by the tipping fee. Collection fees are volume based and vary according to whether a household chooses a 35-, 64- or a 96-gallon cart. Some single individuals and smaller households have expressed a desire to have the option of choosing a smaller size cart, since many have difficulty filling up the 35-gallon cart in time for regular pickup service. This may reduce the incentive to recycle since some people may decide to fill up the cart with recyclable material. A plan is being developed to introduce a 20-gallon cart later this year, with correspondingly lower fees.

City Public Works Waste Management Practices

The following wastes are collected as a part of City operations:[30]

Concrete

Under current city operations, all of the waste concrete is recycled.

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[29] Department of Environmental Protection, Solid Waste Management in Florida, June 1998.

[30] Conversation with Tom Frisbie, City of Gainesville Public Works Department, January 22, 1999.

Sand and Leaves

These items are picked up by City street sweepers. They are classified as a hazardous material due to lead content. A contract with Alachua County commits the City to landfill this material at the transfer station. The City currently spends approximately $100,000 per year to landfill this material.

Trees and Vegetation

Smaller branches of trees and vegetation collected from City operations are chipped and used as mulch for the tree-planting program. Medium branches and trunk pieces to 12" in diameter are cut into fireplace size pieces and left by the tree for citizens to pick up. Twelve to 36" branch and trunk pieces are carried to the public works compound for splitting for the Fire Wood Distribution Program. Pieces larger than 36" are placed in dumpsters and hauled to Wood Resources Recovery with other branch clippings, where they are made into mulch.

House Demolition Debris

Debris from City house demolitions is recycled as much as possible, and the remainder is delivered to the transfer station.

City Landfill Analysis

The City C & D landfill was located on the eastern portion of the Gainesville Regional Airport property. Part of the site included the Old Airport Landfill discussed under the "Hazardous Waste and Contamination Sites" section later in this Data Collection and Analysis Report. In cooperation with the Florida Department of Environmental Protection (FDEP), a remedial study was conducted for the old landfill. To date, there has been no detection of contamination of tributaries to Little Hatchet Creek as a result of the materials placed at the old landfill. Monitoring of the groundwater is required quarterly to detect possible contamination.

The landfill was part of a borrow pit operation for City sand needs. The excavated space was filled with waste concrete pieces too large for rip-rap recycling. The landfilled concrete was derived exclusively from City Government operations within city limits. The concrete is considered inert and therefore is not expected to be a threat to the environment.

The City landfill was closed in 1995 as a C&D landfill. From 1995 to 1997, the facility was used for clean fill only. It was not worth the liability insurance cost to maintain the site as a C&D landfill.[31]

Other Construction and Demolition Debris

As noted above in the "Disposal of Solid Waste" section, a relatively small and unknown quantity of solid waste destined for landfilling is not sent to the transfer station. Much of this waste consists of construction and demolition debris destined for public and private construction and demolition debris landfills, rural collection centers, or is illegally dumped (see Maps 1 and 3).

Sludge Disposal

Significant amounts of sludge are collected from three wastewater treatment facilities within the city limits: (1) the Gainesville Regional Utilities (GRU) facility at Kanapaha; (2) the GRU facility at South Main Street; and (3) the University of Florida facility on the university campus.

The Kanapaha Water Reclamation facility (KWRF) serves the GRU service area roughly west of 13th Street. The South Main Street Wastewater Treatment Plant (MSWWTP) facility collects wastewater from GRU customers east of 13th Street.[32] Existing biosolids digestion capacity allows GRU to comply with Chap. 62-640, FAC requirements for treating and land applying treated wastewater residuals. These requirements are based on and adopt by reference the EPA regulations (CFR Part 503, Subpart D) for the treatment and subsequent land application of biosolids. Since biosolids are aerobically digested, they are considered "Class B" biosolids in accordance with rules of both the FDEP and EPA. All biosolids removed from GRU's facilities are land applied either by surface application or soil incorporation.

Because the service area has relatively low levels of industrial activity, the sludge from both the KWRF and the MSWWTP are classified using EPA criteria "Exceptional Quality." The wastewater biosolids are digested, thickened, and then hauled by truck for land application at one of the land application sites in Alachua County and surrounding areas. GRU maintains a current Agricultural Use Plan that includes each application site and tracks the nutrient loading throughout the year. In some cases, pH adjustment is necessary prior to land application of biosolids. Adjustment of pH is accomplished by either spreading a calcium carbonate by-product from the Murphee Water Treatment Plant or applying agricultural lime.

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[31] Conversation with Emory Swearingen, City of Gainesville Public Works Department, 1998, April 1999.

[32] Gainesville Department of Community Development, 1991. Ibid.

Currently, the two GRU facilities produce 35,000 gallons per day of biosolids at approximately 5 percent solids.[33]

The university facility serves university campus wastewater generators.[34] Sludge from the facility is a wet sludge or slurry, used in land application.[35] The university currently ships all collected sludge to a tree farm for land application. Like the GRU sludge, university sludge is classified as "Grade 1." As a result, there is no expected adverse environmental impact from current university sludge land application practices.

DIVERTING WASTE FROM THE LANDFILL

In 1988, the Florida Legislature passed the Solid Waste Management Act, which, among other things, requires each county to reduce by 30 percent the amount of municipal solid waste that would be disposed of in the absence of recycling efforts, and that this reduction be attained by 1994. This objective was established in recognition of the fact that landfilling is an extremely costly method of solid waste management. The Act also requires the following:

* Only shredded tires accepted at landfills (by 7/1/89).

* Used oil banned from landfills (by 10/1/89).

* Major appliances (white goods), and plastic grocery bags not biodegradable in 120 days banned from landfills (by 1/1/90).

* Yard trash, and plastic foam and plastic-coated paper take-out containers (unless biodegradable in 12 months) banned from landfills (by 1/1/92).

* Plastic bottles and packages must have a molded label showing type of resin (by 7/1/92).

* One-cent charge on all glass, aluminum, and plastic containers not recycled at rate of at least 50 percent (by 10/1/92).

* A majority of the newspaper, aluminum cans, glass, and plastic bottles must be diverted from the landfill and recycled (by 12/31/94).

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[33] David Richardson, Gainesville Regional Utilities, February 1999.

[34] Gainesville Department of Community Development, 1991. Ibid.

[35] CH2M-Hill. 1987. Ibid.

* Two-cent charge on all containers not recycled at rate of at least 50 percent (by 10/1/95).

These state requirements are designed to divert from the disposal system those wastes which should be managed by one of the five diversion techniques described below. Typically, diverting waste material from landfills does not make money for the City (or even pay the full cost of the diversion programs). Instead, the primary value associated with diversion is the avoided costs (especially tipping fees and environmental costs). While the City is successfully diverting large amounts of recyclable materials through the curbside recycling program, Table 5 in the Appendix lists additional significant materials delivered to landfills from within city limits in recent years that should be diverted from landfills because of their recycling potential, their tendency to consume large amounts of landfill space, or their potential for harming the environment.

In general, there are four techniques available for diverting solid waste from landfills: (1) source reduction; (2) re-use; (3) recycling; and (4) composting. Each will be discussed below.

Source Reduction

Source reduction involves the reduction in quantity of material or toxicity of a manufactured product (or elimination of the item from the production stream). Typically, items targeted for source reduction are those deemed extremely difficult to manage in an environmentally acceptable manner. Examples include DDT, chlorofluorocarbons, and asbestos. Information is available from the City's Solid Waste Division to the general public and businesses concerning source reduction and how it is effective at reducing the amount of waste and the cost of disposing of it.[36]

Advantages of Source Reduction

* Represents the most effective means of reducing pollution, saving energy, and conserving other natural resources.

Disadvantages of Source Reduction

* Difficult for local governments to encourage source reduction.

Source Reduction Strategies

* Provide information to the local legislative delegation to support state and federal initiatives which encourage the reduced production or elimination of difficult-to-dispose products.

[36] Solid Waste Division, City of Gainesville, 1999.

Re-Use

Re-use involves the collection of discarded materials and the re-use of those materials by another user. (For example, the collection and re-use of polystyrene peanuts and books.) Re-use differs from recycling in the sense that re-use involves little or no reprocessing of the material before it is put back into use, whereas recycling involves reprocessing techniques such as melting or shredding to convert the material to a usable form.

Currently, there are several individuals and businesses in the city which accept items such as white goods, old autos, furniture, and books for re-sale. Among the programs available that are designed to encourage re-use are:

1. Volume-based rates,
2. Distribution of the booklet, "Breaking the Waste Habit,"
3. The "smart shopper" promotion,
4. Backyard recycling, mulching, etc.,
5. The furniture collection and lottery event, and
6. The City auction of surplus items.[37]

Advantages of Re-Use

* Extremely efficient as a means of conserving energy and other natural resources.

* Maintains a market of relatively low-cost products.

* Results in less generation of pollution than the manufacture of products from raw materials.

Disadvantages of Re-Use

* Difficult to establish sufficient incentives to encourage a high rate of re-use.

* Planned obsolescence of products by the manufacturer.

Re-Use Strategies

* Encourage the use of re-usable tote bags for groceries and other retail shopping.

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[37] Gina Hawkins, Gainesville Recycling Coordinator, April 1999.

* Ensure that City purchasing policies encourage the purchase of re-usable products.

* Provide information to the local legislative delegation to support state and federal initiatives, which encourage re-use of materials and products.

Recycling

Recycling involves the separation of materials such as glass, aluminum, paper, and scrap metal from solid waste, and delivery such materials to a facility which reprocesses the material for re-use. As described previously, the City has established an aggressive recycling program that included all single-family residences as of May 1989. In addition, a mandatory commercial recycling program was established in 1997. The University of Florida, which generates 5 to 10 percent of all waste delivered to the transfer station, has also started a strong recycling program. As an added recycling incentive, the City has revised its land development regulations to allow recycling centers within the MU-2 (mixed use medium intensity) zoning district. These actions are in addition to previously existing recycling efforts, such as auto scrapping, auto battery and oil collection, and programs in certain government office buildings.

Advantages of Recycling

* High level of public acceptance.

* Saves relatively large amounts of energy and other natural resources.

* Results in less generation of pollution than the manufacture of products from raw materials.

Disadvantages of Recycling

* Often difficult to identify lucrative markets for recyclables.

* Recyclables such as certain types of plastic and paper either cannot be recycled using current technology, or may yield a recycled product that is inferior to the original product.

Recycling Strategies

* Establish government quotas for the purchasing of recycled materials.

* Establish monetary incentives, such as a variable-rate user fee curbside collection program, for increased household recycling.

* Maximize the number of non-single-family land uses (such as multi-family, commercial, governmental, and institutional) involved in the recycling program.

* Discourage the use of difficult-to-recycle materials such as glossy paper and certain types of plastic.

* Promote recycling through public education programs.

* Establish or expand government and private office paper recycling programs.

* Provide information to the local legislative delegation to support state and federal initiatives which encourage recycling of materials and products.

The State Comprehensive Plan (Chapter 187, Florida Statutes) has a new provision concerning the initiation of programs to develop or expand recyclable material markets, particularly those involving plastics, metals, paper and glass. In 1998, the City Commission approved a source reduction and recycling procurement policy that is intended to increase the recycled content of products purchased and used by the City, reduce waste in the manufacture and use of products purchased and used by the City, and encourage businesses that promote recycling to locate within the Gainesville area. This will increase demand for products with recycled content, which will improve the price for materials collected for recycling, as well as encourage source reduction.

Composting

Composting involves collecting organic wastes such as yard trash (mostly grass, leaves, and tree branches) and kitchen waste (food scraps, etc.). These wastes are then converted to a soil conditioner for use in soil improvement efforts. As noted previously, both the City and the University have established yard trash composting programs. In addition, the University has conducted pilot studies to examine the efficiency of various types of composting methods.

Advantages of Composting

* Represents a large percentage of the total quantity of waste historically delivered to landfills.

* Home composting of yard and kitchen waste reduces the amount of waste to be picked up at curbside, and provides a soil amendment for home gardens and landscaping. By reducing the amount picked up at curbside, the City lowers costs for collection, transport, and processing of residential waste.

Disadvantages of Composting

* Home composting of kitchen waste when done improperly can result in nuisances such as odor and attraction of scavenging animals.

Composting Strategies

* Encourage home composting of yard trash and kitchen wastes.
* Provide information to the local legislative delegation to support state and federal initiatives which encourage composting.

Diverting from Landfills at Various Rates

As noted previously, state law requires all Florida counties to reduce the waste that is disposed of by 30 percent by 1994. (No more than 50 percent of this reduction may be due to yard waste, construction/demolition debris, white goods, and tires. This results in the adjusted recycling rate versus the unadjusted recycling rate which is the weight of recycled wasted divided by the total weight of all the solid waste collected in the jurisdiction.) This objective is part of a nation wide effort to extend the life of landfills and therefore reduce the economic and environmental costs of waste disposal.

As noted previously in the "Trends in Solid Waste, Recyclables, and Yard Trash Collection" section, it is currently estimated that the City is diverting approximately 38 percent of the residential portion of solid waste generated within city limits through its curbside recycling program. The current diversion rate for all land uses within city limits (which includes commercial, industrial, and institutional generators) is unknown. As of, however, it has been estimated that the total countywide diversion rate for all land uses is approximately 34 percent adjusted and 47 percent unadjusted.[38]

The maximum theoretical amount of municipal waste diversion that can be attained through recycling ranges from 50 to 80 percent.[39] The City of Seattle established a goal of recycling 40 percent by 1991, 50 percent by 1993, and 60 percent by 1998.
Existing recycling rates include 50 percent in Japan, 52 percent in Woodbury, New Jersey, and 59 percent in Perkasie, Pennsylvania.[40]

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[38] Gina Hawkins, Gainesville Recycling Coordinator, April 1999.

[39] Concern, Inc. 1988. Ibid. Also: Blumberg, Louis, and Robert Gottlieb. 1989. "The Facts." Planning. November 1989. Also: Miller (ed.) 1979. Living in the Environment. Wadsworth Co., Belmont, CA.

[40] Environmental Protection Agency. 1989. Recycling Works! Washington, D.C. Also: Concern, Inc. 1988. Ibid. Also: Dumas, Kitty. 1990. "N.J. City Divides Its Garbage

The City surpassed the 30 percent diversion rate by 1994 in accordance with the State goal established by the 1988 Solid Waste Management Act. The City intends to go beyond the State goal and achieve a 50 percent diversion rate by 2000.

Note that economic and environmental benefits due to diversion would be attained by the City even if additional landfill capacity becomes available in the future. This is true for two reasons: (1) even with infinite landfill capacity, there are economic and environmental costs associated with failure to divert waste from landfills; and (2) assuming landfill capacity is finite, diverting waste saves costs by extending the life of existing and future landfills.

HAZARDOUS WASTE

Background

As required by the state Water Quality Assurance Act of 1983, the Alachua County Department of Environmental Protection (A.C.E.P.D.) prepared a hazardous waste assessment for Alachua County.[41] The assessment commenced in May 1984 and was completed in May 1987. The following is a summary of its findings:

Approximately 16.5 million pounds of hazardous wastes were generated annually in the county by large quantity generators (LQGs) and small quantity generators (SQGs). (Households also contribute significantly to the hazardous waste problem, but were not included in this assessment.) Based on a 1987 Alachua County population of 179,715, this generation rate is equal to 92 pounds per person per year. Most generators and waste volumes are located in the Gainesville urban area.

Hazardous Waste Generators and Quantities

Major hazardous waste problems in the County originate from SQGs, conditionally exempt small quantity generators (CESQGs) and households.

Based on 1997 data provided by the Alachua County Department of Environmental Protection, the top five hazardous wastes-generated by SQGs, by weight, are as follows:

Hazardous Waste	Pounds/Year	Percent of Total

and Reaps Savings." Governing. January 1990. Also: Miami Herald. 1989. "Market snags could lay law's merits to waste." June 25.

[41] Alachua County Department of Environmental Services. 1987. "Hazardous Waste Management Assessment for Alachua County." Gainesville, Florida.

Oil Filters	8,504,762	51
Used Oil and Other Lubricants	2,946,844	18
Lead Acid Batteries	2,447,905	15
Absorbents with listed non halogenated solvent	749,560	4.5
Spent anti-freeze w/low lead	614,282	3.7

The largest LQGs in Alachua County as reported in 1997 were Perma-Fix with 3,479 tons generated, Eveready Battery Company with 591 tons generated, Archimica (formerly known as PCR) with 448 tons generated and Koppers Industries with 194 tons of waste generated.

Hazardous Waste Management

A permanent commercial hazardous waste management facility was built at the Leveda Brown Environmental Park/Transfer Station just outside of city limits at 5115 N.E. 63rd Avenue, to treat, store, or transfer hazardous waste produced by CESQGs and households. Paint, paint thinners, used oil, dry-cell batteries, and lead-acid batteries are collected at the five rural collection centers. Also, as noted in the Alachua County Comprehensive Plan,[42] several commercial establishments in the county currently collect used oil and auto batteries.

A.C.E.P.D. staff operates the permanent Household Hazardous Waste Collection Center at the Leveda Brown Environmental Park/Transfer Station. The center began operation in the fall of 1999 and is open five days a week, year round, to accept household hazardous waste and CESQG business waste.[43]

Hazardous Waste and Contamination Sites

There are ten hazardous waste and contamination sites within city limits. There are also several abandoned dump sites (e.g., Citizens Field, Arredondo, A. Quinn Jones, Old City Dump northeast of the Main Street WWTP, the Original City Dump at Gainesville Shopping Center, Williams Elementary/Lincoln Middle School) which are not included because they were used primarily for household waste. The potential for significant hazardous waste contamination from households is thought to be minimal. Information about the sites was obtained from FDEP and the Alachua County Department of Environmental Protection as of June 1999. The sites are briefly described below and shown in Map 3, in Appendix A.

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[42] Solid Waste Element of the Alachua County Comprehensive Plan (adopted October 1991).

[43] Kurt Seaburg, Alachua County Environmental Protection Department (A.C.E.P.D.), July 1999.

Cabot Carbon/Koppers

The Cabot Carbon/Koppers site was designated as a "Superfund" site in 1983. Activity at the site has contaminated the surficial aquifer and soil. Compounds found in groundwater and soils include phenols, terpenes, pentacholorophenol, creosote, copper, chromium, arsenic. Clays in the Hawthorn Formation which underlie the site apparently protect the Floridan aquifer, as well as the municipal wellfield 2.3 miles to the northeast. In June 1990, the Environmental Protection Agency gave tentative approval to a plan by Cabot Corp. and Beazer Materials and Service (formerly Koppers Co.) to clean up this site. Site investigation was completed by EPA in 1990. Remedial action methods selected included in-situ bioremediation, soil excavation, soil washing and groundwater treatment. Remedial actions and groundwater monitoring are on-going.

Crom Corp. (Zirtech)

Groundwater monitoring identified contamination of the unconfined Floridan aquifer by this company, which manufactures drilling fluid additives. Contaminants include iron and chromium. Additional investigations found no surface water contamination. No further testing is being done. In cooperation with FDEP, the company carries out on-going compliance inspections.

Fabco Air

The surficial aquifer and soil at this site were contaminated with solvents through an industrial septic tank drainfield. Fabco has completed a soils cleanup at the site. A contamination assessment plan was approved by FDEP in January 1988, and a consent order for corrective actions was executed in March 1988. Groundwater assessments at the site have been completed. Source treatment of the groundwater is the likely form of remedial action to be taken in the near future.[44]

Flying Colors

An inspection in July 1988 revealed hazardous waste from this facility was being discharged into Little Hatchet Creek. The facility strips and paints aircraft at a Gainesville Regional Airport site. In May 1990, a final order was issued by FDEP. The facility obtained a closure permit from FDEP on June 1993. The permit included provisions for closing two land treatment units and a storage area. Closure activities were completed in 1994.

Former Gainesville Airport Landfill and Burn Site

A landfill and unlined solvent pits have contaminated the surficial aquifer. Compounds include organics (benzene, trichloroethylene) and heavy metals (chromium and lead). In February 1990, Environmental Science and Engineering (ESE) consultants submitted a contamination assessment plan to FDEP. Additional sampling of the aquifer was conducted. A risk assessment plan prepared by ESE was approved by FDEP in September 1990. A remedial study was conducted for the old landfill and to date, there has been no detection of

[44] Waste Cleanup Section, Department of Environmental Protection, Jacksonville, FL, May 1999.

contamination of tributaries to Little Hatchet Creek as a result of the materials placed at the old landfill. Monitoring of the groundwater is required quarterly to detect possible contamination.

Gainesville Gas

Asphalt sludges and residues were reportedly disposed of at this site by gas manufacturing companies which previously operated at the site. In May 1989, a preliminary contamination assessment was completed with recommendations for further study. Gainesville Regional Utilities, which currently owns the site, has submitted a contamination assessment plan to FDEP. The site is eligible for the Early Detection Incentive (EDI) program, which provides for state-funded remediation of petroleum contamination sites. This site is now the subject property of the Brownfield Project, located south of Depot Avenue, with an estimated cost $2,000,000. This project would involve using the brownfield site for a master stormwater basin for the downtown area. A grant funded a recent environmental assessment of the site to determine the environmental issues and how remediation would be done.[45]

Gainesville Scrap

Soil samples from the site indicated the presence of PCBs. The source of the PCBs was apparently 2000 gallons of transformer oil that was dumped on the ground during transformer recycling. Gainesville Scrap and Iron Co. formerly recycled metal (including transformers) at the site, which was acquired by Florida Mining and Materials (FMM) in 1987. FDEP is negotiating a consent order with FMM for an assessment and remediation plan. The site received a "No Further Action" determination from FDEP in 1993.

PCR, Inc. (formerly SCM)

Water quality in the surficial aquifer was degraded by past plant practices including waste burial, possible spills, and possible piping leaks. On-site contamination from organic compounds was identified through groundwater monitoring. A contamination assessment plan prepared by PCR in cooperation with FDEP was conditionally approved by FDEP in May 1990. A monitoring program began in January 1991, and remedial action has proceeded.[46] PCR is now known as Archimica.

University of Florida Landfill

Contamination by several organic compounds (benzene, chlorobenzene, vinyl chloride, clomethane, and dichlorobenzene) has been detected at an upgradient off-site well. FDEP plans to conduct an investigation to determine the source of the contamination, and will then begin enforcement action against the responsible parties for site remediation. Assessment work and groundwater sampling was conducted by the Florida Department of Environmental Protection Site Investigation Section in 1997. A final report has not been produced and the site is still under investigation.

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[45] Ibid.

[46] Ibid.

Hazardous Waste and Contamination Sites Outside of City Limits

Seven additional hazardous waste and contamination sites are located within the urban area but outside of city limits as described below and shown in Map 3, in Appendix A.

Fairbanks Sandpit

Florida Department of Transportation (FDOT) disposal of 55-gallon containers of organic solvents led to leakage of solvents into groundwater (including the intermediate aquifer). The site was discovered in 1983. Subsequently, over 1,000 drums were removed and a groundwater treatment system was installed. FDOT funded the provision of city water service to residents in the area because drinking water wells had become contaminated. In March 1990, FDOT discovered 43 additional containers, 18 of which were either filled or partially filled with material. In all, 300 additional drums were excavated in 1990. A long-term monitoring program has been established, and will include quarterly assessments. Contaminated soil removal was completed in 1996 and a groundwater remediation system was installed and permitted in 1997. Groundwater remediation is in progress.

Feagles Fill Dirt

Elevated levels of total organic carbon and violations of primary drinking water quality standards for lead and mercury were detected at this site. In 1983 and 1984, FDEP inspected the site and issued warnings about improper landfilling materials and activities. FDEP approved a closure plan in 1984 and requested further hydrogeologic monitoring. The County revoked special use permits for the site in June 1984. The site was acquired by William Renfroe in 1985 and is now used as a construction and demolition debris landfill. Renfroe entered into a consent order with FDEP in 1986 requiring a closure plan and allowing construction and demolition debris landfilling in previously excavated areas. The plan was submitted in 1987. Among other things, the consent order requires annual sampling of four monitoring wells for volatile organics. This facility is now known as the Florence Landfill, operating as a construction and demolition debris landfill. The site has an ongoing groundwater monitoring program.

Alachua County Southwest Landfill

In 1985, volatile organics were observed in landfill monitoring wells and nearby private water supply wells. The Landfill has contaminated the upper portion of the Floridan aquifer in the area. Remediation has involved the installation of a liner, leachate collection and treatment system, and new and replacement monitoring wells. A contamination assessment report was completed in 1996. The site has an ongoing groundwater monitoring program.

Stengle Air Field

This is a former U.S. Department of Army defense site. Groundwater contamination by chlorinated solvents has been detected at this site. Contamination is in the vicinity of one of the old airfield hangers beneath Butler Plaza Shopping Center. An Interim Remedial Action Plan

was submitted to FDEP in 1994. A revised plan was submitted to FDEP in 1998. FDEP has requested further assessment work in order to determine the horizontal and vertical extent of the soil and groundwater contamination.

Vital Industries
Over the years, 18 drums of hazardous waste had accumulated at this site. However, soil samples taken in the location of the leaking drums revealed no contamination. A groundwater recovery system was installed in 1992. A 1996 "No Further Action Request" was denied by FDEP. Additional assessment work and remedial actions are ongoing.

Voyles Quadraplex
In April 1987, methalene chlorine groundwater contamination in the Voyles Quadraplex area was detected. Contamination is attributed to improper dry cleaning solvent disposal and, to a lesser extent, improper laboratory solvent disposal. An FDEP Final Order was issued in 1992 requiring corrective action from Rip's One-Hour Cleaners, ABC Research and Blue Grass Trust to address the onsite contamination. ABC, Inc. is currently performing a Contamination Assessment Report to address their part of the contamination. Rip's One-Hour Cleaners is currently under the Drycleaning Solvent Cleanup Program. The entire site was referred to the FDEP Site Screening Superfund Subsection in 1999 for additional site assessment.

Biohazardous Waste

Biohazardous waste is generated by hospitals, clinics, doctors' offices (including dental and veterinary), funeral homes, nursing homes, research labs, and medical labs. There are four hospitals in the Gainesville urban area (Shands, Shands at AGH, Veterans Administration (VA), and North Florida Regional). These four institutions produce a significant percentage of the total amount of biohazardous waste generated in the county.

Most of the hospitals follow the same procedure for biohazardous waste disposal. Infectious waste is generally shipped out of county for disposal or, in the case of the Veterans Administration hospital, is incinerated on-site. Chemical waste is collected by a licensed hazardous waste hauler for disposal out of state. Radioactive waste is allowed to decay, after which remaining residues are shipped out of state or incinerated on-site.

The advantages of hospital waste incineration include:

* Significant volume reduction
* Little processing needed
* Pathogens destroyed
* Significantly lower disposal cost for hospital
* Generally burn a smaller volume of waste than municipal incinerators

The disadvantages include:

* Potential air pollution problems. (Hospital incineration tends to produce more dioxins and furans per gram incinerated than municipal incineration.)

* Hospitals tend to be located in densely populated areas, which increases public exposure to emissions.

Currently, none of the hospitals except for the VA conduct medical waste incineration. Browning, Ferris Industries has contracts with the facilities generating medical wastes and handles collection and disposal. The VA hospital is required to conduct chemical monitoring and submit quarterly reports to FDEP.[47]

The environmental risks associated with biohazardous waste include illegal dumping, accidents during the handling of the waste, and emissions and ash from incinerators.

Hazardous Waste Legislation

Federal

The Resource Conservation and Recovery Act of 1976 (RCRA) authorized the EPA to establish requirements for generators and transporters of hazardous waste facilities under Chap. 40 CFR Parts 260-268. In particular, the Act established criteria for the design and operation of treatment, storage, and disposal by hazardous waste facilities.

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 established the "Superfund" program. This program, administered by the EPA, provides clean-up money for abandoned hazardous waste sites.

State

In 1974, the State enacted the "Resource Recovery and Management Act", Chap. 403, Part IV, FS, which requires counties to prepare a solid waste plan. Chap. 17-730, FAC, essentially adopts the federal regulations (Chap. 40 CFR Parts 260-268) implemented pursuant to the RCRA, which specifically addresses hazardous waste management.

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[47] Conversation with Chris Childers, Alachua County Health Department, Environmental Health, January, 1999.

Biohazardous waste generators must comply with Chap. 10D-104, FAC, which prescribes minimum standards for the safe handling and disposal of biohazardous waste. The Department of Health and Rehabilitative Services oversees on-site handling, while FDEP regulates off-site handling and disposal.

Local

Alachua County's Hazardous Waste Disclosure Ordinance (83-6) requires SQGs to file a disclosure form annually with the County. The form was developed from FDEP guidelines.

The County adopted a hazardous materials management code in 1991. The Code is designed to uniformly regulate facilities handling hazardous materials in order to prevent discharges to the environment. The Code includes provisions for early detection of leaks, cost recovery to pay for emergency response actions performed by the County, containment requirements, discharge recovery requirements, and standards for construction, operation, maintenance, monitoring, replacement, and closure of hazardous materials storage facilities. The Code was amended in 2000 to add licensing requirements and air quality regulation.

County Hazardous Waste Programs

Household Hazardous Waste Collection Network
This FDEP-funded grant program provides money to establish waste collection facilities for recyclable hazardous wastes generated by households. Currently, there are five such collection facilities serving rural areas of the county.

Used Motor Oil Collection Network
This program allows individuals to dispose of their motor oil at the rural waste collection centers. Major oil marketers and vendors also participate by allowing individuals to dispose of their oil at retail facilities. Some also accept used oil filters.[48]

Latex Paint Recycling Program
Since April 1994, latex paint has been separated and re-blended by SunTec Paints of Gainesville. The paint is reconditioned and then redistributed throughout the community. There is a free paint giveaway program for low-income people.[49]

Fluorescent Lamps

[48] Ibid, Kurt Seaburg, A.C.E.P.D., July 1999.

[49] Alachua County Solid and Hazardous Waste Public Information Committee. Solid and Hazardous Waste News, Volume 4, April 1997.

Also in 1994, Alachua County began collecting fluorescent lamps as part of a mercury awareness campaign. As of June 1999, over 20,000 fluorescent lamps had been collected for recycling.[50]

Household Hazardous Waste Center

In early 1999, Alachua County began construction of a Household Hazardous Waste (HHW) collection and processing center adjacent to the transfer station located at 5115 N.E. 63rd Avenue. The facility opened on October 26, 1999. An evaluation by County staff determined that the center would provide a higher level of service at a lower cost, compared to using a private firm like Perma-Fix to serve as the contractor for collection of hazardous waste. Some of the other benefits include:

* Reduction of overall HHW program costs;

* Enhanced opportunity to promote reuse and recycling of products within the local community;

* Better service and lower waste disposal costs for small businesses;

* Greater public access due to year round operations;

* Greater capacity to receive and process HHW from remote rural collection events; and

* Increased opportunity to promote pollution prevention and waste reduction to small businesses.

The HHW Collection Center will accept wastes considered hazardous including corrosive, toxic, ignitable and reactive materials. The intent is to minimize and divert HHW from landfills and improper disposal by means of reuse, recycling or hazardous waste disposal. The Collection Center will feature a reuse area where particular products that are accepted will be made available for use by the public.[51]

Hazardous Waste Management Strategies

Siting Hazardous Waste Collection Facilities

The County (and to a limited extent, certain commercial establishments) maintains facilities for treating, storing, or transferring hazardous wastes from conditionally exempt small quantity

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[50] Ibid, Kurt Seaburg, A.C.E.P.D., July 1999.

[51] Alachua County Solid and Hazardous Waste Public Information Committee. Solid and Hazardous Waste News, Volume X, November 1998.

generators (CESQGs). However, these facilities are extremely limited and inconvenient for the purpose of CESQG hazardous waste disposal. Instead, a centralized collection facility is being established to increase the visibility, convenience, and the safe collection involved in proper hazardous waste management for CESQGs. This facility is sited in the Gainesville urban area where most of the CESQGs are located. Waste delivered to this facility can be consolidated into truckloads that are economically efficient to transfer to treatment facilities. The treatment facility would treat, recycle, or reduce the waste before shipping it for ultimate disposal or re-use.

The following criteria were used to site the HHW Collection Center and shall be used to site any future hazardous waste collection facilities for CESQGs:

* Outside of the Murphree Wellfield Protection Zone

* Outside of areas of high aquifer recharge, stream-to-sink basins, 100-year floodplain

* Primary and secondary public access to a major road such as an arterial or collector

* Low permeability soils and underlain by the Hawthorn Formation

* Fire/emergency medical service within 10 minutes

* Outside of environmental conservation areas

* Adequate buffering from residential and sensitive institutional land uses

Alternatives to Permanent Collection Sites and Collection Events

There will be certain circumstances for which it will not be possible to collect certain hazardous wastes at permanent collection sites or collection events. Many of these circumstances have been mitigated with the opening of the transfer station and the HHW Center. These circumstances include:[52]

* Temporary storage of abandoned or illegally dumped hazardous waste for which no responsible party is identifiable;

* Temporary storage of household hazardous wastes for which a citizen cannot attend a regularly scheduled collection event;

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[52] Solid Waste Element of the Alachua County Comprehensive Plan (adopted October 1991), Kurt Seaburg, A.C.E.P.D., July 1999.

* Temporary storage of potentially hazardous waste removed from the solid waste stream by landfill spotters and collection center attendants; or

* Temporary storage of residuals from hazardous materials spills resulting from transportation accidents when the responsible party does not have other storage options available.

Such temporary storage will take place at the transfer station and at the HHW Center. The storage buildings are designed to provide primary, secondary, and tertiary containment of stored wastes. The HHW Center serves as a site for temporary storage of hazardous materials. This enables the citizen to drop off household hazardous wastes during regular business hours. A chemical storage building is available at the transfer station, where the hazardous waste removed from the waste stream by collection center attendants can be transferred over to the adjacent HHW Center. Hazardous materials from transportation accidents can be transported to the HHW Center.[53]

Other Hazardous Waste Management Strategies

One or more of the following strategies can be adopted:

* Because waste oil and batteries represent 80 percent of SQG and household hazardous waste, there is a need to continue to establish collection facilities at sites that are convenient for regular disposal by SQGs and households. Provision of these decentralized sites must be supplemented with a greatly expanded, on-going public education program. The Hazardous Materials Management Code inspection documents verify proper disposal for used oil and batteries.

* Maintain an emergency response plan as required by Chap. 84-223, Laws of Florida. Currently, city and county developing an interlocal agreement to establish the administrative framework for an enlarged regional emergency response team for hazardous materials in the eleven county North Central Florida Region.

* Encourage on-going education and training for employees of companies and agencies which handle hazardous materials.

* Reduce the quantity of hazardous waste by: (1) encouraging large quantity generators (LQGs), SQGs, and CESQGs to use alternative, non-hazardous materials; (2) encouraging these handlers to recycle a larger percentage of their wastes; and (3) providing such handlers with information about proper management practices.

[53] Kurt Seaburg, Alachua County Environmental Protection Department, April & July 1999.

* The County should continue to require reporting of hazardous materials used by SQGs.

* Encourage the County to maintain a solid waste fee assessment at the transfer station which transfers a portion of the fee revenue to programs for hazardous waste disposal, education, enforcement, and clean-up.

APPENDIX A

Definitions
Map 1-5
Tables A-1—A-4
Figure A-1

DEFINITIONS

BIOHAZARDOUS WASTE: any solid or liquid waste which may present a threat of infection to humans. Includes, but is not limited to, nonliquid human tissue and body parts; laboratory and veterinary waste which contain human-disease-causing agents; used disposable sharps; human blood, and human blood products and body fluids; and other materials which in the opinion of the Florida Department of Health and Rehabilitative Services represent a significant risk of infection to persons outside the generating facility.

CLEAN DEBRIS: solid waste which is virtually inert and which is not a pollution threat to groundwater or surface waters and is not a fire hazard, and which is likely to retain its physical and chemical structure under expected conditions of disposal or use. Includes, but is not limited to, uncontaminated concrete, brick, glass, and ceramics.

CLOSURE: cessation of operation of a landfill, and the act of securing the landfill so that the landfill will pose no significant threat to human health or the environment.

COMPOST(ING): breakdown of organic matter in solid waste in the presence of oxygen by aerobic bacteria to produce a humus-like end product, which can be used as a soil conditioner.

CONSTRUCTION AND DEMOLITION DEBRIS: materials generally considered to be not water soluble and nonhazardous in nature, including, but not limited to, steel, glass, brick, concrete, or asphalt roofing material, pipe, gypsum wallboard, and lumber from construction or destruction of a structure as part of a construction or demolition project, and including rocks, soils, and vegetative matter which normally results from land clearing or land development operations for a construction project. If such material is mixed with non-construction or demolition debris, such material shall be classified as other than construction and demolition debris.

CONSTRUCTION AND DEMOLITION DEBRIS LANDFILL: a landfill that accepts only construction and demolition debris.

DISPOSAL: discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or upon any land or water so that such solid waste or hazardous waste or any constituent thereof may enter other lands or be emitted into the air or discharged into any waters, or otherwise enter the environment.

GARBAGE: kitchen and table food waste and/or animal or vegetative waste that is attendant with or results from the storage, preparation, cooking, or handling of food materials; and any bottles, cans or other containers, excluding recyclable containers, utilized in normal household use, which, due to their ability to retain water, may serve as breeding places for mosquitoes and other insects.

HAZARDOUS MATERIAL: any substance or material which has been determined by the secretary of the United States Department of Transportation to be capable of imposing an unreasonable risk to health, safety, and property. This term includes hazardous waste. This term also includes any additional materials defined as hazardous by Gainesville or Alachua County.

HAZARDOUS WASTE: solid waste which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or may pose a substantial present or potential hazard to human health or the environment when improperly transported, disposed of, stored, treated or otherwise managed.

HOUSEHOLD TRASH: accumulated paper, magazines, packaging, containers, sweepings, and other accumulations of a nature other than garbage or yard trash, which are usual to housekeeping and to the operation of stores, offices, and other businesses.

INCINERATION: the controlled process by which combustible wastes are burned and changed into gases.

INDUSTRIAL WASTES: debris and waste products generated by manufacturing, food processing (except restaurants), land clearing, any commercial shrubbery or tree cuttings, building construction or alteration (except do-it-yourself projects) and public works type construction projects whether performed by a government unit or by contract.

LANDFILL: any solid waste disposal area for which a permit, other than a general permit, is required by Sec. 403.707, FS, that receives solid waste for disposal in or upon land other than a land-spreading site, injection well, or a surface impoundment.

CLASS I LANDFILL: receives an average of 20 tons or more of solid waste per day, or 50 cubic yards or more per day, and which is covered daily.

CLASS II LANDFILL: receives an average of less than 20 tons of solid waste per day, or less than 50 cubic yards of solid waste per day, and which is covered at least once every four days.

CLASS III LANDFILL: receives only trash or yard trash, and which is covered at least once every seven days.

LITTER: garbage, rubbish, trash, refuse, can, bottle, container, paper, or tobacco product which is thrown, discarded, placed, or deposited along public highways, on public or private lands, or in public waters.

PUTRESCIBLE: organic matter that can be decomposed by microorganisms, in part, to foul-smelling by-products.

RECYCLABLES (or RECYCLABLE MATERIAL): any material or group of materials which can be collected and sold for recycling at a net cost equal to or less than the cost of collection and disposal of the same materials.

RECYCLING: any process by which solid waste, or materials which would otherwise become solid waste, are collected and processed into raw materials suitable for creation of new products. (see also RE-USE)

REFUSE: rubbish and garbage or a combination or mixture of rubbish and garbage, including paper, glass, metal and other discarded matter, excluding recyclable materials.

RE-USE: any process by which solid waste, or materials which would otherwise become solid waste, are collected and returned to use with little or no processing. In contrast, recycling involves relatively intensive processing such as shredding or melting before the material can be reused. (see also RECYCLING)

RUBBISH: solid waste other than garbage which is usually attendant to domestic households or housekeeping, and to the operation of stores, offices and other businesses. Includes, but is not limited to, paper, magazines, packaging, containers, rags, excelsior and other packing material, bottles and cans, excluding recyclable materials.

SOLID WASTE: sludge from a waste treatment facility, water supply treatment plant, air pollution control facility, or garbage, clean debris, white goods, special wastes, rubbish, refuse, or other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from domestic, commercial, industrial, mining, agricultural, or governmental operations.

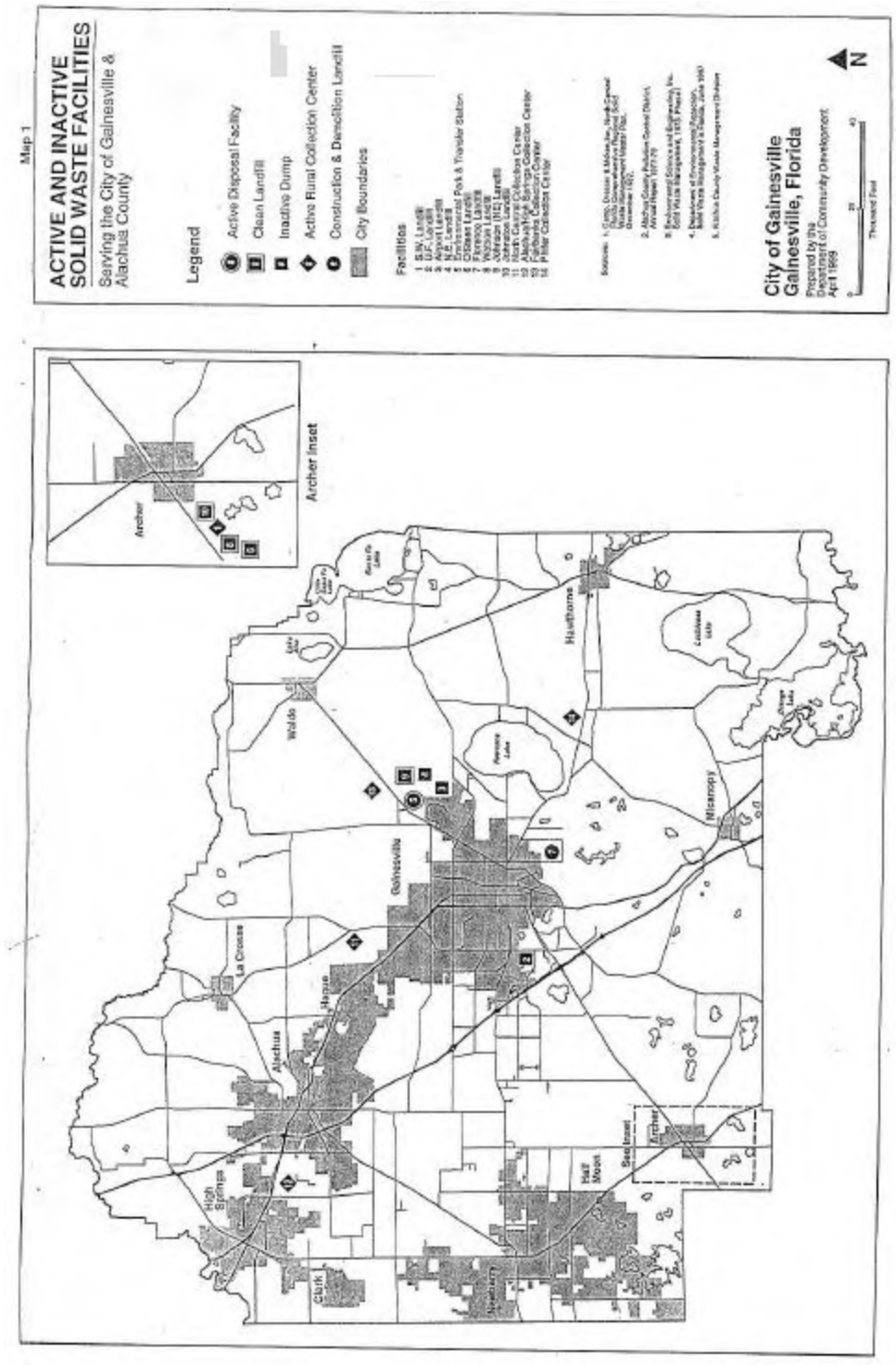
SPECIAL WASTES: solid wastes that can require special handling and management, including, but not limited to, asbestos, white goods, whole tires, used oil, mattresses, furniture, lead-acid batteries, and biological wastes.

TRANSFER STATION: A large warehouse-like facility where solid waste is sorted and stored prior to shipment to a landfill. The solid waste is transferred from small-capacity collection trucks to large-capacity transfer trailers and containers.

TRASH: a combination of yard trash and construction and demolition debris along with other debris such as paper, cardboard, cloth, glass, street sweepings, vehicle tires, and other like matter.

WHITE GOODS: inoperative and disposed of refrigerators, ranges, water heaters, freezers, small air conditioning units, and other similar domestic and commercial large appliances.

YARD TRASH: vegetative matter resulting from landscaping maintenance and land-clearing operations.


Map 1
ACTIVE AND INACTIVE
SOLID WASTE FACILITIES
Serving the City of Gainesville &
Alachua County
Legend
Active Disposal Facility
Clean Landfill
Inactive Dump
Active Rural Collection Center
Construction & Demolition Landfill
City Boundaries
Facilities
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
April 1999
Archer Inset
Archer
Gainesville
Alachua
Hawthorne
Waldo
La Crosse
Hampton
High Springs
Clark
Newberry
Micanopy
Petition 102CPA-99 PB

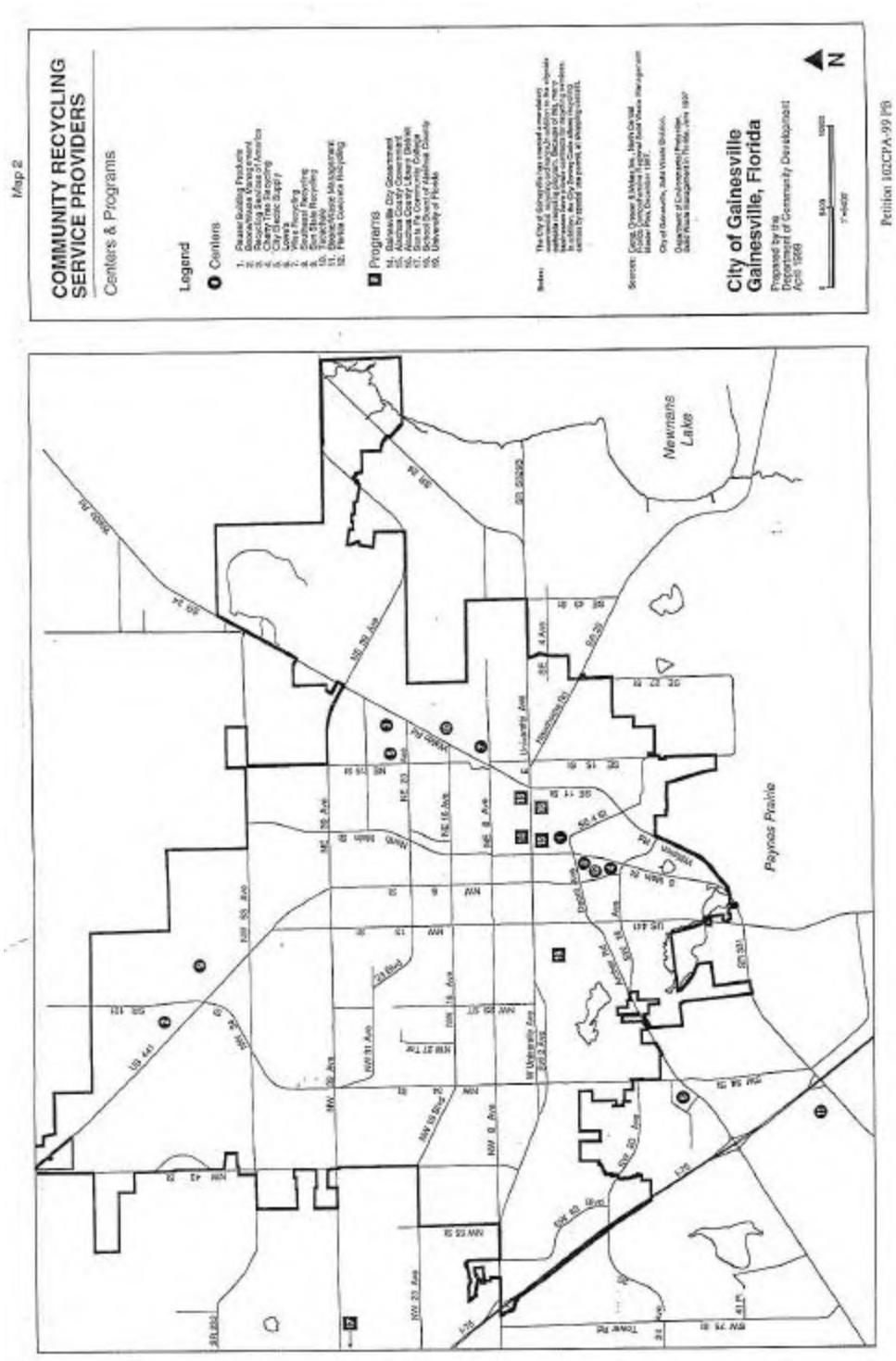

Map 2
COMMUNITY RECYCLING SERVICE PROVIDERS
Centers & Programs
Legend
Centers
Programs
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
April 1999
N
Newnans Lake
Paynes Prairie
Petition 102CPA-99 PB

Table A-1. Solid Waste Disposed or Landfilled By Year

Fiscal Year	Tons	County Population
1990/91	141,683	183,773
1991/92	137,657	186,201
1992/93	140,969	190,655
1993/94	140,830	193,879
1994/95	154,802	198,261
1995/96	145,187	202,140
1996/97	142,091	208,125
1997/98	163,916	211,403
1998/99	167,305	215,585
1999/00	170,766	219,850
2000/01	173,456	223,154
2001/02	176,189	226,508
2002/03	178,967	229,912
2003/04	181,790	233,368
2004/05	184,659	236,875
2005/06	187,242	240,050
2006/07	189,862	243,267
2007/08	192,520	246,527
2008/09	195,216	249,831
2009/10	197,951	253,179
2010/11	200,725	256,572
2011/12	203,540	260,011
2012/13	206,394	263,495
2013/14	209,290	267,027
2014/15	212,228	270,605

NOTES:

* Populations and waste totals subsequent to 1996 are projections. Population estimates do not include Gilchrist County. Waste estimates, however, include waste expected from Gilchrist County.

SOURCES:

1. Alachua County Department of Public Works, September 1998.

Table A-2. Recyclables Collected by Gainesville Curbside Program, by Month (in tons)

Date	ONP	OCC	OMG	Glass	Steel	Aluminum	Plastic	Appliances	Yard Trash	Total Recycled
January 96	289.01	82.25	105.83	137.15	46.96	6.06	23.73	2.04	466	1159.03
February	317.4	87.84	62.1	126.47	17.13	7.93	26.7	1.566	507	1154.136
March	298.91	30.76	31.41	115.02	19.77	6.45	40.06	4.662	586	1133.042
April	298.98	84.92	58.11	49.16	17.14	4.82	26.08	3.996	464	1007.206
May	265.54	33.13	27.7	152.69	19.42	7.53	23.81	5.856	550	1085.676
June	258.01	70.69	61.91	86.28	36.09	4.88	41.1	2.754	431	992.714
July	158.12	190.27	77.69	97.15	30.55	7.95	26.62	4.038	513	1105.388
August	259.23	26.54	49.22	147.49	19.28	7.59	29.08	5.736	260	804.166
September	155.44	59.22	32.08	92.08	12.01	10.01	20.02	4.11	375	759.97
October	175.96	37.71	37.71	82.55	15.62	4.46	33.47	4.578	720	1112.058
November	164.6	29.82	13.92	59.65	15.7	4.71	15.7	4.92	553	862.02
December	177.51	29.21	17.98	53.34	16.3	4.44	13.33	7.992	484	804.102
TOTAL	**2818.71**	**762.36**	**575.66**	**1199.03**	**265.97**	**76.83**	**319.7**	**52.248**	**5909**	**11979.508**
January 97	181.01	51.72	20.11	96.47	20.97	6.29	25.17	7.992	787	1231.212
February	159.25	32.66	12.25	68.63	10.67	4.58	16.78	1.452	680	986.272
March	146.61	28.12	26.11	56.77	11.35	4.26	17.03	4.176	512	806.426
April	176.66	46.76	36.38	81.07	18.42	3.69	25.8	8.316	832	1229.096
May	154.48	26.37	7.54	56.12	11.22	5.61	15.43	8.868	472	757.638
June	157.81	37.87	14.73	20.18	11.73	5.05	20.18	4.746	682	954.296
July	181.21	34.85	16.26	97.12	11.64	8.27	22.73	10.26	787	1169.34
August	126.99	43.54	18.14	50.8	14.51	7.26	25.4	6.828	680	973.468
September	158.95	59.14	22.18	44.36	14.77	3.7	18.48	5.574	512	839.154
October	218.17	27.85	18.57	106.77	13.93	4.64	18.57	6.222	832	1246.722
November	175.09	39.79	23.87	71.63	11.93	3.98	19.9	2.508	472	820.698
December	186.33	42.35	25.41	76.22	12.7	4.23	21.17	7.134	682	1057.544
TOTAL	**2022.56**	**471.02**	**241.55**	**826.14**	**163.84**	**61.56**	**246.64**	**74.076**	**7930**	**12071.86**

										6

ONP - Old Newspaper; **OCC** - Corrugated Cardboard; **OMG** - Old Magazines
Source: City of Gainesville Solid Waste Division, 1999.

Table A-3. Inventory of County Landfills

Site[1]	Map No.	Acres	Class	Opened	Status	Service*
S.W. Landfill	1	140	1 & III	1973	Active	A,B
U.F. Landfill	2	12	?	?	Closed	B
Airport Landfill	3	40	?	?	Closed('73)	A,B,C,D
N.E. Landfill	4	57	1	1973	Closed('82)	A,B,C,D
S.E. Constr. Landfill	5	40	C & D**	1988	Closed	E
O'Steen Landfill	6	565	C & D**	1986	Active	I
Florence Landfill	7	38	C & D**	1989	Active	E
Watson Landfill	8	41	C & D**	1985	Active	I
Johnson (NE) Landfill	9	35	C & D**	1987	Active	I
Johnson (SW) Landfill	10	80	C & D**	1988	Active	I
City C & D Landfill		60	C & D**	?	Closed(95)	F
N.W. Landfill		---	50	?	Closed('82)	?
S.E. Landfill		---	80	?	Closed('81)	?
Archer Rd Landfill		?	?	?	Closed('72)	G
S. Main St. Landfill		20	?	?	Closed	H
Wood Resources Recovery***		15	N.A.	1987	Active	A

NOTES:

[1] See Map 1 for locations of active landfills.

For Map No. location, refer to Map 1.

* "Service" refers to community provided service by the facility:

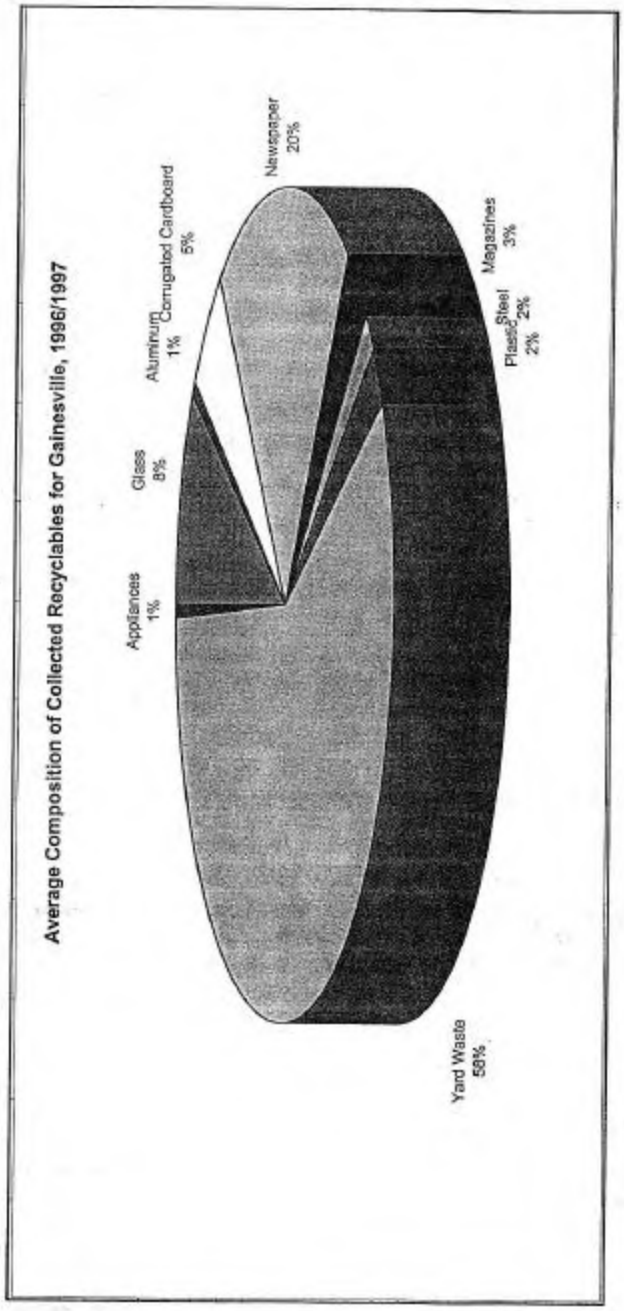
A = Alachua County (including City of Gainesville) residential and commercial.
B = University of Florida Campus.
C = Tacachale.
D = Gainesville Housing Authority.
E = Developers disposing of construction & demolition debris. Only the S.E. Construction and Florence landfills accept waste from the general public. The remaining private C & D landfills only accept waste from the owners or those persons designated by permit.
F = City government operations debris. (Primarily waste concrete.)
G = Bulky wastes.
H = Combustible refuse.
I = Clean fill refuse only.

** "C & D" = construction and demolition debris landfill.

*** Composting facility, not a landfill.

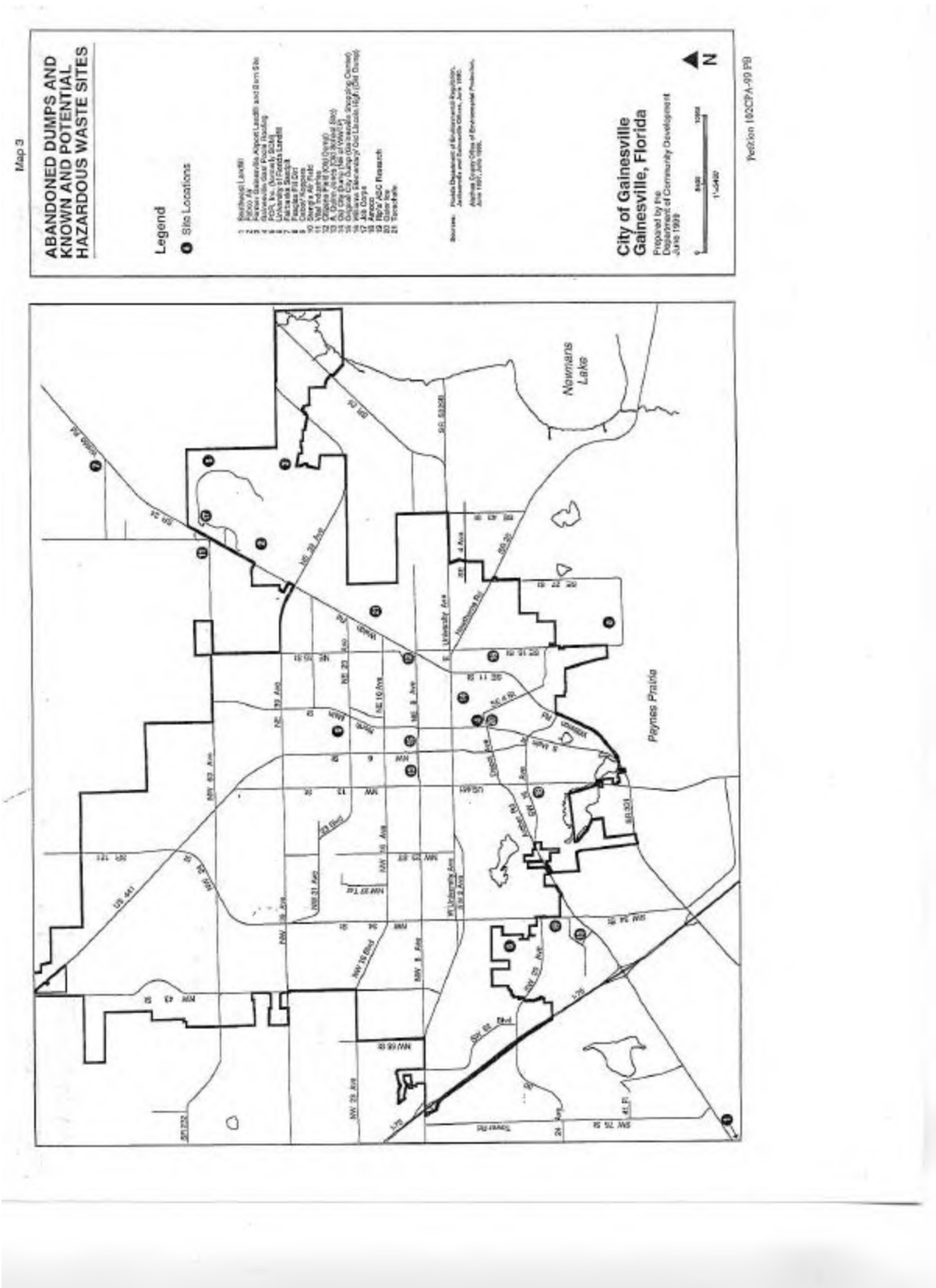
SOURCE: City of Gainesville, Department of Community Development, March ~~1990~~ 1999, Sally Palmi, Alachua County Solid
Waste Coordinator, March 1999.

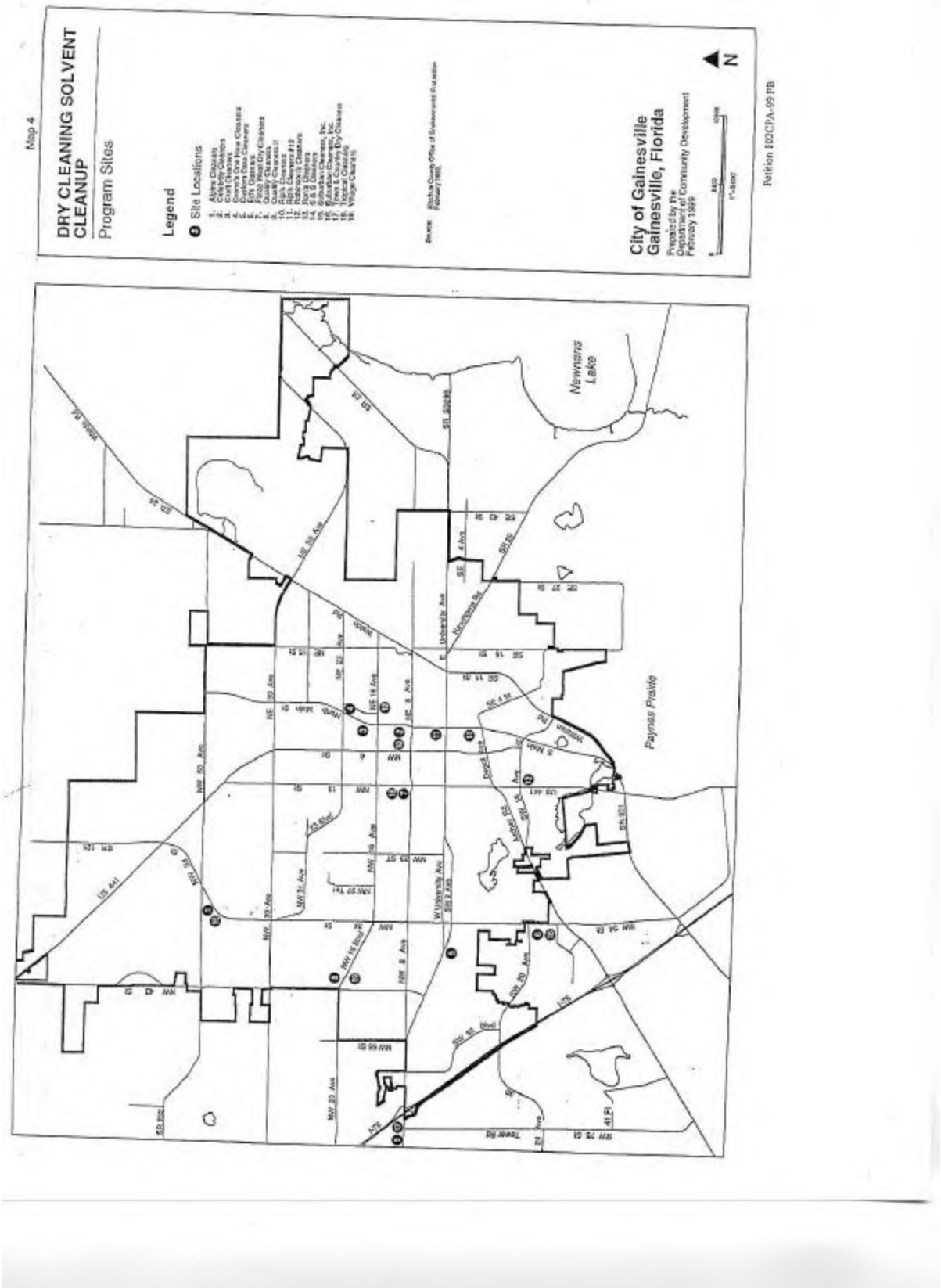
Figure A-1



Source: City of Gainesville Solid Waste Division, 1999.

Petition 102CPA-99 PB


Map 3
ABANDONED DUMPS AND KNOWN AND POTENTIAL HAZARDOUS WASTE SITES
Legend
Site Locations
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
June 1999
N
Petition 102CPA-99 PB
Newnans Lake
Paynes Prairie


Map 4
DRY CLEANING SOLVENT CLEANUP
Program Sites
Legend
Site Locations
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development February 1999
N
Petition 102CPA-99 PB
Newnans Lake
Paynes Prairie
US 441
NW 13th St
NW 23rd Ave
NW 34th St
NW 39th Ave
NW 43rd St
NW 53rd Ave
NW 55th St
NW 75th St
SW 13th St
SW 20th Ave
SW 24th Ave
SW 34th St
SW 40th Blvd
SW 62nd Blvd
SW 75th St
SR 26
SR 24
SR 331
SR 222
SR 20
SR 121
SR 329
SR 26A
SR 26B
SR 26C
SR 26D
SR 26E
SR 26F
SR 26G
SR 26H
SR 26I
SR 26J
SR 26K
SR 26L
SR 26M
SR 26N
SR 26O
SR 26P
SR 26Q
SR 26R
SR 26S
SR 26T
SR 26U
SR 26V
SR 26W
SR 26X
SR 26Y
SR 26Z

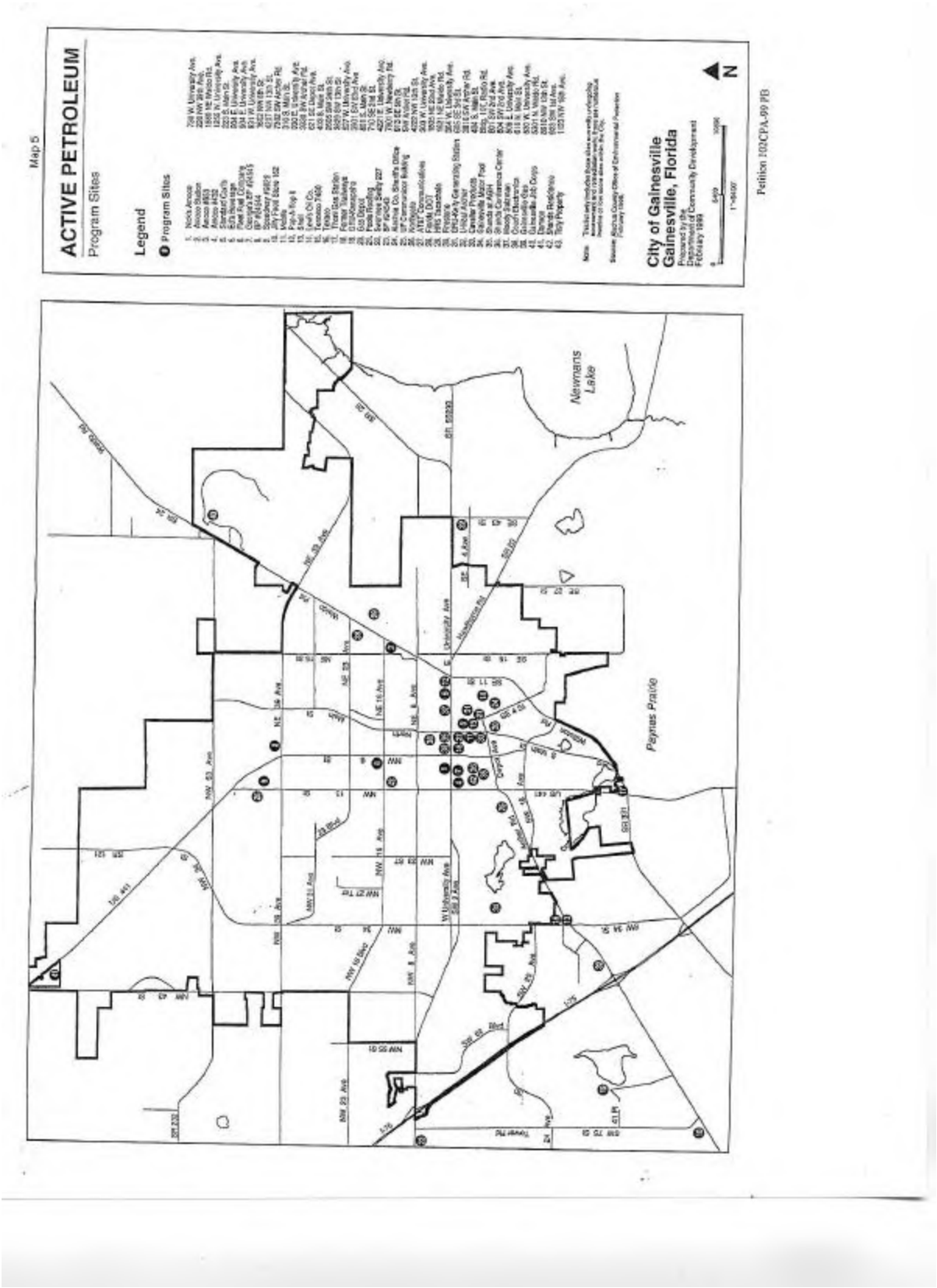

Map 5
ACTIVE PETROLEUM
Program Sites
Legend
Program Sites
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
February 1999
N
Petition 102CPA-99 PB
Newnans Lake
Paynes Prairie

Table A-4. Significant Waste Materials Accepted By Landfills In Past Years That Should Be Diverted From Landfills

* Foam Rubber
* Disposable Diapers
* Waste Oil
* Food
* Plastic Bags, Containers, and Packaging
* Recyclable or Re-usable Beverage Containers
* Cardboard
* Recyclables from Multi-Family and Non-Residential Waste Generators
* "Junk Mail" and Other Slick Paper
* Auto
* Scrap Metal
* Construction and Demolition Debris
* Furnishings, Clothing, Toys, and Other Household Items
* Books, including Phone Books
* Containers for Pesticides, Herbicides, Petroleum Products, Aerosols, Cleaning Fluids, Paint, Solvents, Oil, and Anti-Freeze.

NOTES:

* The above list of materials are potentially harmful to public health and the environment, are potentially recyclable, or have a tendency to consume large amounts of landfill space.

* Before mechanisms are adopted to ban or otherwise discourage the landfilling of these items, a convenient and safe alternative (such as curbside collection or recycling/collection centers) must be set up to minimize the illegal dumping of such materials.

SOURCES:

* City of Gainesville, Department of Community Development, 1991.

* James Abbott, Alachua County Department of Public Works.

* Gina Hawkins, Gainesville Recycling Coordinator, May 1999.

Table 2. Solid Waste Disposed or Landfilled at S.W. Landfill, By Year (in tons)

Fiscal Year	Waste Disposed or Landfilled	County Population
1990/91	141,683	183,773
1991/92	137,657	186,201
1992/93	140,969	190,655
1993/94	140,830	193,879
1994/95	154,802	198,261
1995/96	145,187	202,140
1996/97	142,091	208,125
1997/98	163,916	211,403
1998/99	167,305	215,585
1999/00	170,766	219,850
2000/01	173,456	223,154
2001/02	176,189	226,508
2002/03	178,967	229,912
2003/04	181,790	233,368
2004/05	184,659	236,875
2005/06	187,242	240,050
2006/07	189,862	243,267
2007/08	192,520	246,527
2008/09	195,216	249,831
2009/10	197,951	253,179
2010/11	200,725	256,572
2011/12	203,540	260,011
2012/13	206,394	263,495
2013/14	209,290	267,027
2014/15	212,228	270,605

NOTES:

* Populations and waste totals subsequent to 1996 are projections. Population estimates do not include Gilchrist County. Waste estimates, however, include waste expected from Gilchrist County.

* Percent recycled is 30% for 1996 and expected for all subsequent years.

* Waste tonnage and projections are Class I and Class III totals.

SOURCES:

1. Alachua County Department of Public Works, September 1998.

Table 3. Recyclables Collected by Gainesville Curbside Program, by Month (in tons)

Date	ONP	OCC	OMG	Glass	Steel	Aluminum	Plastic	Appliances	Yard Trash	Total Recycled
FY 94-95										
October	199.68	26.24	10.88	55.68	17.92	5.12	13.44	0.00	434.95	763.91
November	190.08	44.80	23.04	65.92	26.88	6.40	17.92	0.00	452.50	827.54
December	261.76	48.64	41.60	88.32	22.40	8.32	8.96	0.00	378.80	858.80
January	229.76	88.96	58.24	78.08	21.12	3.52	40.96	0.00	472.00	992.64
February	164.42	48.36	46.72	71.77	39.83	6.84	15.68	0.00	479.00	872.61
March	193.66	27.21	43.06	48.08	19.01	7.19	16.80	0.00	719.00	1074.01
April	146.76	20.68	29.15	74.10	3.53	5.44	6.72	0.00	536.00	822.39
May	218.42	40.88	22.81	50.82	9.18	4.48	9.79	0.00	647.00	1003.38
June	171.90	51.12	34.03	84.81	18.58	4.90	25.07	0.00	735.70	1126.10
July	254.31	24.77	29.06	45.54	9.54	15.12	8.24	0.00	538.00	924.59
August	241.36	45.57	32.86	86.46	17.63	7.89	25.72	0.00	680.00	1137.48
September	173.29	43.07	48.76	54.47	13.57	4.18	18.05	0.00	582.00	937.39
TOTAL	**2445.40**	**510.30**	**420.20**	**804.04**	**219.19**	**79.40**	**207.35**	**0.00**	**6654.95**	**11340.84**
January 96	289.01	82.25	105.83	137.15	46.96	6.06	23.73	2.04	466	1159.03
February	317.4	87.84	62.1	126.47	17.13	7.93	26.7	1.566	507	1154.136
March	298.91	30.76	31.41	115.02	19.77	6.45	40.06	4.662	586	1133.042
April	298.98	84.92	58.11	49.16	17.14	4.82	26.08	3.996	464	1007.206
May	265.54	33.13	27.7	152.69	19.42	7.53	23.81	5.856	550	1085.676
June	258.01	70.69	61.91	86.28	36.09	4.88	41.1	2.754	431	992.714
July	158.12	190.27	77.69	97.15	30.55	7.95	26.62	4.038	513	1105.388
August	259.23	26.54	49.22	147.49	19.28	7.59	29.08	5.736	260	804.166
September	155.44	59.22	32.08	92.08	12.01	10.01	20.02	4.11	375	759.97
October	175.96	37.71	37.71	82.55	15.62	4.46	33.47	4.578	720	1112.058
November	164.6	29.82	13.92	59.65	15.7	4.71	15.7	4.92	553	862.02
December	177.51	29.21	17.98	53.34	16.3	4.44	13.33	7.992	484	804.102
TOTAL	**2818.71**	**762.36**	**575.66**	**1199.03**	**265.97**	**76.83**	**319.7**	**52.248**	**5909**	**11979.508**

ONP - Old Newspaper; **OCC** - Corrugated Cardboard; **OMG** - Old Magazines

Source: City of Gainesville Solid Waste Division, 1999.

Alachua County Department of Public Works, September 1998.

FACILITY	Tons Generated
Perma-Fix	3,479
Eveready Battery Company	591
Archimica (formerly known as PCR)	448
Koppers Industries	194

Source: Alachua County Environmental Protection Dept, 1999.

Appendix C

Consistency with Regional Policy Plan on Regionally Significant Resources or Facilities

Appendix B

Interlocal Agreement for Solid Waste Management

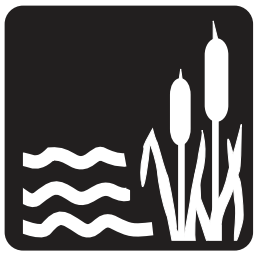
Draft 7/15/99

Solid Waste Element

of the

City of Gainesville 2000-2010 Comprehensive Plan

Goals, Objectives & Policies



Stormwater Management Element

GOAL 1

DESIGN, CONSTRUCT AND MAINTAIN A STORMWATER MANAGEMENT SYSTEM THAT REDUCES THE INCIDENCE OF FLOODING, AND PROTECTS, PRESERVES AND ENHANCES DESIRABLE WATER QUALITY CONDITIONS, AND TO THE MAXIMUM EXTENT FEASIBLE, PRESERVES AND UTILIZES THE EXISTING NATURAL SYSTEMS.

Objective 1.1

The City shall implement Level of Service (LOS) standards to diminish the occurrence of new flooding and to protect or improve water quality. The LOS standards for Stormwater Management are in the Concurrency Management Element.

Policies

1.1.1 The LOS standards for all stormwater management facilities shall be the 100-year critical duration storm. The LOS standard for water quality treatment shall be treatment of "first one (1) inch" of runoff and compliance with the stormwater management facility design and performance standards established by the applicable water management district to ensure that the receiving water quality standards of Chapter 62-302 F.A.C. are met and to ensure that receiving surface waters maintain their classifications as established in Chapter 62-302 F.A.C. These standards shall apply to all new development and redevelopment. Any exemptions, exceptions, or thresholds in the Florida Administrative Code (F.A.C.) citations are not applicable.

1.1.2 The City shall continue to comply with the adopted Land Development Regulations that establish and apply uniform design standards and procedures to the development of water quantity and quality control facilities.

1.1.3 The City shall continue to comply with the adopted Land Development Regulations that provide standards for the design of facilities in volume sensitive drainage basins.

Revised 5/24/99, Ord. 980583
Revised 7/24/00, Ord. 990217
Revised 3/4/02, Ord. 000904
Revised 1/19/12, Ord. 110172
Revised 2/21/13, Ord. 120209

Objective 1.2

The City shall continue to comply with its stormwater management plan that addresses existing deficiencies and identified needs.

Policies

1.2.1 Master stormwater basin plans shall be prepared and finalized for each creek watershed. Such plans shall address:

a. The potential for infill development within each basin;

b. The encroachment of existing developed areas in the 100-year floodplain;

c. The efficacy of regional stormwater basins and potential locations;

d. An assessment of stormwater management facilities with regard to excess and deficiencies in stormwater storage and rate capacity;

e. An assessment of stormwater treatment facilities;

f. Removal of invasive vegetation from city-owned facilities; and

g. Recreating/restoring the natural drainage patterns of watercourses and wetland areas.

1.2.2 The Level 1 capital improvements for 2010 through 2020 shall be as follows:

1. Depot Stormwater Basin as shown in the 5-Year Schedule of Capital Improvements. Located south of S.E. Depot Avenue.

2. Sweetwater Branch Restoration/Paynes Prairie Sheetflow Restoration (General Government portion) as shown in the 5-Year Schedule of Capital Improvements. Located on Sweetwater Branch at Paynes Prairie.

3. Little Hatchet Creek and Lake Forest Creek Basin Management Plan as shown in the 5-Year Schedule of Capital Improvements.

4. N.W. 22nd Street Drainage (West Brook) as shown in the 5-Year Schedule of Capital Improvements.

5. S.W. 35th Terrace Flood Mitigation as shown in the 5-Year Schedule of Capital Improvements.

Revised 5/24/99, Ord. 980583
Revised 7/24/00, Ord. 990217
Revised 3/4/02, Ord. 000904
Revised 1/19/12, Ord. 110172

Objective 1.3

The City shall ensure that proper and adequate stormwater management facilities are provided to meet future needs.

Policies

1.3.1 The City shall continue to conduct assessments on an as needed basis, to determine the performance of design standards and stormwater management projects with regard to maintaining and/or reducing the elevation of the 10-year flood channel and 100-year floodplain, especially where such elevations would indicate inundation of existing developed areas. If the assessment indicates that the flood potential has increased, new development shall be restricted until such time as additional standards are implemented and/or stormwater management improvements are provided to meet the impact of such development.

1.3.2 The City shall continue to inventory all city-maintained stormwater management facilities, conveyance systems and structures.

1.3.3 Stormwater projects identified in the Stormwater Element shall be included in the Capital Improvements Element of this plan.

1.3.4 The City shall continue to study existing deficiencies identified in the needs assessment and proposed capital improvements shall be prioritized.

1.3.5 The City shall continue to coordinate with Alachua County and other governmental entities to maintain the existing capacity and function of shared watersheds and to design floodplain elevation standards at or below the 10-year flood channel and 100-year floodplain as established by the most recent Flood Insurance Rate Map (FIRM) of the Federal Emergency Management Agency (FEMA) or a localized study that uses FEMA-approved analyses and that is reviewed and approved by the City of Gainesville Public Works Department.

1.3.6 The City shall continue to comply with adopted stormwater quantity and quality design standards for the redevelopment of existing sites that have substandard or no on-site stormwater management facilities.

1.3.7 The City shall continue to review information required for site plan submittal for completeness and revise these requirements to reflect current engineering practice.

1.3.8 The City shall continue to comply with the procedure for amending the 10-year flood-channel and 100-year floodplain elevations as may be determined by a site-specific engineering study that uses FEMA-approved analyses and that is reviewed and approved by the City of Gainesville Public Works Department.

Revised 5/24/99, Ord. 980583
Revised 7/24/00, Ord. 990217
Revised 3/4/02, Ord. 000904
Revised 1/19/12, Ord. 110172
Revised 2/21/13, Ord. 120209

1.3.9 The rate of stormwater runoff from any development shall be limited to the pre-development (conditions existing at the point of adoption of this Plan) rate for a site, and shall not degrade the capacity of existing stormwater facilities.

1.3.10 In conjunction with the Record of Decision as finalized by the Environmental Protection Agency (EPA) and the National Pollutant Discharge Elimination System (NPDES) Stormwater Discharge Permit issued by the Florida Department of Environmental Protection, stormwater runoff from the Cabot-Koppers Superfund site shall be treated on-site so that it does not pose a danger to the community.

Objective 1.4

The City shall continue the implementation of a maintenance program for all surface drainage systems, that are the responsibility of the City, for the continued effective operation of the stormwater management system.

Policies

1.4.1 The City shall continue to have a regular inspection program for all surface drainage systems that are the responsibility of the City.

1.4.2 The Stormwater Management Utility Program shall include a maintenance schedule for the regular repair and/or replacement of stormwater facilities for which the City has responsibility.

1.4.3 Projects to correct existing deficiencies shall be reviewed in accordance with the following priorities in the development of the Stormwater Management Utility Capital Improvement Program:

a. Projects designed to reduce or eliminate structure flooding in known problem areas;

b. Projects designed to improve the quality of water flowing into receiving creeks, lakes and sinkholes;

c. Projects designed to reduce street flooding during storm events ranging up to the 25-year storm;

d. Projects designed to reduce or eliminate flooding potential of structures in the 100-year floodplain;

e. Projects designed to reduce the channelization of creeks, and to restore habitat and wetlands;

f. Projects designed to reduce maintenance costs.

Revised 5/24/99, Ord. 980583
Revised 7/24/00, Ord. 990217
Revised 3/4/02, Ord. 000904
Revised 1/19/12, Ord. 110172
Revised 2/21/13, Ord. 120209

The City shall continue to implement an integrated stormwater management program for redevelopment.

Objective 1.5

Policies

1.5.1 The City shall implement Land Development Regulations that allow shared or joint-use stormwater facilities, including public or private master stormwater basins.

1.5.2 The City may allow the use of off-site stormwater management facilities to meet the applicable stormwater quality and/or quantity standards required by the Public Works Design Manual.

The City shall continue to comply with adopted Land Development Regulations that improve inspection procedures and improve coordination with other agencies to protect, and preserve or improve the quality of discharges from stormwater management facilities to natural surface waters and aquifers. Additionally, all new stormwater management facilities shall meet the applicable Water Management District's regulations.

Objective 1.6

Policies

1.6.1 Except as otherwise stipulated in the Stormwater Management Element, water quality LOS standards in all basins shall be consistent with the standards of the applicable Water Management District or shall receive treatment of the first "one inch" of runoff, whichever results in greater water quality improvement.

1.6.2 The City shall continue to comply with adopted Land Development Regulations that restrict activities known to adversely affect water quality within the Murphree Wellfield Protection Zones.

1.6.3 The City shall continue to comply with adopted Land Development Regulations that regulate erosion and sedimentation both during and after construction.

1.6.4 The City shall continue to comply with code enforcement procedures and penalties that help obtain compliance with the approved facility design and function.

1.6.5 Stormwater management facilities shall be inspected during construction and periodically after construction to determine that proper construction, operation and maintenance are ongoing.

1.6.6 The City shall incorporate Low Impact Development (LID) guidelines consistent with those by the state Water Management Districts or the Florida Department of Environmental Protection.

Revised 5/24/99, Ord. 980583
Revised 7/24/00, Ord. 990217
Revised 3/4/02, Ord. 000904
Revised 1/19/12, Ord. 110172
Revised 2/21/13, Ord. 120209

Objective 1.7 **The City shall continue to encourage the preservation and protection of existing drainage features.**

Policies

1.7.1 The City shall continue to comply with adopted Land Development Regulations that protect the intrinsic functions of wetlands and accommodate a variety of wetland conditions, such as size of wetland areas, maintenance or restoration of natural hydroperiods, and diversity of vegetation.

1.7.2 The City shall acquire rights to wetlands and other environmentally sensitive areas in order to further the open space objectives of the Conservation, Open Space and Groundwater Recharge Element of this Plan, and to retain the intrinsic stormwater management functions of these areas. The hydrological and ecological functions of related wetland areas should be preserved, restored, or enhanced as appropriate to the extent feasible.

1.7.3 The City shall regulate developments containing wetlands consistent with the Conservation, Open Space and Groundwater Recharge Element policies.

1.7.4 There shall not be any decrease in the capacity of floodplains nor any destruction of creeks regulated by the "Regulation of Development Near Creeks" ordinance.

1.7.5 The City shall develop guidelines in the Land Development Regulations and the Public Works Engineering Design Manual that encourage or require Low Impact Development (LID) concepts and other environmentally sensitive design guidelines for stormwater management facilities.

Objective 1.8 **Effective groundwater recharge shall continue to be required where soil conditions permit.**

1.8.1 The City shall continue to comply with adopted Land Development Regulations that promote increased volumes of groundwater recharge, for all new development, where soil conditions permit.

Objective 1.9 **The City shall continue to implement stormwater management facility design guidelines that promote dual use and aesthetically pleasing facilities.**

Policies

1.9.1 The City shall have guidelines that promote the following:

Revised 5/24/99, Ord. 980583
Revised 7/24/00, Ord. 990217
Revised 3/4/02, Ord. 000904
Revised 1/19/12, Ord. 110172

a. Joint use of retention and detention basins for habitat, open space, and passive recreation, including the establishment and use of trails;

b. Use of native and non-invasive vegetation, in retention and detention basins to enhance stormwater management objectives;

c. Integration of on-site retention and detention facilities with other elements of a development through aesthetically sensitive design and appropriate landscaping;

d. Maintenance and, where possible, enhancement of the existing hydrological and ecological function of stream or drainage corridors, and of wetland areas which serve stormwater facilities; and

e. Removal of invasive vegetation.

1.9.2 Stormwater management facilities shall be designed to minimize the need for maintenance.

The City shall have funds available to pay for the Stormwater Projects listed in the 5-year Schedule of Capital Improvements identified in the Stormwater Management Element. **Objective 1.10**

1.10.1 The City shall provide at least $200,000 annually for Stormwater Projects. Policy

Revised 5/24/99, Ord. 980583
Revised 7/24/00, Ord. 990217
Revised 3/4/02, Ord. 000904
Revised 1/19/12, Ord. 110172
Revised 2/21/13, Ord. 120209

Stormwater Element
Data and Analysis

Introduction

The Stormwater Management Data and Analysis Report addresses the requirements of the Local Government Comprehensive Planning and Land Development Regulation Act and the Florida Administrative Code, Chapter 9J-5.011, as well as the needs of the City of Gainesville, as they pertain to drainage. The element has been named Stormwater Management because that title is more representative of current engineering design and practice with regard to drainage issues.

The purpose of this report is to describe the City's stormwater management system, assess the system's ability to provide necessary protection to residents, structures, and the environment including groundwater resources.

Stormwater management systems affect the aesthetic and ecological character of the City. Within the City of Gainesville, stormwater management has been an important aspect of the development process for the last two decades. As a result, the City has been able to achieve growth in recent years while minimizing impacts on and preserving the natural function of its creeks, sink holes and lakes.

Through the policies and regulations proposed in this element, the City has endeavored to develop a stormwater management plan that will enhance the ability of natural systems to provide flood control and water quality treatment. Stormwater management design which minimizes the alteration of natural features and increases groundwater recharge is a primary ambition for this plan.

The issues raised in this element affect the community in several ways. The proper management of surface water resources is essential to maintaining the quantity and quality of groundwater resources. As the City grows, the associated increase in impervious surface area requires that the City continue to provide review of the design, installation and maintenance of public and private stormwater management facilities, in order to ensure the safety of citizens and property during storm events, and to protect water quality and creek ecosystems.

MAJOR NATURAL AND MAN-MADE DRAINAGE FEATURES

Stormwater runoff is the water that flows across the surface of the earth during or after a storm event. It is affected by:

* rainfall,
* natural drainage features such as topography and soil types, and
* man-made structures such as culverts, and retention and detention basins.

Stormwater management addresses:

* quality,
* volume, and
* rate of stormwater flow.

NATURAL DRAINAGE FEATURES

Rainfall

The mean annual precipitation for Alachua County for the thirty-year average through 1997 was approximately 53 inches. About 52 percent of the total rainfall occurs during the months June through September. For the Greater Metropolitan area of Gainesville, a rain event of 7.9 inches distributed over a twenty-four hour period is considered a twenty-five-year 24-hour storm event. This means that a storm of this intensity has a four percent probability of occurring or being exceeded each year. A ten-year 24-hour storm event contributes 6.8 inches of rainfall during a 24-hour period. This intensity of storm has a ten- percent probability of occurring or being exceeded each year.

Natural Watershed Characteristics

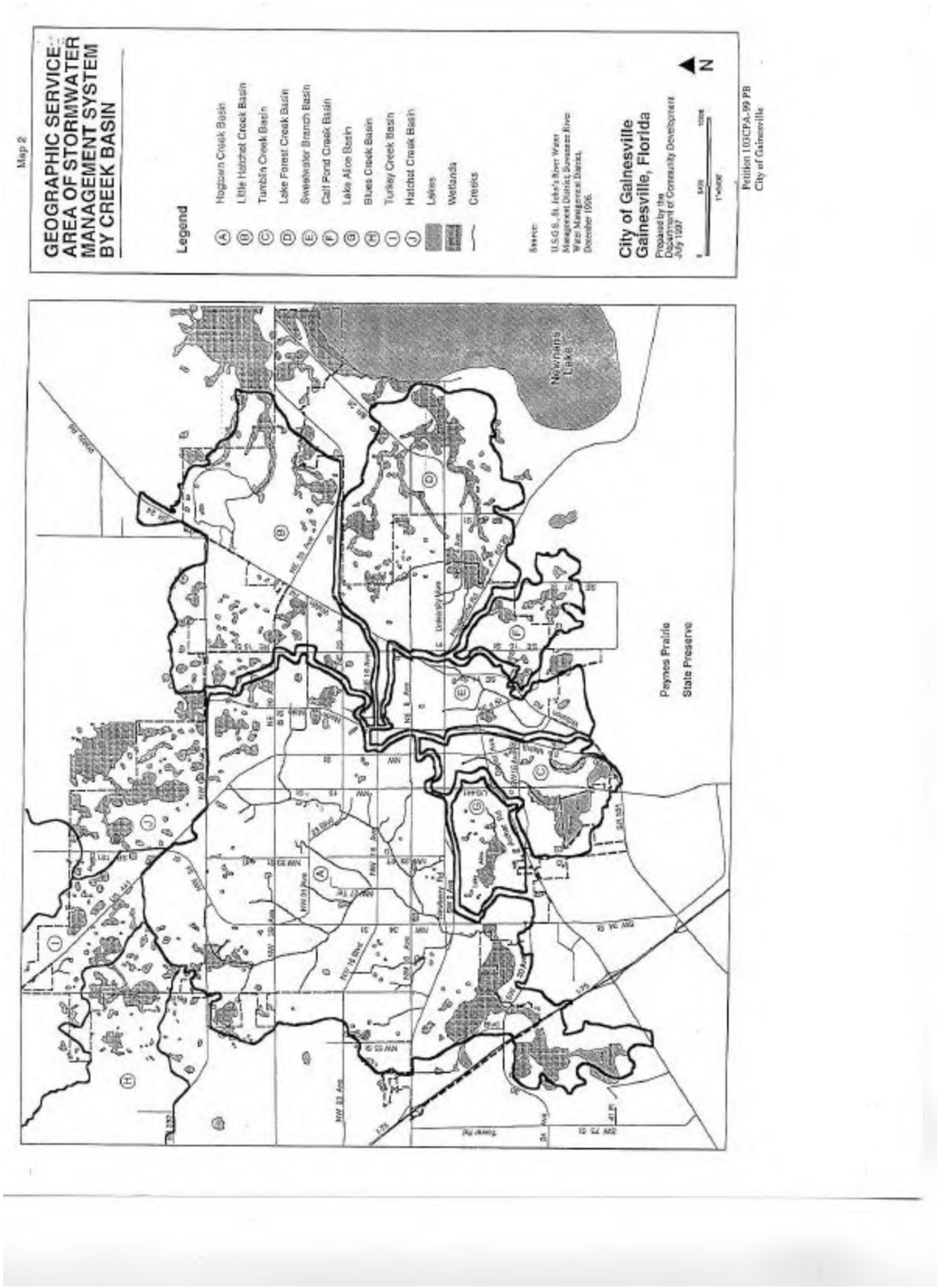
Basin Classification

The City is primarily located within the Oklawaha River Basin, a major regional watershed (see Map 1). Within the Oklawaha River Basin, the City is divided into two sub-watersheds, the Florida Ridge Basin and the Orange Lake Basin. A small portion of the City, in the vicinity of the Northwood subdivision near the northwest city limits, is in the Santa Fe River Basin under the management of the Suwannee River Water Management District.

The two major basin types within the Gainesville area are depression basins and stream basins. Depression basins are those watersheds which have no outlet for stormwater runoff except by percolation into the groundwater and evapotranspiration. Stream basins are those watersheds which drain stormwater runoff via natural streams and man-made channels ultimately discharging into wetlands, lakes or sinkholes.

The City area is divided into ten creek basins (see Map 2) based upon the creek system. Several of these basins extend beyond the City limits and into Alachua County. Very little water leaves the urban area as surface water flow. Only the Little Hatchet and Lake Forest Creek basins have discharges which eventually outfall to the St. Johns River via the Newnans Lake system.

Map 1
ST. JOHNS RIVER WMD/
OKLAWAHA BASIN
Legend
I Nassau River
II St. Marys River
III Lower St. Johns River
IV Middle St. Johns River
V Upper St. Johns River
VI Florida Ridge
VII Okleneita River
VIII Upper Coastal
IX Middle Coastal
X Lower Coastal
Major Surface Water Basin Boundary
Water District Boundary
Source
St. Johns River Water Management District 1997
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development July 1997
Petition 103CPA-99 PB
City of Gainesville
N
ATLANTIC OCEAN
Jacksonville
St. Augustine
Palatka
Daytona Beach
Deland
Titusville
Melbourne
Vero Beach
Sanford
Orlando
Leesburg
Ocala
Gainesville
OKLAWAHA BASIN BOUNDARY


Map 2
GEOGRAPHIC SERVICE AREA OF STORMWATER MANAGEMENT SYSTEM BY CREEK BASIN
Legend
A Hogtown Creek Basin
B Little Hatchet Creek Basin
C Tumblin Creek Basin
D Lake Forest Creek Basin
E Sweetwater Branch Basin
F Calf Pond Creek Basin
G Lake Alice Basin
H Blues Creek Basin
I Turkey Creek Basin
J Hatchet Creek Basin
Lakes
Wetlands
Creeks
Source:
U.S.G.S., St. John's River Water Management District, Suwannee River Water Management District, December 1996.
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development July 1997
N
Petition 103CPA-99 PB
City of Gainesville
Newnans Lake
Paynes Prairie State Preserve

Description of Creek Basins

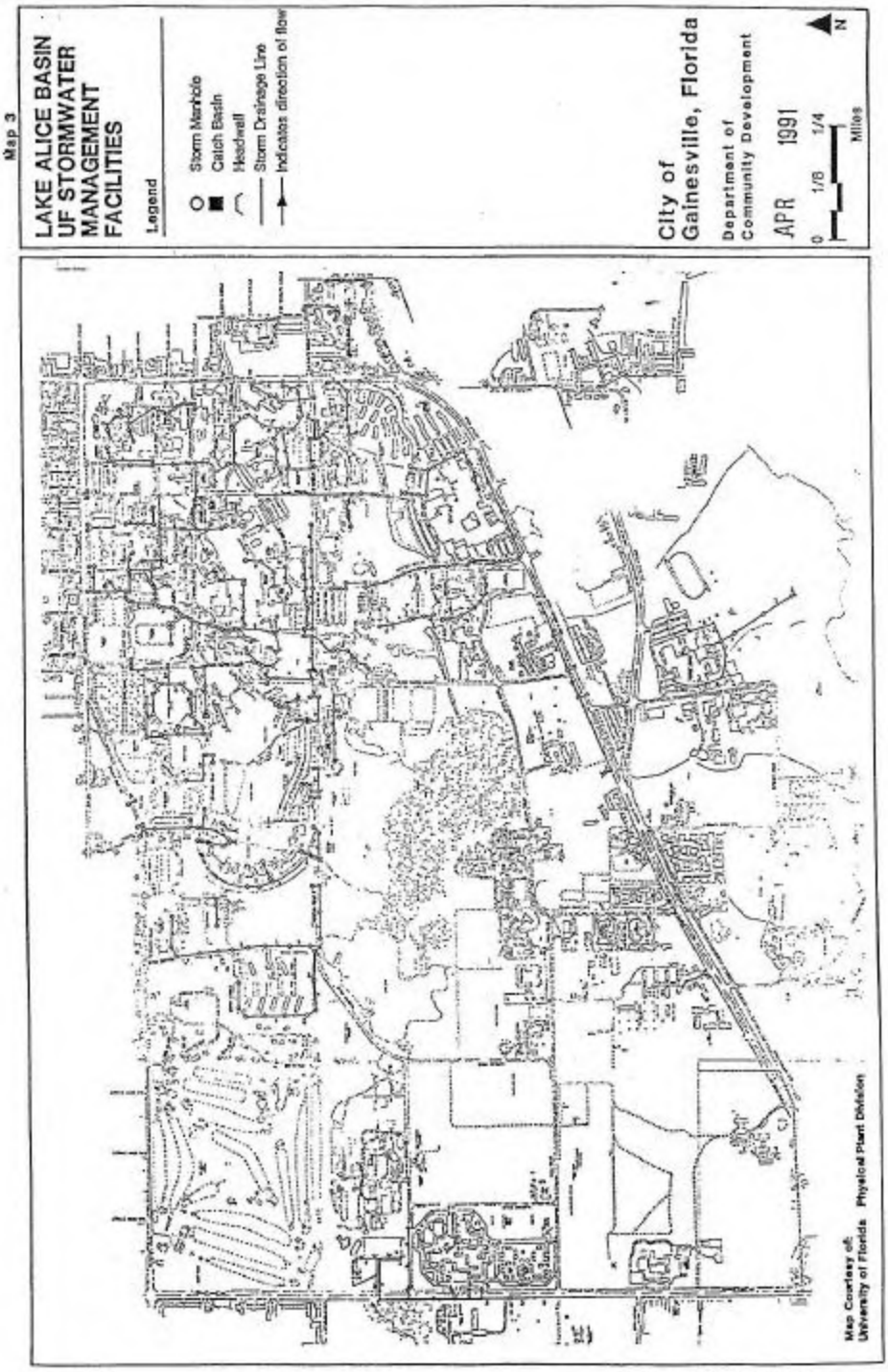
Table 1 lists the basin name and indicates the predominant land use types and the degree of reliance on man-made structures within the watershed.

TABLE 1
CREEK BASINS

Basin Name	Predominant Land Use Type	Predominant Character	Watershed Size (acres)
Hogtown Creek	Residential	Natural	12,500
Little Hatchet Creek	Public Facilities, Industrial Agriculture	Channelized	2,884
Tumblin Creek	Residential Commercial Industrial	Natural and Channelized	1,976
Lake Forest Creek	Education Residential	Channelized	4,547
Sweetwater Branch	Residential Commercial Industrial	Channelized	1,690
Calf Pond	Residential Agriculture	Channelized	1,024
Lake Alice	Education	Natural	1,059
Blues Creek	Residential	Natural	4,976 (estimated)
Turkey Creek	Residential	Channelized	5,640 (estimated)
Hatchet Creek	Industrial	Natural	17,548 (estimated)

Notes: Lake Alice is the drainage basin for the University of Florida. The City of Gainesville has no maintenance responsibility for this basin (see Map 3). There are approximately 150 depression basins within the City. See Future Land Use Element for specific land use designations within basins.

Source: City of Gainesville 1980 - 2000 Comprehensive Plan, December 1979, St. Johns River Water Management District; Suwannee River Water Management District, December 1996; City of Gainesville Department of Community Development, February 1999.



Petition 103CPA-99 PB
City of Gainesville

Recharge Characteristics

Stormwater runoff is collected by creeks and discharged directly into the Floridan Aquifer through the Alachua and Haile Sinks. For further discussion of aquifer recharge characteristics, refer to the Conservation, Open Space and Groundwater Recharge Element.

Wetlands

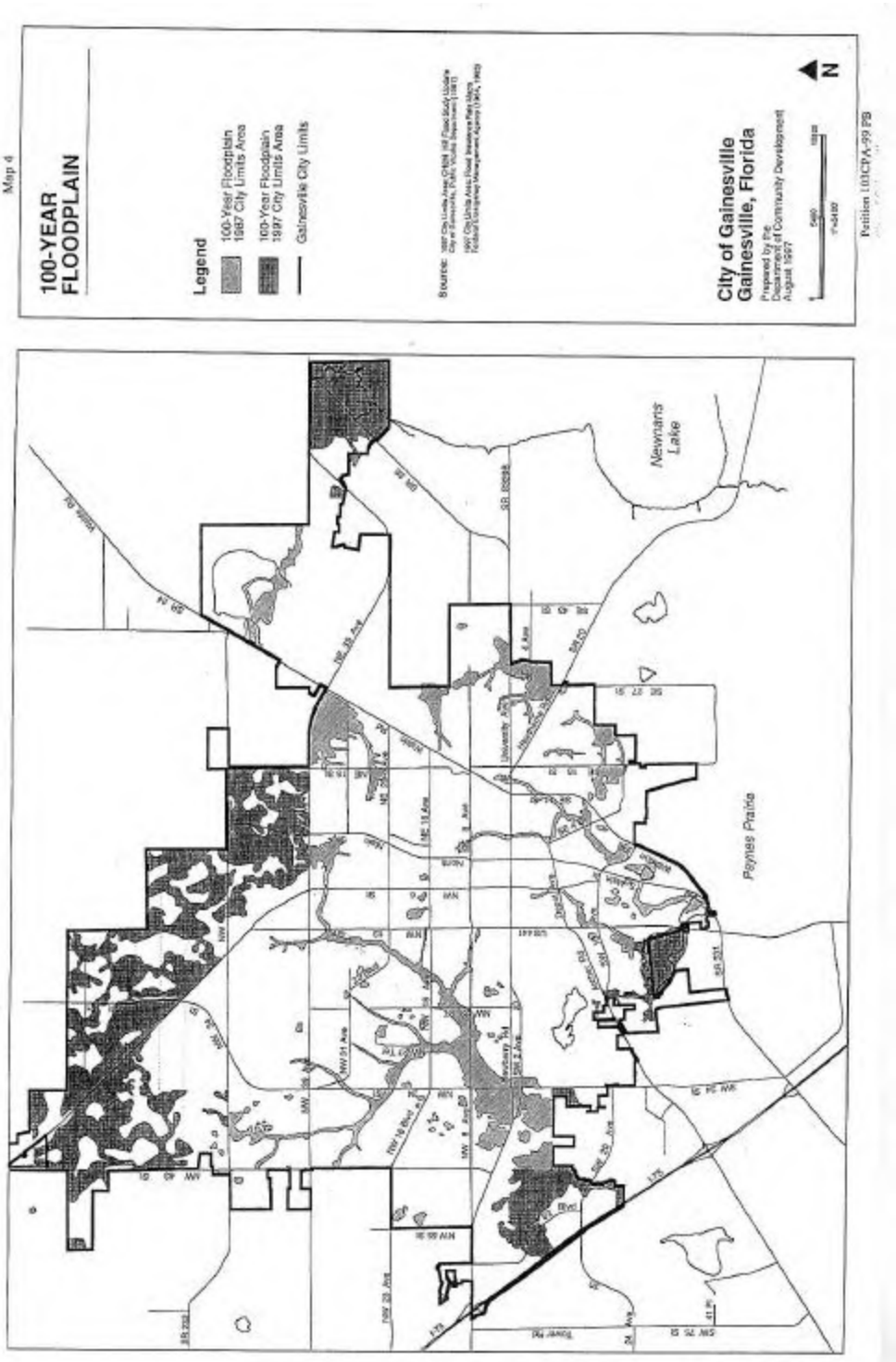
There are approximately 2,330 acres of wetlands within city limits. These wetlands are located along the floodplains of various creeks, while others exist as isolated wetlands. Isolated wetlands are natural depressions storing either surface waters or floodwaters. Trees and other wetland vegetation help slow the speed of the floodwaters, thereby preventing soil erosion. One of the most valuable functions of wetlands is the ability to maintain or improve the quality of surface waters by removing nutrients and reducing the sediment loads entering receiving water bodies. For additional discussion of wetlands, see the Conservation, Open Space and Groundwater Recharge Data and Analysis Report.

Flood Zones

A flood is a temporary inundation of land resulting from an unusual and rapid accumulation of stormwater runoff. The extent of a flood is described in terms of its frequency of occurrence.

The City regulates development in both the 10-year floodplain (flood channel) and the 100-year floodplain. The flood channel is that portion of a watercourse and any adjacent area that must remain unobstructed in order to safely discharge the stormwater runoff resulting from a 10-year 24-hour rainfall event. The floodplain has a dual function. First, it includes the necessary area for the flood channel to convey stormwater. Second, it also includes an area that temporarily stores stormwater runoff until the storm event is over and the capacity of the watercourse is no longer exceeded. A 100-year floodplain has a 1% chance of occurring or being exceeded every year. The 100-year floodplain is shown on Map 4.

Single-family subdivisions that were platted prior to September 1990 and with all subdivision infrastructure improvements made prior to September 1990, are regulated as if they are in the 100-year flood plain. This provision is designed to alleviate any hardships on property-owners resulting from revisions made to the flood elevation maps in 1990. Development on these lots will be governed by floodplain requirements with regard to minimum first floor elevation and floodproofing requirements.


Map 4
100-YEAR FLOODPLAIN
Legend
100-Year Floodplain 1987 City Limits Area
100-Year Floodplain 1997 City Limits Area
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development August 1997
N
Petition 103CPA-99 PB
Newnans Lake
Paynes Prairie

Topography

Drainage basins are delineated by topography (the relative positions and elevations of the natural or man-made features of an area that describe the configuration of its surface). Water flow occurs in basins. Topographic highs establish the divides between basins. Surface elevations in the City range from approximately 50 feet to 190 feet above mean sea level (msl).

Soils and Geology

Alachua County is part of the Central Florida Ridge within the Central Highlands of the Atlantic Coastal Plain. It has four major geological formations which have influenced soil development. They are the Ocala Group, the Hawthorn Formation, the Alachua Formation and the Plio-Pleistocene Terrace Deposits.

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some soils are shallow to bedrock. Clayey or wet soils typically have poor percolation rates. Stormwater design is very dependent on soil type. For a more detailed discussion of Gainesville's soils, refer to the Conservation, Open Space and Groundwater Recharge Data and Analysis Report.

MAN-MADE DRAINAGE FEATURES

The City's stormwater management system also includes but is not limited to constructed facilities such as swales, channels, storm sewers, culverts and detention and retention facilities. These components typically perform two primary functions:

* conveyance; and
* storage

Swales, channels, culverts and storm sewers collect and convey stormwater to particular destinations such as sink holes or lakes. Detention facilities store stormwater runoff temporarily and release it slowly to natural receiving water bodies. The temporary holding allows some purification through the settling of suspended solids. Retention facilities store stormwater runoff and do not discharge directly to surface waters; instead, the runoff is released through evaporation or percolation into the ground. Some facilities perform both retention and detention functions.

STORMWATER CHARACTERISTICS

The quantity of stormwater runoff is diminished by infiltration, transpiration, evaporation, surface storage and other losses. The magnitude of these losses is a function of climate, soils, geology, topography and, most importantly, land use.

Development has four distinct yet interrelated effects on stormwater runoff:

* total runoff volume changes;
* flow rate characteristics change;
* capacity of receiving systems can be diminished; and
* water quality can be degraded.

As an area becomes urbanized, the volume and rate of runoff increase as the flow of stormwater is concentrated in shorter time periods than those produced under natural conditions. These shorter time periods are caused by increases in impervious surface area, which reduce the opportunity for infiltration, evaporation, transpiration, and depression storage. Figure 1 illustrates water balance prior to and after development. As can be seen in the illustration, surface runoff is minimized under pre-development conditions. Post-development opportunities to intercept stormwater are diminished and surface runoff is considerably increased. Pavement and buildings typically contribute almost all of the rainfall upon their surface immediately to stormwater runoff.

Figure 2 illustrates the effect impervious surfaces associated with development have on streamflow rate. Development results in higher and more rapid peak discharges and increased runoff volumes.

Figure 1 Water Balance

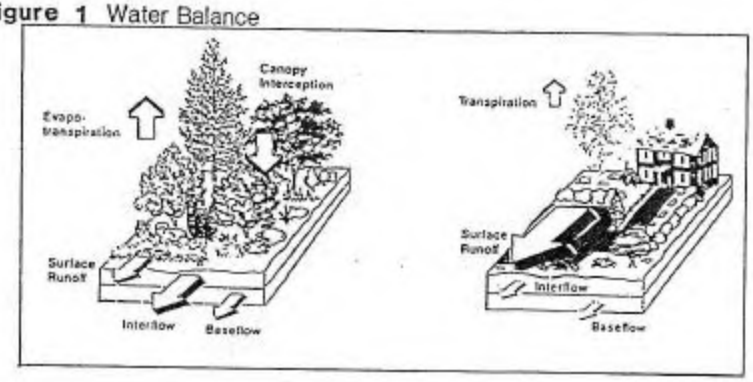


Figure 2 Streamflow

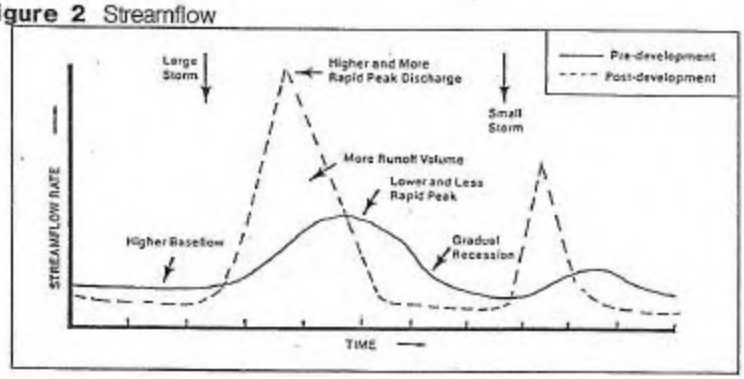


Figure 3 Response of Stream Geometry

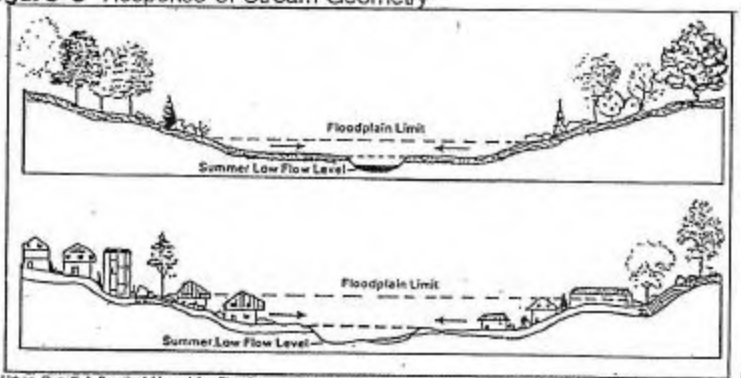


Figure 1.1 Controlling Urban Runoff: A Practical Manual for Planning and Designing Urban BMPs by Thomas R. Schueler Department of Environmental Programs Metropolitan Washington Council of Governments APR 1991

Petition 103CPA-99 PB
City of Gainesville

Increased stormwater flow rates can result in the erosion of vegetative banks along a receiving watercourse. This erosion contributes to downstream accumulations of sediment and debris. Ultimately, the natural balance in the watercourse's ecosystem is disrupted resulting in less diversity of vegetation and a less reliable watercourse to carry stormwater runoff. In response to increases in flow rate and volume of stormwater runoff, flood zones associated with a watercourse increase in size. These changes in stream geometry are shown in Figure 3.

If the receiving system is a storm sewer pipe network, increased levels of stormwater runoff can exceed network capacity and cause flooding of roadways and structures.

All land use affects water quality. In undeveloped areas, many physical, chemical and biological processes interact to neutralize the effects of most of the materials found in the runoff. As urban land uses intensify, these processes are disrupted and the amount and types of potential pollutants increase. Pesticides, fertilizers, animal wastes, oil, grease and heavy metals are washed into receiving waters with stormwater runoff. Studies have shown that 90% of the pollutant load can be found in the "first flush" or approximately the first inch of stormwater runoff. Stormwater quality can be improved by treating the "first flush".

It is current practice to mitigate stormwater impacts of urbanization through the use of detention and retention facilities.

OPERATIONAL RESPONSIBILITY FOR DRAINAGE FACILITIES AND INVENTORY OF DRAINAGE FACILITIES

City-maintained Facilities

Storm Channels and Storm Drains

Maps Series A (appendix) shows major and minor channels within the creek basins previously described in Table 1. The City currently maintains approximately 70 miles of open channels and 130 miles of storm sewers (SMU, 1988: 2-7).

Retention and Detention Facilities

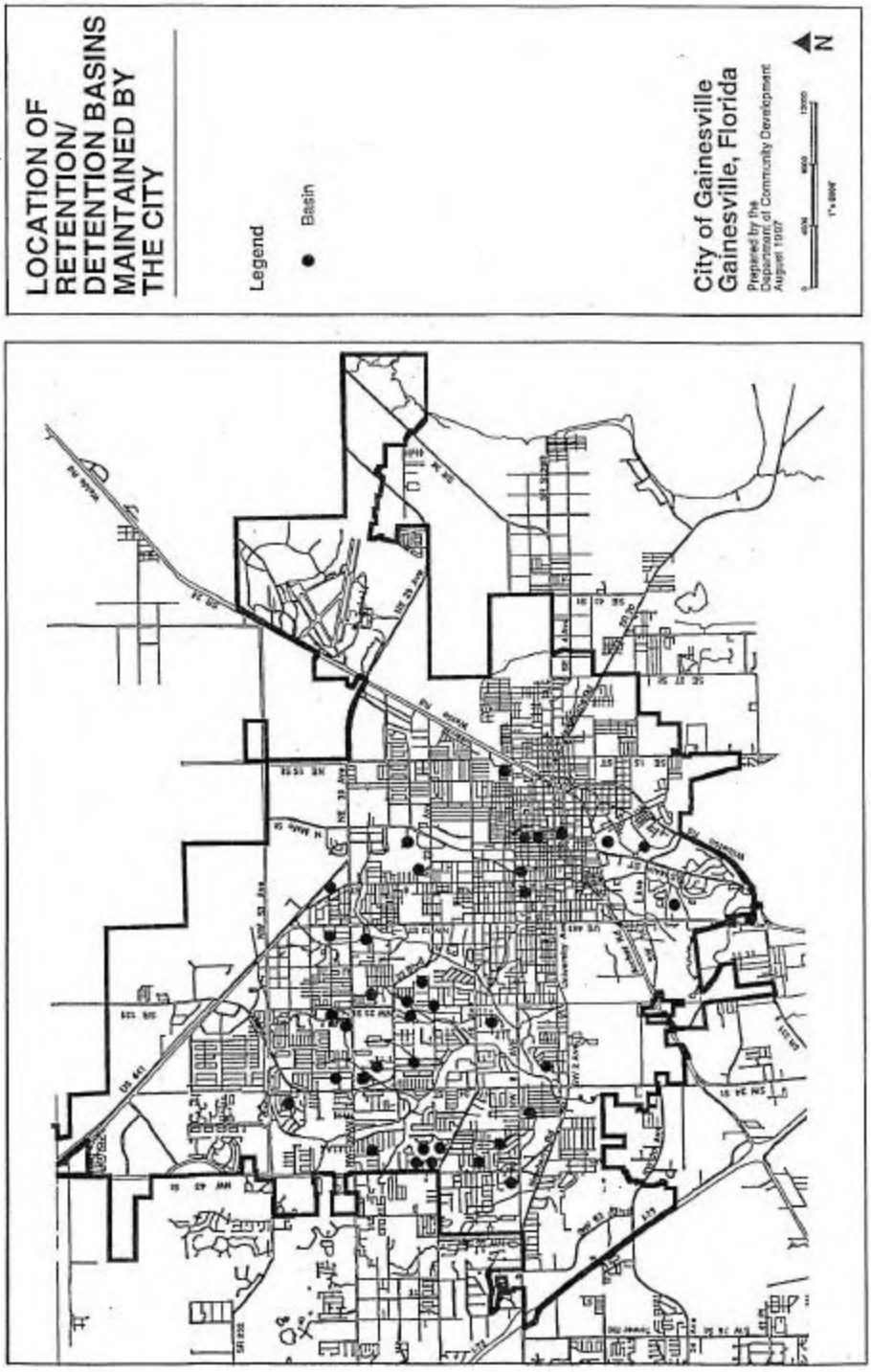
There are over 60 City-maintained detention/retention areas located in the City as shown on Map 5 and listed in Table 2. Table includes basins on City-owned property and in subdivisions with publicly accepted roadways and drainage facilities.

Table 2
RETENTION/DETENTION FACILITIES MAINTAINED BY THE CITY OF GAINESVILLE

Map 5 Key	Subdivision/Facility Name	Number of Basins per location
1.	MetroCorp	1
2.	Landmark Woods II	2
3.	Landmark Woods I	2
4.	Timberbrooke II	2
5.	Timberbrooke	2
6.	Citizen's Park	3
7.	Kirkwood West	1
8.	Coventry	3
9.	Chatworth Court	1
10.	The Valley	1
11.	Royal Gardens	1
12.	Foxgrove	1
13.	Westmoreland 4	1
14.	Raintree	6
15.	Springtree	2
16.	Willow Creek	2
17.	Palmetto Woods	1
18.	Pine Meadows	1
19	Central Park	1
20.	Renaissance	1
21.	S.E. 2nd St, 1100 Block	1
22.	Sandhill	1
23.	Hamilton Park	1
24.	Pine Breeze	1
25.	Cedar Creek	1
26.	Hidden Oaks	1
27.	Pebble Creek	1
28.	Wood Creek	1
29.	Foxfield	1
30.	Hancock Village	2
31.	Xanadu	1
32.	Foxcroft Manor (swales and rear yard)	1
33.	Hermitage	5
34.	Hibiscus Park	2
35.	Thomas Center	1
36.	Police Station	1
37.	Parking Lot 21	1
38.	Parking Lot 9	1
39.	Regional Transit System	1
	Total	61

Source: CH2M Hill, Stormwater Management Utility Program, Phase I Report, May 1988.

Map 5



Petition 103CPA-99 PB
City of Gainesville

Major Culverts

There are 90 major culverts within the City as of 1992. Map Series B (see appendix) shows the culvert locations in each creek basin.

Roadway Drainage Facilities

There are approximately 680 lane miles of street surface within the City. Approximately 430 lane miles have drainage facilities, typically curb and gutter or swales, associated with them. Semi-paved roadways are shown by Map Series C (see appendix) to have deficient drainage systems associated with them.

University of Florida, State and County-Maintained Facilities

The University of Florida maintains all stormwater management systems on the main campus (see Map 3). The Lake Alice Basin consists of an 83-acre lake and 976 acres of tributary land. Lake Alice is a depression basin, with no outflow into the City system (CH2M Hill, 1987).

The Florida Department of Transportation maintains the drainage facilities which serve the State Highway System and Alachua County maintains those drainage facilities serving county-maintained roads (see Map 6).

Privately-Maintained Facilities

City development regulations have required on-site retention/detention facilities since the mid-1970s to manage stormwater. Stormwater management improvements must be completed prior to occupancy. Property owners are responsible for the proper maintenance of these stormwater improvements.

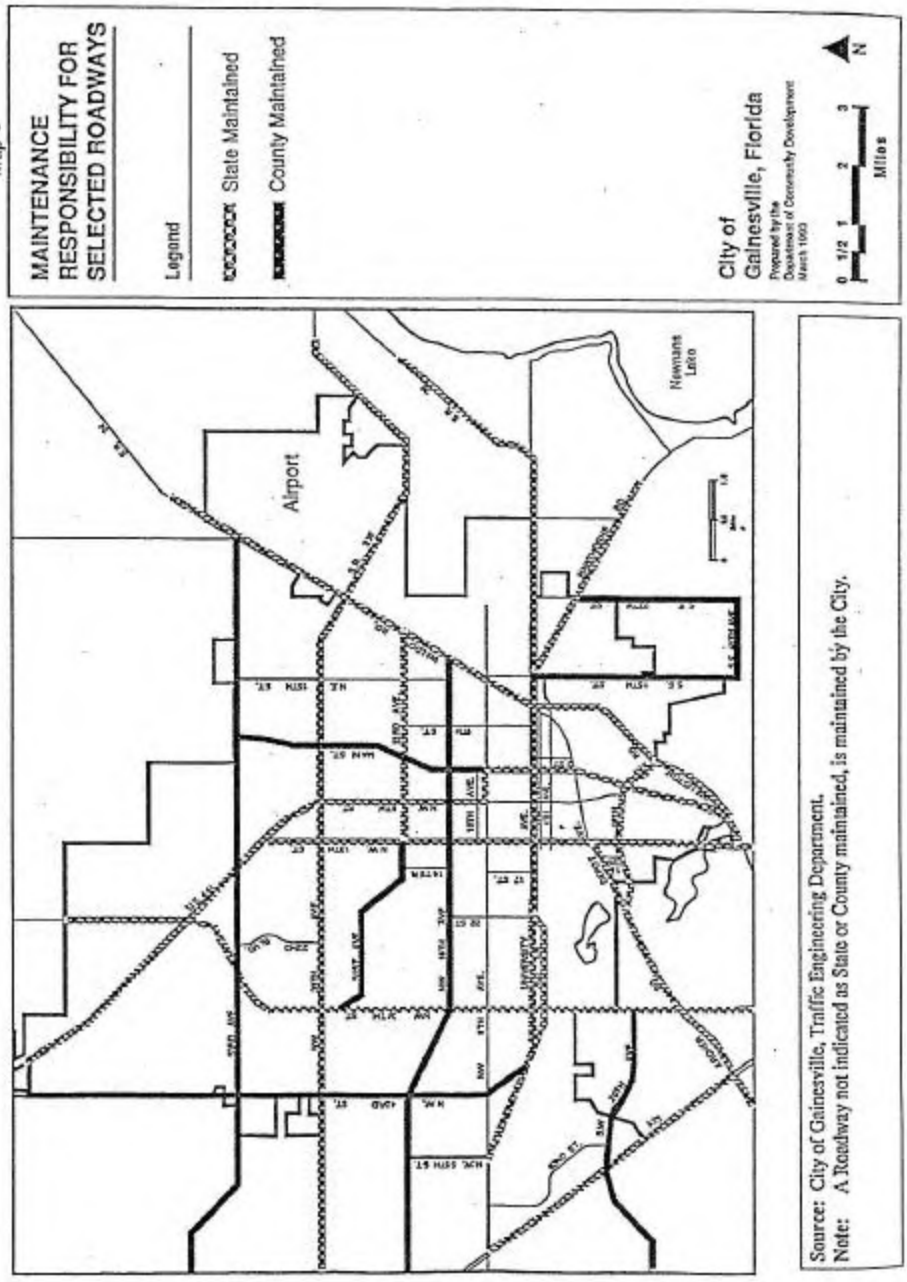
City-Maintained Facilities In Other Jurisdictions

The City of Gainesville does not operate or maintain any stormwater management facilities outside of city limits.

Shared Facilities

The City does not operate any joint stormwater facilities with other jurisdictions. However, since stormwater is directed to natural drainage basins, the basins are shared with Alachua County to the extent they extend beyond the city limits.

Petition 103CPA-99 PB
City of Gainesville



Impact of Drainage Facilities Upon Natural Resources

All stormwater drainage in Gainesville flows into surface waters (creeks, lakes and wetlands) or depression basins. All surface waters in Gainesville, except for certain localized sites such as the Hogtown Creek in the vicinity of the Cabot/Koppers Superfund site, have been designated as "Class III" (suitable for recreation, propagation, and management of fish and wildlife) waters by the Florida Department of Environmental Regulation (DER) (Chapter 17-302, FAC).

Paynes Prairie State Preserve is the natural resource most affected by stormwater runoff. Sweetwater Branch, flowing into the prairie, serves the oldest parts of Gainesville, and therefore has the fewest stormwater treatment facilities. Much of the creek is channelized, which causes increased velocity during storm events. This leads to greater erosion and sedimentation, and increased nutrient loads in the prairie. The Stormwater Management Utility's work program (see section below on Stormwater Management Utility program) includes a study of each drainage basin in the system. Draft studies have been prepared for each stormwater basin except those annexed since 1991. The study of Sweetwater Branch is expected to provide alternative solutions to remediate the existing problems. Other solutions include enhancement of the City's street-sweeping program and improved maintenance capabilities since adoption of the Stormwater Management Utility.

IDENTIFICATION AND ASSESSMENT OF EXISTING PROGRAMS AND REGULATIONS

PROGRAM IDENTIFICATION AND ASSESSMENT

Stormwater Management Utility Program

Pursuant to Section 408.0893, Florida Statutes, a Stormwater Management Utility (SMU), was created by ordinance in 1988 to fund stormwater management services in the City of Gainesville. This utility provides a dedicated funding source for both operational and capital costs related to stormwater management. Fees are charged based on the amount of impervious surface that properties have. Non-residential properties are granted an on-site retention facility SMU fee credit if retention facilities are included in their site design. The fee applies to all public and private lands within the City which use or discharge into the City's stormwater management system. The Stormwater Management Utility is wholly owned by the City of Gainesville, and is only operative within its boundaries.

All revenues are used for stormwater management purposes. Currently, revenues are primarily spent on system maintenance and repairs. A small amount of the revenues are being used for assessing facility needs in one or two basins. The need for additional funding and associated long-term planning will be identified in the 5-year Stormwater Improvement Plan (SIP) for the utility.

Operation and Maintenance Program

An operation and maintenance program to maintain channels and structures is an integral part of the City's stormwater management program. The components of this program include mowing, street sweeping, open channel maintenance, and closed watercourse maintenance.

Mowing

The mowing associated with stormwater management achieves different ends with different facilities. Mowing in open channels maximizes the volume and speed of the water flowing through the channel, while mowing in detention/retention basins keeps the basins from being a public health or safety hazard for the neighborhood or area it serves. The City mows approximately 60 detention/retention basins two-to-three times a year and approximately 70 miles of open channels from twice a year to once every two years.

Street sweeping

Street sweeping has two purposes. The first is to remove litter that might clog drainage facilities, and the second is to remove sediments on the street and prevent them from being flushed into the natural systems.

Currently, downtown areas are scheduled for street sweeping twice per week, collector and arterial routes are swept every one to two weeks, and curbed residential streets every four to six weeks.

Open Channel Maintenance

There are approximately 70 miles of open channels in the City. Maintenance activities focus on keeping the capacity of the channel at its historical levels. This is achieved by removal of obstructions, mowing the vegetation and keeping the bottom of the channel level. These actions keep the channel clear so stormwater can flow with minimum resistance to its destination.

Storm Sewers (Closed Watercourses) and Culverts

This maintenance activity restores the flow capacity of inlets and underground piping. Age and exposure to physical impacts deteriorate these facilities. The Maintenance Division of the Public Works Department replaces those elements identified as critical through its inspection or trouble call processes. These are replaced or repaired as necessary.

REGULATION IDENTIFICATION AND ASSESSMENT

City Code General

The City has numerous regulatory requirements regarding stormwater management and flood control. The requirements were organized and incorporated into Chapter 30, the Land Development Code under Article VIII, Environmental Management. Also, the Public Works Design Manual was adopted by resolution in June of 1992. It includes guidelines for the design and operation of facilities that discourage the breeding of mosquitoes. Maintenance plans for stormwater management facilities are required as part of the development plan approval process. The plan must specify regular maintenance procedures for which the property owner is responsible. The City will periodically inspect stormwater control facilities and shall inspect these facilities upon complaint to determine that such facilities are operating and being maintained as designed.

City of Gainesville Ordinances

Chapter 30 Land Development Code
Article VIII Environmental Management
Division 3. Environmental Overlays
Subdivision II. Flood Control District

Purpose**:** To minimize public and private losses due to flooding.

Applies to: property subject to development plan approval by the City Plan Board and Development Review Board, platting, and all lands located within regulatory flood zones.

Rate Control

The Petitioner must provide calculations demonstrating that the rate of stormwater runoff from the property will be no greater for the design storm after the development than prior to development.

Flood Zone Development

Flood Channel Districts: Flood channels are the geographic area inundated as a result of a ten-year storm event. Construction of any permanent structures is prohibited in the flood channel with very limited exceptions.

Flood Plain Districts: Floodplains are the geographic areas inundated as a result of accumulation of runoff of surface waters from a 100-year storm event. The City will permit construction of structures meeting specific requirements in a floodplain. Structures may not reduce the storage capacity of a floodplain.

The ordinance is very specific about what activities are permitted or prohibited in the designated flood zones. It also includes stormwater management design criteria (City) and floodplain development criteria (City and Federal Emergency Management Agency) that typically provide for local retention, detention and treatment of stormwater generated as a result of development. These guidelines include the preparation of maintenance plans for the stormwater facilities and specify regular maintenance procedures to be followed by the owners.

Subdivision III. Surface Waters and Wetlands District

Purpose: To protect the significant natural communities associated with certain creek systems, regulated lakes and wetlands.

Applies to: All development of land, including single-family residences.

Requirements: No development is permitted within 35 feet of the centerline of any regulated creek, or within 35 feet of a regulated lake or wetland. Between 35 and 150 feet, there is a presumption that development is detrimental to the regulated creek unless demonstrated otherwise.

This section of the Land Development Code is very stringent regarding the need for sedimentation control measures during development. Development is defined as the disturbance of vegetation. This means that smaller projects including single-family home construction as well as larger projects, must be evaluated to determine impacts upon regulated surface water systems and wetlands.

Division 2. Landscape and Tree Management, Stormwater Management and Water/Wastewater Connection Policies
Subdivision II. Stormwater Management
Sec. 30-270(b)(2)f. Design standards for the subdivision of property.

Purpose: To ensure that adequate and necessary physical improvements of lasting quality and requiring minimum maintenance are installed; to prevent periodic or seasonal flooding.

Applies to: All subdivision of land within the City (except minor subdivisions and lot splits).

Requirements: A complete stormwater management system plan, in accordance with the flood control provisions of this article and with the design manual of the Public Works Department must be prepared. Specific requirements include:

1. A system of inlets and pipes must be provided to collect and direct stormwater during a ten-year 24-hour storm event. Public roads may be used to convey stormwater if unimpeded use of public roads during a ten-year 24-hour storm event is possible.

2. A route for stormwater runoff must be provided so as to prevent flooding and ensure access for emergency vehicles during a ten-year 24-hour storm event.

3. A detention/retention system must be provided which will permit a controlled outlet to receiving watercourses. The system shall be designed so that the rate of stormwater runoff is no greater after the development than before the land was developed, based on a 100-year critical duration storm event.

Current policies associated with the public acceptance of stormwater management basins for perpetual maintenance are based primarily on the City's ability to adequately, efficiently and economically complete periodic maintenance.

Article VII. Development Review Process
Division 1. Development Review Process
Sec. 30-160. Submittal Requirements

Purpose: To protect the character and maintain the stability of residential, commercial and industrial areas.

Applies to: Multi-family of five or more units or two or more buildings, office, most business and industrial sites.

Requirements:

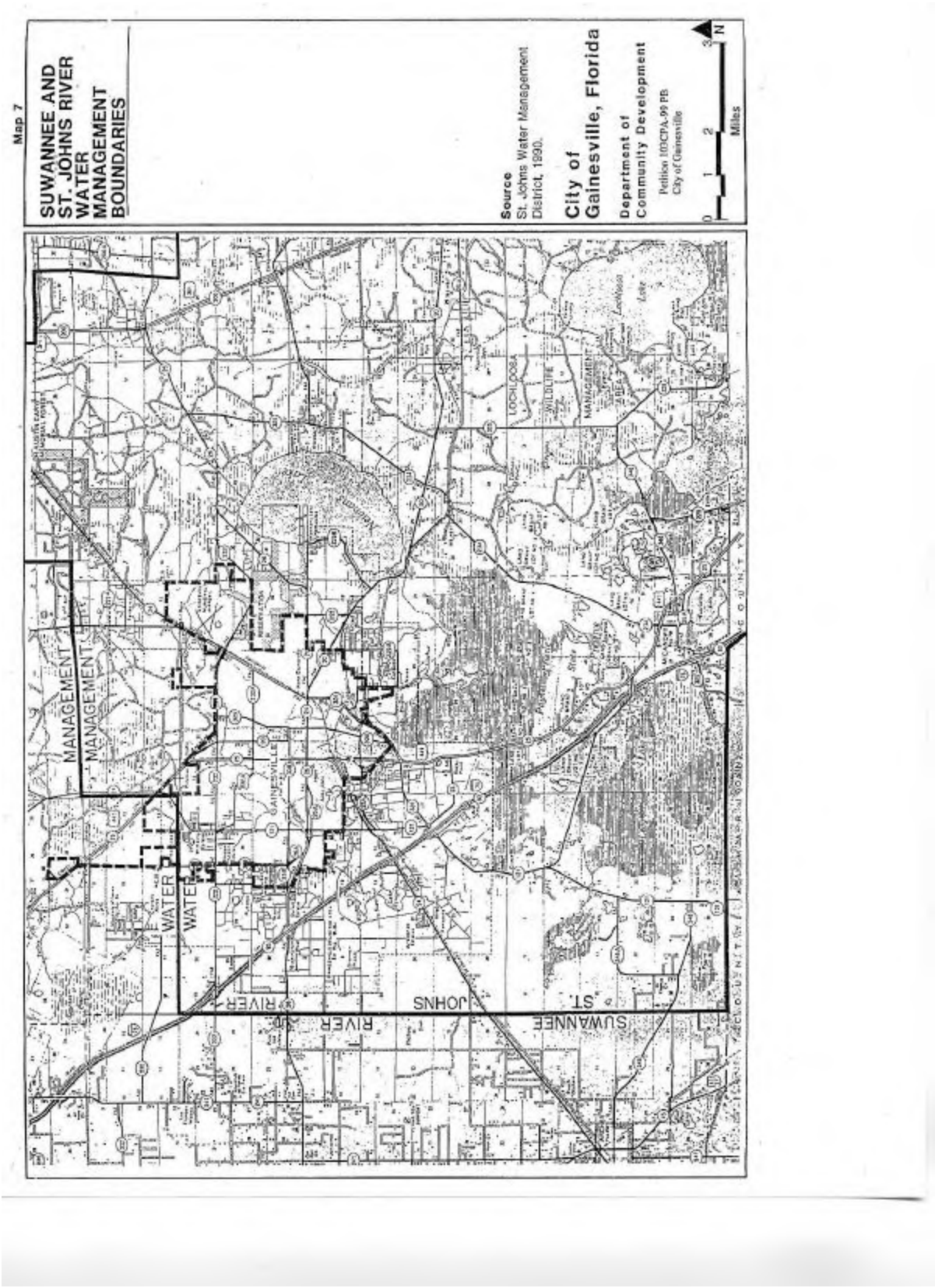
A preliminary stormwater management plan in accordance with Article VIII:

a. Show generalized soil types.
b. Graphically show existing topography in one-foot contours and direction of flow.
c. Graphically show any existing drainage control features, and all natural or manmade water bodies.
d. Note depth of the high water table.
e. Graphically show location, note area and dimensions of proposed drainage/retention basins and swales including proposed depth and elevation of basin bottom and shoulder, elevation of all control structures and all preliminary calculations.

f. Graphically show all easements.
g. Provide documentation if joint facility or master plan facility is to be utilized.
h. Graphically show proposed grading
i. Note proposed roof drainage control system.
j. Name, address and registration number of engineer or landscape architect who prepared preliminary stormwater management plan.
k. Sedimentation and erosion control plan: 1. During construction; and 2. Plan for erosion and sedimentation control over the life of the stormwater facilities.
l. List any permits required by the county, the applicable water management district, and any state agency.

A final stormwater management plan, in accordance with Article VIII, signed and sealed by a professional engineer registered in the State of Florida:

a. Data, method of analysis and explanation of assumptions for final stormwater management plan and stormwater management utility summary sheet.
b. Results of soil borings, if determined necessary by public works department.
c. Typical sections and details of all stormwater management control facilities; construction specifications, complete construction notes.
d. Grading and paving plan, including complete notes and construction specifications.
e. Final sedimentation and erosion control plan: 1. During construction; and 2. Plan for erosion and sedimentation control over the life of the stormwater facilities.
f. Status report on any permits required by the county, the applicable water management district and any state agency.
g. Maintenance plan for stormwater management facilities specifying regular maintenance procedures for which the property owner shall be responsible.


Map 7
SUWANNEE AND ST. JOHNS RIVER WATER MANAGEMENT BOUNDARIES
Source
St. Johns Water Management District, 1990.
City of Gainesville, Florida
Department of Community Development
Petition 103CPA-99 PB
City of Gainesville
0
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Miles
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WATER MANAGEMENT
WATER MANAGEMENT
SUWANNEE RIVER
ST. JOHNS RIVER
GAINESVILLE
LOCHLOOSA WILDLIFE MANAGEMENT AREA
Lochloosa Lake
Orange Lake

Water Management District Regulations

Nearly all of the City is under the jurisdiction of the St. Johns River Water Management District (see map 7). A small portion of the City, in the vicinity of the Northwood subdivision near the northwest city limits, is in the Santa Fe River Basin under the management of the Suwannee River Water Management District.

St. Johns River Water Management District

The SJRWMD has implemented three sets of rules to regulate systems which manage and store surface waters:

40C-4, F.A.C., Management and Storage of Surface Waters
40C-40, F.A.C., General Surface Water Permits
40C-41, F.A.C., Surface Water Management Basin Criteria

The Rule relating to the regulation of stormwater discharge is 40C-42, F.A.C.

Suwannee River Water Management District

SRWMD has implemented the following rules governing surface water management systems:

40B-4.2010, F.A.C., General Surfacewater Management Permits
40B-4.2020, F.A.C., Content of Surfacewater Management Permit Applications
40B-4.2030, F.A.C., Conditions for Issuance of Surfacewater Management Permits
40B-4.2035, F.A.C., Minimum Operation and Maintenance Entity Requirements
40B-4.2040, F.A.C., Minimum Operation and Maintenance Standards.

Florida Department of Environmental Regulation

Permits are required from the Florida Department of Environmental Regulation for certain dredge and fill activities relating to State waters, unless the activity is permitted by the St. Johns River or Suwannee River water management districts.

NEEDS ANALYSIS

DESIGN CAPACITY AND DEMAND

Stormwater management is unique among utility services in that the demand for service is not based directly on population projections. Instead, it is estimated on the basis of historical storm events and the amount of impervious surface added during development. Minimum levels of service for stormwater quantity and quality are dictated by state mandates. Because these mandates are intended to restrict post-development rates of stormwater discharge to pre-development rates for the design storm, further development during the planning period should not reduce the capacity of the City's existing system to handle the design storm. Current deficiencies will require additional study and revenues to correct. They are not anticipated to be completely remedied during the 2000-2010 planning period.

Water Quantity

The City, with County participation, updated its Master Flood Control Planning Maps in 1990. These maps identify flood zone limits and rates of runoff for 10-, 25- and 100-year 24-hour storm events for the primary stormwater management systems in the City. The Flood Study Update[1] incorporated creek and open channel cross sections, as well as structure and land use data in its analysis. It also addressed major creek watersheds and 150 depression basins. The Flood Study Update found that floodplain limits and stormwater discharge rates had increased over those determined in an earlier study. The most significant reason for this increase was the soils information used. The earlier study, completed by Sverdrup and Parcel in 1974, had very limited soil information, as was noted in that study. The Flood Study Update incorporated data from the 1985 Soil Survey of Alachua County by the Soil Conservation Service. The major disparity in the soils data was that the earlier data assumed much more absorptive sandy soils than actually exist in basins draining through Gainesville. Hence, the runoff models predicted more stormwater than in the 1974 study. Increased flood zone elevations were consequently established.

Capacity

The City of Gainesville's stormwater management system is dependent on the natural creek network for a positive outfall (see geographic service area of each basin in Map 2). The City's Flood Study Update predicts the hypothetical impact of the 10-year and 100-year flood events on those

[1] Flood Study Update refers to a series of reports prepared by CH2M Hill which resulted in the Master Flood Control Planning Maps adopted in 1990.

systems. This information, when presented on the Master Flood Control Planning Maps define the extent of the 10-year and 100-year events. This information is useful for two purposes: 1) preserving basin capacity and 2) identifying potential threats to human life and property.

Preserving capacity for each basin is accomplished by evaluating the impact of development proposals on the flood channel (defined by the 10-year event) and flood plain (defined by the 100-year event) portions of the property. The criterion of no development within the flood channel preserves the flow capacity of the basin. The additional criterion of maintaining all flood storage within the flood plain preserves all storage capacity within a basin.

The capacity of each basin was determined by identifying the existing flood channel and floodplain elevations and the 10-year projected elevations at specific stations along each creek. (The flow and elevations both existing and future are given by creek basin in Appendix B.) As can be seen by reviewing the projected elevations (data shown in Appendix B) only minimal changes from the existing condition are expected. The system is adequate for the five-year and ten-year planning period. The study assumed full development of existing platted lots and minor increases in impervious area (200 square feet) on existing developed lots. The changes in projected flood channel elevations and floodplain elevations are minimal due in large part to the fact that the City is 83% built-out (Future Land Use Element, Data and Analysis 1991-2001 Comprehensive Plan), and therefore most lots already contain significant impervious surface area.

Additionally, major redevelopment of existing developed areas that were developed prior to current stormwater management regulations results in improvement to basin capacity. This improvement occurs because the new development must provide on-site storage of a portion of the stormwater, except in cases of redevelopment in the downtown area where an alternative means of stormwater treatment is allowed. With on-site storage an incremental amount of flow is taken out of flow and the basin capacity is not decreased.

Of the ten drainage basins in the City, only the Hogtown basin has existing capacity problems. A remedy developed to offset development impacts was implemented by a policy initiative in 1988. This policy limits the volume as well as the rate of runoff for the 100-year critical duration storm event. In the Hogtown basin no increase in volume from the pre-development condition is permitted to be released prior to 72 hours after the design storm event. Flooding in the basin has not been observed to have increased. This is due to the fact that the majority of basin has already been developed and more stringent development requirements have been implemented. A study conducted by CH2M Hill determined the most effective and feasible location for a regional stormwater basin within this basin. A regional basin is expected to greatly alleviate existing flooding problems. In addition to this study, work was completed to improve a berm located between the Sugarfoot Prairie and the Anglewood Subdivision to reduce the overflow of floodwater from the prairie into the neighborhood.

Water Quality

Regulatory requirements relating to water quality were not implemented in the Gainesville area until 1981. Development prior to that time generally did not incorporate water quality treatment features in the design of stormwater management facilities. There are known contributors of pollutant loading into the City's stormwater system such as the Cabot-Carbon/Koppers Superfund Site (see the 2000-2010 Solid Waste Data and Analysis Report). Since a majority of the City's drainage system eventually discharges to the Floridan aquifer, it would be reasonable to conclude that the current systems should not receive additional pollutant loadings. Any reduction in such pollutant loading would benefit the creek ecosystems and the public health, safety and welfare.

LEVEL OF SERVICE (LOS) METHODOLOGY AND STANDARD

Design Storm

A design storm is a model rainfall event that can be used as a yardstick to quantify runoff rates and volumes and is one of the most important factors in stormwater master planning. The design storm concept is developed using historical data from previous rain storms. The parameters that define a particular design storm include frequency and duration. The selection of a storm event for application in stormwater management facility design must balance the subsequent cost to develop against the resulting increase in flood hazard within a community.

Design Storm Frequency

The City of Gainesville uses the 100-year critical duration storm for the design of stormwater management facilities to ensure that the flood zone elevations defined by the Flood Study Update are not adversely impacted.

Level of Service Standard

The Flood Study Update defines the level of service standard required to maintain floodplain storage and conveyance capacities. Development occurring in the City has been designed so that the post-development rate of discharge for the site cannot exceed the pre-development rate. However, the proposed adoption of the 100-year critical duration storm event as the design storm allows the City to be more consistent with the no net increase in the 100-year floodplain criteria. Minimum first floor elevation standards are also recommended. Only sites that are subject to creek regulation and the water management districts are designed to incorporate additional water quality requirements. These standards require treatment of the first one-half inch of runoff. The level of service standard for stormwater quality should be treatment of the first inch of runoff due to the stream-to-sink characteristics of most of the basins as is now reflected in Policy 1.1.1. Developments completed prior to 1974 do not meet current standards for water quantity and those completed prior to 1981 do not meet current standards for water quality.

NEEDS ASSESSMENT

Hogtown Creek

From a water quality standpoint, the Creek appears to be within acceptable standards for urban surface waters except at the upstream end of the main branch, near N. Main Street. At that location, pollutants from the Cabot-Carbon/Koppers Superfund site (see the Conservation, Open Space and Groundwater Recharge Data and Analysis Report) leach into the Creek. This effect appears to diminish within approximately two miles downstream.

Since 1981, the State, under provisions of Florida Administrative Code Chapter 17-25, has required that all new development treat its "first flush" of runoff for water quality. Therefore, further degradation of water quality has not been as likely since 1981.

Temporary flooding is experienced in many areas within the Hogtown Creek Basin. Flooding occurs when the inlet capacity of Haile Sink is exceeded and/or the available storage for stormwater is filled with transient flows.

Tumblin Creek

The upper basin collects stormwater primarily from residential and commercial development. The watershed becomes predominantly residential as it continues southward. The majority of development within this basin occurred prior to the implementation of any stormwater quality and quantity regulation. Although there is minimal localized flooding along this creek, erosion is a concern due to high water flow rates.

Sweetwater Branch

The area drained by Sweetwater Branch is highly urbanized and most of the development within it occurred prior to the implementation of stormwater quality and quantity regulations. Sweetwater discharges into Alachua Sink via an open channel. Water quality with respect to sediment, debris and pollutants is consequently much more critical for this creek, since only minimal wetland treatment occurs in its open channel.

Calf Pond, Lake Forest and Little Hatchet

Development within these basins occurred prior to stormwater quality and quantity regulations. Flooding is localized and minimal.

Depression Basins

Each depression basin within the City has its own unique drainage characteristics. Most development around the depression basins occurred prior to stormwater quantity and quality

regulations. Increased sediment loadings during and after construction are suspected as a reason some of the basins do not perform as they once did.

GENERAL PERFORMANCE OF EXISTING FACILITIES

Virtually all of Gainesville is served by some form of drainage system. Replacement of aging and inadequate systems is a greater concern than construction of any new systems (Swearingen, 1987, p. 4). Every area of the City has needs for improved stormwater management facilities, however most of Gainesville's critical drainage system improvement needs are in the older areas of the City, i.e., those areas developed more than twenty years ago, prior to requirements for on-site retention (Swearingen, 1987, p.5).

The cumulative effect of past practices is that existing stormwater management facilities do not have adequate capacity to accommodate the 100-year critical duration storm city-wide and are not capable of providing significant water quality treatment.

System function also may be impaired due to inadequate maintenance. For instance, the capacity of stormwater systems can be reduced by leaves and yard debris introduced through roadway drainage systems. The Stormwater Management Utility has made it possible for the City to increase its street-sweeping activities to address this concern. Increased maintenance levels for open channels have also been realized, which in turn, increases system capacity.

The performance of stormwater management facilities is typically assessed in relation to water quantity and quality problems that result from the failure or inadequacy of individual components. The Public Works Department has conducted a preliminary survey of the City's stormwater management systems and has identified existing stormwater management deficiencies (listed in Appendix C.). These deficiencies include both maintenance and capital needs. As a result many can be addressed through the maintenance programs of the Stormwater Management Utility. Capital items have been prioritized. Level of Service Capital Improvements are shown for funding in the 5-Year Schedule of Capital Improvements. The non-Level of Service Capital Improvements that have been prioritized for action between 1999-2003 will be funded if funds become available (see the Capital Improvements Data and Analysis Report Level 2 Capital Improvement Needs).

Projected Capital Improvements

1. Northeast Boulevard/Duck Pond Improvements. Located between NE 10th Avenue and NE 5th Avenue. Estimated cost $400,000;

   The purpose of this proposal is to rebuild the Duck Pond into a free-flowing stream by removing the concrete banks around the stream, allowing it to become free flowing, while planting nutrient removing vegetation along the banks. A system of alternating ponds/wetlands and stream segments would be created to improve water

management, while improvements on the boulevard, including traffic control devices, would also be part of the project.

2. Brownfield Project. Located south of Depot Avenue. Estimated cost $2,000,000;

   This project would involve using a brownfield site for a master stormwater basin for the downtown area. This would allow further redevelopment and revitalization of the downtown area at higher densities and intensities. This will encourage compact development and allow a more urban-type development and design pattern. It would reduce redevelopment costs at individual sites, increase intensity of use on each parcel, and provide a possible recreational amenity in the area.

3. Sweetwater Branch-Paynes Prairie Outfall Facilities. Located on Sweetwater Branch at Paynes Prairie. Estimated cost $2,000,000;

   This is a proposal to build a treatment system to improve the quality of water flowing onto Paynes Prairie from Sweetwater Branch creek. Water from the creek flows across the prairie into Alachua Sink and the Floridan Aquifer. Trash from the creek dumps out onto the north side of the prairie and the creek flow is also blamed for the loss of open marsh to dense vegetation. A treatment system would include a retention pond to catch the litter and sediment and a constructed marsh to remove nutrients.

4. Hogtown Creek Sediment Project. Located at N.W. 34th Street and Hogtown Creek. Estimated construction cost $750,000.

   Construct sedimentation control facilities to reduce the amount of sediment that collects at this location. This will help to reduce the incidences of flooding in the area.

PROBLEMS AND OPPORTUNITIES

Basin-Wide Planning

The data in the Flood Study Update provide a foundation for the development of a comprehensive city-wide stormwater management program. In order to implement such a program, the City will need to complete master stormwater basin plans for each stream basin. The basin-wide management approach will provide the necessary data base for optimizing the planning, design and implementation of stormwater management facilities. These studies will identify areas that could be used for regional stormwater management facilities for water quantity or quality purposes, or both. In addition, a high priority task for the Stormwater Management Element is development of baseline data and an inventory of stormwater facilities in the annexed areas of the City. Since annexation, existing problems have been addressed by special studies.

The basin-wide studies should proceed in phases. As the basin-wide studies and plans are completed, proposed improvements and implementation techniques should be scheduled to begin. The Stormwater Management Utility is the funding source for these engineering studies. Plans are currently being developed.

Regulations

Preservation and protection of existing drainage features has been implemented through regulation. The City's current stormwater management regulations mandate that the City will maintain the existing level of wetland acreage and their function. The City will need to evaluate the wetland protection strategies to determine if 'no net loss of wetlands' remains an appropriate strategy or whether a format for evaluation of wetlands can be developed that would allow greater flexibility in wetland mitigation.

The City also may want to review the water quality standards of the water management districts which regulate the City to determine if one set of criteria would be more applicable to stream-to-sink systems. The application of water quality standards to existing developed sites being modified would be another consideration.

Proposed Amendments to Stormwater Management Element Policies:

1. The LOS standard needs to be amended to adopt the 100-year, critical duration design storm;

2. The Master Flood Control Planning Maps need to be updated to include all annexed areas;

3. The City should complete an inventory of all city-maintained retention/detention basins;

4. The City should complete an inventory of all channels and culverts in the annexed area;

5. The City should evaluate and update roadway drainage data; and

6. The City should finalize the master stormwater basin plans which are now only completed in draft form, and prepare stormwater basin plans for those basins that were annexed.

7. The City should prepare a 5-year Stormwater Improvement Plan (SIP). Associated with this planning document the City should develop a prioritization

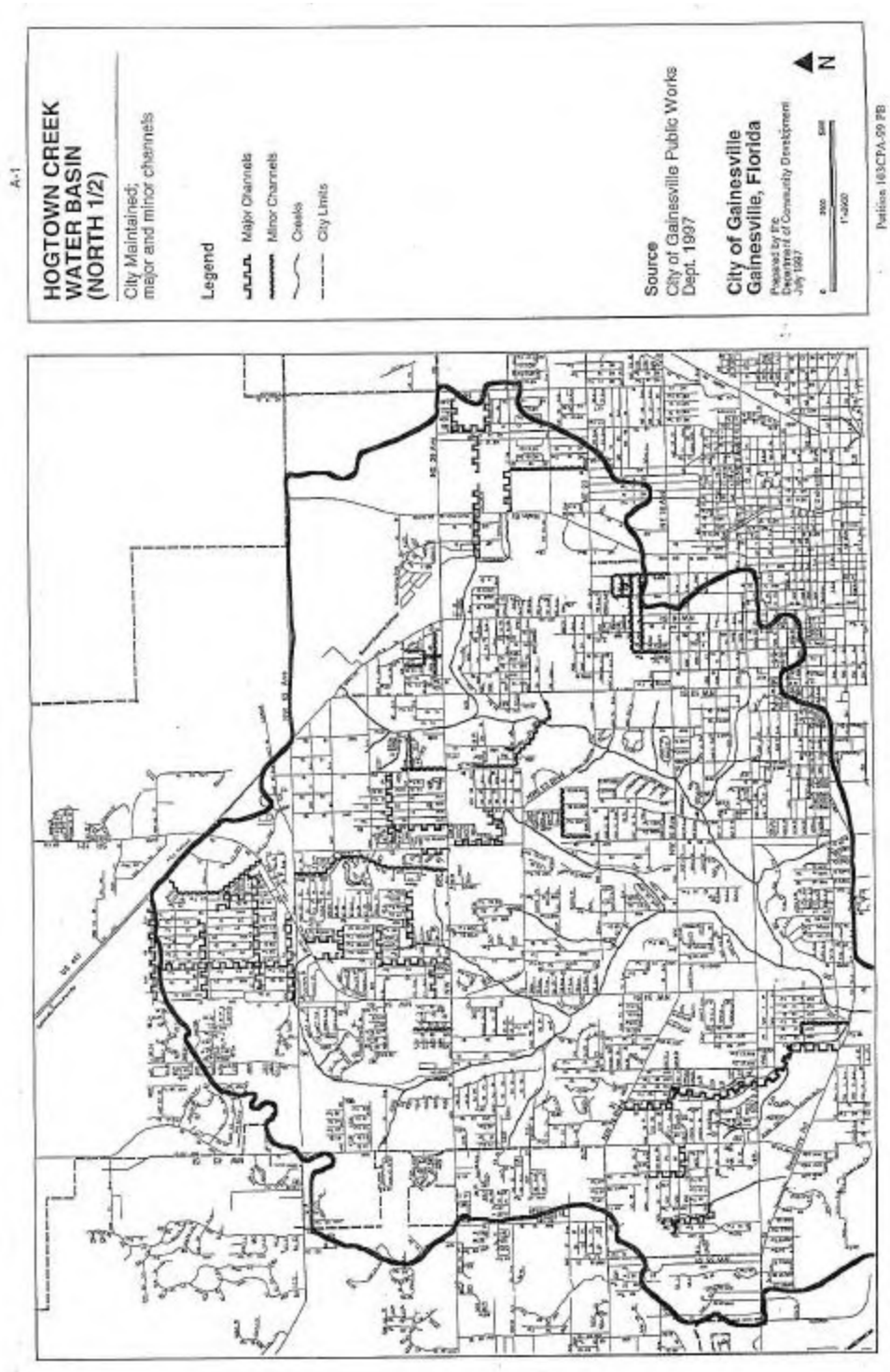
methodology that will rank projects on the Stormwater Improvement Needs list for inclusion in the SIP.

8. The City should adopt a policy regarding stormwater management that would allow for the redevelopment of the downtown core and Central City area, which currently lacks adequate stormwater management facilities.

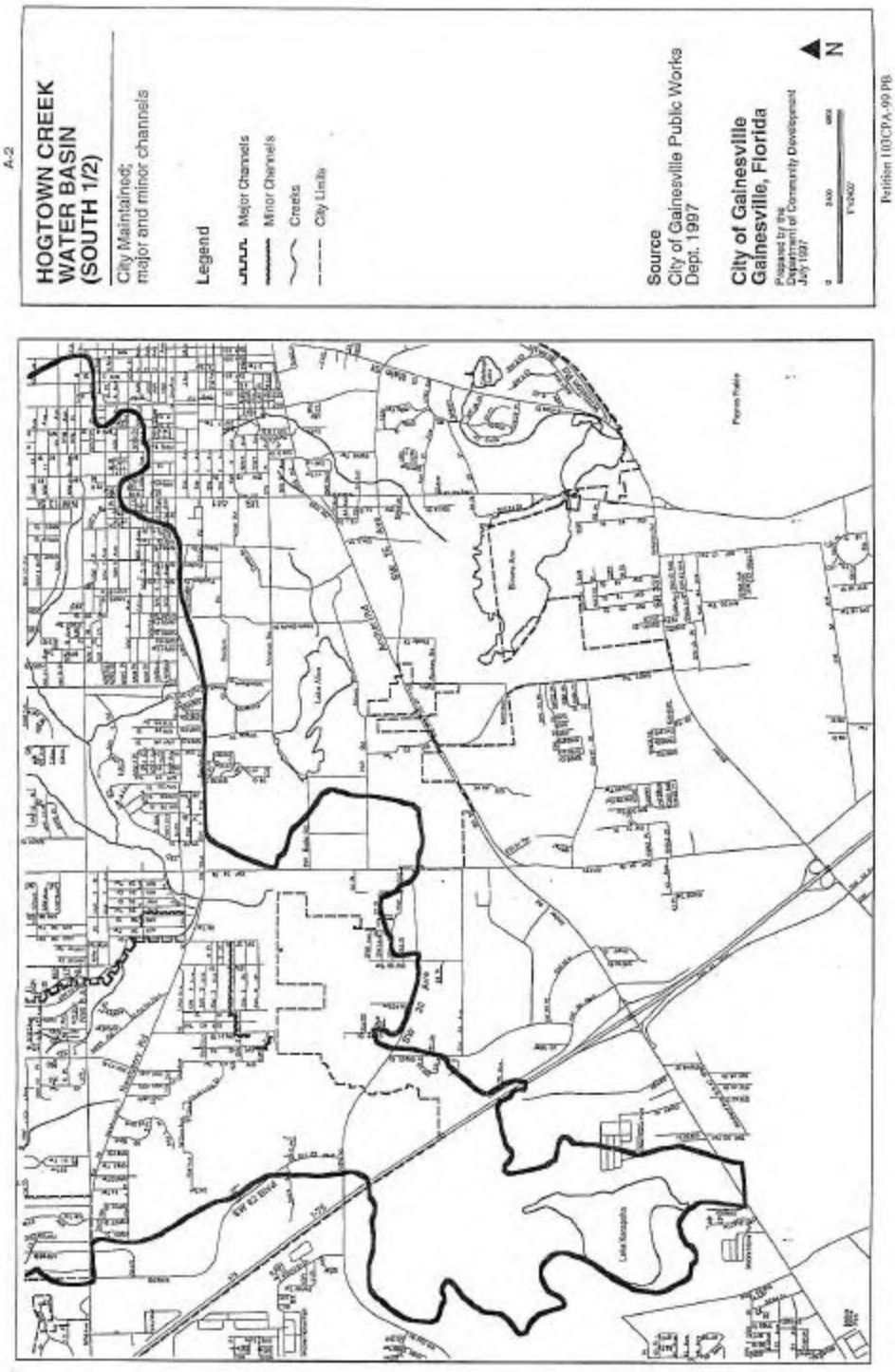
Appendix A

Map Series

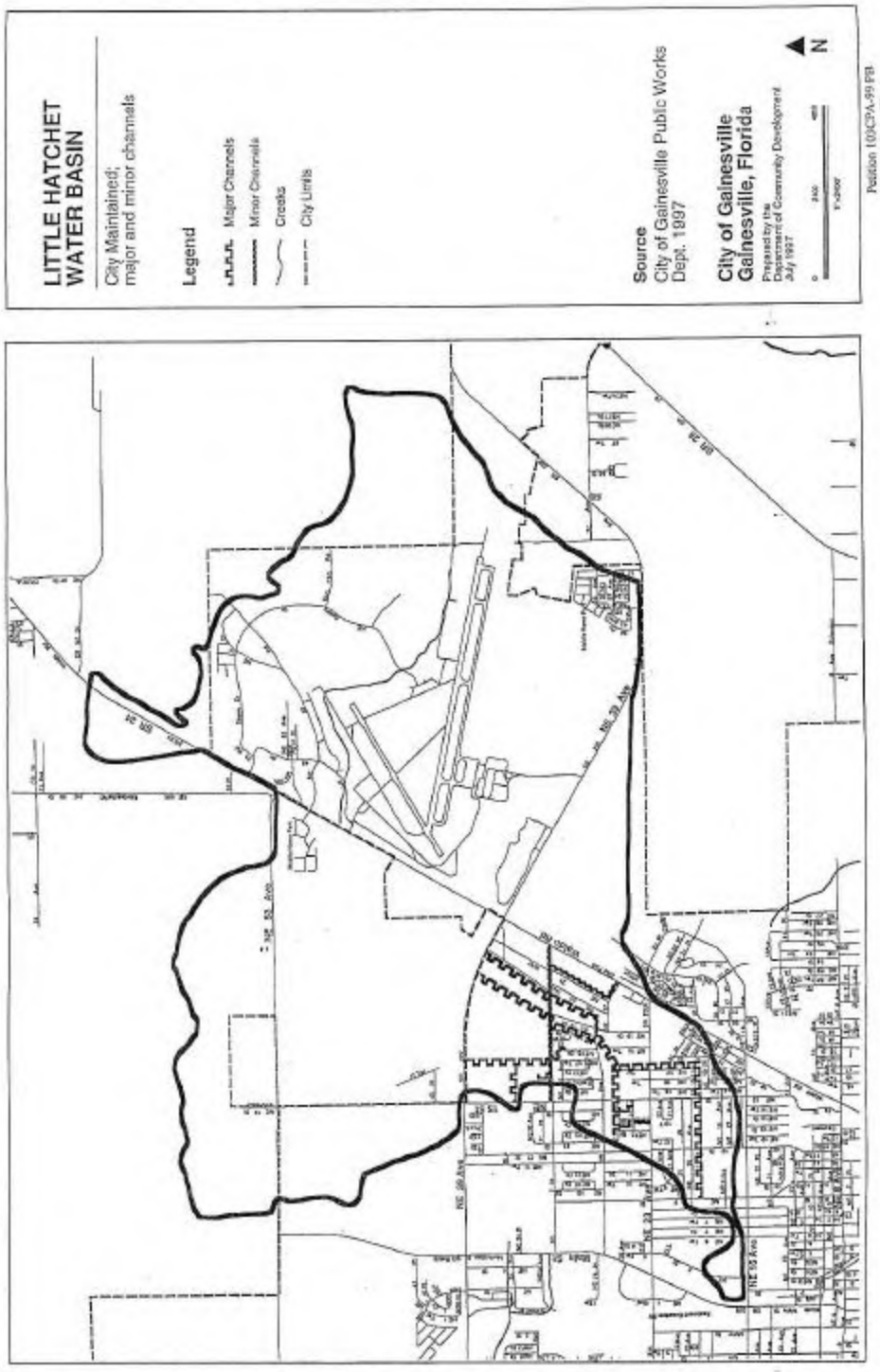
Channels and Creeks—Map Series A
Culvert Crossings—Map Series B
Semi-paved Roadways—Map Series C

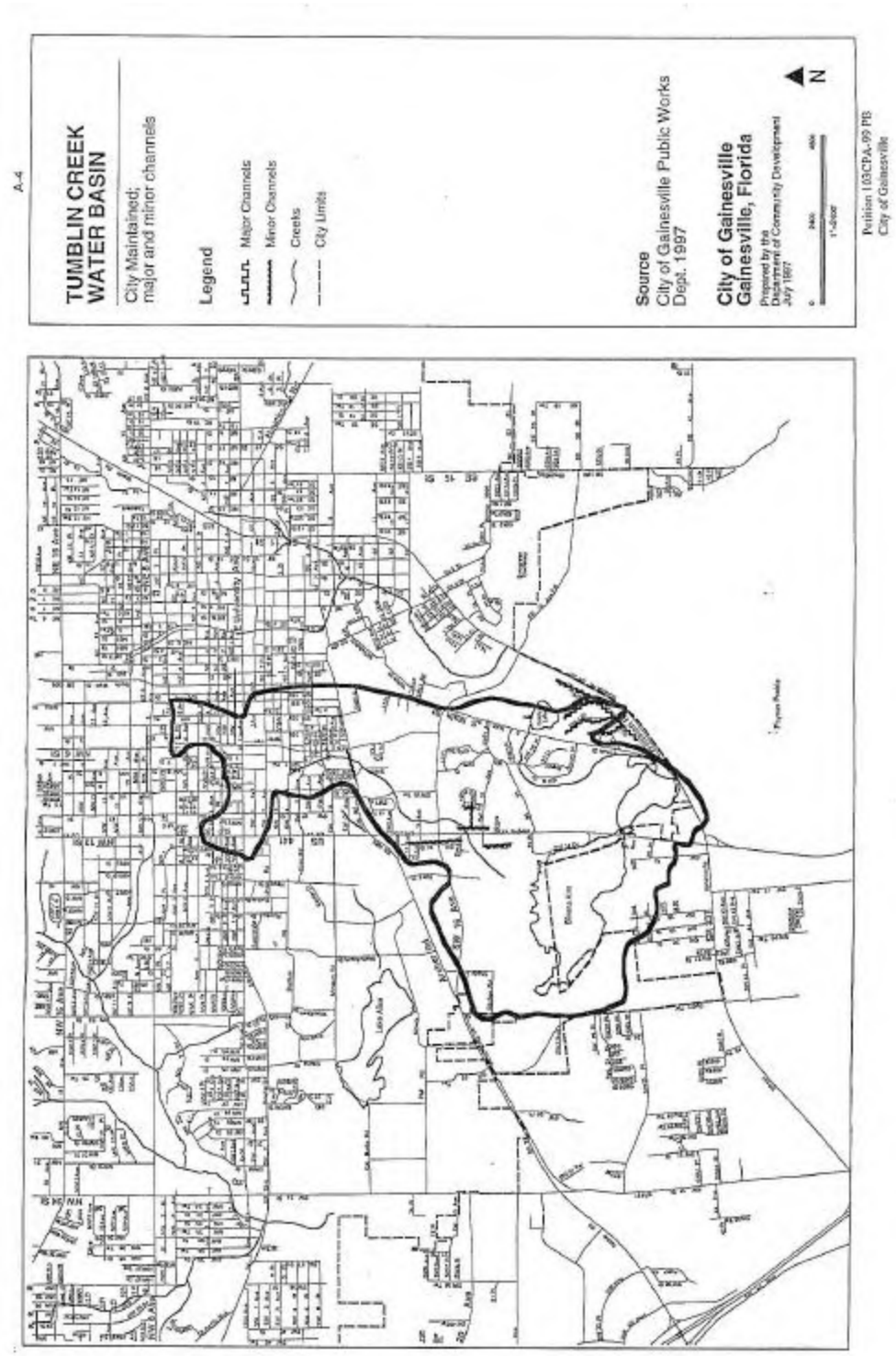

A-1
HOGTOWN CREEK
WATER BASIN
(NORTH 1/2)
City Maintained;
major and minor channels
Legend
Major Channels
Minor Channels
Creeks
City Limits
Source
City of Gainesville Public Works
Dept. 1997
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
July 1997
N
Petition 103CPA-99 PB
City of Gainesville

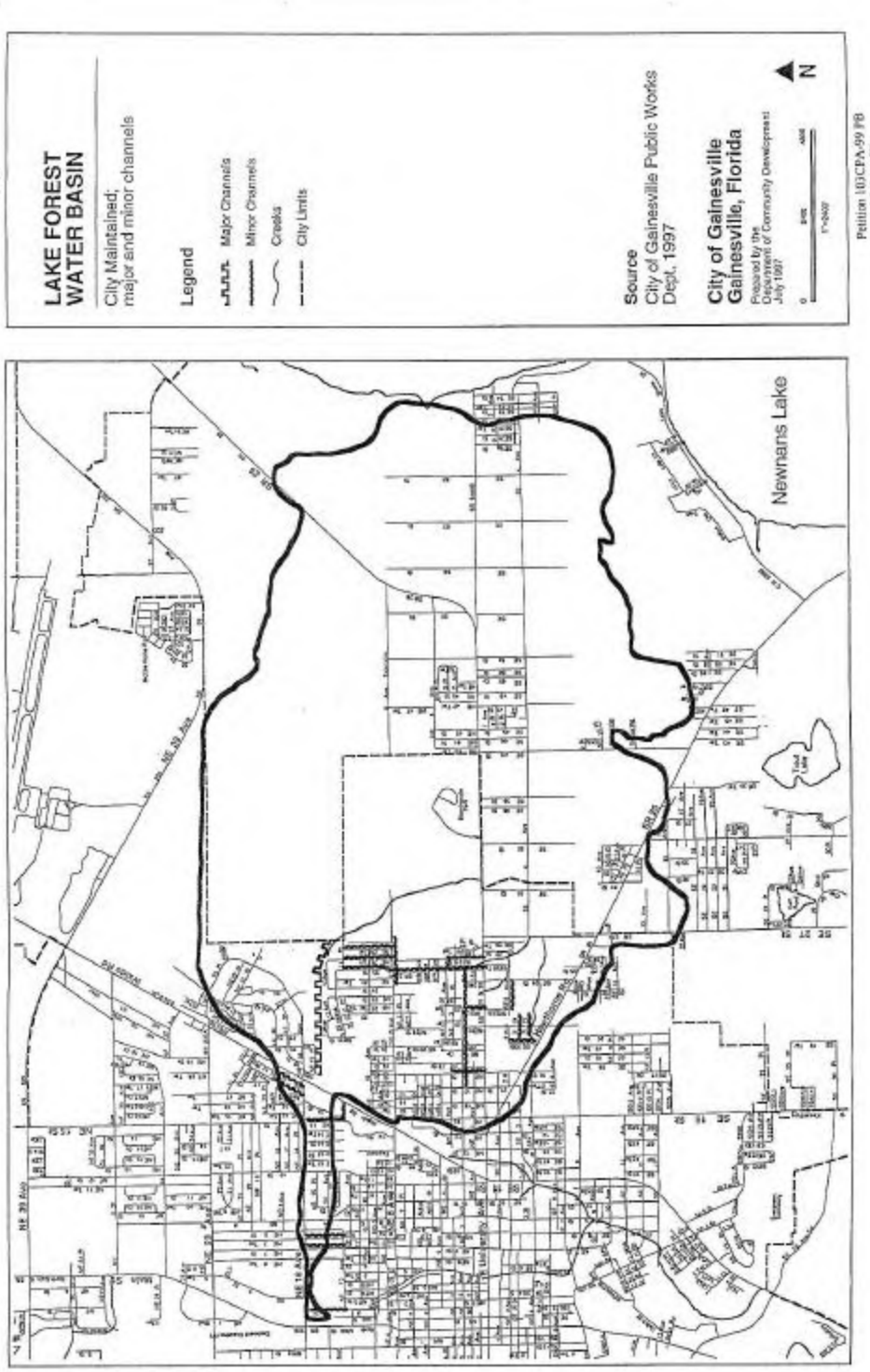
A-2


HOGTOWN CREEK
WATER BASIN
(SOUTH 1/2)
City Maintained;
major and minor channels
Legend
Major Channels
Minor Channels
Creeks
City Limits
Source
City of Gainesville Public Works
Dept. 1997
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
July 1997
N
Petition 103CPA-99 PB
City of Gainesville

A-3


LITTLE HATCHET
WATER BASIN
City Maintained;
major and minor channels
Legend
Major Channels
Minor Channels
Creeks
City Limits
Source
City of Gainesville Public Works
Dept. 1997
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
July 1997
N
Petition 103CPA-99 PB
City of Gainesville


A-4
TUMBLIN CREEK
WATER BASIN
City Maintained;
major and minor channels
Legend
Major Channels
Minor Channels
Creeks
City Limits
Source
City of Gainesville Public Works
Dept. 1997
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
July 1997
N
Petition 103CPA-99 PB
City of Gainesville


A-5
LAKE FOREST
WATER BASIN
City Maintained:
major and minor channels
Legend
Major Channels
Minor Channels
Creeks
City Limits
Source
City of Gainesville Public Works
Dept. 1997
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Gainesville, Florida
Prepared by the
Department of Community Development
July 1997
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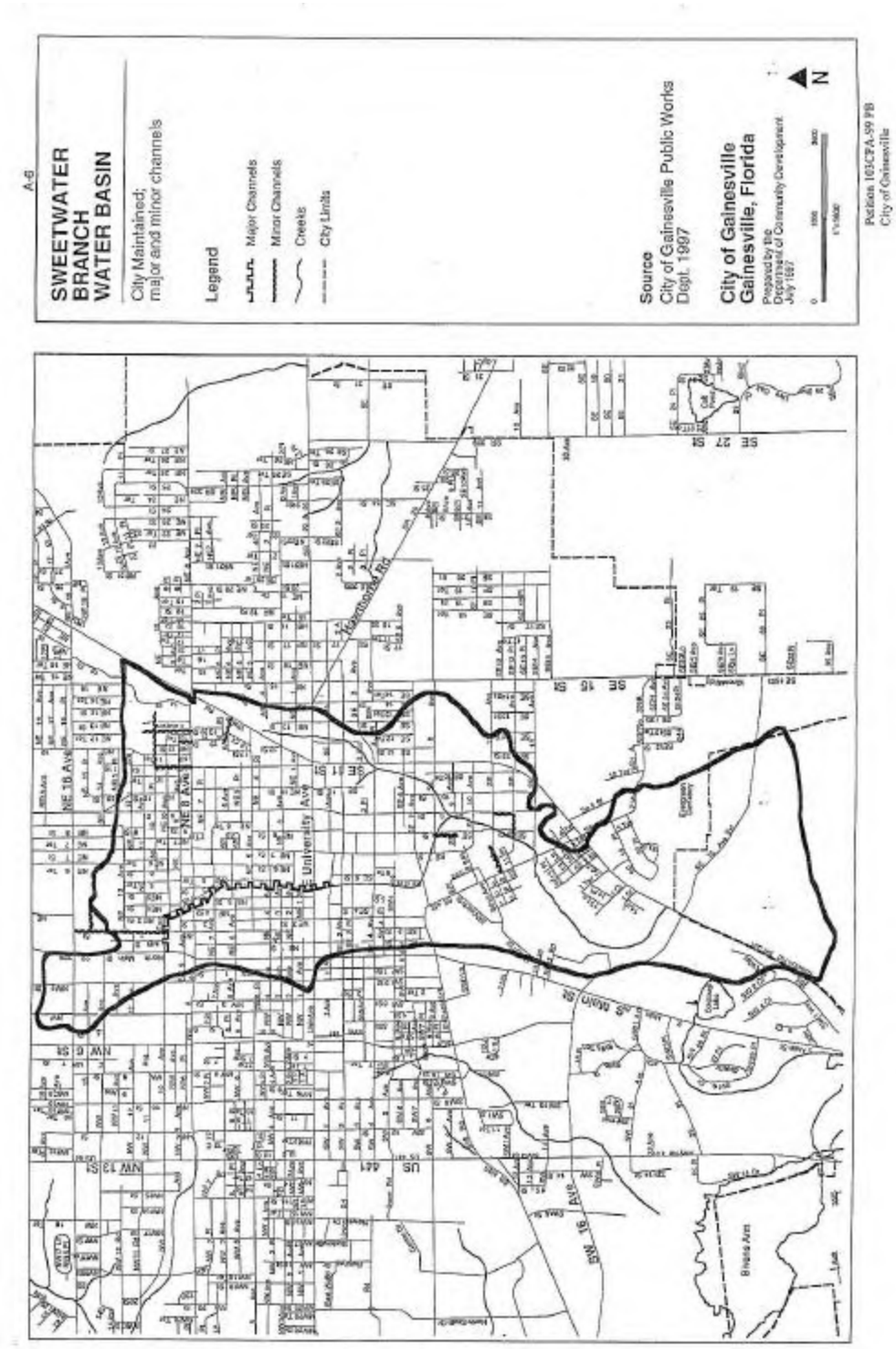
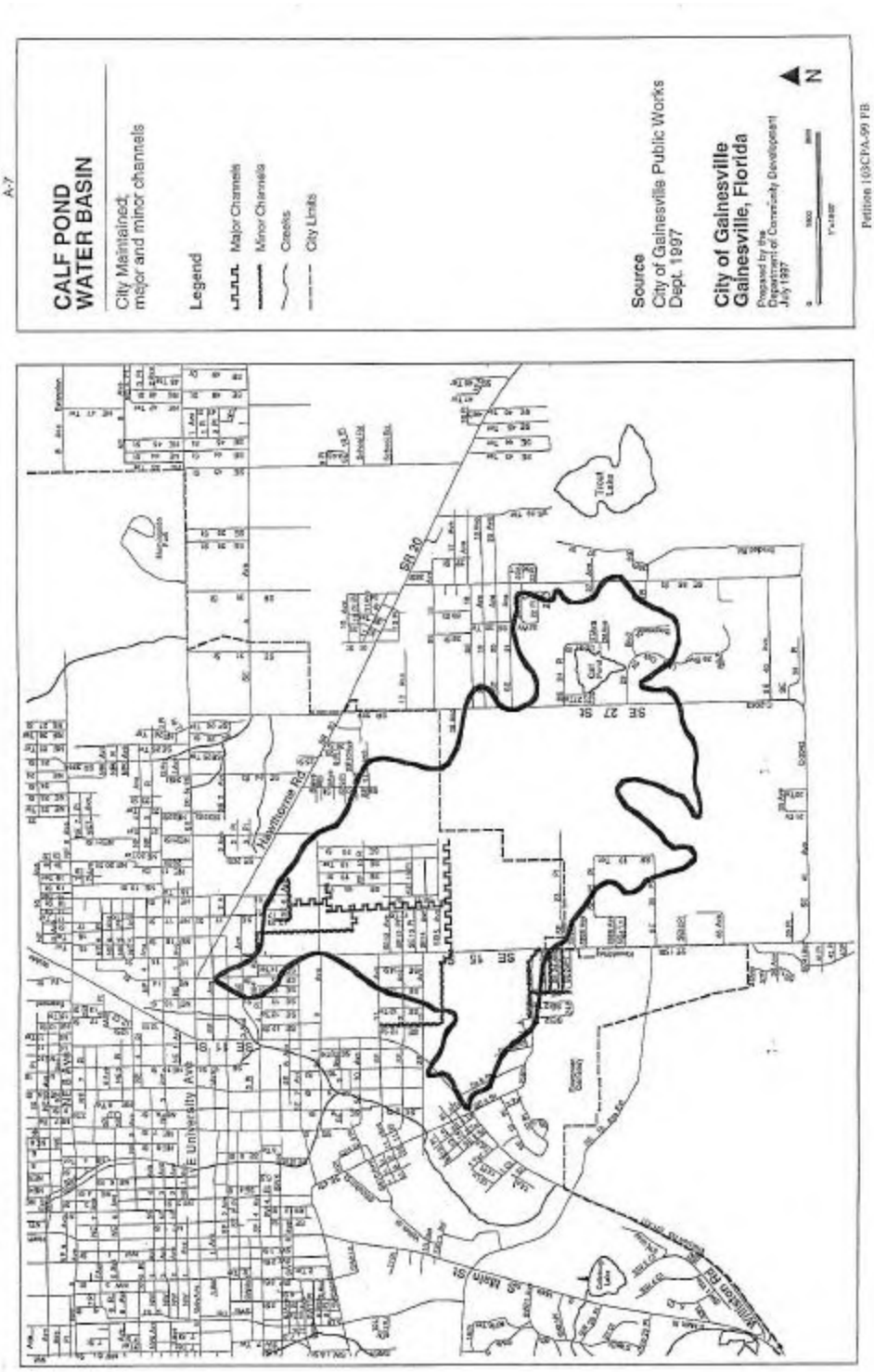
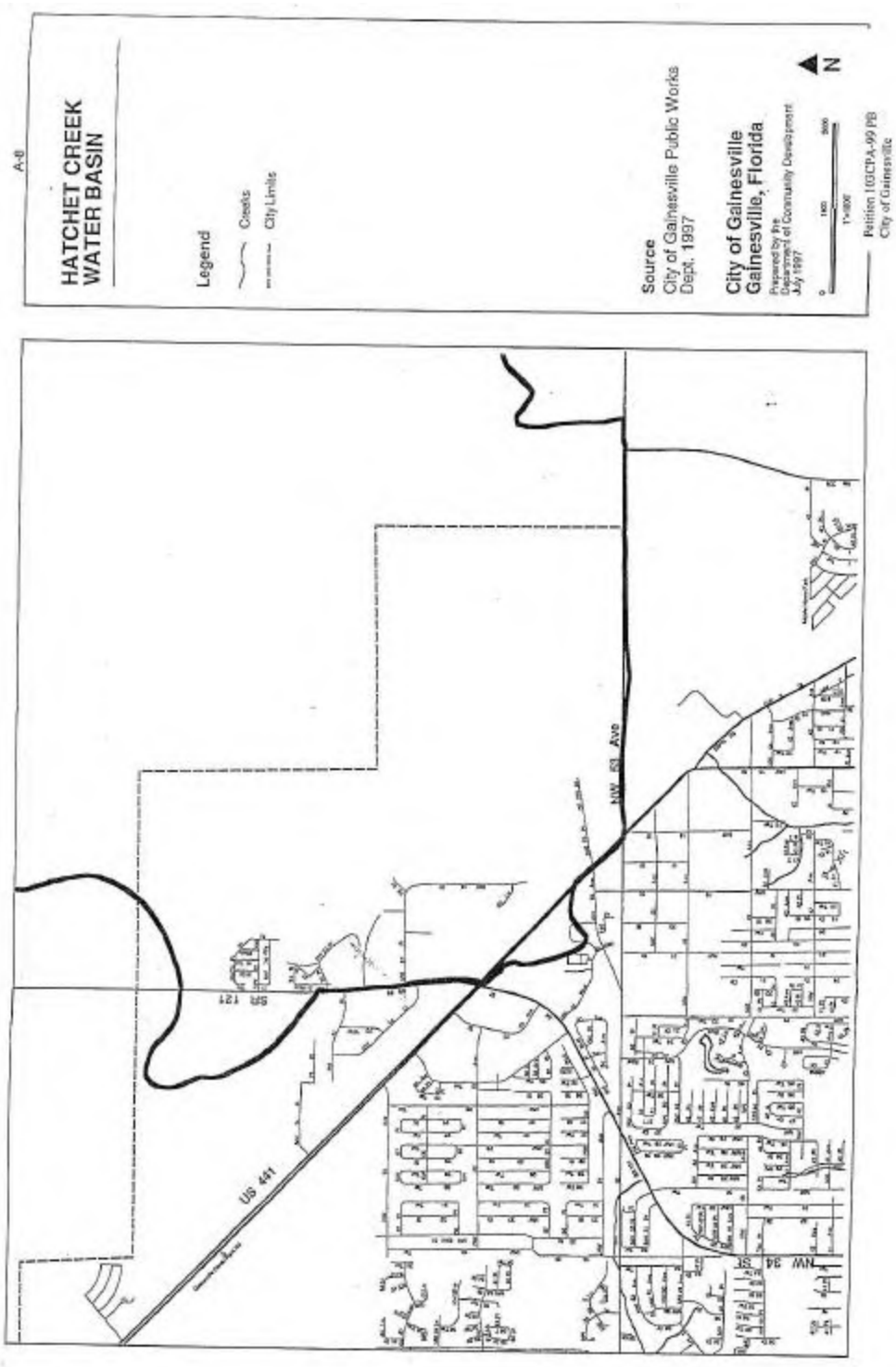
Petition 103CPA-99 PB
City of Gainesville
Newnans Lake


A-6
SWEETWATER BRANCH WATER BASIN
City Maintained; major and minor channels
Legend
Major Channels
Minor Channels
Creeks
City Limits
Source
City of Gainesville Public Works Dept. 1997
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development July 1997
N
Petition 103CPA-99 PB
City of Gainesville
Hogtown Creek
University Ave
NE 16 Ave
NE 8 Ave
NW 13 St
US 441
SW 16 Ave
SE 27 St
SE 15 St
S Main St
Bivens Arm


A-7
CALF POND
WATER BASIN
City Maintained;
major and minor channels
Legend
Major Channels
Minor Channels
Creeks
City Limits
Source
City of Gainesville Public Works
Dept. 1997
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
July 1997
N
Petition 103CPA-99 PB
City of Gainesville
SW 20
Tower Rd
SE 27 St
E University Ave
S Main St
Williston Rd
Trout Lake
Lake Alice
Lake Wauburg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HATCHET CREEK
WATER BASIN
Legend
Creeks
City Limits
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Dept. 1997
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Gainesville, Florida
Prepared by the
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July 1997
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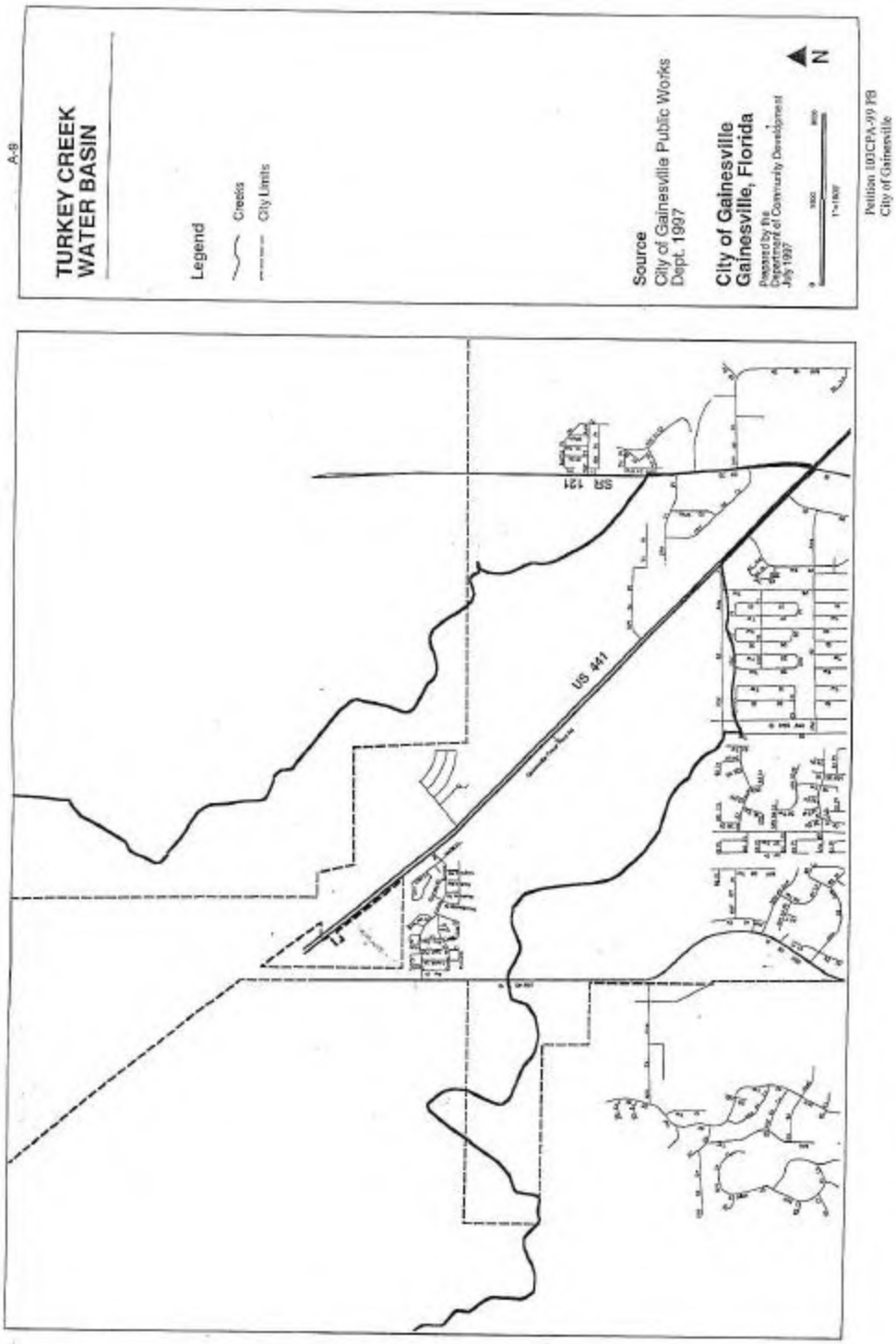
Petition 103CPA-99 PB
City of Gainesville
US 441
NW 34 St
NW 83 Ave


A-8
TURKEY CREEK
WATER BASIN
Legend
Creeks
City Limits
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City of Gainesville Public Works
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Gainesville, Florida
Prepared by the
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July 1997
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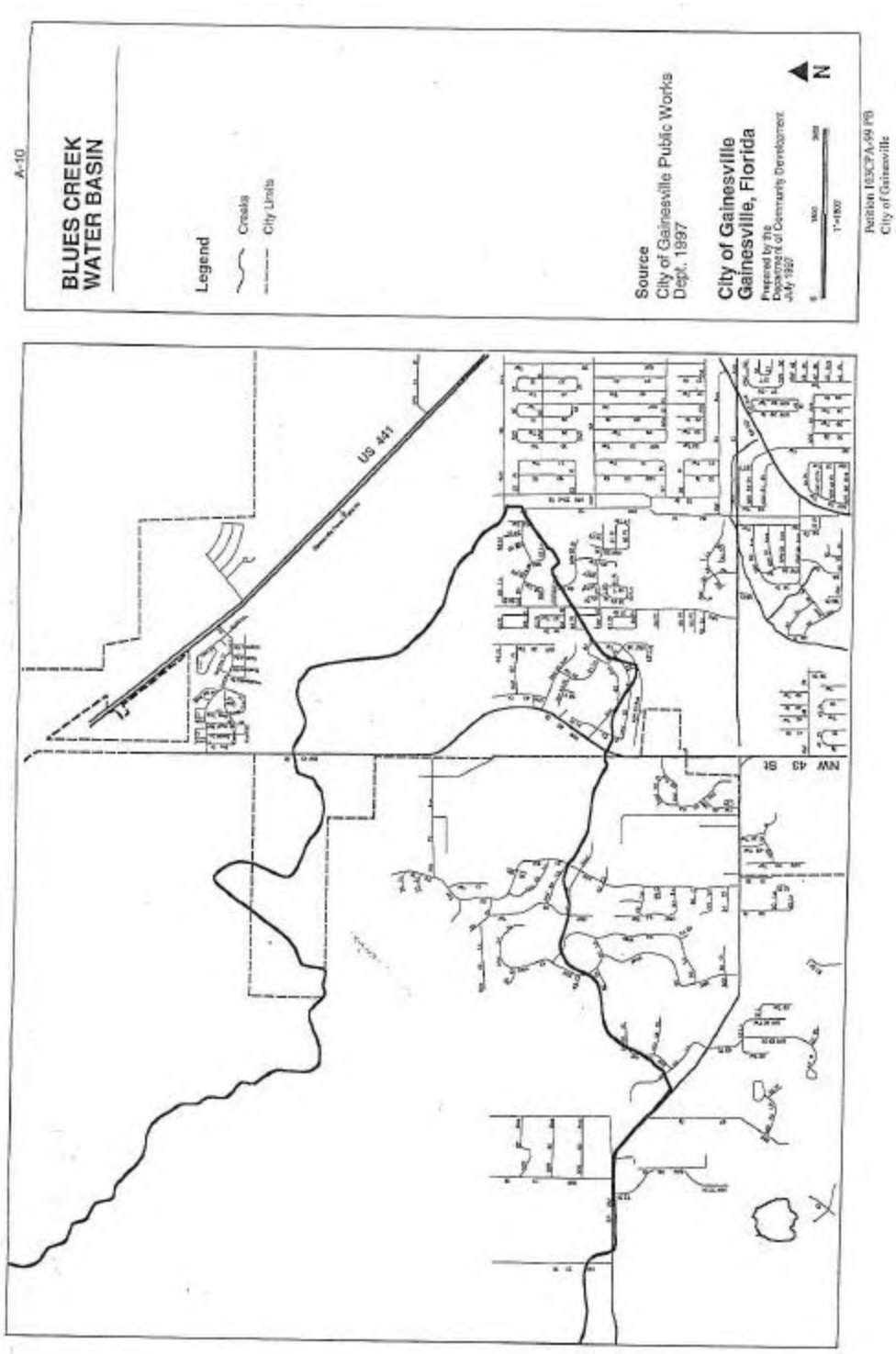
Petition 103CPA-99 PB
City of Gainesville
SR 121
US 441


A-10
BLUES CREEK
WATER BASIN
Legend
Creeks
City Limits
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City of Gainesville
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Prepared by the
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July 1997
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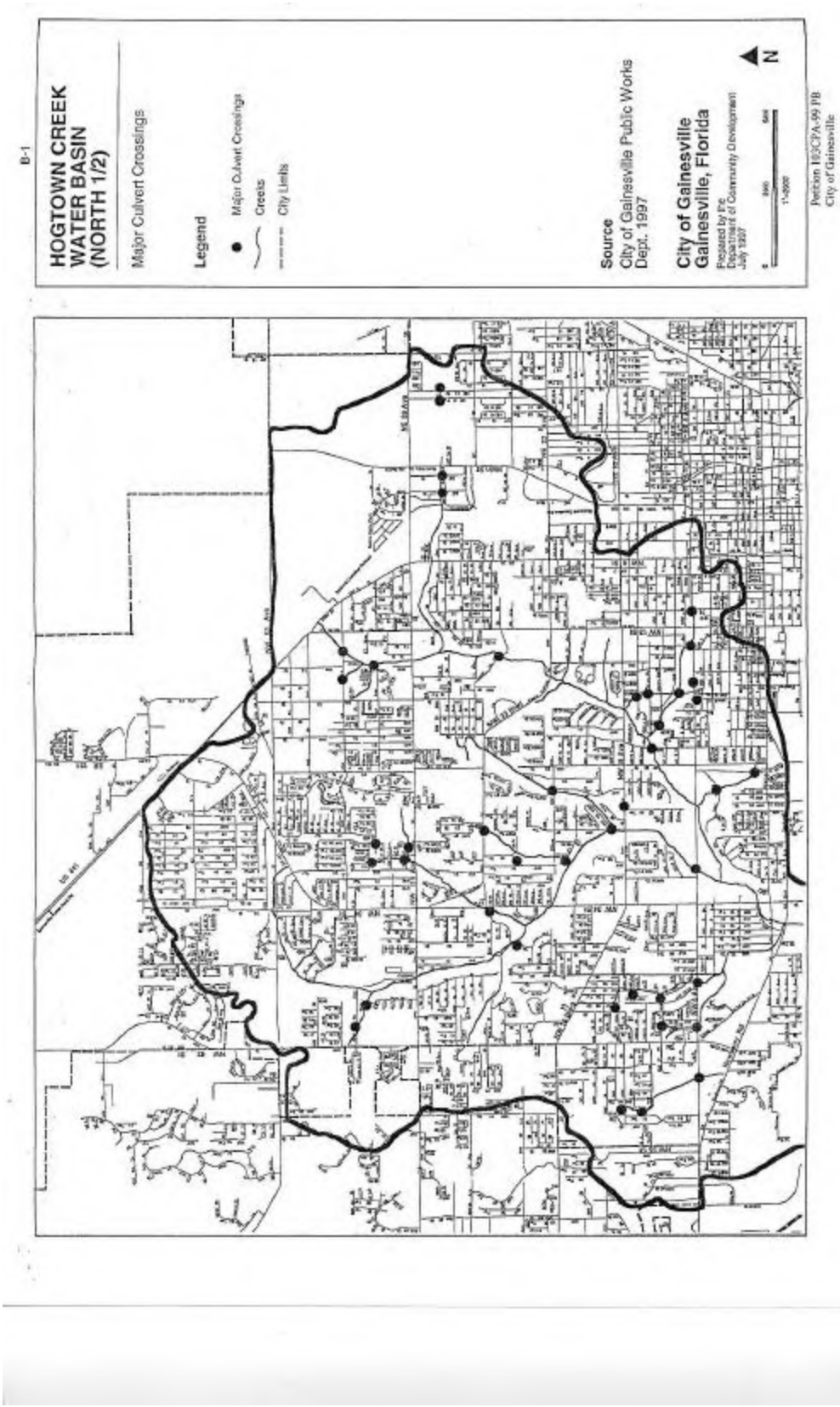
1"=800'
Petition 103CPA-99 PB
City of Gainesville
US 441
NW 43 St


B-1
HOGTOWN CREEK
WATER BASIN
(NORTH 1/2)
Major Culvert Crossings
Legend
Major Culvert Crossings
Creeks
City Limits
Source
City of Gainesville Public Works
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Gainesville, Florida
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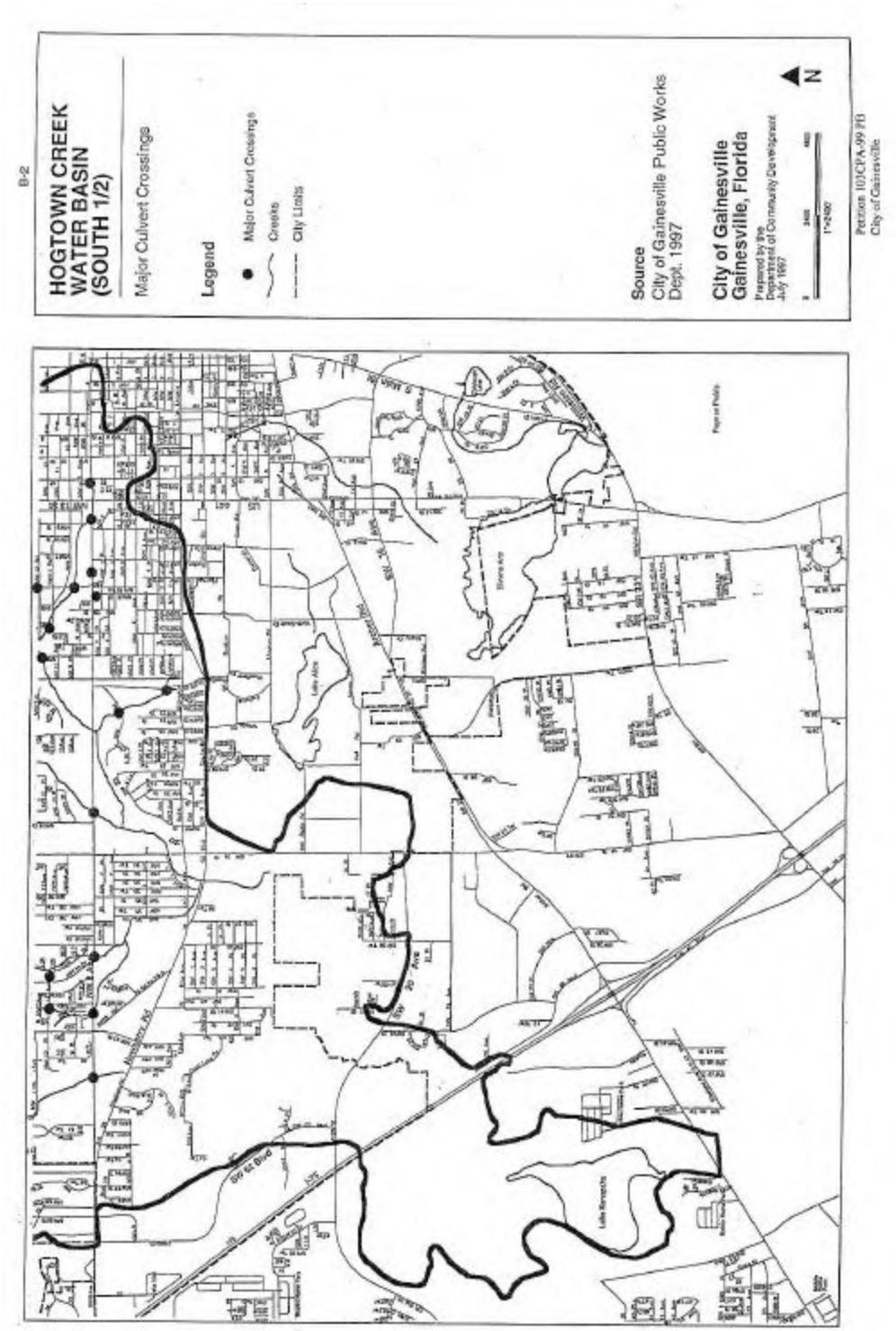
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HOGTOWN CREEK
WATER BASIN
(SOUTH 1/2)
Major Culvert Crossings
Legend
Major Culvert Crossings
Creeks
City Limits
Source
City of Gainesville Public Works
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Gainesville, Florida
Prepared by the
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July 1997
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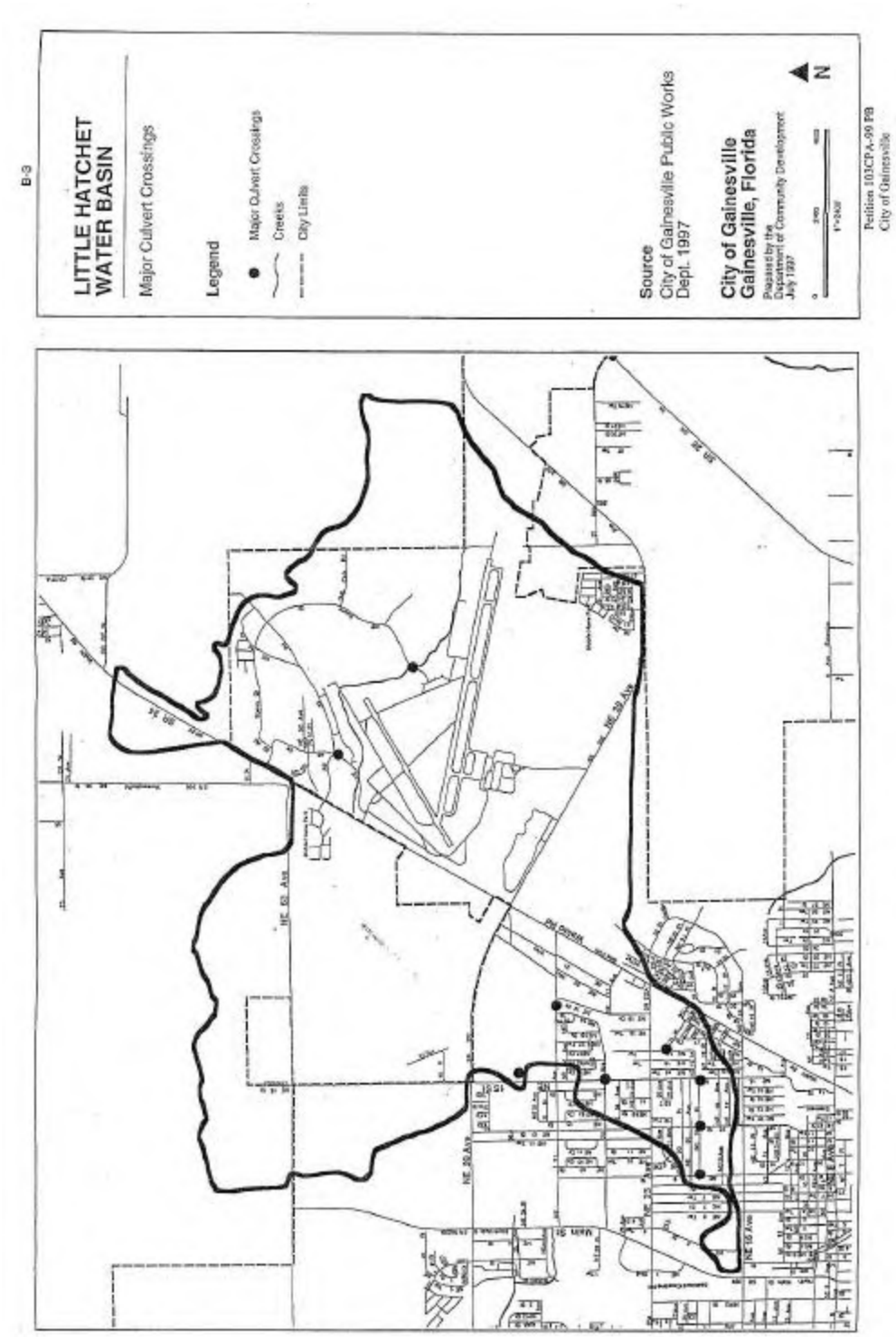
City of Gainesville


B-3
LITTLE HATCHET WATER BASIN
Major Culvert Crossings
Legend
Major Culvert Crossings
Creeks
City Limits
Source
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City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development July 1997
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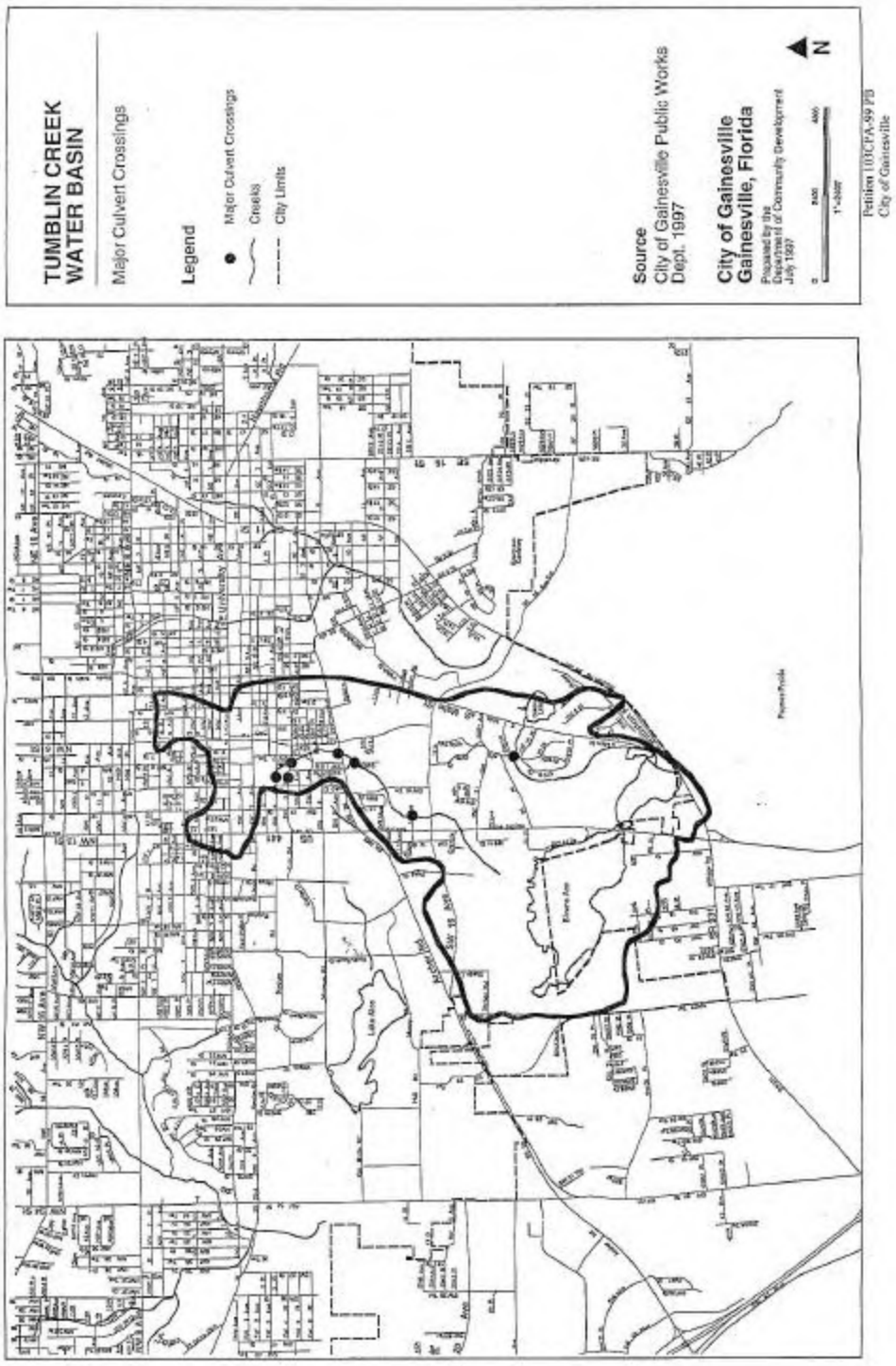
Petition 103CPA-99 PB
City of Gainesville

B-4


TUMBLIN CREEK
WATER BASIN
Major Culvert Crossings
Legend
Major Culvert Crossings
Creeks
City Limits
Source
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City of Gainesville
Gainesville, Florida
Prepared by the
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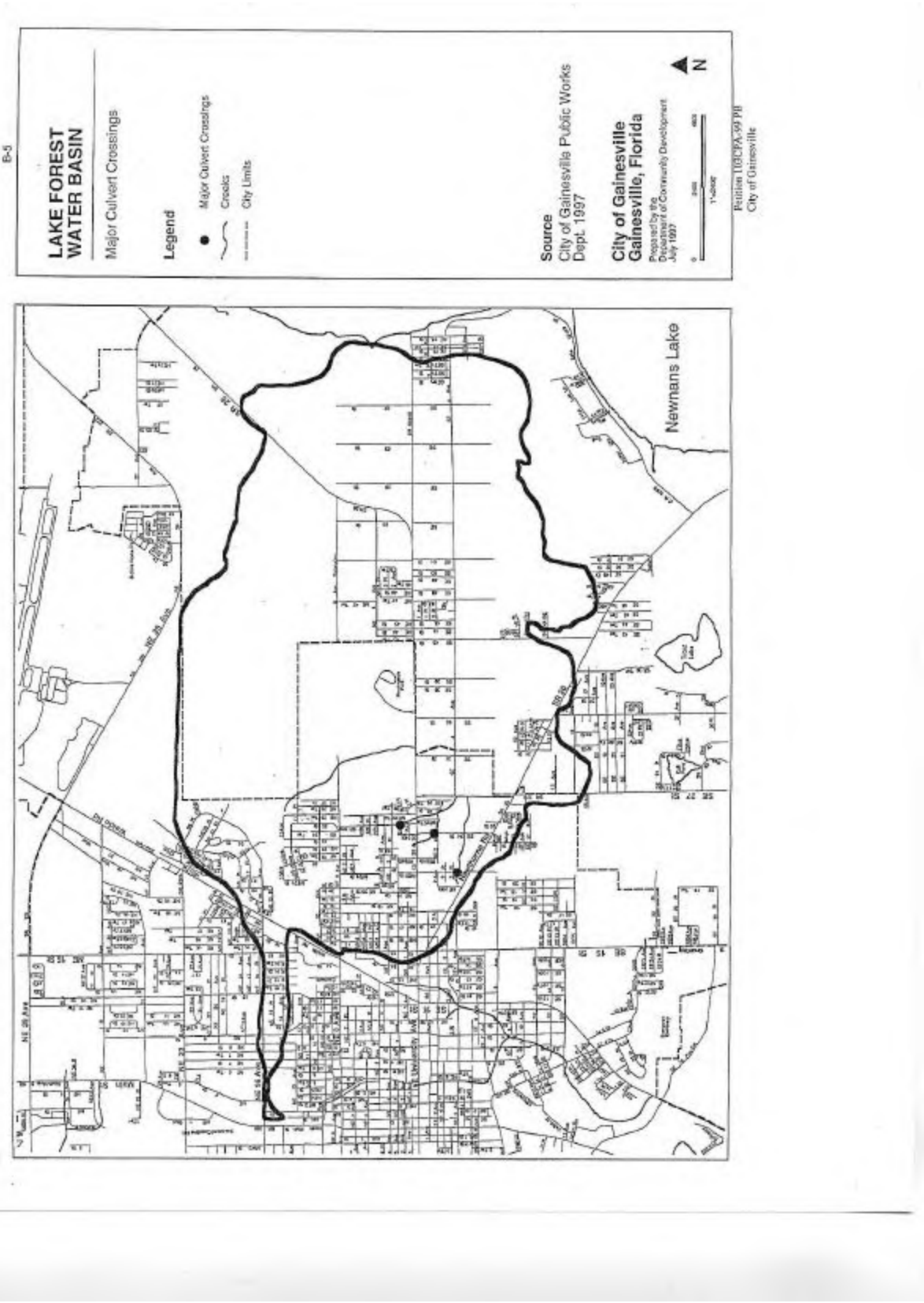
City of Gainesville


B-5
LAKE FOREST
WATER BASIN
Major Culvert Crossings
Legend
Major Culvert Crossings
Creeks
City Limits
Source
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Gainesville, Florida
Prepared by the
Department of Community Development
July 1997
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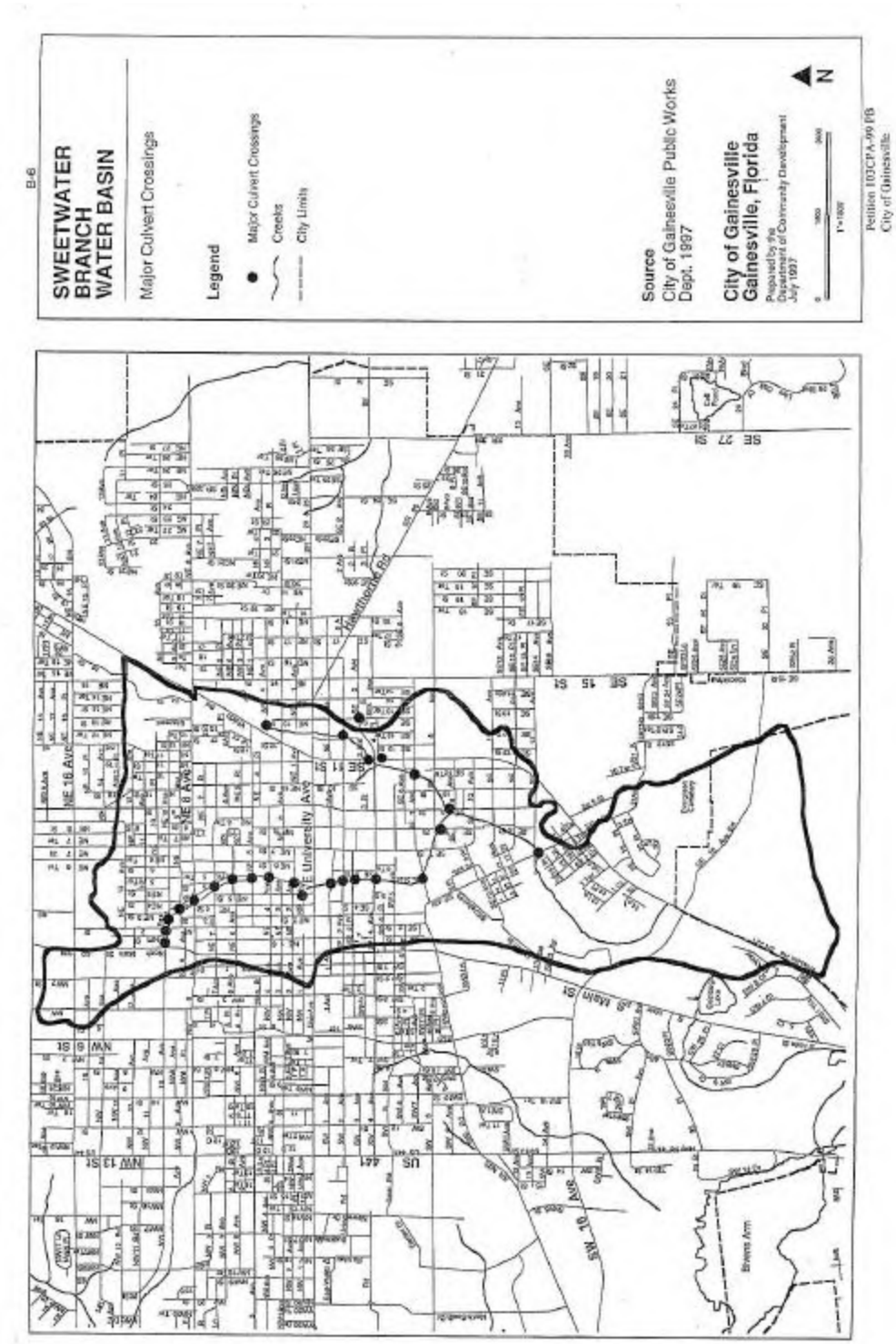
Petition 103CPA-99 PB
City of Gainesville
Newnans Lake


B-6
SWEETWATER BRANCH WATER BASIN
Major Culvert Crossings
Legend
Major Culvert Crossings
Creeks
City Limits
Source
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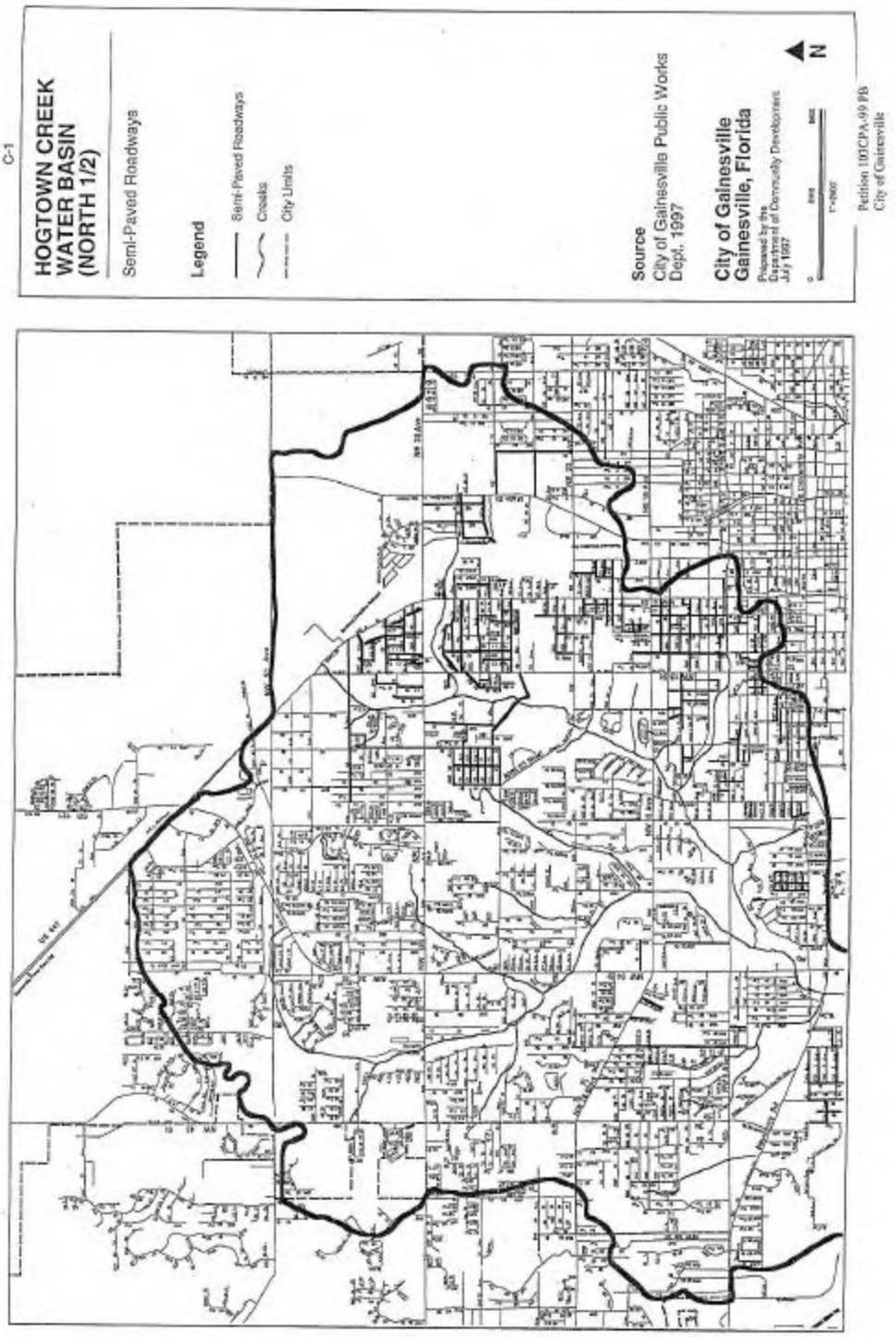
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development July 1997
N
Petition 103CPA-99 PB
City of Gainesville


C-1
HOGTOWN CREEK
WATER BASIN
(NORTH 1/2)
Semi-Paved Roadways
Legend
Semi-Paved Roadways
Creeks
City Limits
Source
City of Gainesville Public Works
Dept. 1997
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
July 1997
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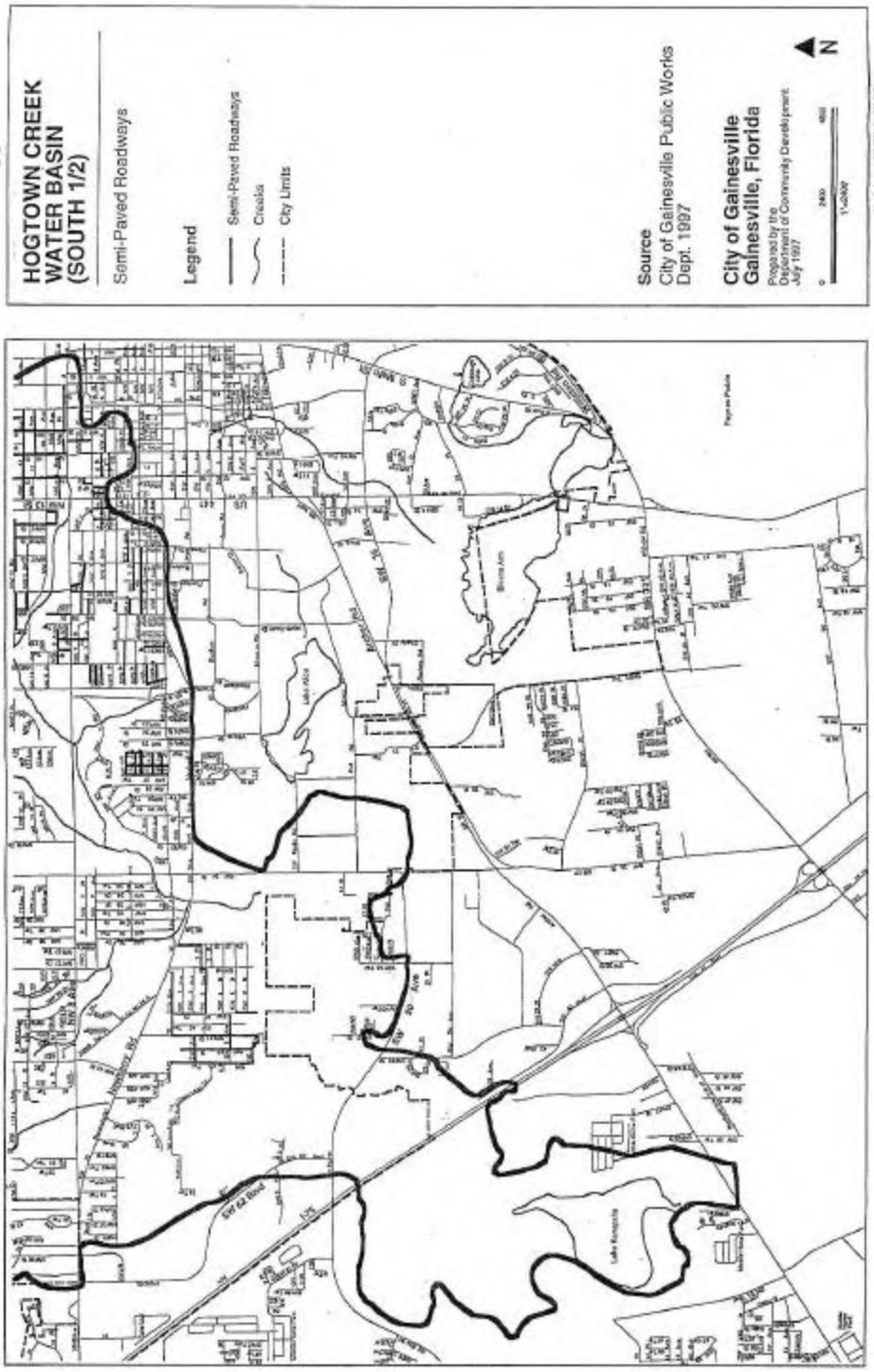
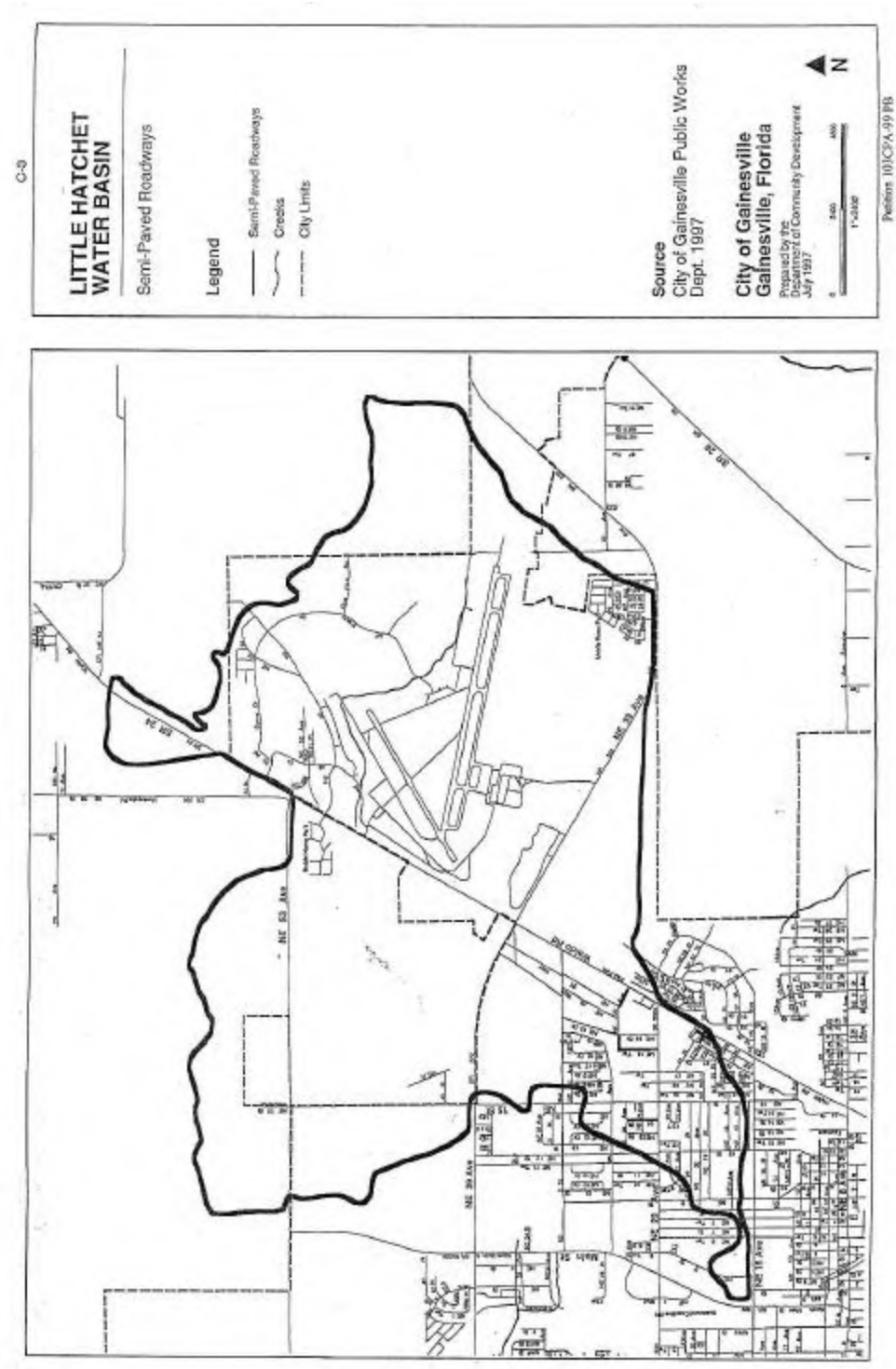
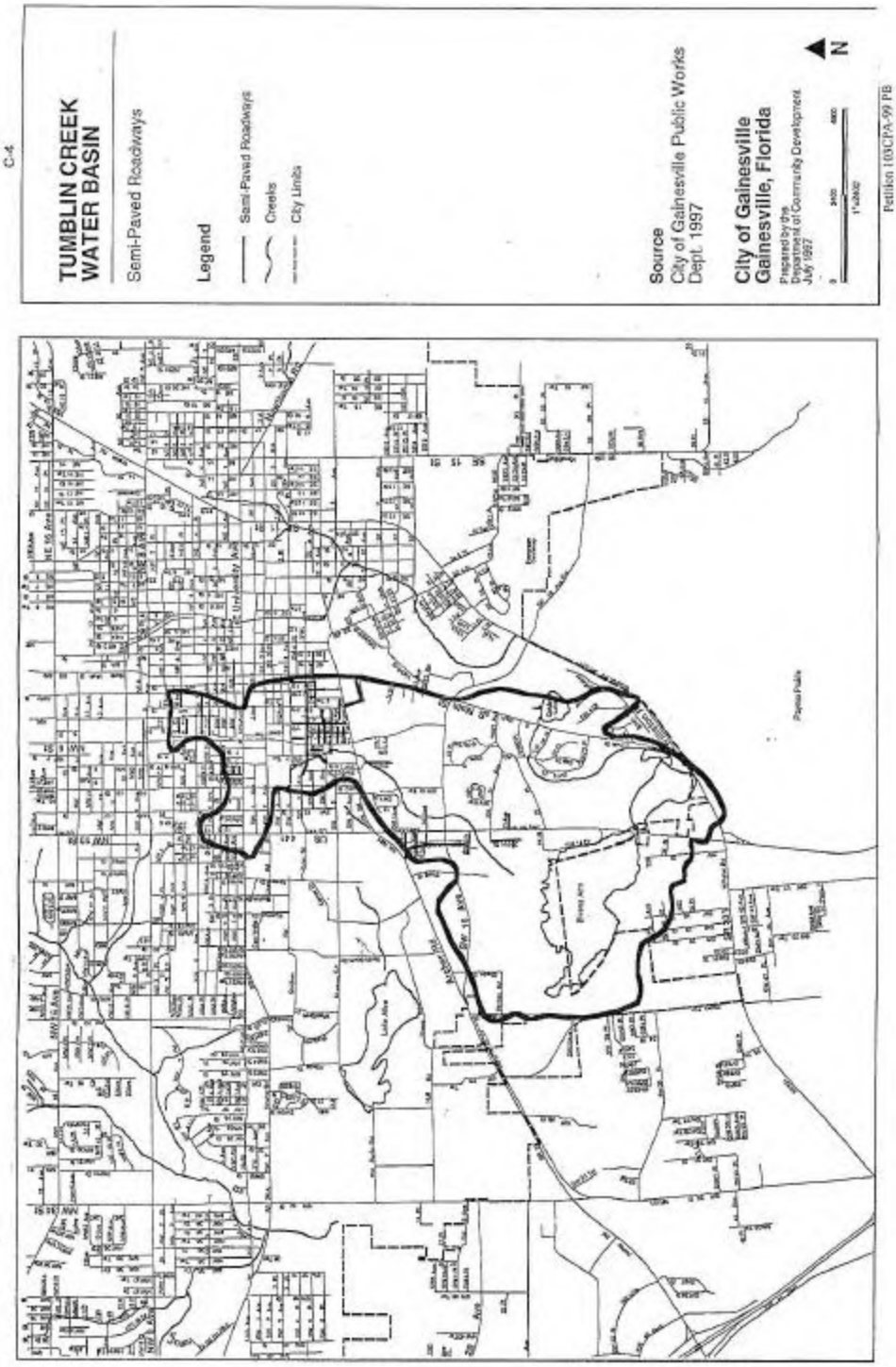
City of Gainesville


C-2
HOGTOWN CREEK
WATER BASIN
(SOUTH 1/2)
Semi-Paved Roadways
Legend
Semi-Paved Roadways
Creeks
City Limits
Source
City of Gainesville Public Works
Dept. 1997
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
July 1997
N
Petition 103CPA-99 PB
City of Gainesville


C-3
LITTLE HATCHET WATER BASIN
Semi-Paved Roadways
Legend
Semi-Paved Roadways
Creeks
City Limits
Source
City of Gainesville Public Works Dept. 1997
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development July 1997
N
Petition 103CPA-99 PB
City of Gainesville


C-4
TUMBLIN CREEK
WATER BASIN
Semi-Paved Roadways
Legend
Semi-Paved Roadways
Creeks
City Limits
Source
City of Gainesville Public Works
Dept. 1997
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
July 1997
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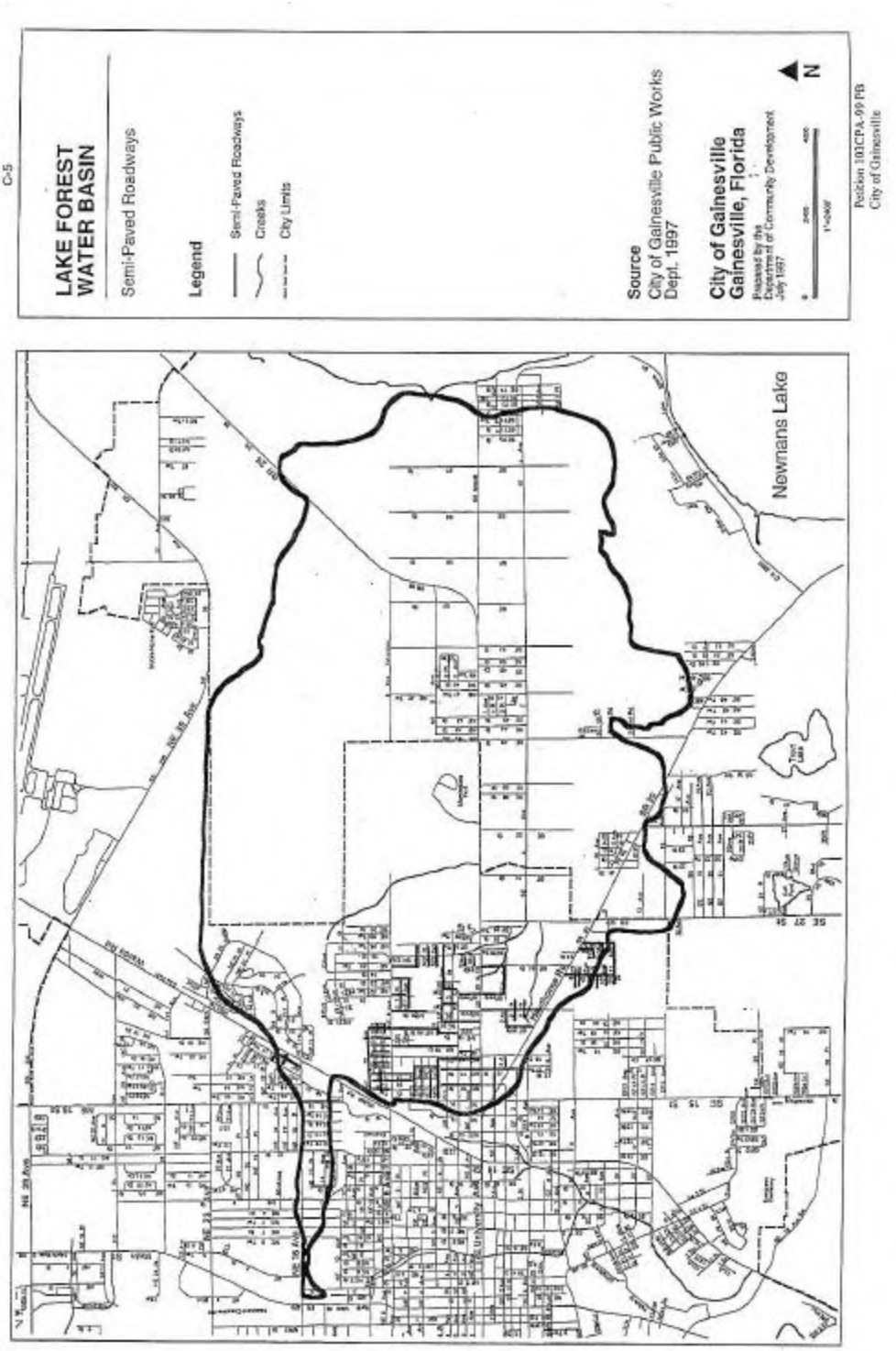
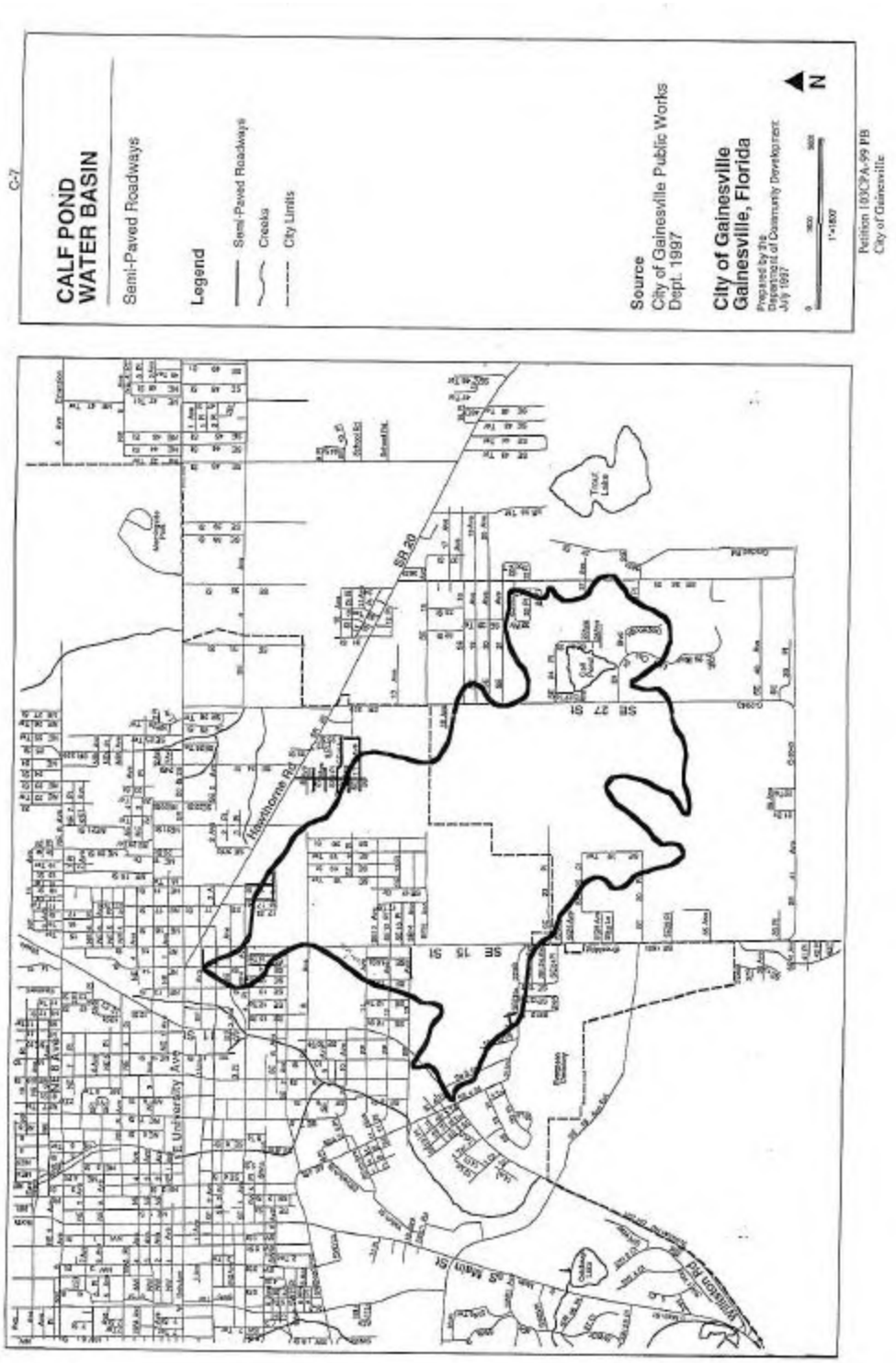
Petition 103CPA-99 PB
City of Gainesville


C-5
LAKE FOREST
WATER BASIN
Semi-Paved Roadways
Legend
Semi-Paved Roadways
Creeks
City Limits
Source
City of Gainesville Public Works
Dept. 1997
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
July 1997
N
Petition 103CPA-99 PB
City of Gainesville
Newnans Lake

Map C-6 Sweetwater Branch Water Basin
Semi-Paved Roadways—C of G Public Works Dept. 1997


C-7
CALF POND
WATER BASIN
Semi-Paved Roadways
Legend
Semi-Paved Roadways
Creeks
City Limits
Source
City of Gainesville Public Works
Dept. 1997
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
July 1997
N
Petition 103CPA-99 PB
City of Gainesville
SR 20
Newberry Rd
SE 27 St
SE 15 St
NE 8 Ave
NE University Ave
SE Main St

Appendix B

Peak Flows and Elevations

Tables B-1 – B-7
Figures B-1 – B-3

Appendix B includes tables and figures excerpted from the 1990 Flood Elevation Update prepared by CH2M Hill. For further information please refer to the full study which is on file with the Public Works Department, City of Gainesville.

For a copy of the tables and figures for this Appendix B, go to the Dept. of Community Development (334-5022). It is at the end of the data & analysis for the Stormwater Management Element, Petition 103CPA-99 PB.

Goals, Objectives & Policies

Transportation Mobility Element

OVERALL GOAL: ESTABLISH A TRANSPORTATION SYSTEM THAT ENHANCES COMPACT DEVELOPMENT, REDEVELOPMENT, AND QUALITY OF LIFE, THAT IS SENSITIVE TO CULTURAL AND ENVIRONMENTAL AMENITIES, AND THAT IMPLEMENTS THE VISION OF THE "YEAR 2035 LONG RANGE TRANSPORTATION PLAN" WITHIN THE CITY OF GAINESVILLE. THE TRANSPORTATION SYSTEM SHALL BE DESIGNED TO MEET THE NEEDS OF PEDESTRIANS, BICYCLISTS, TRANSIT, AND AUTO USERS. SAFETY AND EFFICIENCY SHALL BE ENHANCED BY LIMITATIONS AND CARE IN THE LOCATIONS OF DRIVEWAYS, PROVISION OF SIDEWALK CONNECTIONS WITHIN DEVELOPMENTS, AND AN OVERALL EFFORT TO ENHANCE AND ENCOURAGE PEDESTRIAN MOBILITY THROUGHOUT THE COMMUNITY BY IMPROVEMENT AND PROVISION OF SAFE CROSSINGS, COMPLETE SIDEWALK AND TRAIL SYSTEMS, AND SIDEWALKS OF ADEQUATE WIDTHS. BASIC TRANSPORTATION SHOULD BE PROVIDED FOR TRANSPORTATION-DISADVANTAGED RESIDENTS TO EMPLOYMENT, EDUCATIONAL FACILITIES, AND BASIC SERVICES.

GOAL 1

ADOPT TRANSPORTATION MOBILITY LEVELS OF SERVICE.

Objective 1.1 **The City shall adopt the following transportation mobility levels of service (LOS). These levels of service are solely for planning purposes and are not used to apply transportation concurrency.**

Policy 1.1.1 Roadway LOS:

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a. The LOS for all roadways in city limits shall be LOS E, except for I-75 and roadways operating as backlogged or constrained.

b. The LOS for I-75 segments that fall within city limits shall be maintained at LOS D to the extent feasible, recognizing that I-75 serves land areas and traffic outside city limits.

c. The City shall attempt to maintain the 2012 operating LOS on all backlogged and constrained roadways in city limits.

Policy 1.1.2 Transit LOS:

a. The City shall strive to provide fixed-route transit service within ¼ mile of 80% of all medium and high density residential areas identified on the Future Land Use Map, and within the RTS service area.

b. The City shall strive to provide peak hour frequencies of 20 minutes or less within ¼ mile of all high density residential and UMU-1 and UMU-2 land use areas in city limits.

c. The City shall strive to provide and maintain fixed-route transit service to all Existing Transit Hubs & Transit-Supportive Areas (as mapped in the Transportation Mobility Map Series) with peak hour frequencies of 30 minutes or less.

d. The City shall strive to operate 80% of fixed-route transit routes for at least 14 hours per day.

Policy 1.1.3 Pedestrian LOS:

a. The City shall install at least one linear mile of sidewalk annually to retrofit existing areas without sidewalks.

b. The City's Land Development Code shall require sidewalk construction for all new development, except in areas designated with the Industrial land use category.

c. New streets shall be designed and constructed to include sidewalks.

Policy 1.1.4 Bicycle and Trail LOS:

a. The City shall add an average of at least one mile of bicycle facilities annually, including multi-modal trails.

b. New streets shall be designed and constructed to include bicycle facilities.

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Revised 08/15/13, Ord. 120370
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GOAL 2

DEVELOP AND MAINTAIN A SAFE, CONVENIENT, AND ENERGY EFFICIENT MOTORIZED AND NON-MOTORIZED TRANSPORTATION SYSTEM TO ACCOMMODATE THE SPECIAL NEEDS OF THE SERVICE POPULATION AND THE TRANSPORTATION DISADVANTAGED THAT PROVIDES ACCESS TO MAJOR TRIP GENERATORS AND ATTRACTORS.

Objective 2.1 Create an environment that promotes transportation choices, compact development, and a livable city.

Policy 2.1.1 The City shall enhance the multi-modal transportation system between downtown and the University of Florida (UF) to improve connectivity and promote transportation choice and livability.

Policy 2.1.2 The City shall promote transportation choice, healthy residential and non-residential development, safety, and convenience.

Policy 2.1.3 The City shall support the "Multimodal Emphasis Corridor" designation on 13th Street from SW 16th Avenue to NW 23rd Avenue as shown in the Long Range Transportation Plan Update.

Policy 2.1.4 The City shall coordinate with FDOT to reduce large truck traffic on streets that are not designated truck routes, and direct such traffic to designated truck routes. Improved signs and enforcement shall direct non-local or through trucks to the designated truck route.

Policy 2.1.5 The City shall ensure that street modifications support land use, housing choice, and transportation choice objectives.

Policy 2.1.6 The City shall use "Complete Streets" principles to ensure that roadways are planned, designed, and maintained for safe use by users of all ages and abilities, including pedestrians, bicyclists, transit users, motorists, and freight vehicles.

Policy 2.1.7 The City shall coordinate with UF to ensure that the Campus Master Plan is consistent with the goals, objectives and policies of the Transportation Mobility Element of the Comprehensive Plan.

Policy 2.1.8 The City, in accordance with the policy adopted by the MTPO in 1999, shall avoid using biased transportation terminology.

Policy 2.1.9 The City shall encourage the installation of parking garages and shared parking lots within neighborhood (activity) centers, employment centers, and

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Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

the area between downtown and the UF campus. The land development code shall be amended to ensure that such parking meets performance objectives.

Policy 2.1.10 The City shall use "Context Sensitive Street Design" principles to design transportation facilities that consider the total context within which a transportation project will exist and develop transportation projects that fit the physical setting and preserve scenic, aesthetic, historic and environmental resources while maintaining safety and mobility for all users.

Policy 2.1.11 Development plans for new developments and redevelopment of residential and non-residential sites shall show any existing and proposed bicycle and pedestrian access to adjacent properties and transit stops.

Policy 2.1.12 New development will be encouraged to provide pedestrian/bicycle connections to nearby land uses such as schools, parks, retail, office, and residential when feasible.

Objective 2.2 Ensure that Future Land Use Map designations promote transportation objectives by designating transit-supportive densities in appropriate locations to support transportation choice.

Policy 2.2.1 The City's Future Land Use Map shall remain consistent with transportation choice strategies.

Objective 2.3 Ensure that the City coordinates with the Year 2035 Long Range Transportation Plan and other plans of the MTPO for the Gainesville urbanized area, the Florida Transportation Plan, and the FDOT's Adopted Work Program.

Policy 2.3.1 The City shall coordinate with the MTPO in the Gainesville urbanized area, the FDOT, UF, and other related state and regional and local agencies to implement land use, transportation, and parking policies that promote transportation choice.

Policy 2.3.2 The City shall coordinate with FDOT and Alachua County to implement Access Management regulations.

Policy 2.3.3 The City shall propose transportation projects that affect the City to the MTPO for consideration in the 5-Year Transportation Improvement Program.

Policy 2.3.4 The City shall coordinate with FDOT, MTPO, the Community Traffic Safety Team, and Alachua County to improve transportation system management and enhance safety by the continued expansion and upgrade of the Traffic Management System, and by installing traffic signal priority control for emergency vehicles and buses.

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Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

Policy 2.3.5 The City shall assist the MTPO in annually issuing a Level of Service Report on all GUATS system roadways and shall coordinate with the MTPO to designate backlogged and constrained facilities; these designations shall be amended as appropriate to reflect updated traffic count information and system improvements.

Policy 2.3.6 The City shall strive to implement transportation-related aspects of Plan East Gainesville, including, but not limited to:

a. Coordinating with the MTPO to establish a Bus Rapid Transit system connecting east Gainesville with centers of employment and commerce;

b. Coordinating with the MTPO and FDOT on the implementation of the Waldo Road Multi-Way Boulevard (with limits from University Avenue to NE 39th Avenue) listed in the MTPO 2035 Cost-feasible Plan; and

c. As road reconstruction occurs, including in the transportation network provisions for bicyclists, transit users, and pedestrians on NE 15th Street, East University Avenue, Main Street, and NE 8th Avenue, where applicable.

Objective 12.4 Protect existing and future rights-of-way from building encroachment to the extent that doing so promotes transportation choice.

Policy 2.4.1 The City shall collaborate with FDOT, MTPO, and Alachua County to identify future transportation rights-of-way and to provide for development regulations and acquisition programs that will protect such corridors for their intended future use. Such protection and long-range planning shall include pedestrian, bicycle, car, and transit facilities.

GOAL 3

THE CITY SHALL BECOME A NATIONAL MODEL FOR AN ENHANCED COMMUNITY TRANSIT SYSTEM WITH A VARIETY OF TRANSPORTATION SERVICES THAT PROVIDE A SAFE, CONVENIENT, ACCESSIBLE, COMFORTABLE, CONTINUOUS, AND AESTHETICALLY PLEASING TRANSPORTATION ENVIRONMENT THAT PROMOTES WALKING AND TRANSIT USE. SERVICE SHALL BE PROVIDED WITH THE CLEANEST, QUIETEST, AND MOST ENERGY EFFICIENT EQUIPMENT FEASIBLE.

Objective 3.1 Establish land use designations and encourage development plans that reduce vehicle miles traveled and are transit supportive.

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Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

Policy 3.1.1 The City shall inventory and prioritize all arterial, collector, and local street segments that have sidewalk gaps, and shall maintain such inventory on the City's Geographic Information System (GIS) library to assist in the identification of gaps and priorities. The following criteria shall be used in prioritizing sidewalk gap improvements: (1) proximity to public schools; (2) proximity to major public parks or cultural facilities; (3) proximity to high density residential and commercial areas, or any area exhibiting (or potentially exhibiting) a high volume of walking; (4) proximity to the Traditional City; (5) arterial and collector streets; (6) proximity to transit routes; and (7) proximity to areas of significant blight.

Policy 3.1.2 The City shall identify arterial and collector segments that should be made more walkable. Raised medians, wider sidewalks, and on-street parking should be used, where feasible, on these selected arterials and collector streets within, or adjacent to, the urban area and particularly within pedestrian-oriented areas, such as downtown, UF, and other mixed-use areas.

Policy 3.1.3 The City shall use the "Complete Streets" principles in the design of all new streets.

Policy 3.1.4 Development and redevelopment projects shall be encouraged to provide bicycle and pedestrian access to adjacent properties. Connectivity or stub-outs for future connections shall be included in development and redevelopment plans.

Policy 3.1.5 Street intersection modification, street construction, restriping, reconstruction, and resurfacing shall not increase the difficulty of bicycle, transit, and pedestrian travel. Such changes shall include safety features for bicycles, transit, and pedestrians to offset any negative impact the modification may otherwise create.

Policy 3.1.6 The City shall establish, as feasible and appropriate, pedestrian mid-block refuge areas at street mid-points, particularly for streets with continuous left-turn lanes, areas where a large volume of pedestrians and bicyclists are expected or encouraged, and 5 and 7-lane streets (or any street with a crossing distance greater than 60 feet). For streets within city limits that are not under the City's maintenance responsibility, the City shall coordinate with the governmental unit that has maintenance responsibility to request placement of pedestrian mid-block refuge areas where feasible and appropriate.

Policy 3.1.7 The City shall promote walking, transit use, and bicycling in new development and redevelopment by establishing modest, human-scaled dimensions such as small street blocks, pedestrian-scaled street and building design, ample sidewalks to carry significant pedestrian traffic, and improved access to transit stops.

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Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
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Policy 3.1.8 The City shall collaborate with FDOT to implement the Long Range Transportation Plan that designates University Avenue from Waldo Road to NW 34th Street as a Multimodal Emphasis Corridor.

Policy 3.1.9 The City's Land Development Code shall require new development and redevelopment to provide safe and convenient on-site pedestrian circulation with features such as, but not limited to, sidewalks and crosswalks that connect buildings, transit stops, and parking areas at the development site.

Policy 3.1.10 At least 5 feet of unobstructed width shall be maintained on all sidewalks, except as necessitated by specific physical and/or natural feature constraints that require a more narrow dimension for a short length within a standard width sidewalk. Under no circumstances shall the sidewalk be less than 36 inches in width. Sidewalks shall be free of signs, furniture, and other pedestrian obstacles that reduce the useable width of the sidewalk.

Objective 3.2 Design the City Regional Transit System (RTS) to strike a balance between the needs of those who are transit-dependent and those who have a choice about using the transit system and make up a substantially larger market. The transit system shall serve major trip generators and attractors such as the UF campus, existing transit hubs, and transit supportive areas with safe, pleasant and convenient transit stops, while also providing for the transportation-disadvantaged. Increase transit ridership consistent with the goals in the Transit Development Plan.

Policy 3.2.1 The City shall strive to increase the amount of land designated for multi-family development, when appropriate, on the Future Land Use Map near existing transit hubs or transit-supportive areas.

Policy 3.2.2 The City shall strive to link its land use and transportation planning by using the Transportation Mobility Program.

Policy 3.2.3 The City shall evaluate transit stops in city limits to identify needs for improvements such as well-designed shelters, bicycle parking, route information, benches, waste receptacles, or the need for new transit stop locations.

Policy 3.2.4 The City shall acquire additional buses to accommodate expanded services and increased ridership.

Policy 3.2.5 The City shall support expansion of the Employee Bus Pass Program.

Policy 3.2.6 Upon completion of the Go Enhance RTS study, if a Bus Rapid Transit (BRT) route is found to be feasible, the City shall implement the BRT route by FY 2015 if sufficient funding for capital and operating costs from developers and other sources is available to support the route. In the interim period, the City

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Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

shall explore express bus service on that route as a precursor to eventual BRT service, if funding is available.

Policy 3.2.7 The City shall equip new RTS transit shelters with easy-to-understand timetable and route information and an easily recognizable RTS logo.

Policy 3.2.8 The City transit service shall be enhanced to improve reliability, availability, comfort, and convenience.

GOAL 4

PROVIDE A SAFE, CONVENIENT, EFFICIENT, CONTINUOUS, AND AESTHETICALLY PLEASING TRANSPORTATION ENVIRONMENT THAT IS CONDUCIVE TO BICYCLING.

Objective 4.1 Strive to increase the number of bicycle trips within city limits.

Policy 4.1.1 The City shall strive to provide an interconnected bicycle system with a route to every major destination in the City.

Policy 4.1.2 The City, in cooperation with the County and FDOT, shall strive to ensure that the installation of a turn lane will retain or include a continuous bike lane on the curb lane through the intersection, consistent with FDOT design standards for road facilities.

Policy 4.1.3 The City, in cooperation with the County and FDOT, shall install or encourage the installation of bicycle detection devices at traffic-activated signals on arterial and collector streets, consistent with FDOT standards.

Policy 4.1.4 Traffic signalization should be context sensitive in areas of high pedestrian and bicycle use.

Policy 4.1.5 The City shall identify all arterials and collector segments that are not currently designed for in-street bicycle transportation and determine the most appropriate design to accommodate such transportation, where appropriate. The City's Bicycle/Pedestrian Advisory Board shall be consulted to prioritize such modifications.

Policy 4.1.6 The following criteria shall be used in prioritizing bicycle facility improvements: (1) proximity to major public parks or cultural facilities, public schools, high-density residential and commercial areas, or any area exhibiting (or potentially exhibiting) a relatively high volume of bicycle traffic; (2) arterial and collector streets; (3) promotion of bicycle route continuity; (4) lack of alternative parallel routes; (5) streets serving important transit stops such as Park and Ride ; (6) areas exhibiting a high incidence of car crashes with bicycles; and (7) proximity to the Traditional City.

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Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

Policy 4.1.7 New construction, reconstruction, and resurfacing of arterials and collectors shall be designed using "Complete Streets" and "Context Sensitive Street Design" principles.

Policy 4.1.8 The City shall equip each transit system bus to carry bicycles.

Policy 4.1.9 All new Park and Ride lots shall be designed to accommodate bicycle parking.

Policy 4.1.10 The City shall strive to have bicycle parking facilities designed in conformance with City bicycle parking standards at all appropriate transit stops and transfer points within city limits.

Policy 4.1.11 The City shall support bicycle and pedestrian safety programs in Alachua County schools.

Policy 4.1.12 The City shall support implementation of the Alachua Countywide Bicycle Master Plan adopted by the Metropolitan Planning Organization in 2001 to the extent that it does not conflict with policies in this Comprehensive Plan.

Objective 4.2 Improve bicycle-related security.

Policy 4.2.1 The City's bicycle parking design guidelines shall allow only bicycle racks that provide durability, security, ease of use, attractiveness, adaptability to different styles of bicycles and lock types, and minimal hazard to pedestrians. Examples include bicycle lockers and the "inverted U" bicycle rack.

GOAL 5

DEVELOP AN INTERCONNECTED TRAILS NETWORK THROUGHOUT THE URBAN AREA.

Objective 5.1 Develop and expand a trail network that provides multi-modal transportation opportunities for bicyclists and pedestrians.

Policy 5.1.1 The City shall fill gaps in the Trail Network, as identified as Future Off-Road Trails on the map labeled Off-Street Paved Trail Network in the Transportation Mobility Map Series.

Policy 5.1.2 The City shall extend the Trail Network by cooperating with Alachua County's efforts to expand the Network—both for corridor acquisition and trail construction—particularly for extensions of the Archer Braid Trail within city limits.

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Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

Policy 5.1.3 The City shall require new development and redevelopment to provide pedestrian and bicycle access to nearby trails, where feasible, or to enable a future retrofit connection.

Policy 5.1.4 The City shall evaluate public lands for pedestrian and bicycle trail connections that link various land use destinations. Utility and stormwater management rights-of-way and easements will also be evaluated for such connections.

Policy 5.1.5 The City shall strive to make conversions of rail corridors to rail-trails permanent and not subject to revision, unless a "rails-with-trails" program is established.

Policy 5.1.6 The City shall encourage adaptive re-use of rarely used or out-of-service rail spurs into bicycle, transit, and pedestrian facilities.

Policy 5.1.7 Rail-banking shall be pursued as a way to promote additional trail opportunities and to keep options open for future inter-city passenger rail corridors.

GOAL 6

PROMOTE A MIX OF USES SUCH AS CAR TRAVEL, TRANSIT, AND BICYCLING BY DESIGNING STREETS USING "COMPLETE STREETS" AND "CONTEXT SENSITIVE STREETS" DESIGN PRINCIPLES.

Objective 6.1 Apply "Complete Streets" and "Context Sensitive Streets" design principles to create a safe, balanced, livable transportation system that can be used for all forms of travel to the benefit of neighborhoods, local businesses, and the overall community.

Policy 6.1.1 The City shall use context-appropriate design features to create a more livable transportation system throughout the City that is rich in transportation choice.

Policy 6.1.2 Use traffic calming, where appropriate, to promote transportation choice, reduce the negative impacts of car travel, alter driver behavior, and improve conditions for non-motorized street users.

Policy 6.1.3 The City shall use the "City of Gainesville Engineering Design & Construction Manual" for street design and geometrics on City-maintained streets.

Policy 6.1.4 The City shall use street resurfacing projects as an opportunity to install or enhance sidewalks, bicycle lanes, raised medians, and brick or brick-imprinted, paver, or painted crosswalks, where feasible. If not a City project,

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Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

the City shall recommend that the State or the County make such enhancements.

Policy 6.1.5 The City shall collaborate with the State and the County to design roadways that promote safety, provide pedestrian refuge, promote traffic calming, and provide space for landscaping.

Policy 6.1.6 The street layout of new developments shall be coordinated with the streets and parking of surrounding areas. This shall be done by establishing street connections to adjacent or potentially adjacent streets and parking lots, when feasible, unless natural features prevent such a connection. When not feasible, the end of the street shall establish a right-of-way connection to adjacent, off-site property so that a future motorized or non-motorized connection to an adjacent street or property is not foreclosed.

Policy 6.1.7 The City shall set aside at least one day each year as a designated and publicized sustainable transportation day to encourage citizens to switch from single-occupant car use to another commuting form of travel.

GOAL 7

STRIVE TO REDUCE SINGLE-OCCUPANT VEHICLE TRIPS WITHIN THE GAINESVILLE METROPOLITAN AREA.

Objective 7.1 Provide multi-modal opportunities and mixed-use development areas to reduce single-occupant automobile trips and reduce vehicle miles traveled.

Policy 7.1.1 The maximum number of travel lanes for a new or widened street within city limits shall not exceed 4 travel lanes, except for I-75.

Policy 7.1.2 The City shall review turn lanes on a case-by-case basis to ensure that intersections are safe for all modes of travel.

Policy 7.1.3 The City shall periodically review the Land Development Code to ensure that parking standards are adequate to meet the needs of the community.

Policy 7.1.4 The City shall encourage new public and private schools to provide bicycle and pedestrian connections to nearby residentially designated lands.

Policy 7.1.5 The City shall use the Transportation Mobility Program Area as mapped in the Transportation Mobility Element Data and Analysis Report to encourage redevelopment within the City, and to promote transportation choices.

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Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

Policy 7.1.6 Whenever redevelopment or reuse of a site would result in the combination of one or more parcels of land that had previously operated as separate uses with separate driveways and parking, but are now proposed to operate jointly or to share parking facilities, the total number and location and width of driveways shall be reviewed. In order to reduce access points on the street system, driveways shall be eliminated when the area served can be connected within the site.

Policy 7.1.7 The City shall coordinate the transportation network with the land uses shown on the Future Land Use Map Series in order to encourage compact development patterns, provide safe and convenient access for work, school, shopping, and service-related trips, protect the cultural and environmental amenities of the City, and protect the integrity of the Florida Strategic Intermodal System.

Policy 7.1.8 The City shall encourage large employers to develop incentives for employees to reduce single-occupant vehicle trips to work, such as flex hours, subsidized transit passes, or parking cash-out policies.

Objective 7.2 Use the Transportation Mobility Program policies to improve the land use and transportation planning connection and reduce traffic congestion.

Policy 7.2.1 Widening a street shall not be used as a first response strategy to reduce car congestion. The City shall consider alternative solutions such as intersection modification, signal timing, roundabouts, and strategies that promote transit use, bicycling, and walking.

Policy 7.2.2 The City shall encourage the use of sustainable forms of travel, more transportation choice, and a better retail environment to reduce traffic congestion and improve the City's transportation level of service.

Policy 7.2.3 The Transportation Mobility Program shall promote multi-modal opportunities and better land use planning.

GOAL 8

CREATE A TRANSPORTATION ENVIRONMENT THAT IS FREE OF BARRIERS FOR PEOPLE WITH DISABILITIES.

Objective 8.1 Eliminate existing barriers for people with disabilities.

Policy 8.1.1 Curb ramps, raised crosswalks, and transit stop improvements shall be installed incrementally, in conjunction with other street modifications or in response to specific problem locations.

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Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

Policy 8.1.2 The City shall maintain a transit fleet that can serve persons with disabilities.

Policy 8.1.3 Car parking spaces for persons with disabilities shall conform to the Florida Accessibility Code for Building Construction standards.

GOAL 9

PROVIDE AN AVIATION FACILITY TO MEET THE NEEDS OF PASSENGERS, COMMERCIAL AIRLINES, AND GENERAL AVIATION IN A SAFE AND EFFICIENT MANNER.

Objective 9.1 Promote the Gainesville Regional Airport as the aviation facility for Gainesville and its air service area, and support the implementation of the Airport Master Plan as long as its improvements and operations are consistent with the City's Comprehensive Plan.

Policy 9.1.1 The City shall provide transit service to the Gainesville Regional Airport and the surrounding area.

Policy 9.1.2 The City shall use the Airport Master Plan as the future land use guide for development in and around the airport.

Objective 9.2 Eliminate incompatible land uses within airport noise contours and hazardous obstructions affecting the landing, takeoff, or maneuvering of aircraft, and coordinate the siting of new (or expansion of existing) airports, or related facilities, with the Future Land Use and Conservation, Open Space and Groundwater Recharge Elements.

Policy 9.2.1 The City's Future Land Use Element shall designate compatible land uses within the vicinity of the airport.

Policy 9.2.2 The City shall collaborate with Alachua County to ensure that incompatible land uses within the adopted airport noise contours are eliminated. The adopted airport noise contours are illustrated on the Airport Noise Zone Map dated August 2009 that is located in Appendix F of the City's Land Development Code.

Policy 9.2.3 The City shall encourage the Gainesville-Alachua County Regional Airport Authority to acquire adjacent land that is not compatible with the Airport as identified in the FAR Part 150 Study, and determined to be economically feasible by federal and state land acquisition regulations.

Objective 9.3 Coordinate proposed airport expansions by the Gainesville-Alachua County Regional Airport Authority with transportation plans by the

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Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

Florida Department of Transportation and the Metropolitan Transportation Planning Organization.

Policy 9.3.1 The City shall ensure that future aviation projects and the Airport Industrial Park are integrated with the City's transportation system.

Objective 9.4 Coordinate airport growth with appropriate aviation or other related organizations.

Policy 9.4.1 The City shall collaborate with the Gainesville-Alachua County Regional Airport Authority on all of its aviation projects.

Policy 9.4.2 The Gainesville-Alachua County Regional Airport Authority shall coordinate with the City, the Federal Aviation Administration, the Florida Department of Transportation, North Central Florida Regional Planning Council, the Continuing Florida Aviation System Planning Process, and other appropriate agencies on all of its aviation projects.

GOAL 10

IMPLEMENT A TRANSPORTATION MOBILITY PROGRAM THAT PROMOTES AND ENHANCES:

- **A. URBAN REDEVELOPMENT;**
- **B. INFILL DEVELOPMENT;**
- **C. A VARIETY OF TRANSPORTATION CHOICES AND OPPORTUNITIES INCLUDING AUTOMOTIVE, PEDESTRIAN, BICYCLE AND TRANSIT;**
- **D. THE CITY'S ECONOMIC VIABILITY;**
- **E. DESIRABLE URBAN DESIGN AND FORM;**
- **F. A MIX OF RESIDENTIAL AND NON-RESIDENTIAL USES;**
- **G. STREETSCAPING/LANDSCAPING OF ROADWAYS WITHIN THE CITY; AND**
- **H. PEDESTRIAN AND BICYCLIST COMFORT, SAFETY AND CONVENIENCE.**

Objective 10.1 The Gainesville Transportation Mobility Program Area (TMPA) shall include all property within city limits (although the TMPA shall not apply to annexed properties that do not yet have an adopted City land use category) and shall be subdivided into designated Zones A, B, C, D, E and M as mapped in the Transportation Mobility Element Data and Analysis Report and in the Geographic Information System (GIS) Map Library located on the City's Planning and Development Services Department website.

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Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

Policy 10.1.1 All property within city limits is included in the Gainesville Transportation Mobility Program Area (TMPA); however, the TMPA shall not apply to annexed properties that do not yet have an adopted City land use category. When annexed properties are designated with a City land use category, they shall be assigned to the most physically proximate TMPA zone as mapped in the Transportation Mobility Element Data and Analysis Report and in the GIS Map Library on the City's Planning and Development Services Department website.

Policy 10.1.2 All land uses and development located in the TMPA shall meet the TMPA policies specified in this Element.

Policy 10.1.3 Zone A shall promote redevelopment and infill in the eastern portion of the City and the area near the University of Florida. Except as shown in Policy 10.1.4 and Policy 10.1.14, funding for multi-modal transportation in Zone A shall be provided to the maximum extent feasible by the City, Community Redevelopment Agency, federal or state governments, and other outside sources such as grant funds.

Policy 10.1.4 For any development or redevelopment within Zone A, the developer shall provide the following transportation mobility requirements. The developer shall provide any transportation modifications that are site related and required for operational or safety reasons, such as, but not limited to, new turn lanes into the development, driveway modifications, or new traffic signals, and such operational and safety modifications shall be unrelated to the Transportation Mobility Program requirements.

a. Sidewalk connections from the development to existing and planned public sidewalk along the development frontage;

b. Cross-access connections/easements or joint driveways, where available and economically feasible;

c. Deeding of land or conveyance of required easements along the property frontage to the City, as needed, for the construction of public sidewalks, bus turn-out facilities, and/or transit shelters. Such deeding or conveyance of required easements, or a portion of same, shall not be required if it would render the property unusable for development. A Transit Facility License Agreement between the property owner and the City for the placement of a bus shelter and related facilities on private property may be used in lieu of deeding of land or conveyance of easements. The License Agreement term shall be for a minimum of 10 years;

d. Closure of existing excessive, duplicative, or unsafe curb cuts or narrowing of overly wide curb cuts at the development site, as defined

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

in the Access Management portion of the Land Development Code; and

e. Safe and convenient on-site pedestrian circulation, such as sidewalks and crosswalks connecting buildings and parking areas at the development site.

Policy 10.1.5 For any development or redevelopment within Zones B, C, D, E, or M, the developer shall provide all of the items listed in Policy 10.1.4 and shall provide the transportation mobility requirements as specified in Policies 10.1.6, 10.1.7, 10.1.9, 10.1.11, 10.1.13, and 10.1.14, as applicable. The developer shall also provide any transportation modifications that are site related and required for operational or safety reasons, such as, but not limited to, new turn lanes into the development, driveway modifications, or new traffic signals, and such operational and safety modifications shall be unrelated to the Transportation Mobility Program requirements.

Policy 10.1.6 For any development or redevelopment within Zone B, the developer shall, at the developer's expense, meet the following transportation mobility criteria based on the development's (including all phases) trip generation and proportional impact on transportation mobility needs. The criteria chosen shall relate to the particular development site and the transportation mobility conditions and priorities in the zone, adjacent zones, and/or citywide for criteria that benefit the overall transportation system. Based on cost estimates provided by the developer and verified by the City, the City shall have the discretion to count individual criteria as equivalent to two or more criteria for purposes of satisfying transportation mobility requirements. Provision of the required transportation mobility criteria shall be subject to final approval by the City during the development review process and shall be memorialized in a TMPA agreement between the City and the developer**.**

Net, New Average Daily Trip Generation	Number of Criteria That Shall Be Met
50 or less	At least 1
51 to 100	At least 2
101 to 400	At least 3
401 to 1,000	At least 5
1,001 to 5,000	At least 8

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

Greater than 5,000	At least 12 and meet either a. or b.: a. Located on an existing RTS transit route with minimum 15-minute frequencies in the a.m. and p.m. peak hours. b. Provide funding for a new RTS transit route with minimum 15-minute frequencies in the a.m. and p.m. peak hours or provide funding to improve RTS transit headways to minimum 15-minute frequencies in the a.m. and p.m. peak hours. Funding for new routes shall include capital and operating costs for a minimum of 5 years. Funding for existing route expansions or enhancements shall include capital and operating costs for a minimum of 3 years.

Zone B Criteria

a. Intersection and/or signalization modifications to address congestion management, including, but not limited to: signal timing studies, fiber optic interconnection for traffic signals, roundabouts, OPTICOM signal preemption, transit signal prioritization, and/or implementation of the Gainesville Traffic Signalization Master Plan. The Master Plan includes installation of Intelligent Transportation System (ITS) features such as state of the art traffic signal controllers, dynamic message signs, and traffic monitoring cameras designed to maximize the efficiency of the roadway network by reducing congestion and delay.

b. Addition of lanes on existing road facilities (including, but not limited to, the 4-lane expansion of SR 121 north of US 441 to CR 231), where acceptable to the City and/or MTPO, as relevant.

c. Construction of new road facilities that provide alternate routes, reduce congestion, and create a better gridded network.

d. Use of joint driveways or cross-access to reduce curb cuts.

e. Participation in a transportation demand management program that provides funding or incentives for transportation modes other than single occupant vehicle. Such demand management programs shall provide annual reports of operations to the City indicating successes in reducing single occupant vehicle trips.

f. Provision of ride sharing or van pooling programs.

g. Provision of Park and Ride facilities, built to RTS needs and specifications.

h. Provision of bus pass programs provided to residents and/or employees of the development. The bus passes must be negotiated as part of a contract with the Regional Transit System.

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

i. Deeding of land for the addition and construction of bicycle lanes that meet City specifications. Prior to deeding land for right-of-way, the developer and the City must agree upon the fair market value of the land for the purposes of meeting this criterion. The developer may submit an appraisal to the City to establish fair market value, subject to review and approval by the City.

j. Provision of additional bicycle parking over the minimum required by the Land Development Code. Additional bicycle parking may be used to substitute for the required motorized vehicle parking.

k. Enhancements to the City's off-street paved trail network (as shown in the Transportation Mobility Map Series) that increase its utility as a multi-modal transportation route. Such enhancements may include, but shall not be limited to: 1) trail amenities such as benches, directional signage, or safety systems; 2) bicycle parking at entry points or connections with transit lines; 3) land acquisition for expansion or better connectivity; 4) additional entry points to the off-street paved trail network; 5) bridges spanning creeks or wetland areas; and 6) appropriate off-street trail surfacing.

l. Funding of streetscaping/landscaping (including pedestrian-scale lighting, where relevant) on public rights-of-way or medians, as coordinated with the implementation of the City's streetscaping plans.

m. In order to increase the attractiveness of the streetscape and reduce visual clutter along roadways to promote a more walkable environment, provision of no ground-mounted signage at the site for parcels with 100 linear feet or less of property frontage, or removal of non-conforming signage or billboards at the site. Signage must meet all other regulations in the Land Development Code.

n. Widening of existing public sidewalks to increase pedestrian mobility and safety.

o. Construction of public sidewalks where they do not currently exist or completion of sidewalk connectivity projects. Sidewalk construction required to meet Land Development Code requirements along property frontages shall not count as meeting TMPA criteria.

p. Payments to RTS that either increase service frequency or add additional transit service, including Express Transit service and/or Bus Rapid Transit, where appropriate.

q. Funding for the construction of new or expanded transit facilities.

r. Construction of bus shelters built to City specifications.

s. Bus shelter lighting using solar technology designed and constructed to City specifications.

t. Construction of bus turn-out facilities to City specifications.

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

u. Construction of access to transit stops and/or construction of transit boarding and alighting areas.

v. Business operations shown to have limited or no peak-hour roadway impact.

w. An innovative transportation-mobility-related modification submitted by the developer, where acceptable to and approved by the City.

Policy 10.1.7 For any development or redevelopment within Zone C, the developer shall, at the developer's expense, meet the following transportation mobility criteria based on the development's (including all phases) trip generation and proportional impact on transportation mobility needs. The criteria chosen shall relate to the particular development site and the transportation mobility conditions and priorities in the zone, adjacent zones, and/or citywide for criteria that benefit the overall transportation system. Based on cost estimates provided by the developer and verified by the City, the City shall have the discretion to count individual criteria as equivalent to two or more criteria for purposes of satisfying transportation mobility requirements. Provision of the required transportation mobility criteria shall be subject to final approval by the City during the development review process and shall be memorialized in a TMPA agreement between the City and the developer**.**

Net, New Average Daily Trip Generation	**Number of Criteria That Shall Be Met**
50 or less	At least 1
51 to 100	At least 3
101 to 400	At least 4.5
401 to 1,000	At least 7.5
1,001 to 5,000	At least 12
Greater than 5,000	At least 18 and meet either a. or b.: a. Located on an existing RTS transit route with minimum 15-minute frequencies in the a.m. and p.m. peak hours. b. Provide funding for a new RTS transit route with minimum 15-minute frequencies in the a.m. and p.m. peak hours or provide funding to improve RTS transit headways to minimum 15-minute frequencies in the a.m. and p.m. peak hours. Funding for new routes shall include capital and operating costs for a minimum of 5 years. Funding for existing route expansions or enhancements shall include capital and operating costs for a minimum of 3 years.

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

Zone C Criteria

a. Roadway projects that will provide a more interconnected transportation network in the area and/or provide alternate routes to reduce congestion and pressure on arterials. All roadway projects shall include bicycle and pedestrian facilities. Projects may be located outside of Zone C if demonstrated to be a direct benefit to the transportation system in Zone C. Projects may include, but shall not be limited to, the following:

   1. extension of SW 40th Boulevard to connect from its terminus south of Archer Road to SW 47th Avenue;
   2. extension of SW 47th Avenue to connect from its terminus east and south to Williston Road;
   3. extension of streets, deeding of land, and/or easements to create a more gridded network and provide connectivity in redevelopment areas; and
   4. extension of SW 40th Place from SW 27th Street to SW 47th Avenue.

b. Deeding of land for right-of-way and/or construction of roadway extensions to City specifications. Prior to deeding land for right-of-way, the developer and the City must agree upon the fair market value of the land for the purposes of meeting this criterion. The developer may submit an appraisal to the City to establish fair market value, subject to review and approval by the City.

c. Use of joint driveways or cross-access connections to reduce curb cuts.

d. Intersection and/or signalization modifications to address congestion management, including, but not limited to: signal timing studies, fiber optic inter-connection for traffic signals, roundabouts, OPTICOM signal preemption, and/or implementation of elements of the Gainesville Traffic Signalization Master Plan. Implementation of the Master Plan includes installation of Intelligent Transportation System (ITS) features such as state of the art traffic signal controllers, dynamic message signs, transit signal prioritization, and traffic monitoring cameras designed to maximize the efficiency of the roadway network by reducing congestion and delay.

e. Participation in a transportation demand management program that provides funding or incentives for transportation modes other than single occupant vehicle. Such demand management programs shall provide annual reports of operations to the City indicating successes in reducing single occupant vehicle trips.

f. Design and/or construction studies/plans for projects such as planned roundabouts, road connections, sidewalk systems, and/or bike trails.

g. Provision of matching funds for transit or other transportation mobility-related grants.

h. Construction of bicycle and/or pedestrian facilities/trails to City specifications. This may include provision of bicycle parking at bus shelters or Transit Hubs (as shown on the Existing Transit Hubs & Transit Supportive Areas Map) or deeding of land for the

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

addition and construction of bicycle lanes or trails. Prior to deeding land for right-of-way, the developer and the City must agree upon the fair market value of the land for the purposes of meeting this criterion. The developer may submit an appraisal to the City to establish fair market value, subject to review and approval by the City.

i. Funding of streetscaping/landscaping on public rights-of-way or medians, as coordinated with the implementation of the City's streetscaping plans.

j. Pedestrian-scale lighting in priority areas, including:

1. SW 35th Place;
2. SW 37th/39th Blvd.;
3. SW 23rd Terrace; and
4. Williston Road.

k. Construction of public sidewalks where they do not currently exist or completion of sidewalk connectivity projects. Sidewalk construction required to meet Land Development Code requirements along property frontages shall not count as meeting TMPA criteria.

l. Payments to RTS that either increase service frequency or add additional transit service, including Express Transit service and/or Bus Rapid Transit, where appropriate.

m. Funding for the construction of new or expanded transit facilities.

n. Construction of bus shelters built to City specifications.

o. Bus shelter lighting using solar technology designed and constructed to City specifications.

p. Construction of bus turn-out facilities to City specifications.

q. Construction of access to transit stops and/or construction of transit boarding and alighting areas.

r. Business operations shown to have limited or no peak-hour roadway impact.

s. An innovative transportation-mobility-related modification submitted by the developer, where acceptable to and approved by the City.

Policy 10.1.8 The City establishes the following priority for transportation mobility projects within Zone C and shall collaborate with the Metropolitan Transportation Planning Organization (MTPO) to add these items to the MTPO list of priorities. The City shall also pursue matching grants and other funding sources to complete these projects.

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

a. Construction of a southerly extension of SW 40th Boulevard from its current end south of its intersection with Archer Road to the intersection of SW 47th Avenue. This roadway connection shall include bicycle and pedestrian facilities.

b. Construction of an extension of SW 47th Avenue to connect from its terminus east and south to Williston Road.

c. Funding for the construction of new or expanded transit facilities.

Policy 10.1.9 For any development or redevelopment within Zone D, the developer shall, at the developer's expense, meet the following transportation mobility criteria based on the development's (including all phases) trip generation and proportional impact on transportation mobility needs. The criteria chosen shall relate to the particular development site and the transportation mobility conditions and priorities in the zone, adjacent zones, and/or citywide for criteria that benefit the overall transportation system. Based on cost estimates provided by the developer and verified by the City, the City shall have the discretion to count individual criteria as equivalent to two or more criteria for purposes of satisfying transportation mobility requirements. Provision of the required transportation mobility criteria shall be subject to final approval by the City during the development review process and shall be memorialized in a TMPA agreement between the City and the developer**.**

Net, New Average Daily Trip Generation	**Number of Criteria That Shall Be Met**
50 or less	At least 1.5
51 to 100	At least 4
101 to 400	At least 6
401 to 1,000	At least 10
1,001 to 5,000	At least 16
Greater than 5,000	At least 24 and meet either a. or b.: a. Located on an existing RTS transit route with minimum 15-minute frequencies in the a.m. and p.m. peak hours. b. Provide funding for a new RTS transit route with minimum 15-minute frequencies in the a.m. and p.m. peak hours or provide funding to improve RTS transit headways to minimum 15-minute frequencies in the a.m. and p.m. peak hours. Funding for new routes shall include capital and operating costs for a minimum of 5 years. Funding for existing route expansions or enhancements shall include capital and operating costs for a minimum of 3 years.

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Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

Zone D Criteria

a. Roadway projects that will provide a more interconnected transportation network in the area and/or provide alternate routes to reduce congestion and pressure on arterials. All roadway projects shall include bicycle and pedestrian facilities. Projects may be located outside of Zone D if demonstrated to be a direct benefit to the transportation system in Zone D. Projects may include, but shall not be limited to, the following:

    1. extension of SW 40th Boulevard to connect from its terminus south of Archer Road to SW 47th Avenue; and
    2. extension of streets, deeding of land, or easements to create a more gridded network and provide connectivity.

b. Deeding of land for right-of-way and/or construction of roadway extensions to City specifications. Prior to deeding land for right-of-way, the developer and the City must agree upon the fair market value of the land for the purposes of meeting this criterion. The developer may submit an appraisal to the City to establish fair market value, subject to review and approval by the City.

c. Design and/or construction studies/plans for projects such as planned roundabouts, road connections, sidewalk systems, and/or bike trails.

d. Provision of matching funds for transit or other transportation mobility-related grants.

e. Provision of Park and Ride facilities, built to RTS needs and specifications

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f. Construction of bicycle and/or pedestrian facilities/trails to City specifications. This may include provision of bicycle parking at bus shelters or Transit Hubs (as shown on the Existing Transit Hubs & Transit Supportive Areas Map) or deeding of land for the addition and construction of bicycle lanes or trails. Prior to deeding land for right-of-way, the developer and the City must agree upon the fair market value of the land for the purposes of meeting this criterion. The developer may submit an appraisal to the City to establish fair market value, subject to review and approval by the City.

g. Construction of public sidewalks where they do not currently exist or completion of sidewalk connectivity projects. Sidewalk construction required to meet Land Development Code requirements along property frontages shall not count as meeting TMPA criteria.

h. Payments to RTS that either increase service frequency or add additional transit service, including Express Transit service and/or Bus Rapid Transit, where appropriate.

i. Funding for the construction of new or expanded transit facilities.

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

j. Construction of bus shelters built to City specifications.

k. Bus shelter lighting using solar technology designed and constructed to City specifications.

l. Construction of bus turn-out facilities to City specifications.

m. Construction of access to transit stops and/or construction of transit boarding and alighting areas.

n. Business operations shown to have limited or no peak-hour roadway impact.

o. An innovative transportation-mobility-related modification submitted by the developer, where acceptable to and approved by the City.

Policy 10.1.10 The City establishes the following priority for transportation mobility projects within Zone D and shall collaborate with the Metropolitan Transportation Planning Organization (MTPO) to add these items to the MTPO list of priorities. The City shall also pursue matching grants and other funding sources to complete these projects.

a. Construction of a southerly extension of SW 40th Boulevard from its current end south of its intersection with Archer Road to the intersection of SW 47th Avenue. This roadway connection shall include bicycle and pedestrian facilities.

b. Funding for the construction of new or expanded transit facilities.

Policy 10.1.11 For any development or redevelopment within Zone E, the developer shall, at the developer's expense, meet the following transportation mobility criteria based on the development's (including all phases) trip generation and proportional impact on transportation mobility needs. The criteria chosen shall relate to the particular development site and the transportation mobility conditions and priorities in the zone, adjacent zones, and/or citywide for criteria that benefit the overall transportation system. Based on cost estimates provided by the developer and verified by the City, the City shall have the discretion to count individual criteria as equivalent to two or more criteria for purposes of satisfying transportation mobility requirements. Provision of the required transportation mobility criteria shall be subject to final approval by the City during the development review process and shall be memorialized in a TMPA agreement between the City and the developer**.**

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

Net, New Average Daily Trip Generation	Number of Criteria That Shall Be Met
50 or less	At least 1.5
51 to 100	At least 4
101 to 400	At least 6
401 to 1,000	At least 10
1,001 to 5,000	At least 16
Greater than 5,000	At least 24 and meet either a. or b.: a. Located on an existing RTS transit route with minimum 15-minute frequencies in the a.m. and p.m. peak hours. b. Provide funding for a new RTS transit route with minimum 15-minute frequencies in the a.m. and p.m. peak hours or provide funding to improve RTS transit headways to minimum 15-minute frequencies in the a.m. and p.m. peak hours. Funding for new routes shall include capital and operating costs for a minimum of 5 years. Funding for existing route expansions or enhancements shall include capital and operating costs for a minimum of 3 years.

Zone E Criteria

a. Roadway projects that will provide a more interconnected transportation network in the area and/or provide alternate routes to reduce congestion and pressure on arterials. All roadway projects shall include bicycle and pedestrian facilities. Projects may be located outside of Zone E if demonstrated to be a direct benefit to the transportation system in Zone E. Projects may include, but shall not be limited to, the following:

1. widening of SR 121 to 4 lanes north of US 441 to CR 231; and
2. extension of streets, deeding of land, or easements to create a more gridded network and provide connectivity.

b. Deeding of land for right-of-way and/or construction of roadway extensions to City specifications. Prior to deeding land for right-of-way, the developer and the City must agree upon the fair market value of the land for the purposes of meeting this criterion. The developer may submit an appraisal to the City to establish fair market value, subject to review and approval by the City.

c. Design and/or construction studies/plans for projects such as planned roundabouts, road connections, sidewalk systems, and/or bike trails.

d. Provision of matching funds for transit or other transportation mobility-related grants.

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

e. Provision of Park and Ride facilities, built to RTS needs and specifications.

f. Construction of bicycle and/or pedestrian facilities/trails to City specifications. This may include provision of bicycle parking at bus shelters or Transit Hubs (as shown on the Existing Transit Hubs & Transit Supportive Areas Map) or deeding of land for the addition and construction of bicycle lanes or trails. Prior to deeding land for right-of-way, the developer and the City must agree upon the fair market value of the land for the purposes of meeting this criterion. The developer may submit an appraisal to the City to establish fair market value, subject to review and approval by the City.

g. Construction of public sidewalks where they do not currently exist or completion of sidewalk connectivity projects. Sidewalk construction required to meet Land Development Code requirements along property frontages shall not count as meeting TMPA criteria.

h. Payments to RTS that either increase service frequency or add additional transit service, including Express Transit service and/or Bus Rapid Transit, where appropriate.

i. Funding for the construction of new or expanded transit facilities.

j. Construction of bus shelters built to City specifications, where transit service is available.

k. Bus shelter lighting using solar technology designed and constructed to City specifications, where transit service is available.

l. Construction of bus turn-out facilities to City specifications, where transit service is available or planned as shown in the Transit Development Plan, Bus Stop Improvement Plan or 5-Year Schedule of Capital Improvements.

m. Construction of access to transit stops and/or construction of transit boarding and alighting areas.

n. Business operations shown to have limited or no peak-hour roadway impact.

o. An innovative transportation-mobility-related modification submitted by the developer, where acceptable to and approved by the City.

Policy 10.1.12 The City establishes the following priority for transportation mobility projects within Zone E and shall collaborate with the Metropolitan Transportation Planning Organization (MTPO) to add these items to the MTPO list of priorities. The City shall also pursue matching grants and other funding sources to complete these projects.

a. Widening SR 121 to 4 lanes north of US 441 to CR 231.

b. Funding for the construction of new or expanded transit facilities.

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Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

Policy 10.1.13 For any development or redevelopment within Zone M, the developer shall fund transportation mobility criteria, including transit, pedestrian, bicycle, and vehicular needs, in the zone. This may include projects outside of Zone M that can be demonstrated to be a direct benefit to the transportation system in Zone M. The required transportation mobility criteria shall be based on the development's (including all phases) trip generation and proportional impact on transportation mobility facilities. Provision of the required transportation mobility criteria shall be subject to final approval by the City during the development review process and shall be memorialized in a TMPA agreement between the City and the developer**.** The transportation mobility criteria for any development or redevelopment that has a net, new average daily trip generation of greater than 5,000 trips shall include either 1. or 2. as follows:

1. Located on an existing RTS transit route with minimum 15-minute frequencies in the a.m. and p.m. peak hours.

2. Provide funding for a new RTS transit route with minimum 15-minute frequencies in the a.m. and p.m. peak hours or provide funding to improve RTS transit headways to minimum 15-minute frequencies in the a.m. and p.m. peak hours. Funding for new routes shall include capital and operating costs for a minimum of 5 years. Funding for existing route expansions shall include capital and operating costs for a minimum of 3 years.

It is anticipated that the provision of all mobility needs in Zone M may span a 20 to 30-year time period, and the mobility needs in Zone M, as listed below, shall be identified in the City's 5-Year Schedule of Capital Improvements.

Zone M Criteria

a. Roadway projects that will provide a more interconnected transportation network in the area and/or provide alternate routes to reduce congestion and pressure on arterials. All roadway projects shall include bicycle and pedestrian facilities. Projects may include, but shall not be limited to, the following:

1. extension of Hull Road consistent with MTPO Option M;
2. extension of SW 62nd Boulevard to SW Archer Road in accordance with the MTPO design; and
3. extension of streets, deeding of land, or easements to create a more gridded network and provide connectivity.

b. Deeding of land for right-of-way and/or construction of roadway extensions to City specifications. Prior to deeding land for right-of-way, the developer and the City must agree upon the fair market value of the land for the purposes of meeting this criterion.

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

The developer may submit an appraisal to the City to establish fair market value, subject to review and approval by the City.

c. Design and/or construction studies/plans for projects such as planned roundabouts, road connections, sidewalk systems, and/ or bike trails.

d. Construction of transit superstops in Zone M built to City specifications.

e. A Park and Ride facility with a minimum of 100 spaces, including transfer station and restrooms/information center, built to RTS specifications.

f. Traffic management system equipment for transit vehicles operating on routes in Zone M.

g. Funding for new buses and other capital expenses for routes serving Zone M.

h. Funding for articulated buses.

i. Funding for Express Transit Service or Bus Rapid Transit, where appropriate.

j. Construction of public sidewalks where they do not currently exist or completion of sidewalk connectivity projects. Sidewalk construction required to meet Land Development Code requirements along property frontages shall not count as meeting TMPA criteria.

k. Funding for the construction of new or expanded transit facilities.

l. Construction of access to transit stops and/or construction of transit boarding and alighting areas.

m. Business operations shown to have limited or no peak-hour roadway impact.

n. An innovative transportation-mobility-related modification submitted by the developer, where acceptable to and approved by the City.

Policy 10.1.14 Within the portion of the University of Florida (UF) Context Area that is located inside city limits (as mapped in the Campus Master Plan), all new multi-family residential development shall fund the capital transit costs associated with transit service needs. Transit capital costs include transit vehicles, maintenance facilities, passenger facilities such as transit shelters, and technology equipment (such as GPS). Payments shall be based on a proportionate share contribution for any additional transit service enhancements needed to serve the proposed development and maintain existing service levels (frequencies) in the RTS a.m. and p.m. peak hours. The projected new trips shall be based on the expected mode split of all development trips that will use transit. If the development is within ¼ mile of

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

UF, there shall be a 25% reduction in the required payment in recognition of the pedestrian and bicycle trips that may occur. Any transit payments required under this policy shall not count towards meeting TMPA criteria in Zones B, C, D, or M.

Policy 10.1.15 Redevelopment or expansions of existing developments that generate fewer than ten net, new average daily trips or two net, new p.m. peak hour trips (based on adjacent street traffic) shall not be required to meet Policies 10.1.4, 10.1.5, 10.1.6, 10.1.7, 10.1.9, 10.1.11, 10.1.13, or 10.1.14, as applicable.

Policy 10.1.16 To encourage redevelopment and desirable urban design and form, any development or redevelopment within Zones B, C, D, E, or M that meets standards such as neo-traditional, new urbanist, transit-oriented development (TOD), or mixed-use development and includes a mix of both residential and non-residential uses at transit-oriented densities shall be provided credits, in relation to the multi-modal amenities provided, toward meeting the criteria in Policies 10.1.6, 10.1.7, 10.1.9, 10.1.11, and 10.1.13, as applicable.

Policy 10.1.17 An existing DRI that was approved and built prior to the adoption of the TMPA may be granted TMPA credits for redevelopment or expansion if all of the following requirements are met. All other Chapter 380, F.S., DRI requirements, except those concerning transportation concurrency, shall continue to apply.

a. The DRI is located entirely within the TMPA.

b. At least one public transit route serves the DRI and operates at 15-minute frequencies during the RTS a.m. and p.m. peak hours.

c. The DRI allows transit service to enter the site and drop off/pick up passengers as close as possible to main entry points to facilitate transit user comfort and safety. An appropriate number of bus shelters, as determined by RTS during development review, shall be located at the site. The DRI shall construct required shelters to RTS specifications.

d. The DRI provides a Park and Ride facility at the site, built to RTS specifications and needs.

e. Cross-access connections or easements shall be provided to adjacent developments/sites.

f. Any other transportation modifications (either on or off-site), including, but not limited to, signalization, turn lanes, cross walks, bicycle parking, public sidewalks and internal sidewalk connections, and/or traffic calming measures found to be required during development review shall be provided or paid for by the DRI. The City

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

may require a traffic study to determine the transportation impacts and required transportation modifications depending upon the size of the expansion.

Policy 10.1.18 In order to promote highly desirable development within the TMPA, the City or Community Redevelopment Agency may enter into agreements with developers to provide all or part of the transportation mobility needs that are required by policies within this Element.

Policy 10.1.19 The City shall collect trip generation information for developments within the TMPA. For redevelopment sites, the City shall also collect information about trip credits for the previous use of the property.

Policy 10.1.20 The City may require special traffic studies within the TMPA, including, but not limited to, information about trip generation, trip distribution, trip credits, and/or signal warrants, to determine the need for transportation modifications for improved traffic operation and/or safety on impacted road segments.

Policy 10.1.21 The City shall evaluate the TMPA in conjunction with the City's next required Evaluation and Appraisal process.

Policy 10.1.22 The City shall amend the Concurrency Management section and any other relevant sections of the Land Development Code to reflect the adoption of the new Transportation Mobility Program and the rescinding of transportation concurrency and the Transportation Concurrency Exception Area.

Policy 10.1.23 Developments approved prior to the adoption of the TMPA shall provide any transportation improvements, modifications, or mitigation required as part of the development plan approval, consistent with Future Land Use Element Policy 3.4.5. When development plans that were approved prior to the adoption of the TMPA are amended, they shall meet TMPA policies, consistent with Future Land Use Element Policy 3.4.5.

Objective 10.2 The City shall promote multi-modal transportation choice by adopting the following policies that encourage an interconnected street network, encourage redevelopment, and specially regulate developments with 30 or more acres, and by adopting the Existing Transit Hubs & Transit-Supportive Areas Map as part of the Transportation Mobility Map Series.

Policy 10.2.1 The City shall not close or vacate streets except under the following conditions:

a. the loss of the street will not foreclose reasonably foreseeable future bicycle/pedestrian use;

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

b. the loss of the street will not foreclose non-motorized access to adjacent land uses or transit stops;

c. the loss of the street is necessary for the construction of a high density, mixed-use project containing both residential and non-residential uses or creating close proximity of residential and non-residential uses; and

d. there is no reasonably foreseeable need for any type of transportation corridor for the area.

Policy 10.2.2 The City shall ensure that new streets are designed appropriately for transportation choice by setting design standards that call for minimal street widths, modest turning radii, modest design speeds, curb extensions, traffic calming, gridded and connected patterns, sidewalks, bicycle facilities, and prohibition of cul-de-sacs, where feasible. Street design standards shall include consideration of usage by transit vehicles, where appropriate.

Policy 10.2.3 The City shall require new residential developments, where feasible, to provide street and/or sidewalk/path connections and/or stub-outs to adjacent properties and developments (such as schools, parks, bus stops, retail, and office centers) so that motorized vehicle trips are minimized on major roadways.

Policy 10.2.4 The City shall adopt the Existing Transit Hubs & Transit-Supportive Areas Map as part of the Transportation Mobility Map Series to increase and enhance multi-modal transportation choices and encourage redevelopment in these areas.

Policy 10.2.5 In order to encourage the redevelopment of properties within the TMPA, reduce or prevent blight, and encourage development in close proximity to transit, the following redevelopment trip credits shall apply to projects that are located within ¼ mile of the property lines of an existing transit hub or projects that are located in transit-supportive areas (as shown in the Existing Transit Hubs and Transit-Supportive Areas Map adopted in the Transportation Mobility Element) and are within ¼ mile of an existing transit route. The City shall reduce by 25% the net, new average daily trip generation for any redevelopment project or any project that expands or converts a building to a new use. The City shall reduce by 40% the net, new average daily trip generation for any mixed-use project that includes both a residential and non-residential component where residential dwelling units equal at least 10% of the floor area of commercial/office uses.

Policy 10.2.6 In recognition of the significant redevelopment problems facing the City in the NW 13th Street Activity Center area, the NW 13th Street Special Redevelopment Trip Credit Area (as shown in the Transportation Mobility Map Series) shall receive redevelopment trip credits as follows. The City shall

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

reduce by 30% the net, new average daily trip generation for any redevelopment or expansion/conversion project. The City shall reduce by 45% the net, new average daily trip generation for any mixed-use project that includes both a residential and non-residential component.

Policy 10.2.7 To facilitate a reduction in vehicle miles traveled and energy efficient land use patterns within the TMPA, developments on 30 or more vacant acres that have a residential, commercial, mixed-use, office, or Planned Use District (PUD) land use designation shall comply with the following conditions:

a. A mix of residential and non-residential uses shall be required where residential dwelling units equal at least 10% of the floor area of commercial/office uses.

b. The residential units may be vertically or horizontally mixed with the non-residential portion of the development.

c. A residential unit credit may be received from off-site development that is within ¼ mile of the site, is in an area equal to the size of the development site, and has an existing built residential density of at least 6 units per acre.

d. A minimum of 10,000 square feet of non-residential uses (office or commercial) shall be required to support the needs of residents and minimize trip lengths for goods and/or services.

e. In the case of residential land use, an amendment to PUD will be required to implement the mixed-use requirements of this policy until such time as the City amends the land use categories to allow for a mix of uses.

f. The development can be in the form of a Traditional Neighborhood Development (TND), transit-oriented development (TOD), or New Urbanist type development.

g. There shall be an exemption from the mixed-use requirements of this policy for any infill development in Zones A, B, or C that is surrounded by an area that: a) is at least equal to the size of the development; b) is at least 75% developed with a mix of residential and non-residential uses that may provide support needs; and c) has existing adequate and safe sidewalk connections within ¼ mile of the development.

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

Objective 10.3 **The City's Land Development Code shall provide standards for all new developments and redevelopment within the TMPA. Within the transect zoning district areas, the Land Development code shall regulate urban form to ensure a compact, pedestrian-friendly environment that supports multi-modal opportunities.**

Policy 10.3.1 Within the transect zoning districts, land development regulations shall address urban form in terms of: street types, maximum block perimeter sizes, required new streets or urban walkways, building frontage requirements, building setbacks, location of parking, glazing requirements, building façade articulation, and building entrance location.

Policy 10.3.2 New development of automotive-oriented uses within the TMPA, such as retail petroleum sales (gasoline service stations), car washes, automotive repair, and limited automotive services (as defined in the Land Development Code), shall be designed with service bays and fueling (gas) pumps located to the rear or side of buildings. These design standards shall not apply in industrial zoning districts. Land development regulations shall specify the criteria for the placement of these uses. The number of fueling positions and service bays shall be regulated in the Land Development Code.

Objective 10.4 **Automobile-oriented developments/uses within the TMPA, including drive-through facilities, surface parking lots as a principal use, parking garages, car washes, and gasoline service stations, shall be regulated by the Land Development Code.**

Policy 10.4.1 Drive-through facilities shall be defined to include banking facilities, payment windows, restaurant, food and/or beverage sales, dry cleaning, express mail services, and other services that are extended mechanically or personally to customers who do not exit their vehicles. The following uses shall not be considered drive-throughs: auto fuel pumps and depositories that involve no immediate exchange or dispersal to the customer, such as mail boxes, library book depositories, and recycling facilities.

Policy 10.4.2 Drive-through facilities shall be specially regulated by the Land Development Code. The regulations shall include provisions that include; the maximum number of drive-through lanes; queuing space; minimization of the number of access points to public streets; by-pass lanes or driveway areas to avoid backups at the site; consideration of pedestrian/bicyclist safety; location of drive-through lanes; and minimization of the visual impacts of drive-through lanes on street frontage areas.

Policy 10.4.3 Gasoline and alternative fuel stations shall be specially regulated by the Land Development Code. The regulations shall include provisions that include: locating fueling pumps to the rear or side of buildings; minimization of the

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

number and width of driveways; limitations on the numnber of fueiling positions; and considertion of pedestrian and bicycle safety at the site.

Policy 10.4.4 The Land Development code shall address design requirements for structured parking that include provisions for consideration of: pedestrian and bicycle routes; location and design of vehicle access points; and compatibility with neighborhoods.

Objective 10.5 In order to enhance the visual characteristics of roadways and create an appealing environment that supports multi-modal transportation opportunities, the City shall adopt streetscaping and landscaping standards for regulated roadways within the TMPA.

Policy 10.5.1 The City shall use the November 1998 Gateway Corridor Design Concept Plan as a guideline for all City landscape plans to be prepared for the right-of-ways and medians of all regulated roadways within the TMPA.

Policy 10.5.2 The City Arborist shall approve final landscaping proposals required in Policy 10.5.1.

Policy 10.5.3 The priority for landscaping of roadway right-of-ways and/or medians shall be within Zone A of the TMPA. First priority shall be given to major arterials within Zone A. Funding for the installation of landscape projects within Zone A shall be from the City, Community Redevelopment Agency, state and federal government, and/or grants, as an incentive for development within the area. Maintenance responsibility shall be provided by the City, Community Redevelopment Agency, or grant funds.

Policy 10.5.4 The City shall include right-of-way and median landscaping as part of any major roadway modification program.

Policy 10.5.5 For required landscaping, new development within Zones B, C, D, E, and M shall plant trees selected from the Tree List in the City's Land Development Code that at a minimum are 65-gallon-sized, 14-18 feet tall, and 3.5 inches in trunk caliper, or the equivalent winter-dug and hardened-off balled and burlapped trees. If 65-gallon or equivalent trees are not available, the number of required shade trees may be appropriately increased with the approval of the City Arborist or designee. Within Zone B, these requirements shall only apply along roadways as listed in the annual Level of Service Report produced by the North Central Florida Regional Planning Council. Within Zones C, D, E, and M, these requirements shall apply to all public and private streets. Trees shall be planted on private property within buffer areas or on right-of-way, if approved by the City. Landscaping installations on right-of-way shall comply with the City of Gainesville Engineering Design & Construction Manual. Land Development Code regulations shall specify the type, size, and other tree landscaping standards for the TMPA. All new development within

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

Zones B, C, D, E, and M shall also install an automated irrigation system to preserve new landscaping.

Redevelopment sites shall be required to plant 50% of the number of street trees otherwise required by the City's Land Development Code. Redevelopment sites where 40% or more of the developed area (as defined in the Land Development Code) is being altered shall also meet the automated irrigation system requirement.

Developments meeting the criteria for Rapid Review pursuant to the Land Development Code and developments within landscape exempt areas, special area plans with pedestrian-oriented build-to line provisions, and the approach and clear zone areas as specified on the Gainesville Regional Airport Master Plan shall be exempt from these requirements.

Objective 10.6 The City shall adopt the following policies to regulate parking within the TMPA.

Policy 10.6.1 Parking in excess of that required by the Land Development Code shall be prohibited within the TMPA.

Policy 10.6.2 Developments may apply for a parking reduction within the TMPA, based on criteria in the Land Development Code.

Objective 10.7 The City shall coordinate with the Metropolitan Transportation Planning Organization (MTPO) to balance the need for and design of roadway modifications with the City's needs for urban redevelopment, infill, and quality urban design.

Policy 10.7.1 In cooperation with the MTPO, the City shall encourage consideration of features to improve multi-modal transportation in all designs of new roadways and redesigns of existing roadways, as appropriate. These considerations shall include construction of bus turn-out facilities, bicycle lanes, sidewalks, enhanced pedestrian crosswalks, pedestrian scale lighting, landscaped medians and right-of-ways, and traffic calming mechanisms.

Policy 10.7.2 As part of the ongoing coordination with the MTPO and the Florida Department of Transportation, the City shall designate corridors where road widening is not feasible or desirable. These roadway corridors shall then be designated as "Policy Constrained" or "Physically Constrained" facilities where alternatives to road widening are the primary strategy for roadway congestion.

Objective 10.8 The City shall coordinate with Alachua County on an ongoing basis concerning the TMPA.

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

Policy 10.8.1 Alachua County staff shall be provided the development plans and associated traffic studies for any development within the TMPA that will generate more than 1,000 net, new average daily trips or any development that will generate more than 100 net, new average daily trips within 1/4 mile of an Alachua County-maintained road or the unincorporated area. Alachua County staff shall have the opportunity to comment on the proposed development and its impacts on Alachua County-maintained roads or state-maintained roads and any criteria proposed/required pursuant to Policies 10.1.6, 10.1.7, 10.1.9, 10.1.11, and 10.1.13. Alachua County staff may raise the trip threshold for review of plans at any time by informing the City of such change in writing. The City shall require large developments that meet the DRI threshold to address regional impacts on facilities.

Policy 10.8.2 After receipt of the annual update of the Level of Service Report produced by the North Central Florida Regional Planning Council, the City shall annually monitor and evaluate the impacts to Alachua County-maintained roads of approved development within the TMPA and share the information with Alachua County.

Objective 10.9 The City shall coordinate with the Florida Department of Transportation (FDOT) on an ongoing basis concerning the TMPA.

Policy 10.9.1 For any development that will access state roads, FDOT staff shall have the opportunity to comment on the proposed development and its impacts on state roads.

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

Transportation Mobility Map Series

- Major Thoroughfares and Transportation Routes
- Transit Routes
- Existing Transit Hubs & Transit-Supportive Areas
- Off-Street Paved Trail Network
- In-Street Bicycle Facilities – Existing
- Rail & Airport Facilities
- NW 13th Street Special Redevelopment Trip Credit Area
- Major Trip Generators & Attractors

Revised 08/12/02, Ord. 000515
Revised 04/26/04, Ord. 030466
Revised 12/17/09, Ord. 090184
Revised 08/15/13, Ord. 120370
Revised 07/20/17, Ord. 140817

Transportation Mobility Element

Draft: January 25, 2001

Table of Contents

Transportation Mobility Element ***1***
9J-5.019 Transportation Element 4

Data and Analysis ***14***

Introduction: The Transportation-Land Use Connection ***14***

Pedestrians ***18***
Advantages of Walking as a Form of Travel 18

Existing System and Analysis for Walking **18**
Levels of Travel by Pedestrians 18
Pedestrian Facilities and Programs 18
Pedestrian Safety 19
Pedestrian-friendly streets and intersections 21
Existing and Future Pedestrian Needs 22
Sustainability Indicators for Walking 29

Transit ***30***
Introduction 30
Advantages of the Bus as a Form of Travel 30
Dramatic Recent Increases in Bus Ridership 31
City Transit Priorities 32
Effective Tools to Increase Transit Ridership 33
Sustainability Indicators for Using Transit 36

Existing System and Analysis for Transit System **37**
Transit Service and Frequency 42
Bus Ridership 47
Integration Between Forms of Travel 49
Population Served by RTS 52
Persons with Transit-Related Disabilities 52
Special Needs Populations 53
Transit Trip Generation and Future Bus System Capacity 53
Transit System Capital Needs 54
Major Trip Generators and Attractors 54
Percentage of Trips by Transit and Other Forms of Travel (Modal Split) 59

Bicycling ***60***
Advantages of Bicycling as a Form of Travel 60

Existing System and Analysis for Bicycling **60**
Levels of Bicycle Transportation 60
Existing Bicycle Facilities and Programs 60
Bicycle Safety 63
Existing and Future Needs 64
Key Engineering Strategies to Promote Bicycling in Gainesville 64
Encouraging Bicycling as a Form of Travel 67
Bicycle Capital Improvements Needed 68
Sustainability Indicators for Bicycling 69

The Trail Network ***70***
Trail Network gaps 72

Cars ***73***
Widening Streets Does Not Reduce Traffic Congestion 73
Too Much Street and Car Parking Capacity Creates More Air Pollution and Fuel Consumption 74

Existing System and Analysis for Cars ____ 75
Street Classification ____ 79
Peak Hour Level of Service for the Street Network ____ 79
Land Use ____ 85
Housing and Employment Patterns ____ 87
Projected Levels of Service for Cars ____ 88
Street Needs for Cars ____ 93
Traffic calming ____ 93
Turn Lanes ____ 97
Narrow Streets ____ 98
Transportation Demand Management ____ 98
On-Street Parking ____ 99
Non-street access points ____ 100
Connected Streets ____ 100
Adoption of the Transportation Concurrency Exception Area ____ 101
Maintenance of Level of Service Standards for Car Travel ____ 102
Sustainability Indicators for Car Travel ____ 104
Attributes of Sustainable, "Smart" Transportation ____ 105
Biased Transportation Terminology ____ 106

Need for New Facilities for All Forms of Transportation ____ 110

Airports and Freight Rail Lines ____ 113

Emergency Management ____ 127

Funding ____ 129

Evaluation and Appraisal Report—Major Issues ____ 130

Bibliography ____ 132

9J-5.019 Transportation Element

(1) APPLICATION AND PURPOSE. A local government which has all or part of its jurisdiction included within the urban area of a Metropolitan Planning Organization (MPO) pursuant to Section 339.175, F.S., shall prepare and adopt a transportation element consistent with the provisions of this Rule and Chapter 163, Part II, F.S. Local governments that are not located within the urban area of a MPO shall adopt traffic circulation, mass transit, and ports, aviation and related facilities elements consistent with the provisions of this rule and Chapter 163, F.S., Part II, F.S., except that local governments with a population of 50,000 or less, as determined under Section 186.901, F.S., shall not be required to prepare mass transit or ports, aviation and related facilities elements.

Within a designated MPO area, the transportation elements of the local plans shall be coordinated with the long range transportation plan of the MPO. The purpose of the transportation element shall be to plan for a multimodal transportation system that places emphasis on public transportation systems.

(2) EXISTING TRANSPORTATION DATA REQUIREMENTS.
The element shall be based upon the following data requirements pursuant to Subsection 9J-5.005(2) of this Chapter.

(a) The general location of the following transportation system features shall be shown on an existing transportation map or map series:

1. Road System:
a. Collector roads;
[See Figure 20]

b. Arterial roads;
[See Figure 20]

c. Limited and controlled access facilities;
[See Figure 21]

d. Significant Parking facilities, as determined by the local government.
[See Figure 9, 10]

2. Public Transit System:

a. Public transit routes or service areas;
[See Figure 7, 8]

b. Public transit terminals and transfer stations;
[See Figure 13]

c. Public transit rights-of-way and exclusive public transit corridors;
[None]

3. Significant bicycle and pedestrian ways, as determined by the local government.
[See Figure 14. See Figure 18 for off-street trails]

4. Port facilities;
[not applicable]

5. Airport facilities including clear zones and obstructions;
[See Figure 28, 32]

6. Freight and passenger rail lines and terminals; and
[See Figure 28]

7. Intermodal terminals and access to intermodal facilities;
[Put on Figure 9, 13,]

8. The existing functional classification and maintenance responsibility for all roads;
[Functional: Figure 20. Maintenance: Figure 23]

9. The number of through lanes for each roadway;
[See Figure 22]

10. The major public transit trip generators and attractors based upon the existing land use map or map series; **[See Figure 11, 13]**

11. Designated local and regional transportation facilities, critical to the evacuation of the coastal population prior to an impending natural disaster.
[See Figure 34]

(b) The existing transportation map or map series shall identify the following:

1. Existing peak hour, peak direction levels of service for roads and mass transit facilities and corridors or routes; and
[See Figure 24. The City has hired a consultant to prepare a 2020 transportation plan update that will contain the transit levels of service.]

2. Capacity of significant parking facilities and duration limitations (long-term or short-term), where applicable.
[See Figure 9, 10]

(3) TRANSPORTATION ANALYSIS REQUIREMENTS.
The element shall be based upon the following analyses which address all modes of transportation and support the comprehensive plan pursuant to Subsection 9J-5.005(2).

(a) An analysis of the existing transportation system levels of service and system needs based upon existing design and operating capacities; most recently available estimates for average daily and peak hour vehicle trips; existing modal split and vehicle occupancy rates; existing public transit facilities, including ridership by route, peak hour capacities and headways; population characteristics, including transportation disadvantaged; and the existing characteristics of the major trip generators and attractors within the community.
[Levels of service and system needs: See "Peak Hour Level of Service for Street Network," "Projected Level of Service for Cars," "Street Needs for Cars," "Need for New Facilities for Transportation," and "Exception Areas and Level of Service Analysis"; Average daily and peak hour vehicle trips: See Table 15; Existing modal split and vehicle occupancy: See "Percentage of Trips by Transit and Other Forms of Travel"; Transit facilities, including ridership by route, peak hour capacities and headways: See Table 5, 6, 8; Population characteristics, including transportation disadvantaged: See: "Existing System and Analysis for Transit System;" Generators and attractors: See "Major Trip Generators and Attractors"]

(b) An analysis of the availability of transportation facilities and services to serve existing land uses.
[availability of transportation facilities and services: See "Exception Areas & LOS Analysis," "Projected Level of Service for Cars," and "Land Use."]

(c) An analysis of the adequacy of the existing and projected transportation system to evacuate the coastal population prior to an impending natural disaster**. [According to Alachua County Emergency Management Office on 7/15/99, no analysis has been done. See "Emergency Management" section.]**

(d) An analysis of the growth trends and travel patterns and interactions between land use and transportation, and the compatibility between the future land use and transportation elements, including land use compatibility around airports.
[Growth trends and travel patterns and interactions between land use and transportation: See "Exception Areas and Level of Service Analysis," "Adoption of a Transportation Concurrency Exception Area". Compatibility: See the "Land Use" portion of the airport section.]

(e) An analysis of existing and projected intermodal deficiencies and needs such as terminals, connections, high occupancy vehicle lanes, park-and-ride lots and other facilities.
[Intermodal deficiencies, terminals, connections, high occupancy vehicle lanes, park-and-ride lots: See "Integration Between Forms of Travel," "Transit System Capital Needs."]

(f) An analysis of the projected transportation system levels of service and system needs based upon the future land use categories, including their densities or intensities of use as shown on the future land use map or map series, and the projected integrated transportation system. The analysis shall demonstrate integration and coordination among the various modes of transportation, including rail, airport and seaport facilities. The analysis shall address the need for new facilities and expansions of alternative transportation modes to provide a safe and efficient transportation network and enhance mobility. The methodologies used in the analysis, including the assumptions used, modeling applications, and alternatives considered shall be included in the plan support document. The analysis shall address the effect of transportation concurrency management areas, if any, pursuant to Rule 9J-5.0055(5), F.A.C., and the effect of transportation concurrency exceptions, if any, pursuant to Rule 9J-5.0055(6) and (7).
[Levels of service and system needs and need for new facilities and expansions of alternative transportation modes: See "Street Network and Existing System for Car Travel" and "Exception Areas and Level of Service Analysis;" Integration and coordination among the various modes of transportation: See "Integration Between Forms of Travel"]

(g) The analysis shall consider the projects planned for in the Florida Department of Transportation's Adopted Work Program, long range transportation plan and transportation improvement program of the metropolitan planning organization, and the local transportation authority(ies), if any, and compatibility with the policies and guidelines of such plans.
[Adopted Work Program, long range transportation plan and transportation improvement program of the metropolitan planning organization, and the local transportation authority(ies), if any, and compatibility: See "Street Needs for Cars" and "Need for New Facilities for Transportation"]

(h) The analysis shall demonstrate how the local government will maintain its adopted level of service standards for roads and transit facilities within its jurisdiction and how the level of service standards reflect and advance the purpose of this section and the goals, objectives, and policies of the future land use element and other elements of the comprehensive plan.
[How the local government will maintain its adopted level of service standards for roads and transit facilities and how the level of service standards reflect and advance the purpose of this section of the future land use element: See "Peak Hour Level of Service for the Street Network," "Exception Areas and Level of Service Analysis," "Adoption of a Transportation Concurrency Exception Area," "Projection of Level of Service for Cars," "Street Needs for Cars," "Maintenance of Level of Service for Car Travel", "Need for New Facilities for Transportation," and "Transportation Demand Management."]

(i) The analysis shall explicitly address and document the internal consistency of the plan, especially its provisions addressing transportation, land use, and availability of facilities and services.
[Internal consistency: See "Peak Hour Level of Service for the Street Network," "Exception Areas and Level of Service Analysis," "Adoption of a Transportation Concurrency Exception Area," "Land Use," "Maintenance of Level of Service Standards for Car Travel," "Widening Streets Does Not Reduce Traffic Congestion", "Too Much Street and Car Parking Capacity Creates More Air Pollution and Fuel Consumption", and "Sustainability Indicators for Car Travel."]

(j) An analysis which identifies land uses and transportation management programs necessary to promote and support public transportation systems in designated public transportation corridors.
[There are currently no "designated public transportation corridors."]

(4) REQUIREMENTS FOR TRANSPORTATION GOALS, OBJECTIVES AND POLICIES.

(a) The element shall contain one or more goal statements which establish the long-term end toward which transportation programs and activities are ultimately directed.
[See Goals 1-9]

(b) The element shall contain one or more specific objectives for each goal statement which address the requirements of subsections 163.3177(6)(b), (6)(j), (7)(a), and (7)(b), F.S., and which:

1. Provide for a safe, convenient, and energy efficient multimodal transportation system;
[See Objectives 1.1, 1.2, 2.1, 3.1-2, 4.1-2, 5.1, 6.1, 7.1-2, 8.1]

2. Coordinate the transportation system with the future land use map or map series and ensure that existing and proposed population densities, housing and employment patterns, and land uses are consistent with the transportation modes and services proposed to serve these areas;
[See Objective 1.2]

3. Coordinate the transportation system with the plans and programs of any applicable metropolitan planning organization, transportation authority, Florida Transportation Plan and Florida Department of Transportation's Adopted Work Program; and
[See Objective 1.3]

4. Address the provision of efficient public transit services based upon existing and proposed major trip generators and attractors, safe and convenient public transit terminals, land uses and accommodation of the special needs of the transportation disadvantaged.
[See Objectives 3.1-2]

5. Provide for the protection of existing and future rights-of-way from building encroachment.
[See Objective 1.4]

6. Coordinate the siting of new, or expansion of existing, ports, airports, or related facilities with the future land use, coastal management, and conservation elements;
[See Objective 9.2]

7. Coordinate the surface transportation access to ports, airports, or related facilities with the traffic circulation system shown on the traffic circulation maps or map series.
[See Objective 9.3]

8. Coordinate with any ports, airports, or related facilities plans of the appropriate ports, airports or related facilities provider. United States Army corps of Engineers, Federal Aviation Administration, metropolitan planning organization, military services, or resource planning and management plan prepared pursuant to Chapter 380.F.S., and approved by the Governor and Cabinet, the Florida Department of Transportation 5-Year Transportation Plan, and the Continuing Florida Aviation System Planning Process as adopted; and
[See Objective 9.4]

9. Ensure that access routes to ports, airports, or related facilities are properly integrated with other modes of surface or water transportation.

[See Objective 9.3]

(c) The element shall contain one or more policies for each objective which address implementation activities for the:

1. Establishment of level of service standards at peak hour for roads and public transit facilities within the local government's jurisdiction. For facilities on the Florida Intrastate Highway System as defined in Section 338.001, F.S., the local governments shall adopt the level of service standards established by the Department of Transportation by rule. For all other facilities on the future traffic circulation map, local governments shall adopt adequate level of service standards. These level of service standards shall be adopted to ensure that adequate facility capacity will be provided to serve the existing and future land uses as demonstrated by the supporting data and analysis in the comprehensive plan;
[See Policies 7.1.7-9]

2. Control of the connections and access points of driveways and roads to roadways;
[See Policies 7.1.12, 7.1.10]

3. Establishment of parking strategies that will promote transportation goals and objectives;
[See Policies 1.1.1, 1.1.3, 1.1.8, 1.3.1, 2.1.4, 2.1.11, 3.1.3, 4.1.11-12, 4.2.1, 6.1.1, 6.1.3, 6.1.6, 7.1.3, 7.1.4, 7.1.10, 7.1.13, 8.1.3]

4. For existing or future transportation rights-of-way and corridors designated in the local government comprehensive plan, establish measures for their acquisition, preservation, or protection;
[See Policy 1.4.1]

5. Establishment of land use and other strategies to promote the use of bicycles and walking;
[See Policies 1.1.1-5, 1.1.9-11, 1.3.1, 1.4.1, 2.1.1-16, 3.1.2, 3.2.1, 3..2.3, 4.1.1-13, 4.2.1, 5.1.1-7, 6.1.1-8, 7.1.1-6, 7.1.13, 7.2.1-4]

6. Establishment of transportation demand management programs to modify peak hour travel demand and reduce the number of vehicle miles traveled per capita within the community and region;
[See Policies 1.1.1, 1.1.3, 1.1.5, 1.3.1, 2.1.6-12, 3.2.3, 6.1.1, 6.1.3, 7.1.1-6, 7.1.13, 7.2.3-4]

7. Establishment of transportation system management strategies as appropriate to improve system efficiency and enhance safety;
[See Policies 1.3.2, 1.3.4, 6.1.1-3]

8. Coordination of roadway and transit service improvements with the future needs of seaports, airports, and other related public transportation facilities;
[See Policy 9.3.1]

9. Establishment of land use, site and building design guidelines for development in exclusive public transit corridors to assure the accessibility of new development to public transit;
[N.A.]

10. Establishment of numerical indicators against which the achievement of the mobility goals of the community can be measured, such as modal split, annual transit trips per capita, automobile occupancy rates;
[See Policies 1.1.9, 2.1.2, 7.2.1]

11. Establishment of strategies, agreements and other mechanisms with applicable local governments and regional and state agencies that demonstrate the areawide coordination necessary to implement the transportation, land use, parking and other provisions of the transportation element;
[See Policy 1.3.1]

12. A coordinated and consistent policy with the future land use element to encourage land uses which promote public transportation in designated public transportation corridors;
[See Policies 1.2.1, 3.1.1-2, 3.2.1, 3.2.3]

13. Establishment of strategies to facilitate local traffic to use alternatives to the Florida Intrastate Highway System to protect its interregional and intrastate functions;
[See Policy 7.1.7. The City will continue to use such strategies as the Transportation Concurrency Management Area, bicycle lane and sidewalk installation, transit enhancements, increased land use densities, and more mixed land uses to remove local motor vehicle trips from the Florida Intrastate Highway System to protect its interregional and intrastate functions.]

14. Development of strategies to address intermodal terminals and access to airport, rail and seaport facilities;
[See Policies 9.1.1, 9.3.1]

15. Provision of safe and convenient on-site traffic flow, considering needed motorized and non-motorized vehicle parking;
[See Policies 1.1.8, 1.1.10-11, 2.1.12, 2.1.16, 7.1.10]

16. Establishment of measures for the acquisition and preservation of existing and future public transit rights-of-way and exclusive public transit corridors;
[See Policies 1.4.1]

17. Promotion of ports, airports, and related facilities development and expansion consistent with the future land use, coastal management, and conservation elements;
[See Policies 9.1.2, 9.1.3, 9.2.1-3]

18. Mitigation of adverse structural and non-structural impacts from ports, airports, or related facilities upon adjacent natural resources and land uses;
[See Policies 9.2.1-3]

19. Protection and conservation of natural resources within ports, airports and related facilities;
[See Policy 9.1.3]

20. Coordinated intermodal management of surface and water transportation within ports, airports and related facilities; and
[See Policies 9.1.1, 9.3.1, 9.4.2]

21. Protection of ports, airports, or related facilities from the encroachment of incompatible land uses.
[See Policies 9.1.2, 9.2.1-3]

(5) FUTURE TRANSPORTATION MAP.

(a) The general location of the following transportation system proposed features shall be shown on the future transportation map or map series:

1. Road System:

a. Collector roads;
[See Figure 20]

b. Arterial roads;
[See Figure 20]

c. Limited and controlled access facilities;
[See Figure 21]

d. Local roads, if being used to achieve mobility goals;
[None]

e. Parking facilities that are required to achieve mobility goals;
[See Figure 9, 10]

2. Public transit system:

a. Public transit routes or services areas;
[See Figure 7, 8]

b. Public transit terminals and transfer stations;
[See Figure 13]

c. Public transit rights-of-way and exclusive public transit corridors;
[None]

3. Transportation concurrency management areas pursuant to Rule 9J-5.0055(5), F.A.C., if any;
[None]

4. Transportation concurrency exception areas pursuant to Rule 9J-5.0055(6), F.A.C., if any;
[See Figure 19]

5. Significant bicycle and pedestrian facilities;
[See Figure 14. See Figure 18 for off-street trails]

6. Port facilities;
[N.A.]

7. Airport facilities including clear zones and obstructions;
[See Figure 28, 32]

8. Freight and passenger rail lines; and
[See Figure 48]

9. Intermodal terminals and access to such facilities.
[Put on Figure 9, 13]

(b) The future transportation map or map series shall identify the following:

1. The functional classification and maintenance responsibility for all roads;
[Functional: Figure 20. Maintenance: Figure 23]

2. The number of proposed through lanes for each roadway;
[See Figure 22]

3. The major public transit trip generators and attractors based upon the future land use map or map series;
[See Figure 11, 13]

4. Projected peak hour levels of service for all transportation facilities for which level of service standards are established; and
[See Figure 24]

5. Designated local and regional transportation facilities critical to the evacuation of coastal population prior to an impending natural disaster.
[See Figure 34]

Specific Authority 163.3177 FS.
Law Implemented 163.3177, 163.3178 FS.
History—New 3-23-94, Amended 3-21-99.

Data and Analysis

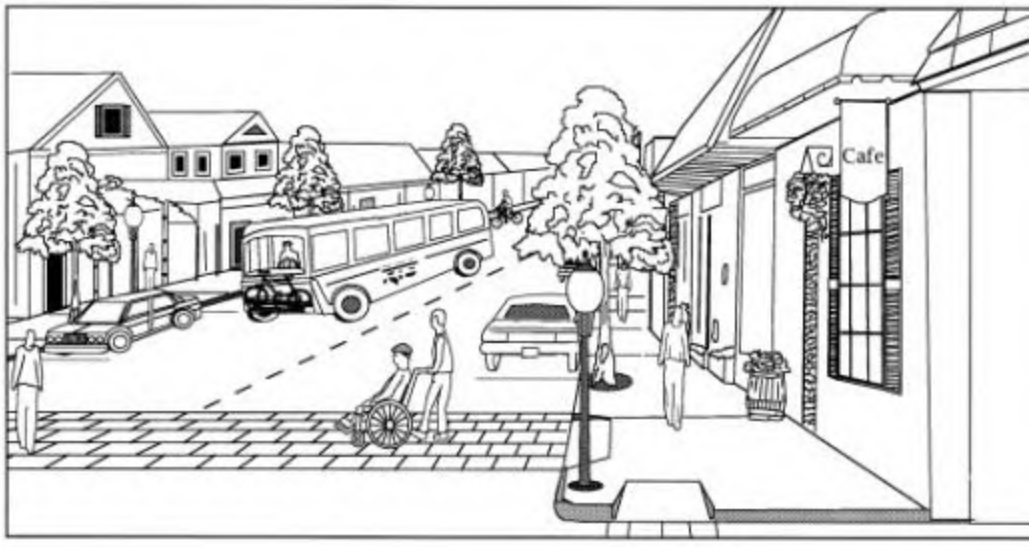
Introduction: The Transportation-Land Use Connection

"Mobility" and "access" should be defined as the freedom to safely, conveniently, and pleasantly get from one place to another with any form of transportation; be it car, bus, bicycle, wheelchair, or on foot. In order to accomplish this, travel distances should be as short as possible.

A "livable" and "sustainable" city is one where citizens are free from extreme levels of danger, noise, air pollution, and water pollution. A place where pleasure, safety, comfort, civic pride, a pleasant ambience, a sense of belonging, and a sense of community can be experienced.

Communities that use the above definitions for "mobility," "access," "livable" and "sustainable" are striving to encourage **transportation choice** (see box and Figure 1 below), in which it is possible and pleasant to travel by foot, bus, or bicycle instead of being forced by the design and layout of the community to travel only by car. Encouraging higher levels of transportation choice by these sustainable means requires compact, higher-density, mixed-use development patterns. It is for these reasons, among others, that the primary theme of the Comprehensive Plan is compact urban development within the Town/Village Center Concept, along with high-quality, pedestrian- and transit-oriented urban design.

Figure 1. A street designed for transportation choice



In the past, transportation planning has mostly been focused on optimizing street performance for cars based on minimum level of service standards for free-flowing car travel. Development impacts on streets have mostly been measured by how much available street capacity will be consumed as a result of the car trips expected to be generated by the development.

Yet this conventional approach does not take into account the close connection between transportation and land use, quality-of-life impacts, or problems associated with "induced" car travel. Nor does it consider the capacity that is added to the streets when people travel by carpool, bus, bicycle, or walking.

An important goal of the Gainesville Comprehensive Plan is to reduce the rate, pressures, and incentives to urban sprawl. Nevertheless, using the Plan to strive to retain street capacity for free-

flowing car travel (through street level-of-service standards) has created strong incentives for more sprawl. Generally, transportation concurrency (street level-of-service standards) encourages new development to seek out development sites in places where there is available street capacity for car travel, and such capacity is inherently found in outlying areas.

Our in-town development locations are the most appropriate places to encourage further development, in part because they feature efficient use of transportation facilities and services, and a healthy level of transportation choice. Yet the conventional approach to level-of-service for streets encourages new development to find locations where people are forced to make more and longer trips by car, thus degrading our overall transportation and access goals throughout the urban area. It is at least in part for these reasons that our area has seen a dramatic increase in motor vehicle registration, percentage of trips made by car, gasoline consumption, and vehicle miles traveled over the past several years.

An important way to reduce these undesirable trends is to emphasize the movement of people instead of the movement of cars. This element adopts this philosophy, and is consistent with the overriding intent to design our community more for the needs of people.

The City recognizes that it is primarily transportation that determines land use in this county. We cannot "build our way out of congestion" because widening streets inherently attracts car trips that would not have occurred without the widening (known as "induced traffic"). Designing streets exclusively for free-flowing car traffic reduces residential and commercial viability for "in town" locations, shifts a higher percentage of trips to car trips, encourages strip commercial development, and conversion of residences to businesses. Urban sprawl inevitably results from these factors.

An important reason why freer flowing car travel encourages land use sprawl is that cross-culturally and throughout time, humans have maintained, on average, a "fixed travel budget" of approximately 1.1 hours of commuting travel time per day. Changes that speed travel will, over time, disperse land uses as this time budget equilibrium is re-established. Conversely, slowing travel (for example, with traffic calming or transportation choice strategies) will, over time, result in more compact land use patterns.

Transportation does not merely respond to land use patterns and plans. Our transportation system largely determines what those patterns and plans will be. It is only by recognizing that street widenings and abundant car parking enables and encourages urban sprawl that we can successfully discourage sprawl and build a more livable, safe, sustainable community rich in transportation choice, environmental conservation, economic health, and civic pride.

Important Components for Retaining and Creating Transportation Choices

Streets & Travel
- Modest street dimensions.
- Connected sidewalks of ample width on both sides of street, shaded with trees and awnings.
- Modest number of street travel lanes (no more than 4).
- Connected streets (rather than cul-de-sacs or dead ends) with modest block sizes (no more than 500 feet long).
- Modest supply of parking for cars, and surface parking and storm basins at the side or rear of buildings.
- Pedestrian- and bicycle-friendly connections from neighborhoods to neighborhood centers.
- Pricing that encourages sustainable travel and discourages single-occupant vehicle travel.
- Frequent, clean, easy-to-use buses coupled with transit passes and bicycle racks.
- Alleys.
- Formally aligned street trees.
- On-street parking.
- Pedestrian short-cuts (cross-access sidewalks, diagonal sidewalk alignment, no walled/gated subdivisions).
- A connected, citywide trail system.

Buildings & Land Use
- Mixed use (vertical, or horizontal within ¼ mile walking distance).
- Buildings at least 2 stories high.
- Mixed housing types.
- In-town development instead of development remote from downtown or neighborhood centers.
- Daily needs (residence, office, retail, recreation, civic) within ¼ mile walking distance, and less frequent needs within 3-mile bicycle/transit range.
- Residential density of at least 7 du/acre and commercial intensity of at least 1.00 FAR (floor area ratio).
- Modest front yard setbacks. For example, building facades aligned at streetside sidewalks.
- Building entrances facing the street.
- Front porches.
- Buildings, lighting, parking scaled for people instead of cars.
- Car-oriented uses designed to be scaled for, and compatible with, neighborhoods.

The street system in Gainesville is the fundamental driving force in shaping the character of the city. "They [streets] enliven daily life or deaden it. They foster human contact or frustrate it. They broaden people's choices or limit them to a narrow range of experiences."[1]

A prominent Florida transportation planner[2] agrees that transportation drives land use and makes this point about a street designed for 50 miles per hour and 50,000 car trips per day: "The 50/50 arterial is a gift-wrapped, gold-plated, gift to strip development. Once in place, almost no power on earth will stop its march toward strip commercial."

By recognizing that transportation drives land use, and that car-focused level-of-service standards encourage sprawl into outlying areas, the City has established a Transportation Concurrency Exception Area (TCEA), the details of which are described later below.

Some Problems Associated with a Lack of Transportation Choices

Excessive Car Dependency Bad for Gainesville's Economy. If cities such as Gainesville invest too much in street widenings, they become less efficient and ultimately less competitive than cities with transportation choices.[3] Cities with the most substantial investments in widening major arterials and other streets, and the highest levels of per capita motor vehicle use, show no corresponding economic advantages. Their "gross regional product" (GRP) is no better than cities with more modest streets.

The world's most car-dependent cities are in the United States and Australia, and devote, by far, the highest share of their GRP to expenditures for transportation (for all forms of travel, private and public). The more money a city puts into street widenings and cars, the less healthy the city transportation systems become. In the United States, on average, 12.4 per cent of a city's GRP is spent getting around. In Toronto, with significantly greater transit capacity and correspondingly lower levels of car use, the equivalent figure is 7.4 per cent.

High Financial Costs. High levels of car travel are extremely costly for households. The average car now costs approximately $4,500 each year to operate,[4] which is equivalent to a $45,000 home mortgage, at 10 percent interest.[5] The average family spends 25 percent of its total income to own and operate cars, compared to 20 percent for housing, 19 percent for food and alcohol, and 1 percent for education. In 1960, only 13 percent of family income went to cars.[6]

Car travel is also expensive for businesses, which spend $85 billion each year to provide free parking for employees. Vehicle crashes in 1992 cost the U.S. $137 billion.

Large Subsidy. The social costs of driving that are not paid by the driver amount to a $300 billion subsidy each year.[7] The EPA (Lowe, 1988) found that if employees were directly handed this subsidy, transit and bicycle use would go up and motor vehicle traffic would go down by 25 percent. A Seattle study found that society pays a $792 subsidy to each motorist each year (excluding a $1,920 annual free parking subsidy).[8] In New York City, the metro area loses $55 billion each year in hidden car costs associated with safety and environmental damage.[9] More than 90 percent of all commuters park for free at work.[10]

Urban Sprawl and Strip Commercial Development. Car infrastructure promotes urban sprawl and reduces the viability and livability of downtown Gainesville.[11] Increasing street capacity (by widening streets, synchronizing signals, or adding turn lanes) reduces travel costs, which in turn reduces the need for citizens to live close to their day-to-day travel destinations, which therefore encourages citizens to locate in remote, dispersed areas. Sprawl also reduces the viability of bicycling and walking by increasing trip distances.[12]

Summary

The key objective is for the City to establish an environment which balances the various forms of travel – an environment rich in transportation choices. By achieving and maintaining such an environment, the City will ensure a high quality of life, a healthy local economy, a healthy natural environment, attractive streets promoting civic pride, transportation equity, independence of travel for those without access to a car, affordable costs for households and local governments, and minimization of costly urban sprawl.

Pedestrians

The 3 keys for establishing a pedestrian-friendly community are:

1. Convenience
2. Comfort
3. Safety

One fundamental yardstick of life within a city is the quality of the walking environment. Walkable cities are livable cities.

Advantages of Walking as a Form of Travel

- Walking is the most reliable form of travel, and is cost-free. It is an "equal opportunity" form of travel because, more so than with other forms of travel, walking can be done by nearly anyone -- regardless of income and without need for athletic physical ability.
- Walking requires none of the enormous space requirements demanded by motor vehicles for parking and driving.
- The maximum field of vision is obtained when walking. As a result, when there are reasonable numbers of pedestrians, buildings along the street tend to be more detailed and interesting -- because it is only at the speed of the pedestrian that such detailing can be seen and appreciated.
- A quality walking environment promotes a healthy transit system.
- Walking is good for retail health.
- Walkable cities tend to be attractive to tourists.

Existing System and Analysis for Walking

Levels of Travel by Pedestrians

Gainesville has a relatively high level of citizens who are active and outdoors-oriented. The community is also the youngest in Florida. For these reasons, a relatively high number of city residents either walk or have the potential to walk regularly.

In 1990, over 10 percent of all trips to work in Gainesville were by foot (including those who worked at home), according to the 1990 U.S. Census.

Pedestrian Facilities and Programs

As of 1999, there are approximately 116 miles of arterial and collector streets within the Gainesville urban area. Of this, approximately 14 miles lacked sidewalk on both sides, and an additional 14 miles lacked sidewalk on one side. Therefore, approximately 28 miles of major streets in the urban area lack sidewalk on at least one side. This represents 24 percent of all major streets in the urban area (see Figures 2 & 3).

The citywide Trail Network is, in general, not associated with the city street system. The Network provides off-street travel for pedestrians, bicyclists, and, when the trail is paved, the disabled (see Figure 17).

However, it should be noted that in 1998, city residents voted to amend the City charter to prevent the City from constructing impervious [paved] trail surfaces within the Hogtown Creek watershed in the western portion of the city.

From 1983 to 1989, and from 1992 to 1997, the City employed a full-time bicycle/pedestrian coordinator. Since 1999, the bicycle/pedestrian coordinator position has been replaced by two new positions. A transportation planning analyst manages the planning, development, and design for bicycle and pedestrian facilities integrated with overall transportation planning. Additionally, a bicycle/pedestrian program assistant manages special events and marketing efforts to improve safety awareness and encourage the use of non-car travel. The program encompasses long- and short-range facility planning, development review, safety education, and publicity to promote bicycling and walking.

The City Land Development Code was amended in 1998 to include "Traditional City" and "Central Corridors" ordinances. These ordinances are intended to dramatically improve the safety, comfort and convenience of pedestrians. Through these ordinances, new developments in the central areas of the city must abide by such objectives. In addition, throughout the city, the Code (Sec. 30-188) has recently adopted new requirements for the installation of sidewalks on nearly all new streets, all of which must be at least 5 feet wide, and have a clear width of at least 5 feet.

As noted above, the City has also designated a Trail Network (see Figure 17). Over time, the City is incrementally developing trails available for use by pedestrians to complete the Network. When completed, this Network will provide pedestrian links from neighborhoods to public schools, jobs, parks, other neighborhoods, civic and cultural facilities, shopping areas, and outlying towns. For areas outside of the Hogtown Creek watershed, the trails can also provide travel for bicyclists and those in wheelchairs.

Pedestrian Safety

The Surface Transportation Policy Project[13] reports that walking is more dangerous than driving, flying, or riding a bus or train. This group notes that this is primarily because our streets are designed for cars instead of people -- essentially high-speed freeways. The group also notes that most pedestrian fatalities occur on neighborhood streets.

Research shows that car/pedestrian crashes are expensive:[14]

- The average economic cost of a vehicle/pedestrian crash is $42,340. This includes medical, legal, emergency, vehicle repair, and administrative services, lost productivity, travel delay and workplace disruption.

- The vehicle/pedestrian crash cost is second only to "head-on" crashes at $50,770, and almost twice as much as the third most expensive crash type: those occurring at a signalized intersection with perpendicular movements ($21,690). In other words, if one concentrates on preventing or lessening the impact of vehicle/pedestrian and "head on" crashes, they are getting good value.

- The average "comprehensive" cost of a vehicle/pedestrian crash is $141,480. This includes economic costs plus pain and suffering. The latter is based on willingness-to-pay studies.

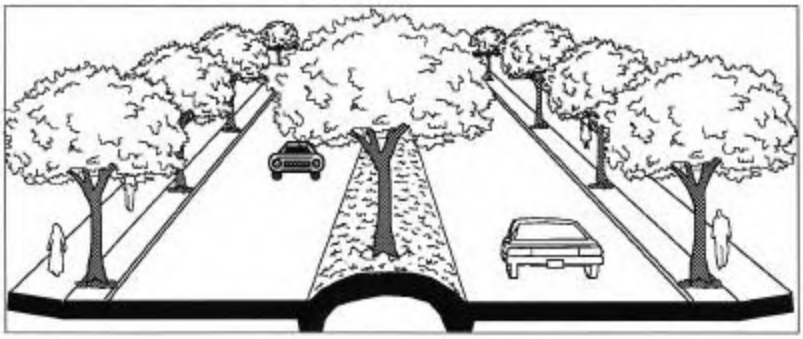
It is important for pedestrian safety that the following pedestrian safety principles be adopted:

- **Modest turning radii** at intersections, which slows motor vehicle turning movements, and reduces the exposure time of a pedestrian within motor vehicle travel lanes.
- **Traffic calming**. Research shows that slower motor vehicle traffic dramatically enhances pedestrian safety. Features include speed humps; speed tables; landscaped bulb-outs; on-street parking; crosswalks with special textures, materials, or colors; and narrower streets and travel lanes. Ewing[15] recommends that local streets use a speed limit no higher than 20 mph, and that arterials and collectors be no higher than 35 mph.
- **Modest travel lanes, crosswalks, and street widths**. In general, travel lanes should not exceed 11 feet in width, and the number of travel lanes should not exceed 4. More excessive widths dramatically endanger the safety of a pedestrian because it increases both the exposure time of a pedestrian within motor vehicle travel lanes, and increases average motor vehicle speeds. Another dangerous feature is a turn lane -- particularly when there is more than one. Such lanes can dramatically increase vehicle speeds and the width of street that must be crossed. They also tend to make the motorist less attentive to pedestrians and bicyclists. Traffic signal cycles should be no more than 60 seconds.
- **Modestly-sized parking lots at the side or rear of buildings**. Large parking lots, or lots in front of the building, decrease pedestrian safety because they increase the amount of interaction between pedestrians and moving vehicles. Pulling buildings relatively closely to the street and installing an entrance that faces the street greatly improves pedestrian safety, comfort, and convenience.
- **Adequate sidewalk widths**. Ample sidewalk width promotes pedestrian safety by providing additional separation between a pedestrian and moving vehicles on the street. Adequate width also enhances the pedestrian experience because pedestrians can walk side-by-side. Adequate width is achieved both by ensuring that sidewalks are wide enough to accommodate pedestrian volumes expected by the nearby land uses, as well as keeping the needed width free of obstructions such as sign poles, light poles, and utility structures.
- **Modest driveway widths**. Driveways that are wide enough to accommodate the infrequent turning movement of large trucks tend to reduce pedestrian safety because such excessive widths encourage high-speed turning movements by the frequent, smaller car and truck. Excessive widths also increase the exposure time the pedestrian experiences in the motor vehicle movement zone along the sidewalk.
- **Minimized walking distances**. The most effective ways to minimize walking distance -- an important means of encouraging walking -- is to establish relatively high residential and commercial densities, mixed land use, creating non-street pedestrian access points between adjoining properties (especially schools and retail areas) and modest building setbacks. Other techniques include modest block face lengths (no more than 400-500 feet),[16] diagonally aligned sidewalks, pedestrian connections at dead-ends or cul-de-sacs, straight instead of curvilinear sidewalks along streets, provisions for mid-block crossings, streets with narrow travel lane widths or a modest number of lanes, and building entrances facing the primary pedestrian street.
- **No Superelevations**. Low speed streets in traditional neighborhoods never superelevate street curves. Superelevation makes the driver feel safer driving at higher speeds (the reason for banked curves at race car tracks). Therefore, such design encourages motorist speeding. Superelevation also makes drainage, intersection and pedestrian crossing design more difficult.[17]
- **Modest Centerline Radii**. Like excessive turning radii, a large centerline radius encourages high vehicle speeds, which tend to be dangerous and otherwise inappropriate within the city. The residential subdivision ordinance should not allow a centerline radius in excess of 150 feet (appropriate for a design speed of 25 mph). Preferably, residential streets would not have a centerline radius in excess of 90 to 120 feet.[18]

Pedestrian-friendly streets and intersections

Streets should be more than public utilities, more than the equivalent of water and sewer lines, more than just a conduit for cars. Streets in cities must also provide places for casual socializing, business transactions, and leisurely strolling. Great streets are places where you can comfortably and safely walk, where you find clearly defined boundaries and qualities that engage your eye, where buildings complement each other and work together to provide a quality public realm.[19]

Raised medians provide a safe refuge area in the middle of the street for crossing pedestrians. Pedestrian safety and convenience is promoted because pedestrians only need to look in one direction when moving to or from the refuge to cross the street, can wait in a safe area in the middle of the street, and do not need as large a gap in the motor vehicle traffic flow, as is required when no raised median is present.



In areas designed to promote the pedestrian, intersection crosswalk lengths should be minimized by minimizing turning radii, so that motor vehicle turning speeds are less than 20 miles per hour on left turns and less than 10 miles per hour on right turns, and so that the length of the crosswalk is no more than 48 feet. Left turns should be minimized or eliminated in downtowns and neighborhood (activity) centers. Sidewalk extensions can also be used to reduce crossing lengths and slow motor vehicle speeds.[20]

Definition of "A" Streets. It is important that the City identify those streets that demonstrate – or have the potential to demonstrate – exceptionally high pedestrian qualities. "A" streets provide quality comfort, safety and convenience for pedestrians.

"A" street: A street which is designed with, or otherwise characterized by features that promote the safety, comfort, and convenience of pedestrians, and does so in a relatively exceptional way, as determined by the city manager or designee. Such streets typically feature sidewalks at least 5 feet wide (higher for commercial, mixed-use, in-town locations), narrow streets, buildings pulled up close to the street, no front yard off-street parking, pedestrian-scaled lighting, on-street parking, landscaped medians, articulated building walls, aligned building facades, a building entrance on the street, modest turning radii, trash receptacles remote from the sidewalk, and outdoor mechanical equipment on the side, rear or roof of buildings.

"A" streets are the streets where the City should focus its regulatory and pedestrian enhancement efforts. Striving to make all streets quality pedestrian streets leads to mediocrity, because "anti-pedestrian" features must be placed somewhere, and "A" street designation establishes a clear distinction about where such features should not be located.

Obstructions. Sidewalks should, to the extent possible and appropriate, remain free of obstructions such as poles. When installation of obstructions is necessary, at least 5 feet should remain unobstructed, with larger unobstructed areas for relatively major streets or higher-density areas.

Disordered and Messy. Because of their unsightly, noisy, smelly nature, dumpsters, outdoor mechanical equipment, and long expanses of blank walls (including a lack of street-level and transparent windows) should be remote from, or screened from, streetside sidewalks to promote a more pleasant pedestrian experience.

Street trees. Formally aligned, consistently-sized street trees provide a means of "narrowing down" a street where the facing buildings are too far apart to create the pleasant "outdoor room" ambience. They provide shade, reduce the "heat island" effect of heat radiating from asphalt and concrete, provide habitat for urban wildlife, enhance nearby property values, and create a memorable, picturesque, inviting place to walk.

Gated Subdivisions. A residential development practice being used over the past decade or so is to develop a gated residential subdivision, or to place a wall around the residences. Such a practice can be detrimental to the "inclusive" sense of community objectives of the City, and the desire to ensure transportation choice. Gates and walls usually reduce travel choice because they significantly increase walking or bicycling distance (which, thereby, also harms transit use).

Sidewalks on streets. Portland, Oregon has established a "pedestrian friendliness" index. The index measures the quality of the pedestrian environment based on the following criteria: (1) ease of street crossing; (2) sidewalk continuity; and (3) street characteristics (grid being better than cul-de-sac).[21] Portland has been restricting or removing vehicle parking in downtown (a permanent cap on such parking was imposed in 1972), has stopped widening downtown streets, has converted about one mile of streets into people-oriented transit areas, has widened sidewalks, and prohibits large blank walls along sidewalks. The downtown is now widely recognized for being economically healthy, vibrant, and livable. Carbon monoxide violations have dropped from 100 per year to zero.[22]

An increase in pedestrian-friendly designs (such as ease of street-crossing, sidewalk continuity, and grid street patterns) in Portland was found to reduce car ownership and increase travel by means other than a car. The average number of cars per household in areas that were hostile to pedestrians was 32 percent higher than in pedestrian-friendly areas.[23]

Existing and Future Pedestrian Needs

While Gainesville has made significant progress in providing an environment conducive to pedestrian transportation, there is much that needs to be done.

For example, traffic signals should be evaluated to determine if sufficient time is provided for pedestrians to cross at crosswalks, and if certain street segments – such as East University Avenue – require additional, specially-designed crossing locations.

The City Public Works Department and Community Development Department have identified needed sidewalk projects as shown in Table 1. Many of these projects are needed to complete sidewalks that are discontinuous (sidewalk gaps), or where sidewalks only serve one side of the street.

As can be seen in Figures 2 & 3, important sidewalk gaps currently exist on city arterials and collectors. The most serious gaps that need to be filled are those where pedestrian travel is most likely:

- Arterial or collector street
- Areas of relatively high residential density or commercial intensity
- Areas with a compact, mixed land use pattern (residential and non-residential within a ¼ mile walking distance)
- Proximity to a public school
- Proximity to a public park

Using these criteria, the most important sidewalk gaps that need to be filled include (see Figure 2):

1. North Main Street between NE 8th Avenue and N 23rd Avenue.
2. NW 2nd Street between NW 4th Avenue and NW 8th Avenue.
3. NW 6th Street between University Avenue and NW 7th Avenue.
4. SE 4th Avenue between SE 3rd Street and Williston Road.
5. NW 10th Street between University Avenue and NW 3rd Avenue.
6. NW 12th Street between University Avenue and NW 5th Avenue.
7. NW 17th Street between NW 3rd Place and NW 8th Avenue

Table 1. sidewa lk gaps

Transportation Element
Petition 146CPA-00 PB
January 25, 2001

Table 1. Important Sidewalk Gaps Within City

Project	From	To	Priority Source	Estimated Cost	Funding Status	Funding Source
NE 10 Ave.	NE 6 St.	NE 12 Terr.	MTPO LRTP/Public Works		Unfunded	City
NE 15 St.	NE 39 Ave.	NE 53 Ave.	Public Works		Unfunded	City
NE 18 Ave.	NE 12 St.	NE 15 St.	Public Works (school)		Unfunded	City
NE 19 Place	NE 9 St.	NE 15 St.	Public Works (school)		Unfunded	City
NE 24 St.	NE 8 Ave.	NE 1000 block	Public Works (school)		Unfunded	City
NE 31 Ave.	Main St.	NE 9 St.	Public Works		Unfunded	City
NE 31 Ave.	NE 9 St.	Waldo Rd.	Public Works (school)		Unfunded	City
NE 31 Ave.	NE 19 Dr.	Waldo Rd.	Public Works (school)		Unfunded	City
NE 8 Ave.	NE 22 Terr.	NE 25 St.	Public Works (school)		Unfunded	City
NE 9 St.	NE 23 Ave.	NE 31 Ave.	Public Works		Unfunded	City
NW 10 Ave.	NW 18 Terr.	NW 13 St.	Public Works		Unfunded	City
NW 10 Ave.	1208 & NW 10 St.	NW 6 St.	Public Works		Unfunded	City
NW 10 Ave.	NW 6 St.	Rail ROW	MTPO LRTP/Public Works		Unfunded	City
NW 17 St.	NW 6 Ave.	NW 8 Ave.	Corridors To Campus/ Public Works *		Unfunded	City
NW 18 Terr.	NW 6 Ave.	NW 8 Ave.	Public Works (school)		Unfunded	City
NW 18 Terr.	NW 7 Ave.	NW 7 Ave.	Public Works (school)		Unfunded	City
NW 19 St.	NW 5 Ave.	NW 7 Ave.	Corridors To Campus/ Public Works *		Unfunded	City
NW 2 St.	NW 6 Ave.	NW 16 Ave.	Public Works		Unfunded	City
NW 2 St.	NW 4 Ave.	NW 6 Ave.	Public Works		Unfunded	City
NW 2 St.	NW 16 Ave.	NW 23 Ave.	Public Works		Unfunded	City
NW 2 St.	1600 block & NW 19 Ave.	NW 19 Lane	Public Works		Unfunded	City
NW 20 St.	NW 7 Ave.	NW 8 Ave.	Public Works (school)		Unfunded	City
NW 22 St.	NW 9 Ave.	NW 16 Ave.	Public Works		Unfunded	City
NW 24 Blvd.	NW 41 Ave.	NW 44 Place	Public Works (school)		Unfunded	City
NW 3 St.	NW 3 Ave.	NW 8 Ave.	Public Works		Unfunded	City
NW 34 St.	NW 23 Terrace	NW 13 St.	Public Works		Unfunded	Federal, State
NW 35 St.	SW 2 Ave.	NW 8 Ave.	Public Works		Unfunded	City
NW 39 Rd.	Newberry Rd.	NW 8 Ave.	Public Works		Unfunded	City
NW 43 St.	NW 65 Ave.	NW 13 St.	Public Works		Unfunded	Fed, State, Local
NW 5 Ave.	NW 19 St.	NW 17 St.	Corridors To Campus/ Public Works *		Unfunded	City
NW 53 Ave.	NW 13 St.	East City Limit	Public Works		Unfunded	Fed, State, Local
NW 7 Ave.	NW 10 St.	NW 8 St.	Corridors To Campus/ Public Works *		Unfunded	City
SE 13 St.	SE 7 Ave.	SE 3 Ave.	Public Works (school)		Unfunded	City
SE 13 St.	SE 3 Ave.	E. University Ave.	Public Works (school)		Unfunded	City
SE 15 St.	Hawthorne Rd.	E. University Ave.	Public Works (school)		Unfunded	City
SE 15 St.	SE 14 Ave.	South City Limit	Public Works (school)		Unfunded	City
SE 22 Ave.	SE 10 Terr.	SE 15 St.	Public Works (school)		Unfunded	City
SE 25 St.	E. University Ave.	NE 8 Ave.	Public Works		Unfunded	City

Source: Gainesville Public Works Dept., 3/23/00

*In the course of reviewing the Corridors to Campus study, the Public Works Dept has assigned these projects a low priority due to right-of-way constraints.

3/27/00

Transportation Element
Petition 146CPA-00 PB
January 25, 2001

Table 1. Important Sidewalk Gaps Within City

Project	From	To	Priority Source	Estimated Cost	Funding Status	Funding Source
SE 4 Ave.	SE 3 St.	Williston Rd.	Public Works		Unfunded	City
SE 4 St.	Williston Rd.	SE 22 Ave.	Public Works		Unfunded	City
SE 4 St.	Depot Ave.	Williston Rd.	Public Works		Unfunded	City
SE 9 St.	SE 4 Ave.	SE 2 Ave.	Public Works		Unfunded	City
SW 10 St.	SW 8 Ave.	SW 2 Ave.	Corridors To Campus/ Public Works *		Unfunded	City
SW 3 St.	SW 8 Ave.	SW 5 Ave.	Public Works		Unfunded	City
SW 3 St.	SW 5 Ave.	SW 4 Ave.	Public Works		Unfunded	City
SW 4 Ave.	SW 6 St.	SW 3 St.	Public Works		Unfunded	City
Depot Ave.	SW 11 St.	Williston Rd.	MTPO LRTP & 1999 List of Priority Projects		Unfunded	Fed, State, Local
N Main St.	N 8 Ave.	N 23 Ave.	MTPO Long Range Trans Plan & 1999 List of Priority Projects		Unfunded	Fed, State, Local
NW 34 St.	NW 39 Ave.	Back Bay	MTPO LRTP		Unfunded	Fed, State, Local
NW 37 St.	NW 53 Ave.	end	MTPO LRTP (school)		Unfunded	Federal, City
NW 41 St.	NW 16 Ave.	NW 28 Lane	MTPO LRTP		Unfunded	Federal, City
NW 43 St.	6000 block	NW 13 St.	MTPO LRTP		Unfunded	Fed, State, Local
NW 6 St.	W. University Ave.	NW 7 Ave.	MTPO LRTP		Unfunded	Fed, State, City
NW 6 St.	End of C&G	NW 13 St.	MTPO LRTP		Unfunded	Fed, State, City
SE 16 Ave.	Main St.	Williston Rd.	MTPO LRTP & 1999 List of Priority Projects		Unfunded	Federal, State
SW 13 St.	Williston Rd.	SW 16 Ave.	MTPO LRTP		Unfunded	Federal, State
SW 2 Ave.	Firestation	Univ Ave/ President's house	MTPO LRTP		Unfunded	Federal State
SW 2 Ave.	Firestation	W. 36 St.	MTPO LRP		Unfunded	Federal, State
SW 20 Ave.	SW 75 St.	SW 34 St.	MTPO LRTP & 1999 List of Priority Projects		Unfunded	Fed, State, Local
SW 62 Blvd.	SW 20 Ave.	Newberry Rd.	MTPO LRTP (scenic)		Unfunded	Fed, State, City
Univ. Ave.	W 6 St.	E 9 St.	MTPO LRTP		Unfunded	Federal, State
W 13 St.	SW 14 Dr.	NW 8 Ave.	MTPO LRTP		Unfunded	Federal, State

Source: Gainesville Public Works Dept., 3/23/01

*In the course of reviewing the Corridors to Campus study, the Public Works Dept has assigned these projects a low priority due to right-of-way constraints.

7/27/00

Table 1. Important Sidewalk Gaps Within City

Project	From	To	Priority Source	Estimated Cost	Funding Status	Funding Source
NW 10 St.	W University Ave.	NW 3 Ave.	CRA	$1,000	Funded	CRA
NW 12 St.	W University Ave.	NW 3 Ave.	CRA	$10,000	Funded	CRA
NW 3 Ave.	NW 10 St.	NW 12 St.	CRA	$10,000	Funded	CRA
NW 3 Ave.	NW 14 St.	NW 15 St.	CRA	$5,000	Funded	CRA
NW 5 Ave.	NW 13 St.	NW 17 St.	CRA	$32,000	Funded	CRA
SW 8 Ave.	SW 12 St.	SW 8 St.	CRA	$16,000	Funded	Challenge Grant
SW 9 St.	SW 6 Ave.	Depot Ave.	CRA	$41,000	Funded	Challenge Grant
NW 1 Ave.	NW 14 St.	NW 20 St.	Corridors To Campus	$78,000	Funded	Campus Dev Agreemt
NW 12 St.	NW 3 Ave.	NW 5 Ave.	Corridors To Campus	$20,000	Funded	Campus Dev Agreemt
NW 17 St.	NW 3 Place	NW 5 Ave.	Corridors To Campus	$16,000	Funded	Campus Dev Agreemt
NW 18 St.	NW 1 Ave.	NW 2 Ave.	Corridors To Campus	$9,000	Funded	Campus Dev Agreemt
SW 12 St.	SW 8 Ave.	SW 2 Ave.	Corridors To Campus	$20,000	Funded	Campus Dev Agreemt
SW 4 Ave.	SW 12 St.	SW 13 St.	Corridors To Campus	$9,000	Funded	Campus Dev Agreemt
SW 5 Ave.	SW 13 St.	SW 10 St.	Corridors To Campus	$24,000	Funded	Campus Dev Agreemt
SW 8 Ave.	SW 12 St.	SW 10 St.	Corridors To Campus	$5,491	Funded	Campus Dev Agreemt
NW 14 St.	NW 1 Ave.	NW 5 Ave.	Public Works	$19,000	Funded	CIP
NW 15 St.	NW 2 Ave.	NW 5 Ave.	Corridors To Campus	$25,000	Funded	CIP
NW 2 Ave.	NW 13 St.	NW 20 St.	Public Works	$37,000	Funded	CIP
NW 3 Ave.	NW 16 St.	NW 17 St.	Corridors To Campus	$18,000	Funded	CIP
NW 3 Ave.	NW 15 St.	NW 13 St.	Corridors To Campus	$10,000	Funded	CIP
NW 7 Ave.	NW 10 St.	NW 12 St.	Public Works	$4,000	Funded	CIP
SW 1 Ave.	SW 8 St.	SW 10 St.	Corridors To Campus	$9,000	Funded	CIP
SW 10 St.	SW 6 Ave.	SW 7 Ave.	Public Works	$6,000	Funded	CIP
SW 3 Ave.	SW 10 St.	SW 13 St.	Corridors To Campus	$28,000	Funded	CIP
SW 6 Ave.	SW 12 St.	SW 9 St.	Corridors To Campus	$21,509	Funded	CIP
SW 7 Ave.	SW 9 St.	SW 10 St.	Corridors To Campus	$18,000	Funded	CIP
SW 8 St.	Depot Ave.	SW 8 Ave.	Corridors To Campus	$16,000	Funded	CIP
NW 26 Lane	NW 43 St.	NW 41 St.	MTPO LRTP	$10,080	Funded	Federal, City
NW 25 Pl.	NW 43 St.	NW 41 St.	Public Works	$8,820	Funded	CIP
NW 19 St.	NW 29 Rd.	NW 45 Ave.	MTPO LRTP (school)/Public Works	Not yet available	Funded	CIP/Rd. Reconst.
NW 29 Rd.	NW 19 St.	NW 13 St.	Public Works	Not yet available	Funded	CIP/Rd. Reconst.
NW 38 St.	NW 8 Ave.	900 block	Public Works (school)	Not yet available	Funded	CIP/Rd. Reconst.
NW 45 Ave.	NW 24 Blvd.	NW 13 St.	MTPO LRTP (school)/Public Works	Not yet available	Funded	CIP/Rd. Reconst.
NW 55 St.	NW 9 Place	NW 23 Ave.	2000-2004 TIP	$177,000	Funded	Fed. ENH
W University Ave.	SR 26A (firestation)	W. 36 St.	2000-2004 TIP	Not yet available	Funded	State, Local
SW 2 Ave	SR 26 (firestation)	2300 block	2000-2004 TIP	Not yet available	Funded	State, Local
SW 2 Ave	SW 34 St.	SW 25 St.	2000-2004 TIP	Not yet available	Funded	State, Local
NE 1 Blvd.	Main St.	Main St.	Public Works		Unfunded	City

7/27/00

Source: Gainesville Public Works Dept., 3/23/00
*In the course of reviewing the Corridors to Campus study, the Public Works Dept has assigned these projects a low priority due to right-of-way constraints.

Transportation Element
Petition 146CPA-00 PB
January 25, 2001

Figure 2

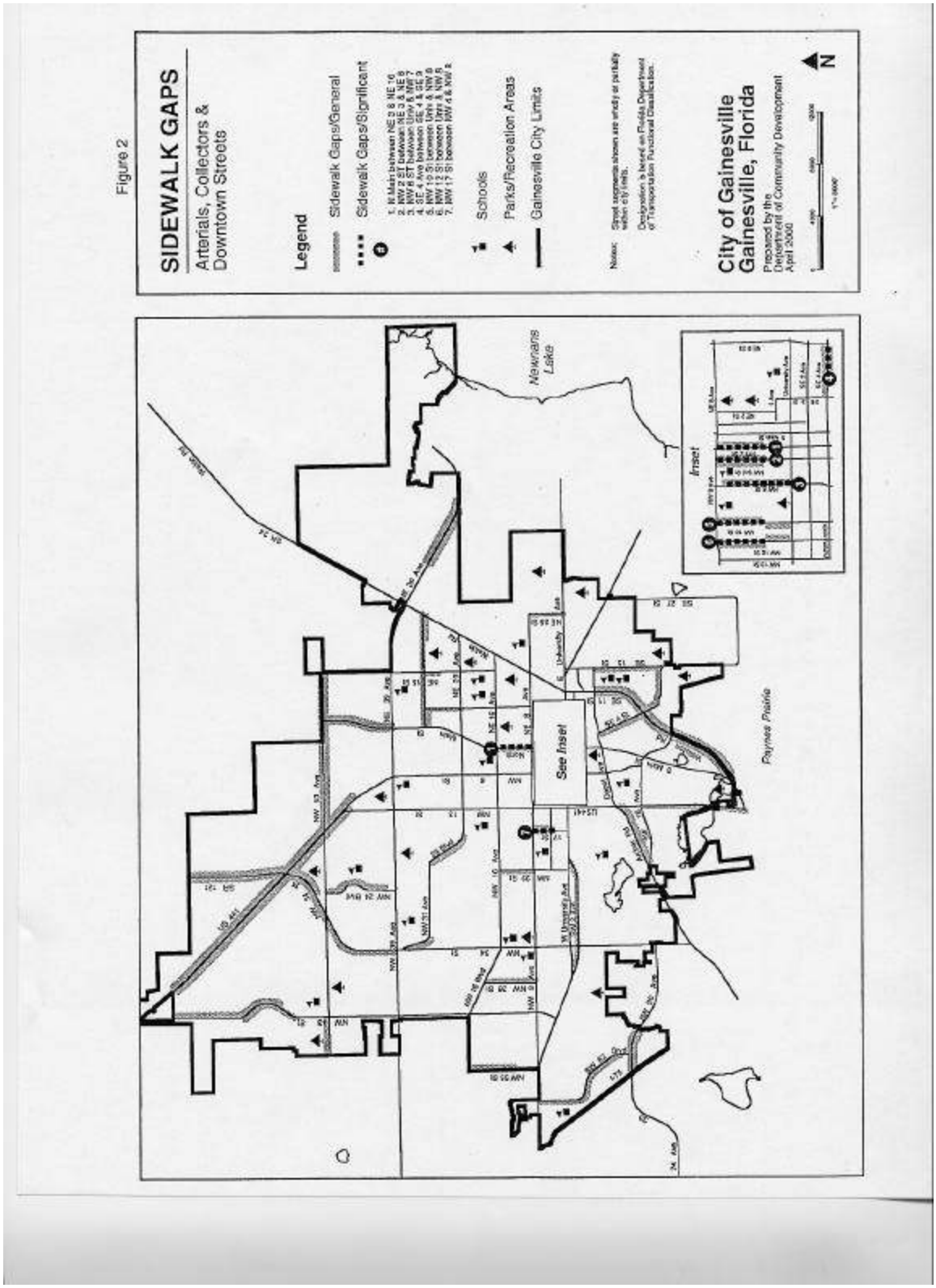
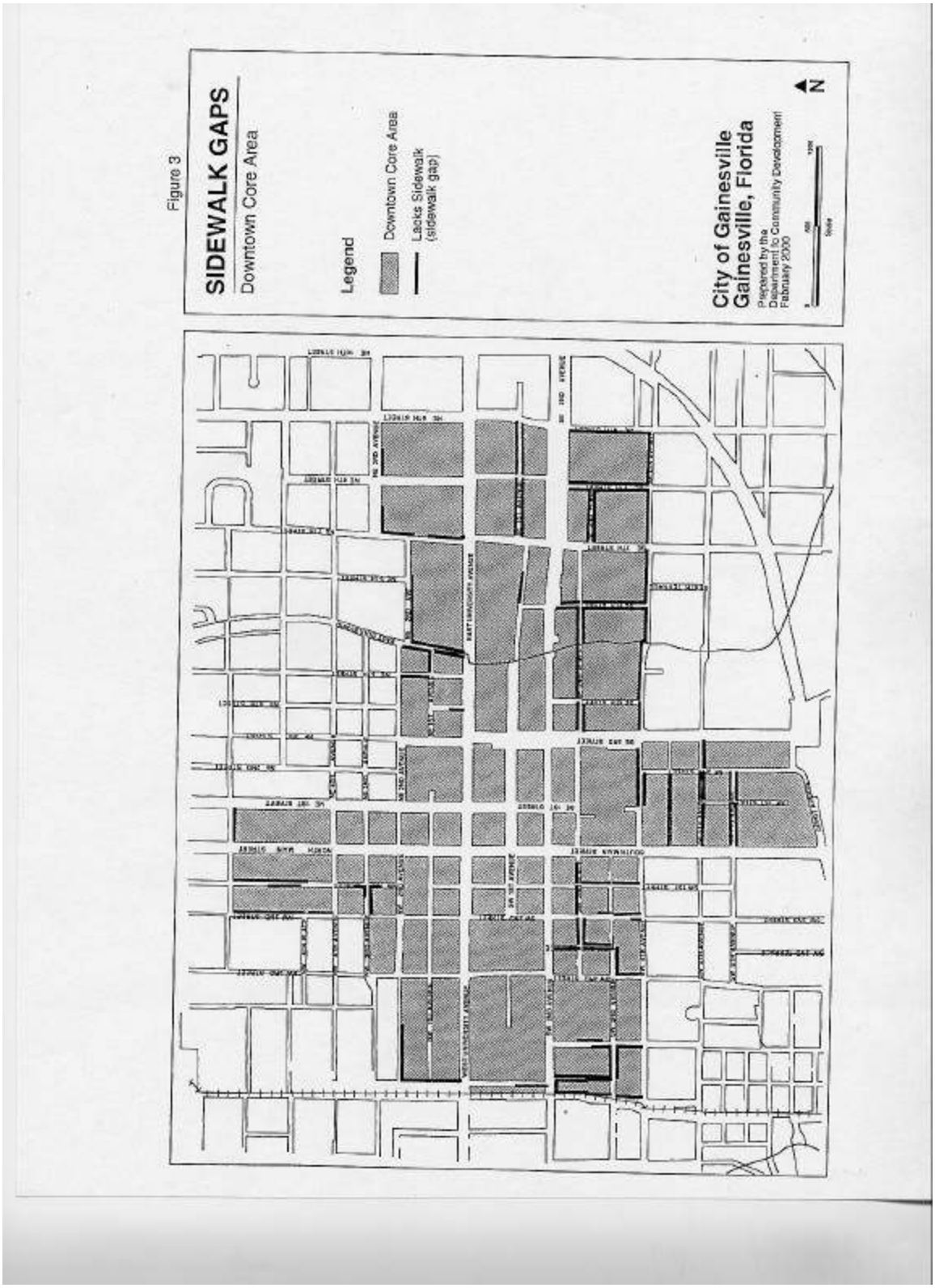

SIDEWALK GAPS
Arterials, Collectors & Downtown Streets
Legend
Sidewalk Gaps/General
Sidewalk Gaps/Significant
1. W Main between NE 9 & NE 10
2. NW 2 ST between NE 3 & NE 8
3. NW 8 ST between Univ & NW 7
4. ST 4 Ave between SE 4 & SE 7
5. NW 6 St between Univ & NW 8
6. NW 13 St between Univ & NW 8
7. NW 17 St between NW 4 & NW 8
Schools
Parks/Recreation Areas
Gainesville City Limits
Notes: Street segments shown are wholly or partially within city limits.
Designation is based on Florida Department of Transportation Functional Classification.
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development April 2000
N
Newnans Lake
Paynes Prairie
See Inset
Inset

Figure 3


SIDEWALK GAPS
Downtown Core Area
Legend
Downtown Core Area
Lacks Sidewalk (sidewalk gap)
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development February 2000
N

Sustainability Indicators for Walking

- Miles of sidewalks on arterials and collectors over time

This indicator chart shows the progress being made by the City to provide important travel corridors in the city with more transportation choices. An increase in sidewalk mileage over time indicates progress in improving the environment for pedestrians and transit users.

- Percentage of arterials and collectors w/ sidewalks over time

Like the "miles of sidewalks on arterials and collectors" chart, this indicator shows progress being made in making the city environment more accommodating for transportation choice. A percentage indicator shows whether progress is being made in making the sidewalk system comprehensive. An absolute mileage increase indicator does not necessarily show this, since it could be the result of additional streets being built, rather than a more comprehensive coverage.

Transit

Introduction

The Regional Transit System (RTS) has recently been successful in reversing several years of bad service design principles. Unlike in the past, ridership is growing, fares are stable instead of increasing, more transit passes are now made available, and public support is growing. Now, instead of assuming that the only people who are forced to use the bus will, in fact, use the bus, the system is being designed for people who have other travel choices, as well as for those with special needs. A new ridership market being sought (people with a choice) means that RTS must work hard to be competitive with other forms of travel. This new attitude can result in improved bus service. By contrast, a system designed to carry people without a choice lacks this incentive to provide improved service, since the small "no choice" market will use the bus regardless of quality.

By also targeting the larger market of those who have travel choices, RTS is able to attract a much larger number of riders, since most licensed drivers can choose to drive a car.

Also, by targeting the "choice" market, RTS is now successfully avoiding the "empty bus syndrome." Full buses create more public support for transit. By contrast, empty buses create a negative public image of transit and reduces support for more buses. It is clear that a healthy number of passengers is the way to create a healthy transit system. If the RTS assumes that the only passengers will be the few people who have no choice but to ride the bus, then RTS will, indeed, have very few passengers on the buses. The RTS would be planning for failure. The "choice" and "no choice" market strategy is bringing success. This is evident in the case of service to UF, which, in recent years, has increased substantially – as has ridership on the routes serving UF.

The City is committed to striking a balance between the transit needs of those who are forced to use a bus, and the large percentage who have the choice to drive a motor vehicle instead of ride a bus.

Advantages of the Bus as a Form of Travel

- An increase in bus travel reduces air pollution, noise pollution, and water pollution.
- An increase in bus travel reduces the need for surface parking lots.
- An increase in bus travel reduces local consumption of gasoline.
- Buses provide mobility for those who do not have access to a motor vehicle.
- Bus travel costs individual passengers less money than private motor vehicle travel.
- An increase in bus travel can reduce motor vehicle traffic volumes on city streets.

- Bus travel is much safer than car travel.
- Buses require substantially less space, overall, than cars, for the number of people carried.
- Designing the street network to accommodate buses creates an environment that is more conducive to bicycling and walking.

Dramatic Recent Increases in Bus Ridership[24]

From 1985 through 1989, ridership fell every year (see Figure 6). Buses operating on the streets were cut every year during this period. Bus fares were raised from 50 cents to 75 cents to $1.00. Transfers that were free increased to 10 cents, then 25 cents. RTS was just barely surviving.

Since 1998, major changes have been made to RTS to better serve the University of Florida (UF) campus. A partnership between the City, Alachua County, UF, the Florida Department of Transportation (FDOT), and the Federal Transit Administration has directed that the transit system focus on the UF campus more so than ever before. Over 60,000 faculty, staff, employees, visitors, and students, make their way each day to UF and Shands. UF has enormous transit ridership potential. As a result, the City believes that even with the substantial increase in ridership in recent years (in large part due to the students voting to increase their fees to obtain a transit pass), we have just scratched the surface in terms of ridership levels.

In 1998, RTS completed its best year ever, as measured by ridership on city bus routes. RTS carried 2,314,384 passengers. That number is up from 1,303,463 in 1997 and 1,148,568 passengers in 1996 (See Figure 6). That represents a 102-percent increase in ridership in just two years. The best previous year for city route ridership was 1985 when transit carried 1,535,737 passengers in Gainesville. After adding in campus shuttle services, overall ridership was 3,355,341 for 1998.

Ridership for the month of September 1998 was up 184 percent from the two prior Septembers. City bus routes boarded 325,855 passengers in September 1998, compared to 154,881 passengers during September 1997 and 114,883 passengers during September 1996. These ridership gains came because public transit is now being provided, directly and frequently, to the UF campus. UF students have responded by using the redesigned bus routes at record levels. UF students now comprise over 70 percent of transit ridership. Overall ridership, including campus shuttles, for the month of September was 478,463 passengers. This is an impressive increase, considering the fact that RTS, not long ago, carried around 2 million passengers for an entire year.

There are several reasons for the recent success of the City RTS as it applies to UF ridership growth:

- **Limiting Growth in UF Parking**. The most important reason there has been a significant growth in people choosing to ride transit to UF is the limiting of the growth in parking spaces on campus. If the campus provided over-abundant parking, too many trips to the campus would be by car. The only exception would be people who don't have access to a car. Therefore, as the number of people wanting to commute to campus has increased and the parking supply has not increased, RTS has benefited from an important opportunity to generate ridership. There is no place in the city that is more pedestrian- and bicycle-friendly than the UF campus – an environment that effectively promotes transit ridership. However,

as shown in Figure 25, the increase in UF parking supply has only stabilized in recent years.

- **Direct, Frequent Service to UF**. If bus service were indirect and infrequent, as it was for many years in the city, few people could be encouraged to leave their car at home to use the bus. Therefore, the second most important reason that people are choosing to ride the bus to UF is that RTS is providing, for the first time, direct, frequent service to campus. The City believes that even more people would ride the bus to campus, beyond the recent growth in ridership, if the City had the capacity to accommodate more riders.

- **Gator One UF Bus Pass Card**. Third, the City does not believe the impact the Gator One Bus Pass Card has had on UF students use of the bus can be overestimated. Every UF student is now a "member of the bus riders club," not just a passenger. This new "membership" concept is making bus riding socially acceptable for the students. The City recently expanded this membership to include all faculty, staff, and employees of UF. In the near future, plans are to extend the Pass Card to Shands. This expanded membership will add another 20,000 potential riders to the RTS market to campus.

- **RTS Staff**. Finally, the City recognizes the staff at RTS who are rising to meet the challenge everyday to get the buses out on the street. If the buses aren't there on time, if they aren't safe, reliable, clean, and comfortable, if the bus drivers don't care, then all of the best laid plans would be for naught.

The City has the opportunity to either move forward, or retreat to the days of serving few passengers on a bus at a time. The City has shown the community that public transit can work, if given an appropriate mission. The City Commission has approved a new vision statement for public transit: "To become a premiere university community transportation system which provides a variety of flexible transportation services that promote accessibility, comfort, a sense of fun, and community pride."

The future will require a major investment in vehicles and services to realize the full potential that public transit has to be a viable alternative to the car. The City intends to work even harder to cement relationships with our partners: Alachua County, the Florida Department of Transportation, the University of Florida, UF Student Government, and the Federal Transit Administration.

City Transit Priorities[25]

Obtain additional local funding for public transit operations. Currently, the County has the ability to increase the local option gas tax by 5 cents. The Alachua County Transportation Funding Advisory Committee has recommended the County increase the tax by 5 cents, as well as dedicate a portion of the increase in County ad valorum revenue to transportation over the next 5 years. These actions would make available an additional $7 million per year in funding for all transportation. The committee recommended that approximately $1 million per year of the total $7 million should be allocated to public transit. The City should work with the County to implement the recommended increase in transportation funding.

Pursue on-going Congressional earmarks of transit capital funds. The City obtained 21 used buses from two other Florida transit systems in 1998. These buses were needed to sustain a

substantial increase in ridership being experienced by the transit system. All of these buses were already eligible for replacement under federal regulations. They need to be immediately replaced. The City obtained a Congressional earmark of federal transit capital funds for FY 1999 in the amount of $1.5 million. This amount will allow the purchase of 5 buses and related equipment. An earmark of $5.5 million to purchase another 19 buses will be made for FY 2001. Congressional earmark requests for transit should be made regularly.

Obtain additional FDOT funding for transit operations. The City, working with the County through the Metropolitan Transportation Planning Organization (MTPO), successfully encouraged FDOT to include the purchase of buses with Federal Surface Transportation Program (STP) funds in the FDOT work program in 1998. Through the MTPO, the City should pursue the allocation of FDOT state highway funds to transit operating expenses. All FDOT state funds are flexible and may be used for either transit operating or transit capital projects. Many local transit routes serve state corridors, such as US 441, SR 20, and SR 24. FDOT needs to be encouraged to share in the operating expenses of transit that serves state corridors.

A multi-jurisdictional transit authority. Since the City acquired the Regional Transit System from Alachua County in the early 1980s, the City has been the primary local funding agency for transit in the Gainesville urbanized area. At the time the transit system was acquired there was much more federal operating assistance available than is now the case. As a result, the City's financial commitment to the transit system (which serves the entire urbanized area) has increased to the point that almost all of the City's share of the local option gas tax is now devoted to the transit system. On the other hand, the County's financial commitment has remained modest and not connected to the amount of bus service provided to unincorporated areas.

Recently, UF has made a major commitment to funding transit service through its Campus Development Plan and a new Student Government transit fee paid by each student.

Effective Tools to Increase Transit Ridership

In general, transit is seen as a more attractive form of travel when it is perceived as...

- Accessible and convenient
- Frequent
- On Time (reliable)
- Safe

...in comparison to using a car.

Tools for a Healthy Transit System

- Develop strong, walkable, mixed use **areas & neighborhood (activity) centers.**
- **Restrict the supply of parking** for cars -- especially free surface parking.
- **Increase the cost** of parking with, for example, cash-out.

- Develop more **frequent** and more **reliable bus service**, with expanded weekday evening service.
- Develop a **transportation demand management** ordinance that requires employers to achieve non-single-occupant-vehicle (SOV) commute targets.
- Have employers and neighborhoods purchase **transit passes.**
- Make using the bus **easier to understand** with a highly visible theme logo, and understandable schedules and routes.
- **Bus stops close** to offices, residences, retail, schools, workplaces, or parks.
- **Street capacity is not increased** for cars.

Transit stop enhancements (see Figure 4)

Comfortable seating
Roof protection from sun and rain
Easy-to-read route maps and schedules
Lighting
Bicycle parking
Easily recognizable as a city RTS bus stop

Bicycle Carriers on Buses

This effective example of a "modal link" expands the service area of a bus stop. For example, the RTS service area is approximately 38 square miles if ridership is drawn from a one-quarter mile walking distance from bus routes, but expands to approximately 84 square miles if ridership is drawn from a one-mile bicycling distance. In addition, bicycle carriers help expand the area that a bicyclist can bicycle. Each of these factors thereby increase both bus and bicycle trips (see Figure 8).

In Portland, Oregon, 14,300 bicyclists used city buses in 1993 after front-mounted bike carriers were installed.[26] In Santa Barbara, bikes on buses were estimated to add over 40,000 new passengers -- 30 percent of whom were formerly using a car. Between November 1978 and November 1979, ridership rose 218 percent. At Connecticut and Chicago rail stations, five to seven percent of all passengers are bike-and-ride patrons.[27]

Figure 4

The City should continue to install bicycle carriers on newly-acquired buses to realize these benefits. Currently, all City RTS buses are equipped with carriers.

Provide bus fare reductions and subsidized transit passes

In October 1985, the North Central Florida

Regional Planning Council cited a study finding that fare-free service improves service for existing transit users but has limited impact on car use. Most of those who are recruited to the bus by a free fare are low-income and without a car. In addition, for fare-free service to encourage people to live in central locations and reduce car ownership, high-quality, fare-free bus service must be assured and coupled with motor vehicle parking restrictions. The study also found that both merchants and apartment owners served by buses benefited from fare-free service.[28]

Greg Dubois, UF Parking Administrator, indicated in 1994 that the biggest obstacle to attracting UF students and staff to ride a bus is that the buses are too inconvenient. In 1994, a UF math professor found that a free bus pass for UF students would cost UF $235 per year for each student given a pass, compared to $550 that UF pays per year (for 20 years) for a parking space (including maintenance, and not including land, lighting, security, and parking enforcement).[29] The University has, since 1998, instituted a Gator One Bus Pass Card that provides a pre-paid bus service for students. This program was expanded to include faculty and staff in 2000.

Bus ridership in Boulder, Colorado rose 14 percent in 1993 due to incentive programs such as free student bus passes.[30] The $18,000 start-up cost in 1989 was less than what it costs to build one downtown parking space. The City expected a 10 percent participation rate in the first year. It turned out to be 25 percent. The program also includes a free package delivery service for downtown shoppers that use the bus, which discourages people from driving to work on days when they need to shop.[31] New shuttle buses and discounted transit passes have helped increase bus ridership in that city by 24 percent from 1992 to 1994. Another program at that time reimbursed 350 businesses up to a quarter the cost of purchasing annual bus passes for their employees. The program encourages businesses to subsidize transit instead of parking. In 1992, during "Alternative Transportation Month," a local hospital saved 35,000 car commuter miles using the program. Like the University of Florida, where students now pay $6 per semester, University of Colorado students voted to increase their student activity fee (by $10 at Colorado) and are now able to use their student ID card for pre-paid bus rides.[32] Other cities providing free employee bus passes include San Francisco, Milwaukee, and Denver.[33]

Unfortunately, IRS rules state that employers can only provide $22 per month tax free to employees who commute by bus. Free parking, on the other hand, is fully tax free.[34]

Increase bus frequency

In October 1985, the North Central Florida Regional Planning Council[35] cited a study calling for 10-minute frequency (headways) during peak periods and 20-minute frequency off-peak. Calthorpe[36] calls for 15-minute frequency throughout the day. See Table 5 for current frequencies for RTS buses.

Bus traffic signal pre-emption/priority

These devices allow bus drivers to trigger a green light at traffic signals. They are currently available to the City Fire Department.

Light rail

The feasibility of light rail is based on sufficient non-residential square footage downtown (at least 20 million square feet) and high residential densities along the rail corridors. Weissman &

Corbett[37] report that the minimum residential density needed within 1/8 mile of a station is 43 dwelling units per acre and 10 dwelling units per acre in the next 1/8 mile. Even though Gainesville is currently well below the minimum densities needed to make rail feasible, it may be wise to pursue rail regardless, since, in the long run, a rail line will encourage the higher, mixed-use densities needed to make the rail feasible. In the short run, of course, such a strategy would require heavy subsidies, which perhaps can be justified by the significant quality-of-life improvements the rail would provide. Portland, Oregon, for example, is taking this approach.[38]

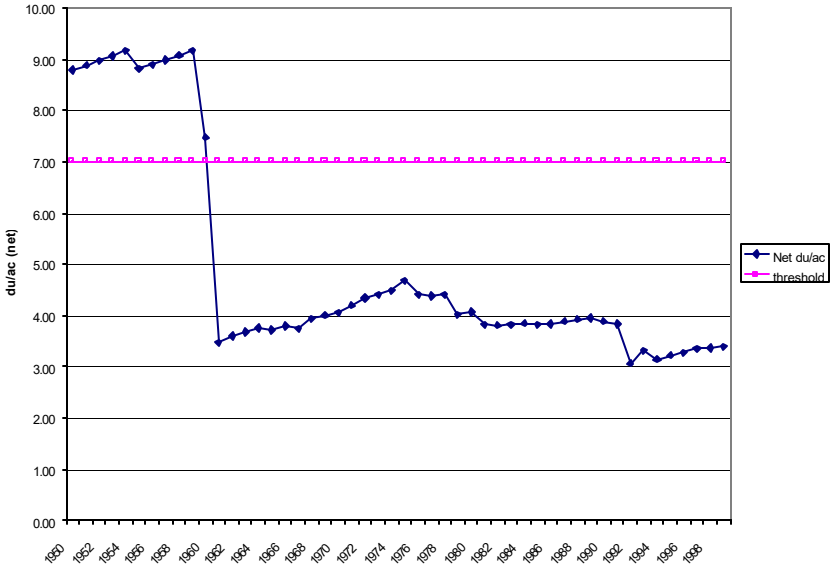
Light rail is considered more effective than bus systems in encouraging more dense, mixed-use development along the transit route, primarily because rail infrastructure is more permanent than bus infrastructure -- due to cost -- and investors can therefore better rely on the rail line to remain well into the future.[39] It is much easier to move a bus route than a transit route, which makes an investment that assumes the existence of transit a safer investment.

Because of substantial highway infrastructure, large subsidies for car travel, and dispersed, low-density development patterns in cities such as Gainesville, "rubber-tire" transit (including decentralized bus and van service) appears to be the only viable transit option in cities such as Gainesville.[40]

Sustainability Indicators for Using Transit

It is generally recognized that for bus transit to be viable and healthy – that is, free of unsustainably high public subsidies and freedom from the "empty bus syndrome" – an average net residential density of at least 7 dwelling units per acre is necessary. As can be seen in Figure 5, from 1960 through current times, the density has been nearly 2 times less than this threshold density. The decreases in overall density is largely due to the City annexing low-density areas over time.

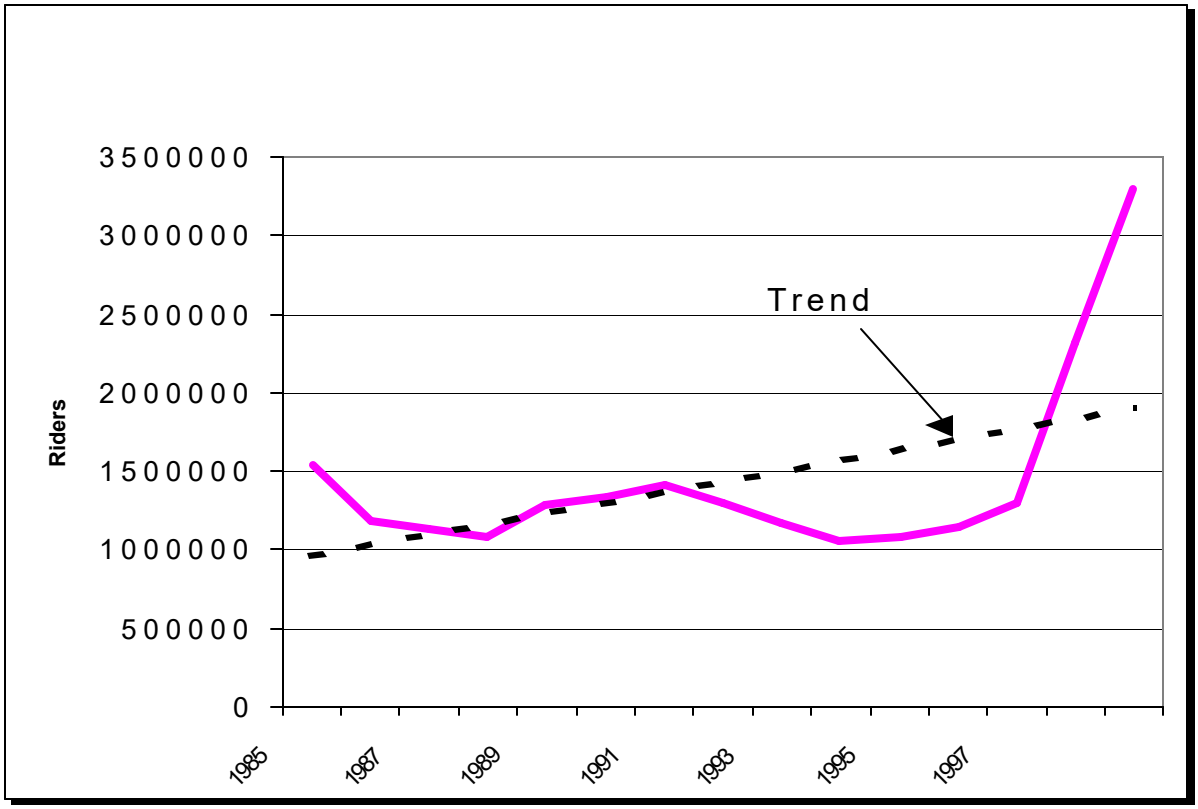
Figure 5. Gainesville Density and Transit Threshold (1950-1999)



Source: Gainesville Dept of Community Development, 4/8/99.

As noted above, there has been a substantial increase in bus ridership over the past few years (see Figure 6 and Table 2) due to a number of important bus enhancements. The City should set a goal of at least 5.5 million annual riders by 2005, and 8 million riders by 2010.

Figure 6. Gainesville Citywide Bus Ridership (1985-1998)



Source: Gainesville RTS.

Existing System and Analysis for Transit System

Existing Transit Services. The City owns and operates the RTS. Four types of transit services are offered by RTS:

1. A fixed route, "main bus" service serving the urban area.
2. Contractual service with the University of Florida (UF) to provide on-campus bus service.
3. A demand-responsive system serves ADA paratransit eligible individuals who are travelling in the service area (within ¾ mile of a fixed bus route).
4. Service for special events provided upon request, at cost.

More specialized transit services are provided by private and non-profit transit providers including taxi companies and emergency transport agencies.

Table 2: Annual Main and UF Campus Bus Ridership

Calendar Year	Citywide Riders	UF Campus Riders
1985	1,535,737	
1986	1,188,733	
1987	1,127,753	
1988	1,080,546	
1989	1,286,739	
1990	1,336,899	
1991	1,407,016	
1992	1,297,534	
1993	1,165,005	
1994	1,062,354	
1995	1,084,862	
1996	1,148,568	1,001,225
1997	1,303,463	941,355
1998	2,314,384	1,040,957
1999	3,299,933	1,196,787

"Riders" include anyone who gets on a bus for a ride.
Source: Gainesville RTS, March 1999.

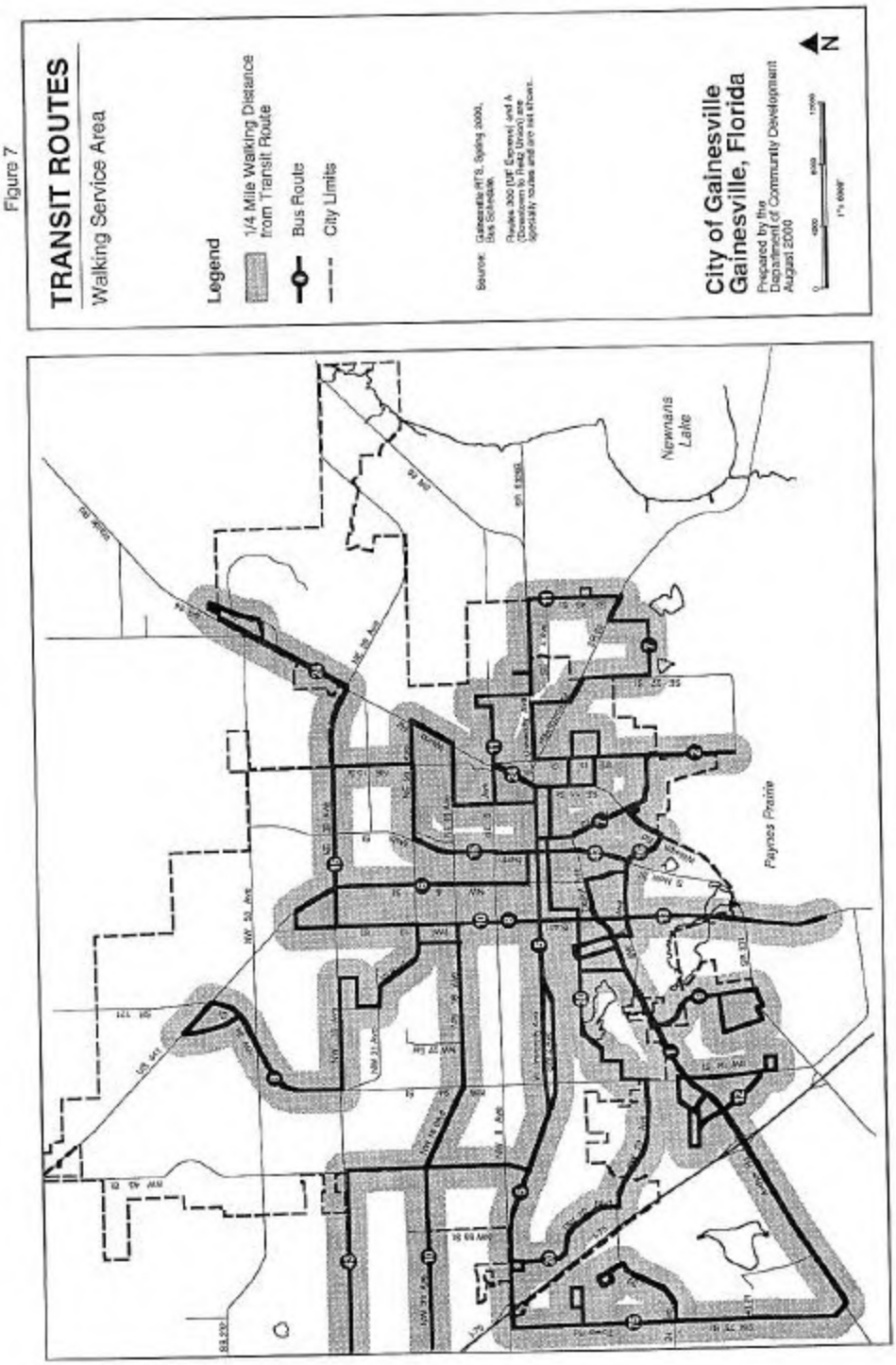
Main Bus Service. The main bus service has 18 routes. These routes, as noted above, create an RTS service area of approximately 38 square miles if ridership is drawn from a one-quarter mile walking distance from bus routes, and approximately 84 square miles if ridership is drawn from a one-mile bicycling distance. This service area reaches outside of city limits, but for comparison purposes, the City currently is 49 square miles in size, and including the unincorporated Gainesville urban area, the urban area is 148 square miles in size. Figure 7 compares the service area of the main bus system to the area within the city limits. Several of the routes have common bus stops, but the only transfer station is the main bus terminal in the downtown plaza. Figure 8 shows the transit service area if bicycle access is assumed.

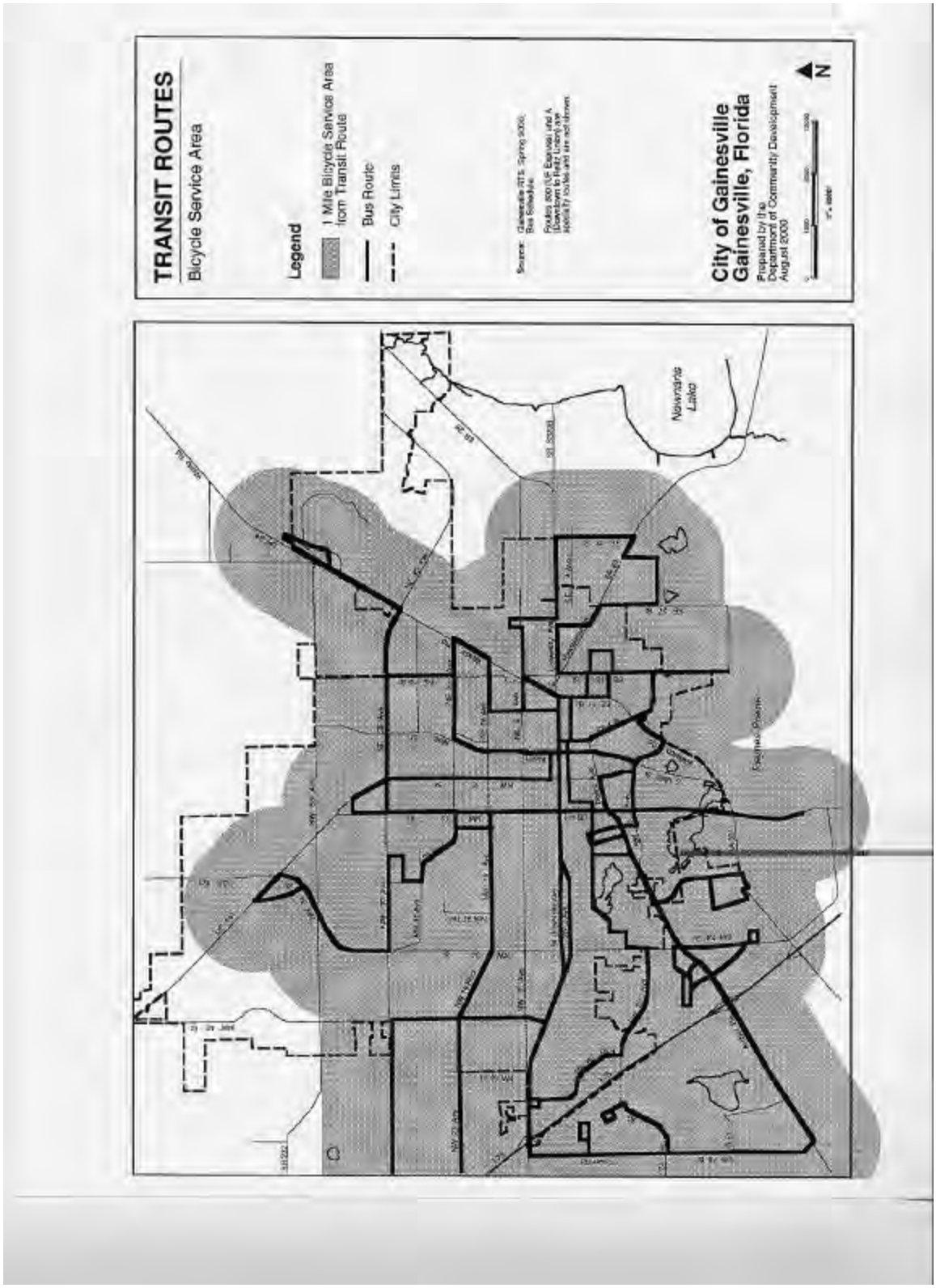
Each of the fixed bus routes has a wheelchair-accessible bus assigned to it. For routes with more than one bus providing service, at least one of the buses is wheelchair-accessible. Currently, 28 of the 72 buses in the fleet, or 39 percent, are wheelchair-accessible.

Demand-Response System Service. The City transit system operates a demand-responsive, curb-to-curb paratransit service. RTS determines if applicants are eligible for Americans with Disabilities Act (ADA) paratransit service and certifies eligible applicants. Coordinated Transportation Systems (CTS) administers "demand-responsive" service in Alachua County. RTS contracts with CTS to provide this service for ADA paratransit eligible individuals who are travelling in the service area (within ¾ of a mile from a fixed bus route). Persons using this service must request transportation from CTS at least one day in advance. CTS notifies RTS of the request.

Paratransit service is provided on the same days and with similar hours as the RTS fixed route service. The current price for a paratransit trip is $2.00 each way. As of March 1999, RTS had a total of 233 certified ADA paratransit recipients of which 196 are fully eligible and 37 are conditionally eligible.

Figure 7


TRANSIT ROUTES
Walking Service Area
Legend
1/4 Mile Walking Distance from Transit Route
Bus Route
City Limits
Source: Gainesville RTS, Spring 2000, Bus Schedule.
Routes 300 (SE Express) and A (Downtown to Field Union) are typically routes and are not shown.
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
August 2000
N
Newnans Lake
Paynes Prairie


TRANSIT ROUTES
Bicycle Service Area
Legend
1 Mile Bicycle Service Area from Transit Route
Bus Route
City Limits
Source:
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
August 2000
N
Newnans Lake

Chapter 427 Florida Statutes (enacted in 1979 and amended 1989) requires that all federal, state and local moneys used to transport elderly and low income persons be coordinated through one transportation system to avoid duplication of services and costs. The City currently contracts for this service with CTS.

The provider (CTS as of 9/29/99) arranges transportation for the transportation disadvantaged population of the city and Alachua County. The clients include persons who, because of physical or mental disability, income status, age or remoteness from other public transit are unable to transport themselves.

The provider coordinates 5 types of transportation services:

1. 24 hour, non-emergency medical transportation to non-ambulatory (wheelchair and stretcher) clients.

2. 24 hour, ambulatory transportation in Alachua County supplementing RTS demand-responsive routes.

3. Transportation for clients of Mental Health Services (MHS) to and from MHS facilities, and Developmental Service clients to and from their training facilities.

4. School Board sponsored transportation of residents from public housing communities. School buses are used to transport primarily elderly residents of 4 Gainesville communities and one Alachua County community for medical appointments and personal shopping.

5. "Meals on Wheels" and "Gainesville Meals Transport" by contract with MHS.

The provider requests proposals to meet various transportation demands from sub-providers. This procedure is carried out every one to two years. Currently, there are 4 sub-providers under contract with the provider: RTS (paratransit service), Medicoach, Inc., North Central Florida Mental Health Services and the School Board of Alachua County.

The provider also provides itemized bills to agencies and programs such as Medicaid Transportation Disadvantaged Commission, Developmental Services (HRS), the Division of Blind Services (HRS), Foster Grandparents and Retired Senior Volunteer Program, whose clients use the RTS demand-responsive system and other services.

Campus Shuttle and other Campus Services. UF contracts with RTS to provide on-campus shuttles. Nine buses shuttle students and university personnel between classes and from commuter lots. The shuttle system operates between 7:00 a.m. and 5:30 p.m., 7:15 p.m., and 7:30 p.m. on Family Housing and Fraternity Row, Commuter Lot, and Park-n-Ride, respectively. Shuttles service only operates on weekdays. Shuttle service does not run during semester breaks, and only four buses run during summer session. The Park-n-Ride shuttle does not operate in the summer.

Transit routes 1, 4, 5, 8, 9, 10, 12, 13, 16, 20, and 43 serve the UF campus. Santa Fe Community College (SFCC) main campus is served by routes 10 and 43. Routes 5, 6, and 10 serve the SFCC downtown campus. Demand-responsive services are available to disabled students on the same

basis as the general public. UF student government also finances and provides transportation for disabled and temporarily disabled students.

The students approved a referendum in March, 1997 to authorize up to $1 a credit hour of their Activity and Service Fee be allocated to transit. In return for these funds, the City has authorized the "Gator One" card as a bus pass, systemwide, at all times. The card provides the student with free use of RTS buses. As of Spring 1999, UF Student Government collected 15 cents a credit hour and intends to collect 50 cents a credit hour in the fall of 2000. These funds will be used to enhance bus service to campus.

Private Transit Systems. Additional transit for non-emergency patient transportation is available through the private sector. These systems currently include Accent Medi-Van, Medicoach Incorporated and Southern Comfort. Area hospitals and nursing care facilities broker services from these sources for their patients. Many of these firms also provide limousine and charter bus service.

Private carriers such as cab companies and limousines also provide transportation opportunities on a demand-responsive basis. Limousine and taxi services tend to provide specialized services such as transportation to airports and area tours. Table 3 shows these privately available transit services, including several bus lines that offer regular long-distance service from Gainesville.

Table 3: Private Transit Services

Bus Companies	Limousine Services	Taxi Services
Boca Bus Company	A Candies Coaches	Gainesville Cab Company
Breakaway Tours	Modern Age Limousine	Gator Cab
GMG Transportation	Airport Passenger Express	Safety Cabs
Greyhound Bus Lines		Santa Fe Cab Company
		Yellow Cab

Source: City of Gainesville, Department of Community Development. Staff survey, April, 1999.

There are a number of companies located outside the county that provide charter services in the Gainesville area. The list of providers shown above often changes. The list simply indicates the variety of transportation alternatives available at a recent point in time.

Exclusive Transit Rights-of-Way or Corridors. Currently, there are no exclusive transit rights-of-way or corridors in the RTS service area.

Transit Service and Frequency

Table 4 shows the main bus service (the "fixed route" service) by route as of Spring 1999. Included are the route numbers and names, the route attractors/generators served, round trip mileage on route per hour and number of buses by route that are wheelchair accessible. Table 5 shows the bus frequency and service span as of Spring 1999. The number of buses used on each route and the frequency are shown for both peak and off peak hours. Also included in Table 5 is the weekday service span of each route.

Table 4: Main Bus Service, by Route, September 2000

Route Name and No.	Attractor/generator served	Round trip mileage on route per hour	No. of buses that are wheelchair accessible
1. Butler Plaza to Downtown	Butler Plaza Alachua General Hospital Downtown Plaza University of Florida Shands at UF VA Medical Center	9.5	1
2. Downtown to Robinson Heights	Downtown Williams Elementary Lincoln Middle Prairie View Elementary	8.2	1
5. Oaks Mall to Downtown via University Ave.	N. Fl Regional Medial Ctr. Oaks Mall University of Florida Westgate Plaza SFCC, downtown campus Downtown	10.9	1
6. Downtown to Gainesville Mall via 6th Street	Downtown SFCC, downtown campus Stephen Foster Elementary Gainesville Mall	12.2	1
7. Downtown to Eastwood Meadows	Downtown Eastside High School	15.9	1
8. Pine Ridge to Shands at UF via NW 13th Street	Gainesville Mall Shands at UF Gainesville High School University of Florida	17.9	1
9. Lexington Crossing to McCarty Hall	University of Florida	7.4	1
10. SFCC to Downtown via NW 16th Avenue/University Avenue	SFCC Millhopper Square University of Florida SFCC, downtown campus Downtown	16.7	1
11. Eastwood Meadows to Downtown via University Ave.	Downtown Health Department Duval Elementary Loften High School Lake Forest Elementary	11.7	1
12. Campus Club to McCarty Hall via Archer Rd.	Butler Plaza University of Florida	7.9	1
13. One Stop Career Center to Museum Rd./ Newell Dr. via SW 13th St.	University of Florida Shands at UF City College	6.0	1

	Mental Health/One Stop		
15. Downtown to NW 23rd Ave & NW 6th St	Center for Independent Living Stephen Foster Elementary Family Service Rawlings Elementary Downtown	14.7	1
16. Newell Dr./Museum Rd. to Sugar Hill via SW 16th Ave.	University of Florida Shands at UF Winn Dixie on Main	5.6	1
20. Oaks Mall to McCarty Hall via SW 20th Ave.	Oaks Mall N. Fl Regional Medial Ctr. Kash & Karry Plaza University of Florida	13.2	1
24. Downtown to Job Corps	Downtown Health Department HRS Rawlings Elemntary Family Service Gainesville Regional Airport Job Corps	17.1	1
43. SFCC to Downtown via NW 43rd Street	SFCC Timber Village Shops Millhopper Square Westgate Plaza University of Florida Shands at UF P.K. Yonge Downtown	26.7	1
75. Butler Plaza Oaks Mall via 75th Street	N. Fl Regional Medial Ctr. Oaks Mall Tower Center Tower Hill Office Park Butler Plaza	26.2	1

Source: Gainesville RTS, September 2000.

Table 5: Main Bus Frequency and Service Span, March 1999

Route #	Route Description	Revenue Mi.	Revenue Hrs	Operating Cost	Vehicles Req. (W)		Frequency		Service Span (Weekdays)
					Peak	Off Peak	Peak	Off Peak	
1	Vet Mem. Pk to Newell Dr./Mus. Rd.	32,422	2,176	$83,776	2	1	30	60	5:45 am - 9:44 pm
2	Downtown to Robinson Heights	22,089	1,364	$52,495	1	1	30	30	6:30 am - 7:57 pm
4	Shands to Downtown (Shuttle)	13,761	1,529	$58,867	1	1	30	30	6:00 am - 9:28 pm
5	Oaks Mall to Downtown	30,947	2,691	$103,604	2	2	30	30	6:00 am - 9:27 pm
6	Gainesville Mall to Downtown	14,244	1,261	$48,529	1	1	60	60	6:30 am- 6:57 pm
7	Downtown to Eastwood Meadows	22,640	1,415	$54,478	1	1	60	60	6:00 am - 7:57pm
8	Pine Ridge to Shands	43,700	2,526	$97,251	2	2	30	30	6:12 am - 8:13 pm
9	Lexington Crossing to McCarty Hall	35,392	3,291	$126,704	3	2	15	20	6:45 am - 9:12 pm
10	SFCC to Downtown	21,328	1,270	$48,876	1	1	60	60	7:00 am - 6:58pm
11	Eastwood Meadows to Downtown	16,281	1,346	$51,802	1	1	60	60	6:30 am - 7:57 pm
12	Campus Club to McCarty Hall	39,577	3,423	$131,786	3	2	15	20	6:30 am - 9:17 pm
13	Job Serv to Newell Dr./Musuem Rd.	22,590	2,017	$77,655	2	1	15	30	6:28 am - 8:45 pm
15	Downtown to Gainesville Mall	19,178	1,279	$49,222	1	1	60	60	6:30 am - 6:58 pm
16	Newell Dr./Museum Rd. to Sugar Hill	23,502	2,026	$78,001	2	1	15	30	6:45 am - 8:45 pm
20	Oaks Mall to McCarty Hall	44,369	3,729	$143,547	4	2	15	30	6:15 am - 9:15 pm
24	Downtown to Job Corps	23,631	1,415	$54,478	1	1	60	60	6:00 am - 7:57 pm
43	SFCC to Downtown	30,440	2,230	$85,855	2	2	60	60	6:00 am - 7:58pm
75	Vet. Mem. Park to Oaks Mall	37,878	2,140	$82,390	2	1	30	60	5:45 am - 8:43 pm
101	Lexington Express to Reitz Union	8,330	595	$22,908	1	-	30	30	7:10-11:30,2:24-5:08
Subtotal		**502,296**	**37,720**	**1,452,220**	**33**	**25**			
118,119,127,128	Park-N-Ride	33,600	3,360	$129,360	3	3	10	10	7:00 am -7:30 pm
120	Family Housing	8,232	840	$32,340	1	1	30	30	7:00 am - 5:30 pm
121, 122	Fraternity Row	15,392	1,480	$56,980	1	1	15	15	7:00 am - 5:30 pm
123, 124, 126	Commuter Lot	16,120	2,600	$100,100	3	3	10	10	7:00 am - 7:15 pm
100	UF Express. Oaks Mall to The Hub	12,760	1,160	$44,660	3	-	15	15	6:20-9:15a-3:08-6:16p
Subtotal		**86,104**	**9,440**	**$363,440**	**11**	**8**			
300	Later Gator A (Reitz Union to DT)	7,742	842	$32,398		3	10	10	9:30pm-3:20am
301	Later Gator B (Lex Pk to Reitz Union)	-	-	-		2	15	15	9:30pm-3:00am
302	Later Gator C (Cps Club-Reitz Union)	-	-	-		2	20	20	9:30pm-3:00am
303	Later Gator D (Oaks Mall-Reitz)	-	-	-		2	20	20	9:30pm-3:00am
Subtotal		**7,742**	**842**	**$32,398**	**-**	**9**			
61, 62, 63	ADA Complemt Paratransit Service				2	1			
Totals		**596,142**	**48,002**	**$1,848,058**	**46**	**43**	-	-	-

Regular Service:

Number of Weekday Service = **80**

Number of Saturday Service = **18**

Number of Holiday Service = **5**

Total Number of Days = **103**

Night Service

Number of Weekday Service = **32**

Number of Saturday Service = **17**

Number of Holiday Service = **2**

Total Number of Days = **51**

Peak Hrs:

Route 1: 5:45–10:42 a.m. & 2:45 – 6:42 p.m.

Route 9: 6:45 –11:30 a.m. & 2:20 – 6:30 p.m.

Route 12: 6:30–11:30 a.m. & 2:15 – 6:30 p.m.

Route 13: 7:45–11:40 a.m. & 2:30 – 6:10 p.m.

Route 16: 7:45 – 11:40 a.m. and 2:30 – 6:10 p.m.

Route 20: 7:15 – 10:30 a.m. and 2:15 – 6:30 p.m.

Route 75: 6:15 – 10:45 a.m. and 2:45 – 6:45 p.m.

Notes:

PNR, CL (1 Bus After 6:00 pm)

Operating Costs are based on a rate of $38.5/Rev. Hour

Source: Gainesville RTS, March 1999.

UF Campus Shuttle Bus Service Area and Frequency

Frequency of the shuttle service is determined by contract between the City and UF. The nature of a campus shuttle requires frequent bus service. Current frequency is 10 minutes from commuter parking lots, 15 minutes on Fraternity Row, and 30 minutes for service to on-campus married student housing. Shuttle bus service does not extend to the School of Veterinary Medicine.

Inventory of Bus Facilities and Vehicles

Table 6 shows the bus vehicle inventory for the Main Bus System and the Campus Shuttles. There are 56 buses in the Main Bus/Campus Shuttle Fleet. Table 7 shows the bus vehicle inventory for the Demand Response paratransit service. There are 6 buses in the Demand Response paratransit service fleet.

Table 6: RTS Inventory: Main Bus and Campus Shuttles

Year Built	Status	Seats	Length (feet)	Width (inches)	Type of Power	Total	Active	with Wheelchair Access
87	A	33	30	96	DF	7	Y	N
89	A	33	30	96	DF	9	Y	N
89	A	37	35	96	DF	5	Y	N
89	A	43	35	96	DF	5	Y	N
95	A	42	40	96	DF	12	Y	Y
85	A	46	40	96	DF	6	Y	N
85	A	38	35	96	DF	4	Y	N
82	A	37	35	96	DF	2	Y	N
82	A	45	40	96	DF	5	Y	N
83	A	37	35	96	DF	1	Y	N
81	A	40	40	102	DF	10	Y	Y
2000	P	38	40	102	AF	6	N	NA

Notes:

AF = Alternative Fuel
DF= Diesel Fuel
Y= Yes
N= No
A= Available
P= Procurement

Source: Gainesville RTS, March 1999.

Table 7: Demand Response Fleet

Year Built	Status	Model	Seats	Length (feet)	Width (inches)	Type of Power	Total	Active	with Wchair Access
96	A	CS 2000	25	28	96	DF	6	Y	Y

Notes:

DF= Diesel Fuel

Y= Yes

A= Available

Source: Gainesville RTS, March 1999.

Bus Ridership

Main Bus and Campus Shuttle Bus Ridership

Ridership is based on RTS Monthly Reports and is shown in Table 8. Overall annual ridership since 1985 is shown in Figure 6.

Route 12 began running in January 1998. Route 39 only ran May-August 1998. Route 43 began running in August 1998. The following routes began running in May 1998: 13, 15, 16, 20, 24, 39, 75.

Most of the routes were re-routed in May 1998.

ADA Complementary Paratransit Service Ridership

Table 9 presents the average daily ridership for the RTS ADA Complimentary Paratransit Service. Currently, there appears to be adequate capacity to meet demand.

Table 9: ADA Complementary Paratransit Service Ridership, by Fiscal Year

Fiscal Year	Ridership	Change Since Prior Year
1985/86	67,266	NA
1986/87	62,900	-6%
1987/88	61,700	-2%
1988/89	63,529	+3%
1989/90	NA	NA
1990/91	65,576	NA
1991/92	65,576	0%
1992/93	54,100	-18%
1993/94	54,100	0%
1994/95	74,547	38%
1995/96	98,400	32%
1996/97	6,005	NA
1997/98	11,156	NA
1998/99	7,769	-30%
Total	**692,622**	

Source: Gainesville RTS, April 2000.

Table 8. RTS Calendar Year Ridership by Route

Route	1997	1998	1999
9	81,988	242,904	414,831
20	NA	100,124	361,317
12	NA	126,616	296,303
5	207,248	192,696	279,794
16	NA	41,813	253,544
13	NA	53,316	240,226
1	149,976	158,213	208,669
8	128,303	150,163	183,131
75	NA	48,335	171,266
43	NA	22,953	130,355
15	NA	33,297	102,586
6	83,408	88,770	88,438
10	92,920	82,659	88,205
11	18,920	50,541	81,808
24	NA	31,408	77,885
7	85,855	88,834	77,773
2	68,838	88,139	74,817
4	183,650	196,954	72,112
300 (Later Gator)	NA	2,561	58,870
100 (UF Express)	NA	5,259	21,608
101 (Lexington Express)	NA	NA	11,115
3	117,491	94,361	NA
39	NA	10,997	NA
Total	**1,101,106**	**1,805,555**	**3,294,653**
Campus			
Park-N-Ride	360,070	400,387	379,621
Park-N-Ride2			28,864
Frat Row	260,252	250,348	315,222
Commuter Lot	230,563	250,809	314,539
Commuter Reverse			16,501
UF Circulator			22,899
Additional Frat Row			26,137
Family Housing	96,791	83,505	93,004
Total	**947,676**	**985,049**	**1,196,787**
Other Services			
Gator Aider	NA	12,360	36,808
Basketball Game Service	NA	1,119	7,666
Special Services	NA	17,993	36,967
ADA Paratransit Service	6,005	11,154	10,011
Van Pool			3,032
Total	6,005	42,626	94,484
Grand Total	**2,048,782**	**2,833,230**	**4,585,924**

Park-n-Ride does not run May – July
Routes that began running 8/17/98: 43, UF Express
Later Gator started 9/98. Route 11 began 5/97. Lexington Express began 1/99.
Several routes changed substantially in 1998. Therefore, ridership by route in prior years is not comparable.

Integration Between Forms of Travel

A number of initiatives have been undertaken to improve pedestrian and bicycle integration with the bus system:

- The **Campus Shuttle Bus** is well-integrated with pedestrians and bicyclists at UF. The 9-bus system circulates with frequency ranging between 10 and 30 minutes, depending on the destination. This system provides car-to-bus integration for commuters from the **park-n-ride** lot at SW 34th Street, commuters who park their cars in the various commuter lots on Campus (Norman Hall, North/South Drive and O'Connell Center), and it also serves pedestrians who would otherwise need a car to travel to distant locations on campus.

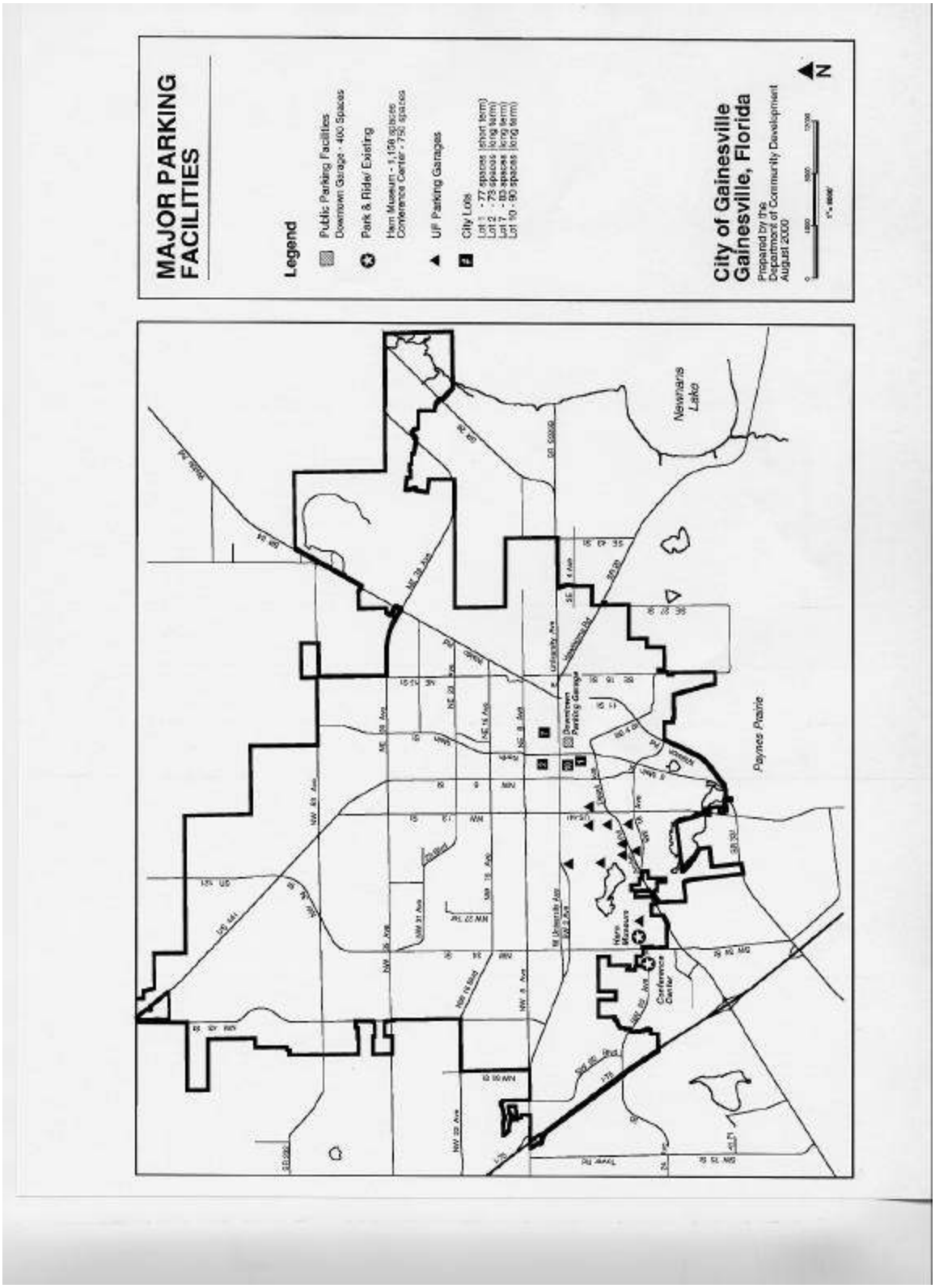
- RTS provides special **park-n-ride services for major events** such as UF football games (Gator Aider), UF basketball games (Fastbreak Shuttle), and concerts at the O'Connell Center. Temporary services have been provided for several years. Figures 9 and 10 show major parking facilities – some of which currently provide park-n-ride, and some of which have potential to serve as park-n-ride.

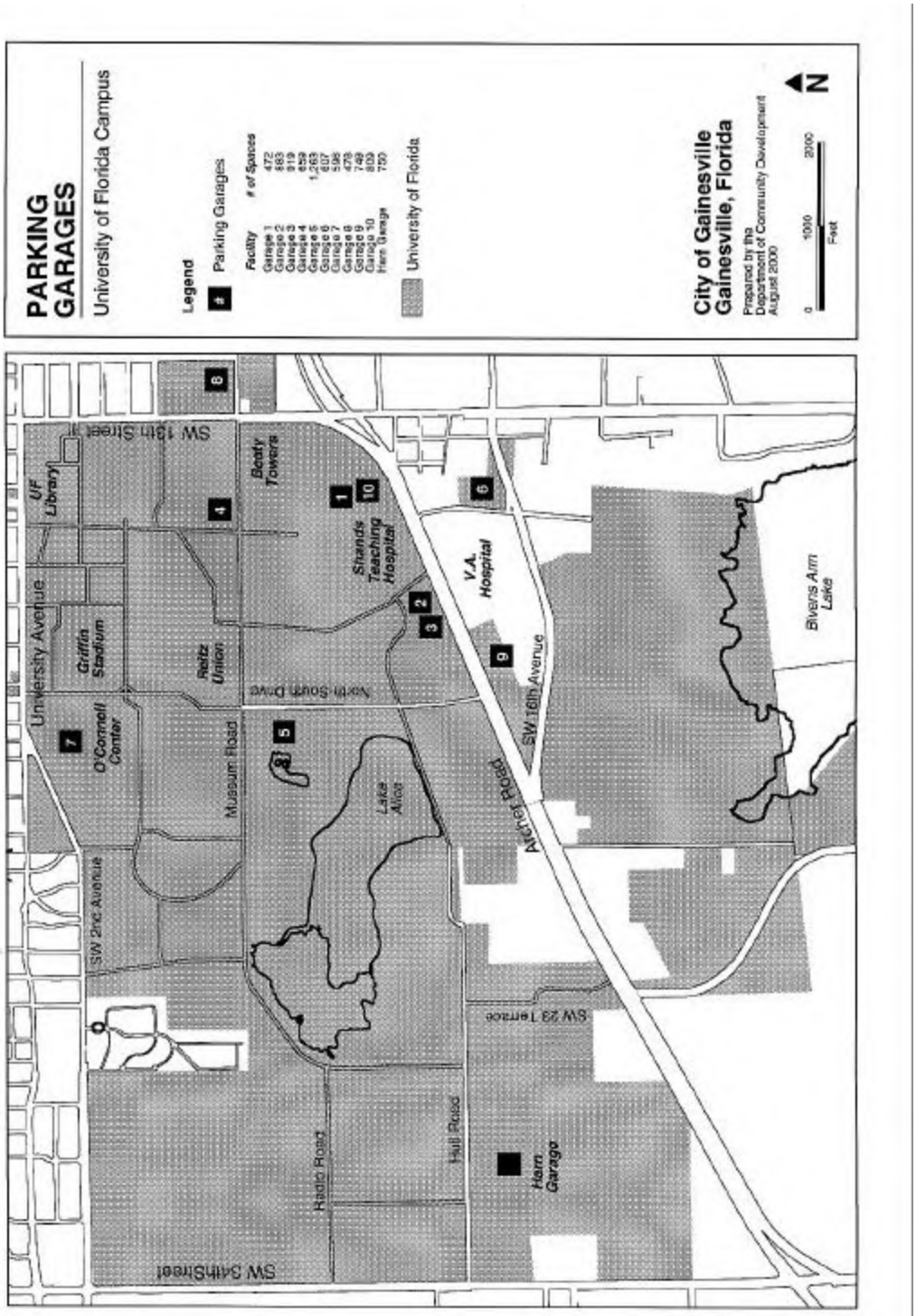
- In addition to these programs, there is now a **park-n-ride** service available from the Oaks Mall to the UF campus (UF Express), and at Harn Museum on the UF campus. A new park-n-ride has recently been built on SW 34th Street near SW 20th Avenue. (see Figure 9)

- In the late 1980s and early 1990s, the Central Business District of the downtown underwent **streetscape and street lighting improvements** as part of downtown revitalization efforts which were started in 1985. The Community Redevelopment Agency has completed a downtown design plan which is designed to enhance the pedestrian environment, and improvements to encourage more vibrant street activity. The bus system benefits because the downtown is a bus system hub, and the system gains more riders in this location because a larger set of pedestrians have safer and more convenient access to the plentiful downtown buses.

- Coordinated with downtown improvements, the City's Cultural Affairs Department schedules **events for the downtown** throughout the year. The bus system benefits in the same way as described above.

- **New investment in the downtown** area includes the recent completion of the Matheson Historical Museum, downtown multi-family residential development, the mixed use, multi-story Union Street Station, and the main branch of the Public Library. Soon-to-be-completed projects include the Commerce building, which includes conversion of a surface parking lot to townhouses, construction of a new county courthouse, and renovation of older buildings for restaurants, retail, services, and offices. The City and County have taken a very active role in maintaining the concentration of cultural, residential and government facilities in the central business district and proceeding with a pedestrian streetscape system. The bus system benefits in the same way as described above.


MAJOR PARKING FACILITIES
Legend
Public Parking Facilities
Downtown Garage - 460 Spaces
Park & Ride/ Existing
Ham Museum - 1,156 spaces
Commerce Center - 750 spaces
UF Parking Garages
City Lots
Lot 1 - 77 spaces (short term)
Lot 2 - 73 spaces (long term)
Lot 7 - 83 spaces (long term)
Lot 10 - 90 spaces (long term)
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
August 2000
N
Newnans Lake
Paynes Prairie
Downtown Parking Garage
Ham Museum
Conference Center


PARKING GARAGES
University of Florida Campus
Legend
Parking Garages
Facility # of Spaces
Garage 1 472
Garage 2 883
Garage 3 919
Garage 4 859
Garage 5 1,283
Garage 6 607
Garage 7 596
Garage 8 478
Garage 9 749
Garage 10 809
Hern Garage 750
University of Florida
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
August 2000
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1000
2000
Feet
N
SW 13th Street
University Avenue
SW 2nd Avenue
SW 34th Street
Museum Road
North South Drive
Hull Road
Radio Road
SW 23 Terrace
Archer Road
SW 16th Avenue
UF Library
Griffin Stadium
O'Connell Center
Reitz Union
Beaty Towers
Shands Teaching Hospital
V.A. Hospital
Lake Alice
Hern Garage
Bivens Arm Lake

In 1998, the City adopted the **Traditional City** and **Central Corridors** ordinances, which promote a more safe, convenient, and pleasant pedestrian environment in the core area of city and the main streets leading into the core. The bus system benefits in the same way as described above.

- The downtown has a number of **parks** and **public spaces**. The city-wide bicycle, pedestrian, and disabled person-carrying **Trail Network** has several trails that converge at the southern fringe of downtown. By doing so, the Trail Network and bus system enjoy a symbiotic relationship.

- RTS has equipped all of its main **buses with bicycle carriers**. These carriers greatly expand the service area of the bus system, and increases ridership. See Figures 7 & 8.

- The **in-street bicycle system** provides facilities for the commuting cyclist. All new arterials and collector streets include bicycle lanes. Bicycle lanes or wide curb lanes are also installed whenever feasible when existing streets are resurfaced. Like bicycle carriers on buses, the in-street bicycle system expands the bus service area. In addition, new development is required to provide **bicycle parking** as a part of the on-site traffic circulation plan.

- RTS is currently seeking the following to correct **deficiencies in transferring** from another form of travel to the bus. For example, funding is needed to construct the new transfer facility at in the Depot Area downtown, as well as a terminal or transfer station near or on the UF campus. "Busways" may be needed along University Avenue and Archer Road. Park-n-Ride lots are needed at Gainesville Mall, Haile Plantation, Winn Dixie on NW 13th Street, and the Winn Dixie on South Main Street.

There are no passenger rail or seaport facilities in Gainesville. However, a bus shuttle is provided from the Downtown Plaza to the Amtrak station in Palatka. The Gainesville Regional Airport is not currently served by bus because ridership was too low to sustain that service. There is taxi service and van service from some hotels to the airport. Bike lanes on NE 39th Avenue and the Waldo Road Rail-Trail provide bicycle access to the vicinity of the airport.

Population Served by RTS

The estimated walking distance (1/4-mile from routes) transit service area population for the year 2000 is approximately 107,300. For the year 2020, it is approximately 130,000. It is important to note that over time, there is a declining percentage of the Gainesville Urban Area population located within the transit service area due to the fact that most new homes that are built are located outside of the service area.

Persons with Transit-Related Disabilities

RTS provides two services to disabled riders.

- The demand response paratransit service provides service to ADA paratransit eligible individuals.

- The main bus service includes limited handicapped-accessible buses serving the urban area. CTS and other private providers supplement this service.

Table 10 shows estimates of persons with transit-related disabilities for the city and the unincorporated portion of the urban area.

Table 10: Persons with Transit-Related Disabilities

Group	1980	1996	2001	2005	96-01 Change	Total Change
City 16-64	843	993	1,050	1,098	57	207
City 65+	1,040	1,314	1,419	1,509	105	379
Unincorp. 16-64	336	585	647	701	62	311
Unincop. 65+	330	1,200	1,391	1,565	191	1,061
Total	**2,549**	**4,092**	**4,507**	**4,873**	**415**	**1,958**

Source: Bureau of the Census, July 1983; Department of Community Development staff calculations, April 2000. Numbers do not always total due to the use of samples and rounding error. Data for 2005 are extrapolated forward from 1996-2001 annual percentage increases for each age group. 2000 Census data are not available at this time.

Special Needs Populations

The population groups considered to have special transportation needs include seniors, low income persons and persons with transit-related disabilities. Each of these groups have been discussed in the preceding sections. Studies by the FDOT (July 1984) and the Gainesville Urbanized Area MTPO (February 1990) estimate the total of these groups to comprise 34 percent of Alachua County's population. Analysis by City staff indicates that this total could be above 50 percent for the City and unincorporated urban area.

Transit Trip Generation and Future Bus System Capacity

The location of future primary trip generators and attractors for the city is discussed in the "Major Trip Generators and Attractors" section. That discussion showed that almost all antic ipated attractors and generators are served by the city transit system.

According to Gainesville RTS in February 2000, the number of RTS person trips at full capacity is 21,200,000, and existing transit demand is 4,413,198 person trips.

The distribution of trips is expected to change by the year 2005 as development intensifies in some areas and peaks or declines in other areas. Changes in the distribution of trips may lead to a change of transit route configurations in the future. The overall capacity of the RTS system is, in most cases, adequate to handle trips in the year 2000. However, additional capacity is required in particular areas – particularly in Southwest Gainesville and nearby southwestern

unincorporated urban areas, where people are being left at bus stops because buses are full on weekday mornings. In 1985, 78 percent of all main bus trips were in the City. By the year 2000, this percentage is expected to decline to 65 percent. The largest single trip generator is UF for each of these two years, with 16 percent of all trips in 1985 and a projected 65 percent in the year 2000.

Transit System Capital Needs

The Florida Department of Transportation 5-Year Work Program, dated February 14, 2000, contains the following committed capital projects for the transit system:

- Passenger amenities (benches, shelters, and related)
- Expansion of the bus fleet to include "Alternate Fuel" buses (15 in FY 00'-01' & 4 in FY 01'-02')
- Land acquisition and design funding for new transfer center

The Gainesville RTS prepared a Capital Improvement Program in 1999 that, in addition to the above, included the following:

- 25 40-foot, ADA-compliant replacement buses over the next 5 years.
- 7 expansion buses (40-foot, ADA-compliant) to carry the increased passenger loads experienced in recent years. These buses will be used to provide new RTS routes, including more routes to the UF campus, a route to the Gainesville Regional Airport, and additional late night service.
- 5 lift-equipped vans leased to a local operator providing the ADA-required complementary paratransit service.
- 5 vans to be used to start a new vanpool and commuter assistance program in the county.

Major Trip Generators and Attractors

Existing Major Trip Generators And Attractors. There are 23 areas identified as major trip "generators" or "attractors" (see Figure 11). These areas are identified based on the existing and future land use map series. These include neighborhood (activity) centers within the city and those identified by the County in the Gainesville Urban Reserve Area. Figure 12 shows existing and future industrial concentrations. Table 12 lists these areas, and the main bus routes which serve them. Major trip generators and attractors contain the vast majority of jobs, shopping, government offices and other essential services needed by city residents. The only existing trip generators and attractors not served by transit are Northwood Village, the Gainesville Regional Airport and the Airport Industrial Park. These are developing neighborhood (activity) centers and RTS will assess the need for service to these areas as they develop. (RTS provided service to the airport in the 1980's, but service was discontinued upon evaluation of the ridership generated and attracted by the airport.)

Table 12: Bus Service to Major City Generators and Attractors

Generator/Attractor	Bus Route
Santa Fe Community College	6, 10
Oaks Mall	4, 5
Archer Road/Butler Plaza	1, 12
Westgate Regency	5, 6
Millhopper	6, 10
Ridgeway Village	8
Northwood Village	8
NW 13th Street at 39th Avenue	2
Gainesville Mall	2, 8
University of Florida and Alachua Gen. Hospital	1, 3, 4, 5, 6, 8, 9, 10, 12
Shands and Veteran's Hospital	1, 3, 4, 6, 8, 9, 12
SW 13th Street	3
Downtown Gainesville	1, 2, 3, 4, 5, 10, 11
Gainesville Shopping Center	3
Winn-Dixie Shopping Center at North Main Street	7
Airport	None
Tacachale (Sunland Center)	7
University Avenue at Waldo Road	7
SE Hawthorne Road at SE 27th Street	7
39th Avenue and North Main Street	None
Industrial	
South Main Street	4, 8
NW 6th Street	2
Koppers at North Main Street	None
Hugh Edwards	7
Airport Park	None
Outside City Limits	
Springhill	10
Nationwide Insurance on Williston Road	12
North Central Florida Mental Health	3

The Land Use Element of the County Comprehensive Plan lists a number of urban activity centers, rural activity centers and rural employment centers located outside the Gainesville Urban Reserve Area. Currently, these are outside the RTS main bus service area, but within the Demand-Response System Zone 3 service area. Improvements within the existing main bus service area would have a higher priority than would extension of main bus service to these areas. Through adoption of a Transportation Concurrency Exception Area (TCEA), the City identified "existing and potential transit hubs (see Figure 13).

Figure 11

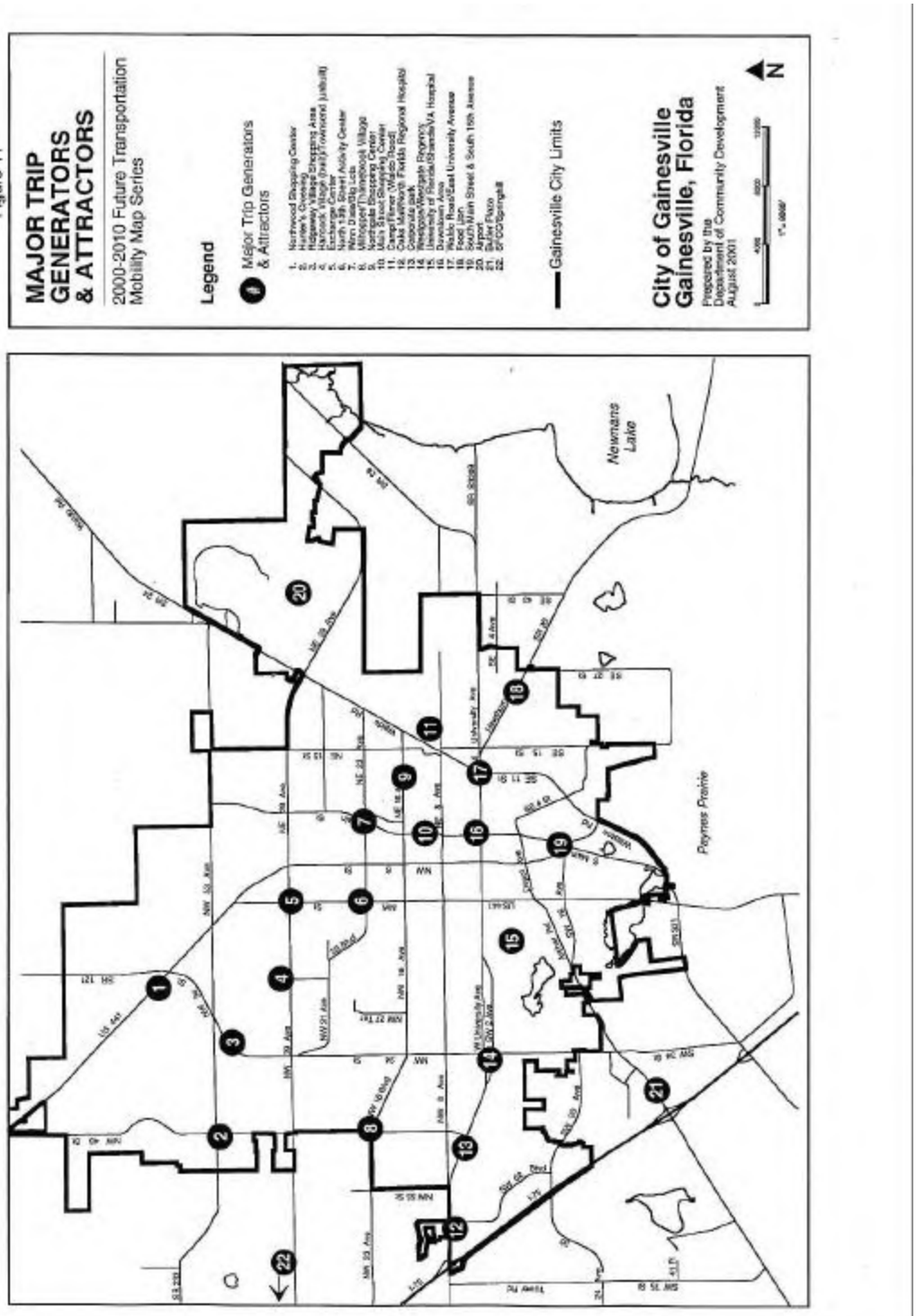

MAJOR TRIP GENERATORS & ATTRACTORS
2000-2010 Future Transportation Mobility Map Series
Legend
Major Trip Generators & Attractors
1. Northwood Shopping Center
2. Kennedy Homes
3. Ridgeview Village Shopping Area
4. Hartcock Village (Owl)/Frankwood (Jubilee)
5. Exchange Center
6. North 13th Street Activity Center
7. Millhopper/Thelma Boltin Village
8. Northgate Shopping Center
9. Mid-School Shopping Center
10. Downtown/Plaza of the Americas
11. Oaks Mall/Gainesville Regional Hospital
12. Cabana park
13. Reserve/Westgate Property
14. University of Florida/Shands/VA Hospital
15. Downtown Area
16. Publix Plaza/East University Avenue
17. Food Lion
18. South Main Street & South 16th Avenue
19. Airport
20. Butler Plaza
21. SF/OO/Springhill
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
August 2001
N
Newnans Lake
Paynes Prairie

Figure 12

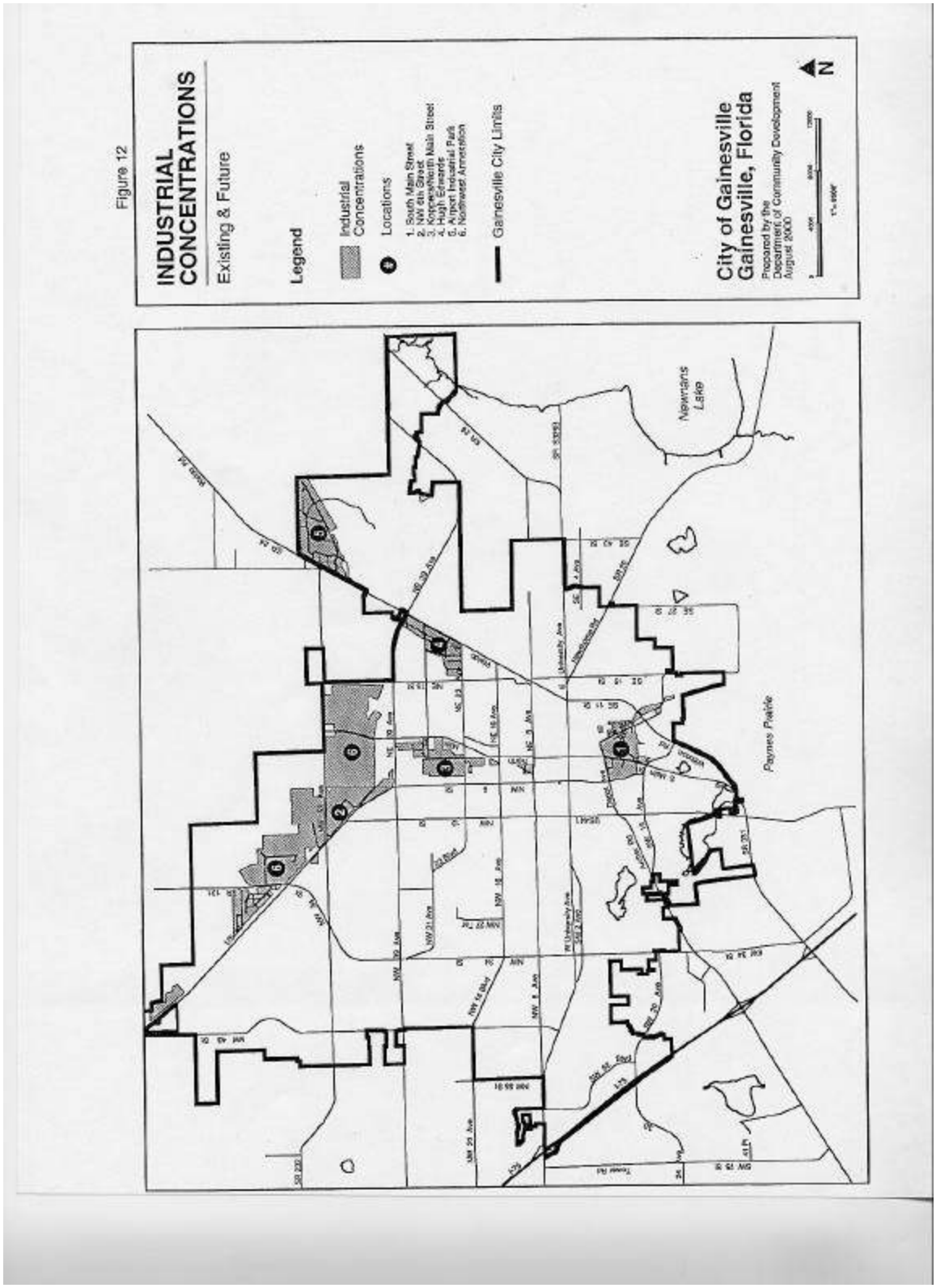
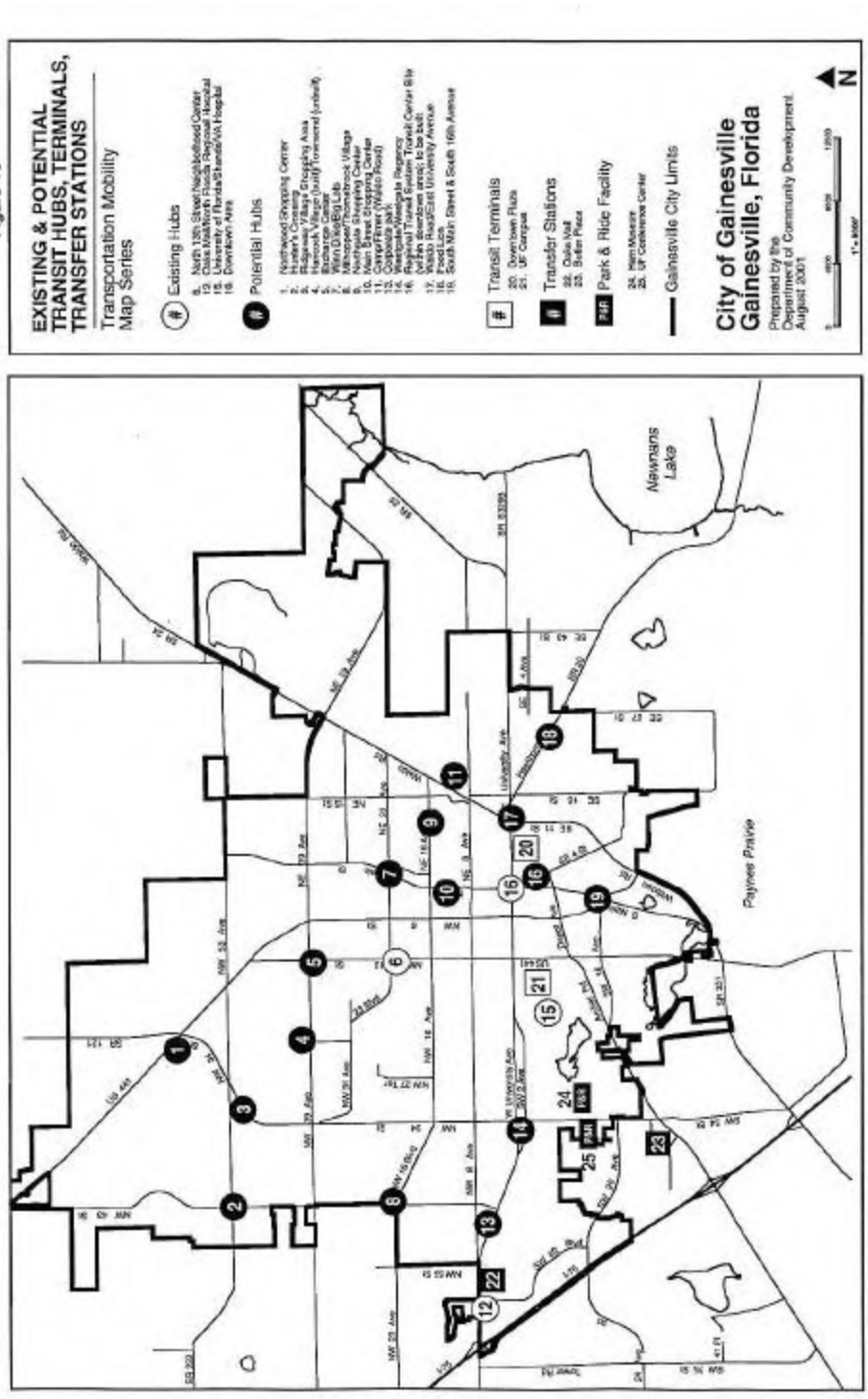

INDUSTRIAL CONCENTRATIONS
Existing & Future
Legend
Industrial Concentrations
Locations
1. South Main Street
2. NW 6th Street
3. Kirkpatrick Main Street
4. Airport Industrial Park
5. Airport Industrial Park
6. Northwest Annexation
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development August 2000
N
Newnans Lake
Paynes Prairie

Figure 13


EXISTING & POTENTIAL
TRANSIT HUBS, TERMINALS,
TRANSFER STATIONS
Transportation Mobility
Map Series
Existing Hubs
Potential Hubs
Transit Terminals
Transfer Stations
Park & Ride Facility
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
August 2001
N
Newnans
Lake
Paynes Prairie

Significant City-Owned Parking Facilities. Table 11 is an inventory of major city-owned parking facilities.

Table 11: Significant City-Owned Parking Facilities

Lot	Spaces	Type of Parking	Time Restriction	Duration Limitations
1	77	Permit, Reserved, Meters	2-hour	Short-term
2	73	Permit, Meters	10-hour	Long-term
7	83	Reserved	None	Long-term
10	90	Permit	None	Long-term

Source: Gainesville Public Works Department, March 22, 2000. "Significant" defined as a facility with at least 50 parking spaces for cars.

Percentage of Trips by Transit and Other Forms of Travel (Modal Split)

In 1985, the GUA MTPO adopted a long range modal split goal that 5 percent of all trips in the area would be transit trips in the year 2005. This goal was to be met incrementally:

Transit "Percentage of Trips" Goals

Year	Percent Transit
1990	1.02
1995	1.73
2000	2.93
2005	5.00

The percentage of non-car trips (modal split), as reported in the 1991 Transportation Mobility Element as follows:

Non-Car Percentage of Trips

Form of Travel	% of Areawide Vehicle Trips
Fixed Route Transit	1.1%
UF Shuttle Bus	0.7%
Bicycle	0.8%

The percentage of trips by various forms of travel varies throughout the city, with the concentration of bicycle and transit trips being highest on the UF Campus and in surrounding areas. The average motor vehicle occupancy, as reported in the 1991 Mobility Element, is 1.36 persons per vehicle.

The City should establish an objective that at least 6 percent of all trips within the city be made by a means other by car: by bus, by foot, or by bicycle.

Bicycling

The 3 keys for establishing a bicycle-friendly community are:

1. Convenience
2. Comfort
3. Safety

Advantages of Bicycling as a Form of Travel[41]

- Bicycling can be the quickest way to travel for most short urban trips, especially during rush hour, or in more congested, high-density areas.

- Bicycles require only one-sixteenth of the parking space needed for cars. As a result, more bicyclists mean a smaller need for land-consumptive parking facilities. The small bicycle space needs also offer the bicyclist the convenience of parking closer to the entranceways of his or her destination.

- An increase in bicyclists would reduce wear and tear on streets, thereby reducing on-going operation and maintenance costs for the street network.

Existing System and Analysis for Bicycling

Levels of Bicycle Transportation

Gainesville has long been recognized as a community with a high level of bicycle transportation. For example, it was once estimated that approximately 28,000 daily trips are made by bicycle in Gainesville, and that over 70 percent of these trips were for utilitarian purposes such as commuting to work, school, or shopping.[42]

A 1990 modal split estimate[43] showed that 2.4 percent of the person trips in the Gainesville urban area were made by bicycle in 1990.

However, while the number of trips made by bicycle have remained relatively high, bicycle counts by the MTPO and the Urban Area Bicycle Advisory Board showed a steady decline in the number of trips made by bicycle from 1984 through 1997.[44] See Figure 16.

Existing Bicycle Facilities and Programs

As of December 1998, there are approximately 70 miles of arterial and collector streets within the Gainesville urban area designed to accommodate bicycle transportation.[45] See Figure 14. Nevertheless, 39 percent of the arterial and collector street system mileage has not yet been retrofitted to accommodate bicycle transportation (see Figure 15).

The citywide Trail Network is, in general, not associated with the city street system, and provides off-street travel for pedestrians, physically-adept bicyclists, and, where the trail is paved, less-abled bicyclists and the disabled (see Figure 17).

Figure 14, Bicycle Facility Types does not insert into document. Call 334-5022 or come to the Dept. of Community Devleopment to see the map.

Figure 15, Bicycle Route Gaps does not insert into document. Call 334-5022 or come to the Dept. of Community Devleopment to see the map.

The City Land Development Code requires that a certain percentage of off-street parking consist of bicycle parking facilities. In addition, the Traditional City ordinance has removed the bicycle parking exemption for the downtown area. As a result, most recent developments within city limits now provide bicycle parking. There remain several existing developments, however, that were not required to provide such parking, because the development occurred before the City had bicycle parking requirements in place.

Over time, the City is incrementally developing trails to complete the Trail Network. In recent years, the Depot Rail-Trail and the Waldo Rail-Trail have been constructed. The City is attempting to acquire the 6th Street railroad corridor in anticipation of developing a rail-trail for use by pedestrians and bicyclists. The City also anticipates developing a "Downtown Connector Trail" that will link downtown Gainesville with the Gainesville-Hawthorne Trail and the overall citywide Trail Network.

When completed, this Network will provide links from neighborhoods to public schools, jobs, parks, other neighborhoods, civic and cultural facilities, shopping areas, and outlying towns.

Bicycle Safety

A leading cause of motor vehicle crashes with bicycles is the lack of bicyclist predictability, or awareness by bicyclists of motorists. A second and related cause is the failure of motorists to see bicyclists while driving.

For example, studies of bicycle crashes in the Gainesville urban area have found that most reported crashes occur at intersections. The three actions by bicyclists that cause most crashes are: (1) riding a bicycle against the flow of motor vehicle traffic; (2) failure to obey traffic signals and signs; and (3) riding at night without proper lights.[46]

A study of Gainesville bicycle crashes from 1973-1981[47] found that almost 50 percent of all bicycle crashes involved college-age individuals (18 to 25 age group), and that 35 percent of all bicycle crashes within city limits occurred on West 13th Street or University Avenue. This study also found that the 3 leading causes of crashes over this time period were: (1) a bicyclist travelling on a main street colliding with a motorist turning onto or crossing through the main street on a street controlled by a stop sign; (2) a bicyclist travelling through an intersection colliding with a motorist making a left turn in the path of the bicyclist; and (3) a bicyclist travelling in the same direction or opposing direction of traffic colliding with a motorist making an unexpected right turn.

It is clear from the above that most car crashes with bicycles result from bicyclists not observing cars, or motorists not being able to observe or predict the behavior of bicyclists. Therefore, a bicycle crash reduction program must focus on engineering, education, and enforcement practices which increase bicyclist visibility and predictability. For these reasons (and others), the focus of bicycle planning has shifted from an emphasis on separating bicyclists from motor vehicle traffic to an emphasis on integrating bicyclists with motor vehicle traffic. This largely translates into recognizing the bicycle as a vehicle, providing in-street bicycle lanes, and assigning to the bicyclist all of the responsibilities and benefits associated with vehicular travel.

Existing and Future Needs

There are 5 types of bicycle travel facilities: (1) an in-street bicycle lane; (2) a paved shoulder; (3) a wide curb lane; (4) a bicycle path physically separated from the street; and (5) a sidewalk with ramps. In general, the first 3 types are considered safest for bicycle travel.

Bicycle paths (type #4) should only be constructed for routes not served by streets and where there is little or no cross flow by motor vehicles. Paths should be designed for exclusive or preferential use by bicyclists. Sidewalks (type #5) are generally unsuitable for bicycle transportation. Sidewalks for bicycle transportation should only be considered for a very special circumstances where other forms of bicycle route design are not feasible.[48]

One of the best ways to encourage bicycle use is to remove the conditions, costs, and barriers which limit bicycle use or make it unsafe. The barriers to commuting to work (or other utilitarian trips) by bicycle continue to be significant and widespread. Bicyclists are often faced with:

- A lack of street designs which accommodate bicycle transportation.
- Street hazards such as storm sewer grates, debris, rough pavement, high motor vehicle speeds, shoulder rumble strips, narrow traffic lanes on streets with high average vehicle speeds and excessive driveways.
- Traffic signals which ignore bicyclists.
- Workplace destinations without showers or lockers for a change of clothes.
- A lack of choice to live in housing that is close enough to destinations to allow convenient bicycling.

Key Engineering Strategies to Promote Bicycling in Gainesville

Street Design. Because of the increased speed and convenience it provides, utilitarian bicyclists (those making shopping trips, or commute trips to work or school) generally prefer to travel to destinations by using the same street network found most popular by motorists; namely, arterial and collector streets. As noted earlier, Figure 15 shows that 39 percent of arterial and collector street mileage within the Gainesville urban area are not currently designed to accommodate bicycle transportation.

Bicycle lanes on streets. Up to 95 percent of the public will not bicycle to work, to shopping, or to a park unless they are provided with bike lanes or separate bike paths. On local neighborhood streets, in downtown, and other neighborhood (activity) centers, there is a reduced need for bike lanes when vehicle speed is 20 to 25 miles per hour, and the need is minimal when speeds are 15 to 20 miles per hour. One study has found that cities with substantial bicycle lane mileage have three times more bicycle commuters than cities without such facilities. No significant bicycling occurs in any industrialized area without dedicated bicycle facilities.[49] Of people who biked at least once in the past year, 46 percent would occasionally commute to work by bicycle if safe bike lanes were available.[50]

In Gainesville, bicycling facilities are relatively prevalent and a large number of trips to the UF campus are made by bicycle. Over 75 miles of lanes were built in the 1980s, at the same time in

which a significant increase in bicycling activity occurred, and an 80-percent reduction in bicyclist fatalities were observed from 1980 to 1984.[51] Nevertheless, as noted above, approximately 39 percent of all arterial and collector street mileage within city limits is not designed to accommodate bicycle travel. Priority retrofitting should be assigned to those routes that link important local destinations such as shopping areas, schools, and parks.

Bike lanes allow more motorist swing-turning width onto and off of side streets, which enables turning radii at intersections to be smaller. This, in turn, reduces pedestrian crossing time and distance by 60 to 100 percent.[52]

Cities with higher levels of bicycle commuting have 70 percent more bikeways per street mile and 6 times more bike lanes per arterial mile than average.[53]

Strategic gaps. In most cities, the most effective way to use bicycle funds is to concentrate on projects that fill strategic gaps in the bicycle system or provide connections between major trip generators. These improvements complete bicycling corridors that would probably be used more often except for a critical missing section or the presence of a barrier. For prospective bicyclists, gaps in a corridor could mean the difference between riding a bicycle or driving a car. An example of a successful gap-filling project occurred in Eugene, Oregon. There, a "Greenway Bicycle Bridge" resulted in a reduction of at least 665 motor vehicle trips per week. Approximately 30 percent of all bicyclists surveyed would not have made the trip by bicycle if the bridge had not been built.[54]

Prioritizing Street Improvements for Bicycle Travel. As can be seen in Figure 15, important bicycle route gaps currently exist on city arterial and collector streets. Currently, 39 percent of arterial and collector street mileage within the city is not designed to accommodate bicycle travel. The most serious gaps that need to be filled are those where bicycle travel is most likely:

- Areas of relatively high residential density or commercial intensity
- Areas with a compact, mixed land use pattern (residential and non-residential within a 3-mile bicycling distance
- Arterial or collector street
- Proximity to a public school
- Proximity to a major public park or cultural facility
- Lack of alternative parallel routes
- Street segments that link existing bicycle routes
- Street segments displaying a high incidence of motor vehicle crashes with bicycles
- Streets serving major transit stops such as park-n-ride

Using these criteria, the most important bicycle route gaps that need to be filled are (see Table 13 for gaps identified by the MTPO):

1. NW 6th Street between University Avenue and NW 50th Avenue.
2. N 8th Avenue between NW 14th Street and Waldo Road.
3. NW 16th Avenue between NW 43rd Street and N Main Street.
4. Archer Road between SW 34th Street and SW 13th Street.
5. SW 16th Avenue between Depot Avenue and SW 13th Street.
6. NW 31st and 23rd Avenues between NW 34th Street and Waldo Road.
7. NE 15th Street between NE 16th Avenue and NW 53rd Avenue.
8. University Avenue between NW 21st Street and NW 23rd Street.

Table 13: Important Bike Lane Gaps Within Gainesville Urban Area

Priority	Street Segment	From	To	Type of Bicycle Improvement	Implementing Agency
MTPO '95	W. 75th St.	Archer Rd	University Ave	Bicycle lanes	County
MTPO '95	SW 2nd Ave	Newberry Rd	University Ave	Bicycle lanes	State
MTPO '95	Newberry Rd	I-75	NW 8th Ave	Bicycle lanes	State
MTPO '95	W. Univ. Ave	NW 23rd St	North/South Dr	Bicycle lanes	State
MTPO '95	W. Univ. Ave	NW 13th St	North/South Dr	Bicycle lanes	State
MTPO '95	N. Main St	N. 16th Ave	N. 23rd Ave	Bicycle lanes	County
MTPO '95	N. Main St	N. 8th Ave	N. 16th Ave	Bicycle lanes	County
MTPO '95	S. Main St	SW 16th Ave	Williston Rd	Bicycle lanes	State
MTPO '95	Depot Ave	PD&E start pt	PD&E end pt	Bicycle lanes	City
MTPO '95	NE 2nd St	NE 16th Ave	NE 10th Ave	Bicycle lanes	City
MTPO '95	NW 2nd St	NW 23rd Ave	NW 16th Ave	Bicycle lanes	City
MTPO '95	NW 6th St	NW 13th St	NW 8th Ave	Bicycle lanes	State
MTPO '95	NW 23rd Ave	I-75	N.W. 55th St	Bicycle lanes	County
MTPO '95	NW 23rd Ave	NW 13th St	Waldo Rd	Bicycle lanes	County
MTPO '95	SW 16th Ave	Archer Rd	SW 13th St	Bicycle lanes	State
MTPO '95	NW 19th St	NW 45th Ave	NW 31st Ave	Bicycle lanes	City
MTPO '95	NW 53rd Ave	U.S. 441	Waldo Rd	Bicycle lanes	County
MTPO '95	SE 15th St	SE 41st Ave	SE 14th Ave	Bicycle lanes	County
MTPO '95	NW 31st Ave	NW 16th Terr	NW 34th St	Bicycle lanes	County
MTPO '95	NW 34th St	University Ave	NW 1th Ave	Bicycle lanes	State
MTPO '95	NW 38th St	NW 16th Ave	NW 8th Ave	Bicycle lanes	City
MTPO '95	SE 43rd St	Hawthorne Rd	University Ave	Bicycle lanes	County
MTPO '95	E. 18th St	NE 8th Ave	Hawthorne Rd	Bicycle lanes	City
MTPO '95	Archer Rd	I-75	SW 13th St	Bicycle lanes	State
MTPO '95	NW 45th Ave	NW 24th Blvd	NW 13th St	Bicycle lanes	City
MTPO '95	SW 62nd Blvd	Newberry Rd	SW 20th Ave	Bicycle lanes	City
MTPO '95	NW 143rd St	Newberry Rd	CR 235	Bicycle lanes	County
MTPO '95	SW 63rd Blvd	SW 41st Pl	Archer Rd	Bicycle lanes	County
MTPO '95	Williston Rd	I-75	SW 13th St	Bicycle lanes	State
MTPO '95	University Ave	Hawthorne Rd	Lakeshore Dr	Bicycle lanes	County
MTPO '95	Lakeshore Dr	University Ave	Hawthorne Rd	Bicycle lanes	County
MTPO '95	SW 25th St	University Ave	SW 2nd Ave	Wide curb lanes	City
	Millhopper Rd	The Hammock	NW 43rd St	Bicycle lanes	County

Source: North Florida Regional Planning Council. (12/14/95) "Year 2020 Long Range Transportation Plan Update: Bicycle/Pedestrian Element."

Bicycle Parking. The City requires that most new developments provide bicycle parking. The result has been that the City now has a relatively large amount of parking suitable for bicycles. Nevertheless, important bicycle parking problems persist.

Within the City, bicycle parking inadequacies are found at most older developments which were constructed before adoption of the current parking ordinance. Also, many recently installed bicycle parking facilities are incorrectly designed or installed.

One bicycle parking strategy which can result in significant increases in both bicycle and bus commuting is the installation of bicycle parking adjacent to transit stops. (The University of Florida campus provides at least one example of such a facility.) In certain communities in California, Connecticut, Illinois, and New Jersey, such bike-and-ride lots allow 5 to 10 percent of all park-and-ride commuters to arrive at the lot by bicycle.[55] Such success is probably attributed to the fact that bicycling is in many ways well suited to trip distances often found between suburban homes and park-and-ride lots. However, because bicycles must be parked for long periods of time at such relatively unsupervised lots, bicycle parking facilities at such lots should provide a relatively high degree of bicycle protection from weather, theft, and vandalism. Prioritizing the installation of bicycle parking at park-and-ride lots should be based on the expected demand for such parking.

Top-of-the-line bicycle parking costs approximately $100 per space for racks to $1,000 per space for bicycle lockers as a fixed, one-time expense. Motor vehicle parking, by contrast, costs $1,450 to $3,820 per year at Stanford University.[56]

Encouraging Bicycling as a Form of Travel

"Encouragement" is the promotion of increased bicycle transportation through the creation of incentives for bicycling. While incentives should be offered to all citizens, it is most important that employers and school officials provide incentives to the two largest groups of potential utilitarian bicyclists: employees and students.

Both employers and employees benefit when employees commute to work on a bicycle. Employers benefit from lower parking costs, lower employee health costs and lower absenteeism, and increased employee morale. Employees benefit by enjoying increased physical fitness and lower transportation costs.

Employers can encourage employees to be bicycle commuters by:

- Providing adequate, sheltered, secure, convenient bicycle parking.
- Offering employees a transportation allowance (or “parking cash-out”) that can be used to pay for motor vehicle parking, bicycle equipment, bus passes, or walking shoes.
- Providing a flex-time option.
- Providing showers and clothing lockers.
- Offering bicycle riding information through an employee newsletter.
- Purchasing a fleet of bicycles for employee errands.
- Sponsoring encouragement campaigns such as bike-to-work days and public service announcements.
- Offering rewards and other recognition to employees who bicycle.
- Sponsoring community-wide bicycle recreation events, such as "Prairie Day" at the rail-trail.
- Reimbursing employees for trips made by bicycle, usually through use of a car trip reduction policy/ordinance.
- Sponsorship of employee bicycle clubs and outings.

Similar strategies are available to school officials for the encouragement of student bicycling.

An essential education tool and encouragement strategy in Gainesville is the development of the Trail Network. Trails are a critical gateway or “training ground” for novice bicyclists -- those just starting to ride and who are uncomfortable and unsure about bicycling. Trails are seen by the

novice as a safe, pleasant, sociable, recreational place to bicycle. Because they safely and conveniently link homes to jobs, shopping, schools, offices, and parks, they encourage high levels of travel by bicycle and foot. As has been shown in other communities with extensive trails, such off-street paths attract large numbers of novice bicyclists who, after bicycling on the trails, develop the skills, enjoyment and confidence to "graduate" to bicycling on streets, where it is more appropriate for "utilitarian" (as opposed to recreational) bicycle trips. By being such powerful gateways for beginners, trails educate large numbers of citizens about the feasibility and enjoyment of bicycling -- resulting in dramatic increases in bicycle travel throughout the community. There are currently 27.6 miles of designated Trail Network in the city (see Figure 17).

Bicycle Capital Improvements Needed

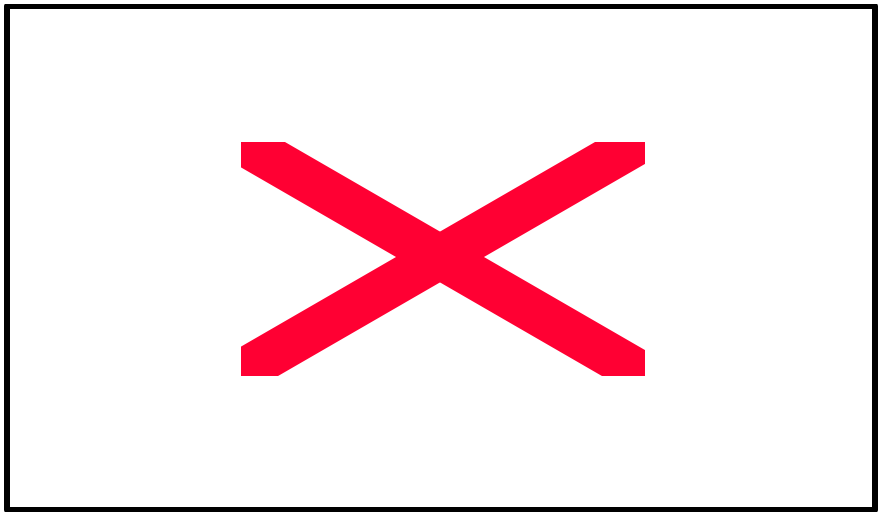
The 1995 Bicycle/Pedestrian Element of the MTPO "Year 2020 Long Range Transportation Plan Update" identified the following independent bicycle capital improvement priorities as needed in the urban area (see Table 13). By adopted policy, bicycle lanes or wide curb lanes are planned as an integral part of each street construction project. Therefore, many projects that are bicycle capital improvements are not listed below because they will be included as part of a street modification project.

Sustainability Indicators for Bicycling

An important indicator for how "bicycle friendly" the city has become is the annual bicycle counts trend. As can be seen in Figure 16, the trends in bicycle counts have steadily declined since 1984. This decline may be attributed to:

- Free and abundant surface parking for cars throughout most of the city.
- The cost of gasoline, adjusted for inflation, remaining the lowest it has ever been.
- The growing dispersal of residences, retail and office establishments, and community-serving facilities.
- An increase in per capita car ownership.

Figure 16. Bicycle Counts for Gainesville Urban Area



Source: Gainesville Traffic Engineering, 1999.

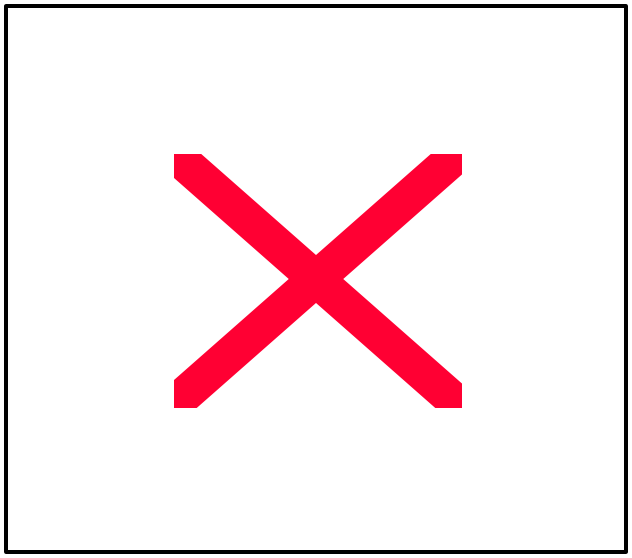
Another important sustainability indicator for bicycling is the percent of major street mileage (arterials and collectors) within the city that are designed for safe bicycling (wide curb lane, shared parking lane, paved shoulder, or in-street bicycle lane). Arterials and collectors are the most important streets for bicycle commuters, since, like for motorists, these routes are the fastest for bicycle travel and are therefore preferred by the bicycle commuter. Without safe bicycle access to major streets, bicycle commuting is unlikely to occur at meaningful levels.

Figure 17 shows historical trends in the percentage of major streets within city limits that are designed for safe bicycling.

The Trail Network

The Trail Network is a set of paths serving bicyclists, pedestrians, and people in wheelchairs that are separate from the street and sidewalk system -- usually following a creek or abandoned railroad right-of-way. Trails are a cost-effective way to provide a popular transportation system for pedestrians and bicyclists. (Note that because of the low-density, suburban character of American cities such as Gainesville, most trails and rail trails have higher levels of bicycle use than pedestrian use.)[57] Gainesville's 1991 Comprehensive Plan designated 28 miles of trails as part of the Trail Network (see Figure 18). The trails run through each of the four quadrants of the urban area.

The 3 keys to making such trails useful for transportation are accessibility to the trail (including convenience of the trail to major destinations and a large number of access points along the trail), an active maintenance program, and trail safety.[58]

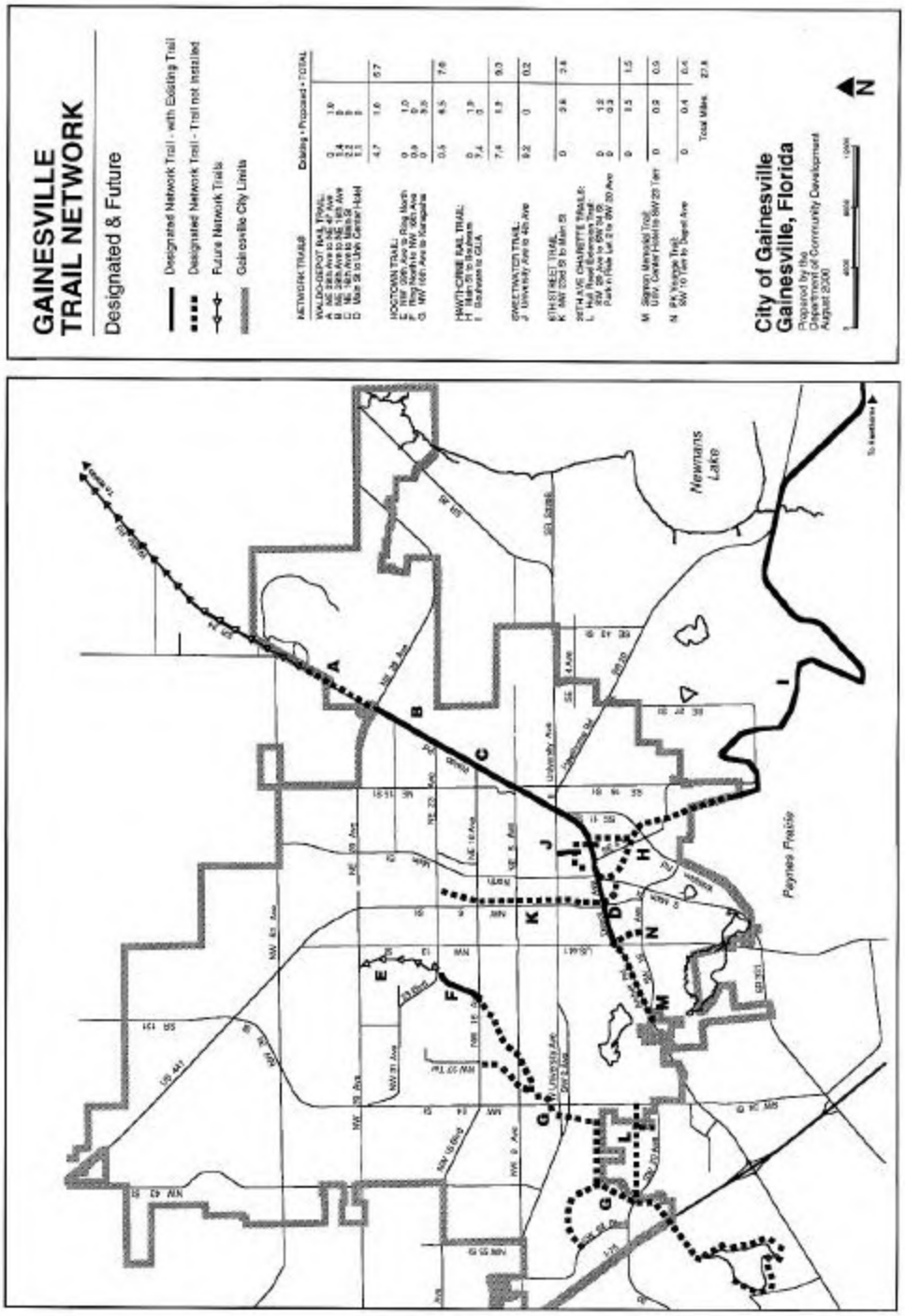


The importance of trails as a safe alternative for bicyclists and pedestrians is shown by studies indicating that the main disincentives to bicycling, besides weather, is motor vehicle traffic safety hazards and lack of bicycle routes.[59] Also important are travel time and travel distance, secure parking, and destination facilities such as showers and lockers.[60]

Of the people who have bicycled at least once in the past year, 53 percent would commute by bicycle if safe, separate paths were available.[61]

A recent survey along the urban-oriented Pinellas Rail Trail (Pinellas County, Florida) found that 30 percent of the trips were for utilitarian purposes such as shopping or commuting to work. Most or all of these trips would have been motor vehicle trips had it not been for the trail.[62]

The City is incrementally establishing a citywide Trail Network consisting of creekside trails, rail-trails, and utility easements and right-of-way corridors. The intent is that these trails accommodate pedestrians, bicyclists and people using wheelchairs in the interest of maximizing transportation choice for all ages and skill levels, and promoting the most efficient use of public transportation expenditures. Therefore, to the extent possible, the trails should be designed to safely and conveniently provide access for all forms of non-motorized travel.


GAINESVILLE
TRAIL NETWORK
Designated & Future
Designated Network Trail - with Existing Trail
Designated Network Trail - Trail not Installed
Future Network Trials
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
August 2000
N
Newnans Lake
Paynes Prairie

Trail Network gaps

A number of "gaps" in the Trail Network need to be filled to make the Network significantly more effective and popular. The most important gaps needing to be filled include:

- The **6th Street Rail-Trail Gap**. This gap is an abandoned rail corridor that runs from NW 23rd Avenue to Depot Avenue, and would provide trail network access from north and northeast Gainesville.
- The **Downtown Connector**, which would link the Waldo, Depot, 6th Street and Sweetwater Trails (which connect in the downtown area on Depot Avenue) to the highly popular and scenic 17-mile Gainesville-Hawthorne Rail-Trail.
- The **Waldo/University Avenue Gap**. This gap occurs at the intersection of East University Avenue and Waldo Road, where a major street intersection creates a significant barrier to the convenient and safe use of the Waldo Rail-Trail.
- The **Matheson Center Gap**. This gap occurs just west of the Matheson Historical Center, where the Sweetwater Trail crosses E. University Avenue.
- The **UF Campus Gap**. This gap occurs just west of the Depot Rail-Trail bridge crossing SW 13th Street, where the Depot Trail must cross the very dangerous Archer Road in order to reach the UF campus. There is no clear trail route from this point to SW 34th Street.

Cars

Widening Streets Does Not Reduce Traffic Congestion

An analysis by The Surface Transportation Policy Project, a respected transportation research organization, shows that the most common way to ease congestion has had little effect on the growth of motor vehicle traffic congestion in major urban areas in the last 15 years.[63] The analysis compared urban areas that have added extensive new street capacity with those that have not, and found no significant difference in the rise in motor vehicle traffic congestion.

Extravagant spending by various urban areas did not help drivers avoid the costs of being stuck in traffic, compared to those areas that did not spend large amounts of money to add capacity. The analysis found that between the two groups, the urban areas that added more new lanes spent roughly $22 billion more on construction, but their drivers are still paying high costs due to congestion delays, and these delays are not made up for by time savings due to the widenings, since the savings are either small in comparison to the delays, or result in *more* lost time due to the "triple convergence" (or "induced traffic") problem. Therefore, widening streets is not only ineffective, but it is expensive as well.

The report noted that part of the problem may be what is known as "induced traffic." Several recent studies have documented that widened streets actually encourage more driving and more motor vehicle trips than would have occurred had the street not been widened. A University of California study of 30 urban counties in the state found that every 1 percent increase in lane miles generates a 0.9 percent increase in motor vehicle traffic within five years, negating the congestion-easing effect of wider streets. The Federal Highway Administration found in a recent study in Milwaukee that induced traffic accounted for 11-22 percent of the area's increased motor vehicle traffic from 1963 to 1991.

When drivers perceive an increase in either travel time or cost, they typically respond by changing their travel routes, traveling at a different time, or traveling less by car. When street capacity is expanded near congested routes the opposite happens -- drivers throughout the region flock to the new facility hoping for reduced travel times, thereby increasing the total amount of motor vehicle traffic in the region. Anthony Downs[64] calls this the "Triple Convergence."

Almost all car drivers normally hunt for the fastest route, according to Downs. Since most drivers know where the fastest routes are, they converge on the fastest routes from many points of origin.

Downs notes that unfortunately, during rush hour on weekdays, so many drivers converge on these fastest routes that the routes quickly become congested, particularly in urban areas. Car travel on these routes eventually slows to the point where they have no advantage over the alternative routes. In other words, a "route speed" equilibrium is reached on the various routes. Sometimes the direct street may become even slower than alternative streets, and some drivers eager to save time will switch to these indirect streets. Soon, travel times on both types of route is approximately the same. The opposite happens if travel becomes slower on alternative streets than on the direct arterial or collector route.

If the more direct and major urban street is widened to have more travel lanes, the drivers using it move much faster than those using alternative routes. But this faster movement condition only

lasts briefly because other drivers soon learn that this newly widened street is faster. Once they learn, they converge on this faster route and soon congest it.

Therefore, 3 types of convergence inevitably occur on the widened street:

(1) Many drivers who formerly used alternative routes during rush hour switch to the widened street (spatial convergence);
(2) Many drivers who formerly traveled just before or after rush hour start traveling during rush hour (time convergence); and
(3) Some commuters who used to take transit during rush hour now switch to driving, since driving a car has become faster (modal convergence).

Conventional transportation models typically ignore human reactions to time costs and prices. They also assume that land uses won't change, regardless of what transportation infrastructure is built. In using these conventional models for transportation planning, land use is only an input to the models. That is, the models claim, unrealistically, that if you build a freeway out into the cornfields, the farmers won't sell out to developers.

Finally, the models assume that levels of bicycling and walking remain the same, regardless of the quality of the bicycle and pedestrian space provided. This is clearly untrue, since contemporary transportation facility construction is a "zero-sum" game. In other words, any modification that improves conditions for motor vehicle travel will result in a less safe, less convenient, and less pleasant trip for all other forms of travel -- thereby discouraging such trips.

Therefore, the conventional models overestimate the congestion produced by removing travel lanes; and they fail to predict that new lanes added to a congested system will quickly generate new motor vehicle traffic, and become congested.

Evidence of induced traffic is rarely used in travel modeling, where it would have a big impact on deciding whether a street modification project gets built. The City position is that travel modeling used for street analysis in the Gainesville area shall incorporate induced traffic impacts in the traffic models used.

In the early 1990s, the City Commission adopted a resolution stating that streets within the city shall not be widened beyond 6 travel lanes. However, Reid Ewing[65] states that "...the concept of human scale implies two or four travel lanes, no more. It is hard to find a 6-lane street that is easy to cross, pleasant to walk along, or comfortable to wait along when using transit."

Too Much Street and Car Parking Capacity Creates More Air Pollution and Fuel Consumption

According to researchers in Australia,[66] cities that

- Increase residential and job density;
- Increase transportation choices by designing for all forms of travel and not just single-mindedly for cars;
- Rarely or never widen streets;
- Focus on the core area downtown; and
- Have healthy transit

are cities where gasoline consumption diminishes. In addition, cities with a very high percent of total trips made by motor vehicle have 2.5 times more central area parking per 1,000 Central Business District (CBD) jobs than cities where trips are more balanced between the car and other forms of travel. These researchers recommend no more than 200 parking spaces per 1,000 CBD jobs. A 1995 analysis found that Gainesville's CBD has more than 4 times this threshold: approximately 840 parking spaces per 1,000 CBD jobs.

In addition, the research points out that even though congestion diminishes significantly from central to outlying areas and vehicle fuel efficiency improves, actual per capita gasoline use increases significantly in outlying areas. Vehicles in central areas have lower fuel efficiency than the average for a city due to congestion, but the central area residents use approximately 25 percent less gasoline.

Essentially, the better fuel efficiency and lower air pollution emissions that individual cars experience in outlying areas are negated because in the congested but denser and more compact central area, travel distances are shorter and people are more likely to use transit, walk or bicycle. Widening streets tends to disperse the city and create greater levels of car dependence. Both gasoline consumption and air pollution are higher overall in a more dispersed, car-dependent community.

The objective, therefore, is to "level the playing field" so that there is less car dependence and car subsidy, and a reallocation of available transportation funds toward more transportation choice. So for example, less effort should be devoted to widening streets and increasing car parking supply, and more spent buying buses, building sidewalks and bike routes, and more effort directed toward developing compact, in-town development.

Existing System and Analysis for Cars

We are now 15 years into implementation of the 1985 Florida Growth Management Act, which was billed as the solution to Florida's uncontrolled and explosive population growth problems. Yet the state is more plagued than ever with sprawling low-density suburban growth, a proliferation of citizen opposition to such growth, the emergence of a "property rights" movement, an escalation of taxes, a decline in services, the creation of seas of asphalt, the construction of miles of commercial strips, and near-gridlock motor vehicle traffic congestion.[67]

Why has the Act not succeeded in controlling sprawl? The answer, it seems, lies in our approach to transportation problems.

For the past several decades, our response to motor vehicle traffic congestion has been directed toward measures which increase street capacity (primarily by adding travel lanes and turn lanes). However, because this increased capacity has created a positive feedback loop (increased street capacity creates incentives for more low-density suburban development and disincentives for bicycling, walking, and transit, which, in turn, creates incentives for more street capacity, ad infinitum), street capacity increases have not been able to keep pace with the demand (a substantial increase in the numbers of cars on streets, the distance traveled by car, and the number of car trips per household since the street widening sprees of the 1950s and 1960s).

The demand by motorists for more street capacity has become so great that a growing number of transportation agencies (such as the California and New Jersey Departments of Transportation and the US DOT) can no longer justify the astronomical costs necessary to widen streets. The

response to motor vehicle traffic congestion is increasingly shifting from increasing street capacity to a much cheaper and socially beneficial strategy of "managing demand."[68]

Unfortunately, this fundamental shift in perspective regarding transportation solutions has still not made much headway in Florida. An important reason why this shift has not yet occurred here is the transportation concurrency requirements of the Growth Management Act.

It is widely acknowledged that the "teeth" of this legislation was to force local governments to establish level-of-service (concurrency) standards that cannot be degraded or lowered by new development. The standards came in response to rapid growth over the past few decades -- growth that often led to congested streets; overcrowded schools and parks; excessive, environmentally destructive demands for water, electric and sewer service; higher taxes; and overflowing landfills throughout the state.

In theory, the level-of-service standards are laudable. They establish a "truth in planning" requirement which gives local governments a choice: either certify that the new shopping center or subdivision will not lower service standards, or prohibit the development.

In general, the standards seek to ensure that enough capacity exists to absorb the new development -- enough landfill space, enough park space, enough drinking water supply. However, while this "capacity" approach makes sense for most services, it is counter to sustainable community improvement objectives when it is applied to maintaining capacity for car travel.[69]

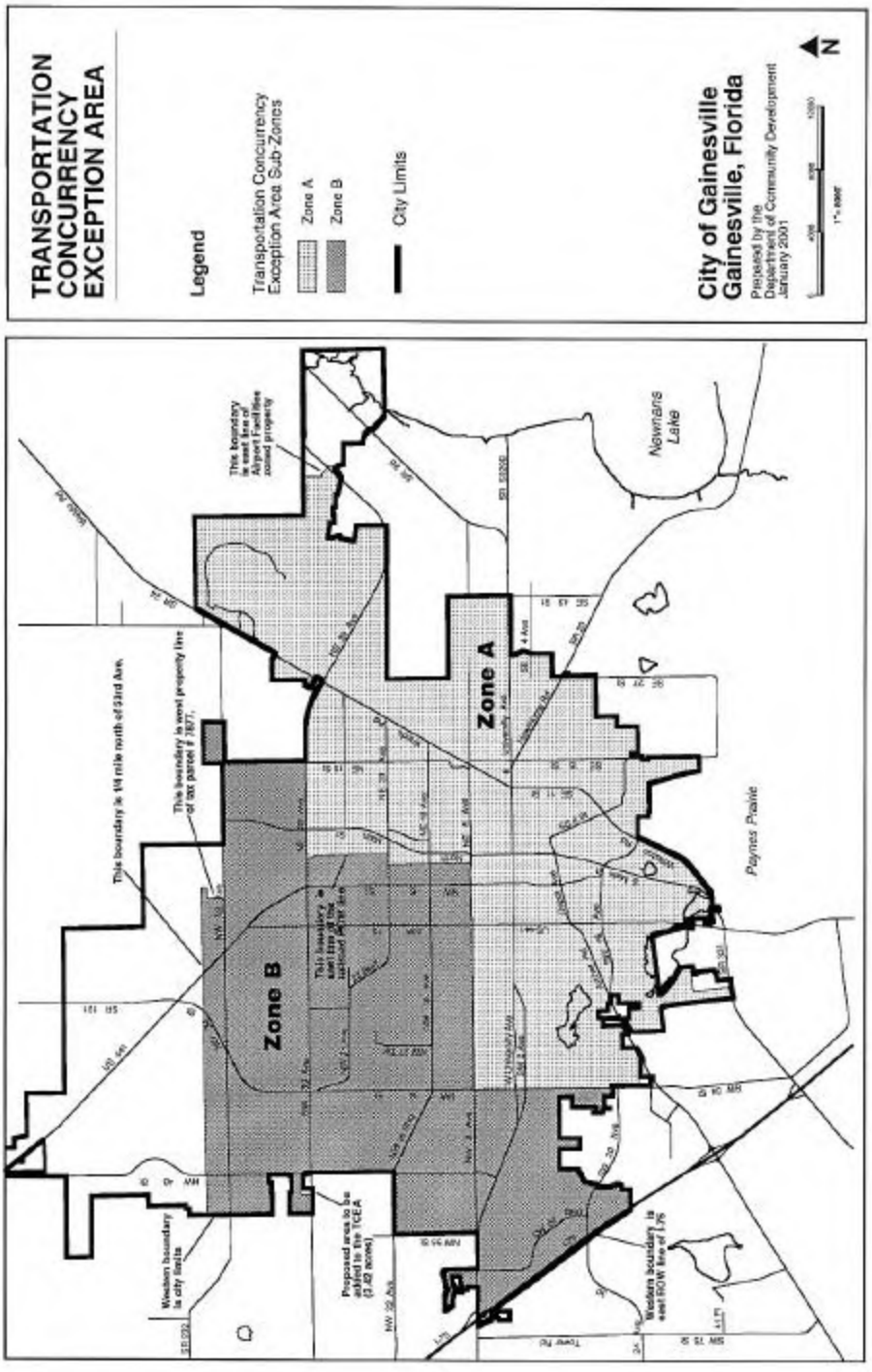
This is true for at least 2 reasons: The first is that most available street capacity typically exists in the places that are least appropriate for new development -- the remote, dispersed locations that, when developed, cause environmental and social problems, excessive dependence on cars for travel, and place excessive service demands on local governments. Meanwhile, lack of street capacity is typical in those parts of the community that are most appropriate for development -- the closer-in locations near or within our existing commercial and residential neighborhood (activity) centers. The result of applying a capacity (concurrency) standard to streets is that we create a plan which, when implemented, will create strong incentives for developing in outlying areas. And such a development pattern is counter to the objectives of our Plan for a more compact, sustainable, livable city with transportation choices. Therefore, street concurrency standards, when they encourage more dispersed development, are clearly an internal contradiction within a Plan that calls for such land use and transportation objectives.

The second reason that a capacity standard is flawed when applied to streets is that it erroneously assumes that maintaining or increasing street capacity in cities is beneficial for cities. But this is simply untrue. The reason that maintaining or increasing street capacity is considered beneficial is that most of us have come to think that the sole purpose of streets is to move the maximum number of cars (and to allow them to move as fast as possible). In fact, the purpose of streets (and other parts of our transportation system) is actually to move *people and goods* (as well as to allow people to congregate along streets for socializing, business, and politics). It has become abundantly clear that increasing street capacity cannot, in the long run, keep up with the demand for capacity (as already noted above).

Because of such factors as “induced traffic” and “triple convergence” (see “Widening Streets Doesn’t Reduce Traffic Congestion” below), the fact that higher levels of street vehicle congestion promotes many community livability and sustainability objectives, and the fact that

area-wide level-of-service concurrency requirements promote urban sprawl, the City has recently established a "Transportation Concurrency Exception Area" (see Figure 19).

If transportation level of service is to accommodate the City objectives of transportation choice and livability, it must, as a concurrency measure, go beyond simply using the capacity of streets to carry large numbers of high-speed cars.[70] Transportation concurrency must be revised to include additional measures of quality of life: How well the streets create livable neighborhoods, healthy retail, economic efficiency, and a sustainable future, for example.


TRANSPORTATION CONCURRENCY EXCEPTION AREA
Legend
Transportation Concurrency Exception Area Sub-Zones
Zone A
Zone B
City Limits
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
January 2001
N
Zone A
Zone B
Newnans Lake
Paynes Prairie
This boundary is 1/4 mile north of 53rd Ave.
This boundary is west property line of tax parcel # 7877.
This boundary is east line of Airport Facilities zoned property
Western boundary is city limits
Proposed area to be added to the TCEA (3.62 acres)
Western boundary is east ROW line of I-75

Street Classification

Arterials, collectors and limited access streets. Figures 20 and 21 show arterial streets, collector streets, and limited and controlled access streets that are at least partially within city limits. The classifications are based on state "functional classification." The number of travel lanes is shown on Figure 22. The number of travel lanes is based on the number of "through" lanes, in both directions, passing through the "terminal intersection" of a particular street segment. The number of travel lanes therefore does not include turn lanes. None of the city arterials are one-way streets. Figure 23 shows maintenance responsibility for all functionally classified streets.

Peak Hour Level of Service for the Street Network

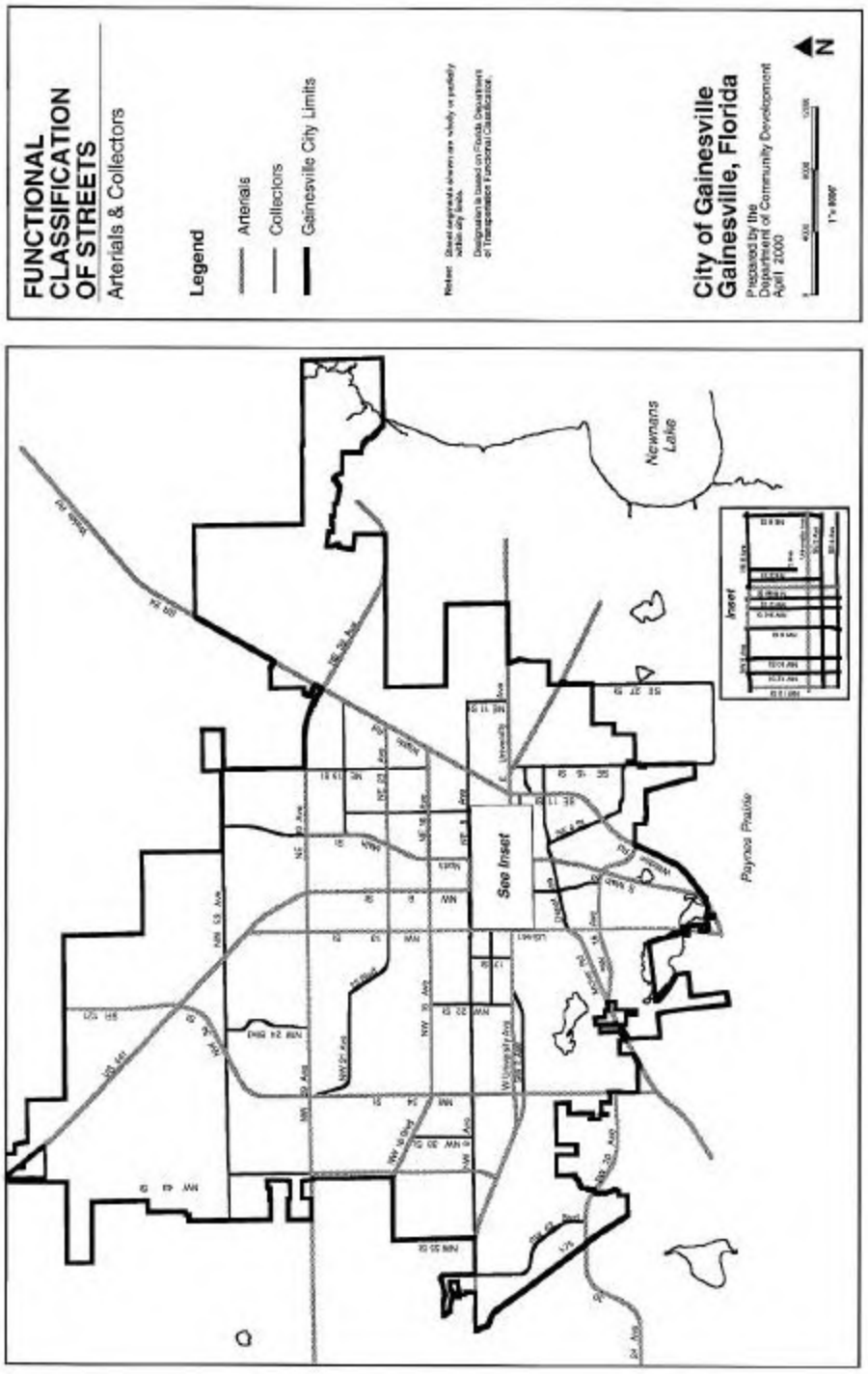
Peak hour level of service for the city street network is shown in Figure 24. Note that this figure does not include trips "reserved" on various streets by future development. However, the City is de-emphasizing the use of level of service standards for cars, and the concern for maintaining car street capacity that these standards imply. This de-emphasis is, in part, demonstrated by the Transportation Concurrency Exception Area (TCEA – see "Exception Areas" section below) recently adopted by the City.

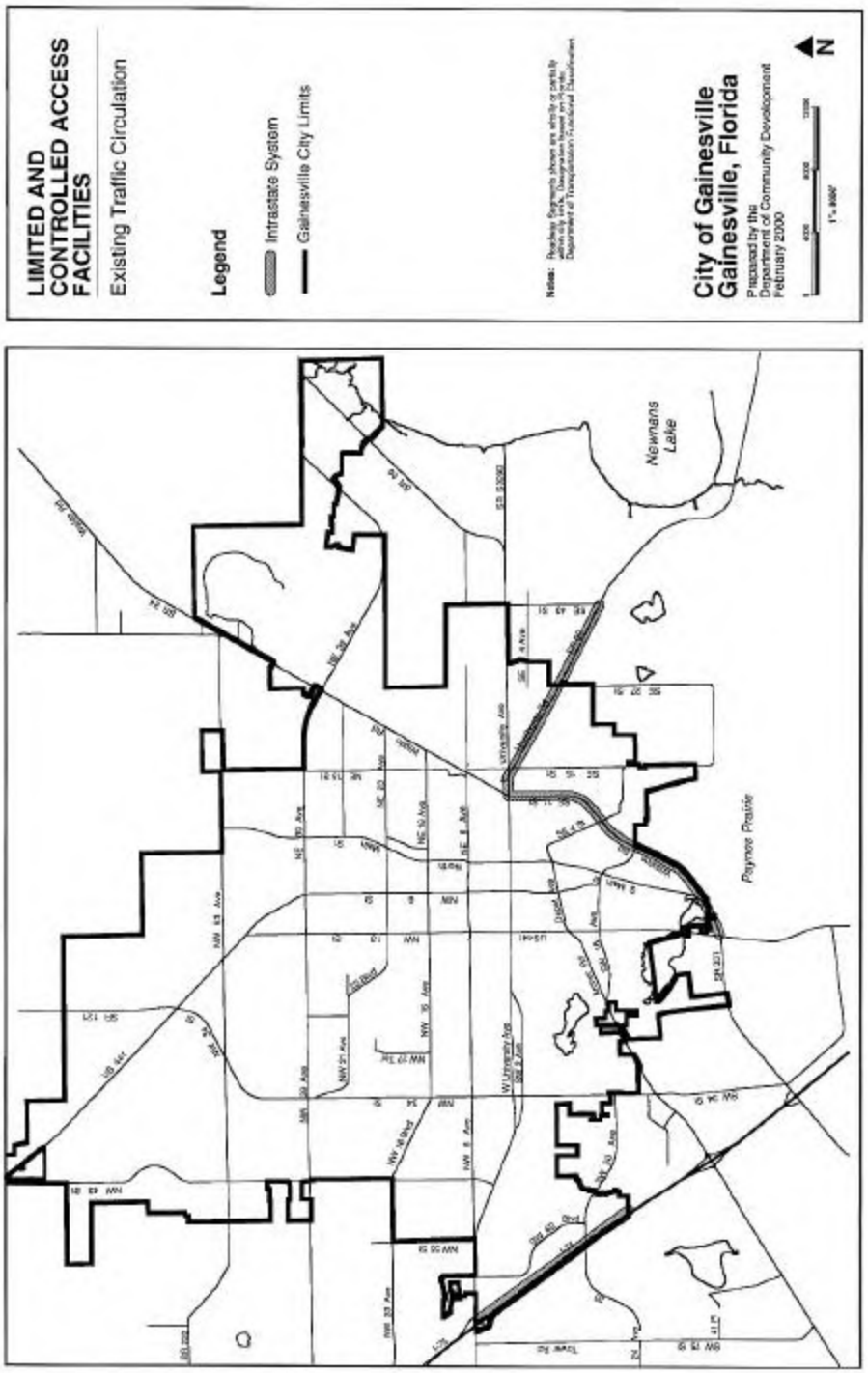
This de-emphasis is driven by the intent to create more transportation choice in the city, and discourage urban sprawl. Maintaining street capacity for cars through level-of-service standards required by the State of Florida works against this intent, since it discourages transportation choice and encourages sprawl. Sprawl is encouraged partly by street level of service standards. When such standards compel the creation or maintenance of free-flowing, high-speed car traffic, residents find it easier to live in remote locations, as commute time by car is more tolerable when living in remote areas. Consequently, such standards make in-town areas less hospitable to residences (which also encourages people to leave the city), as the streets near the in-town areas are little more than "escape routes" for residents in remote locations.

Furthermore, as noted elsewhere in this report, adding capacity to overburdened urban streets is ineffective and counterproductive because of the "triple convergence," wherein traffic problems are worsened due to "induced traffic" that would not have occurred in the absence of the capacity increase. It is simply a recognition that the City cannot, even in theory, build its way out of congestion, and the City hurts attainment of a number of important community objectives when trying to do so (such as quality of life, reduction of auto dependence, financial health, and discouragement of sprawl). In addition, the City recognizes that there are a number of benefits of traffic congestion in attaining those objectives.

Congestion is now less seen as a "problem" so much as it is more often seen as a solution.

Travel by various forms of transportation is self-regulating. That is, since adding street capacity encourages more car travel than would have occurred had there not been an increase in capacity, the converse is also true. Because people value their time, money, and quality of life, they adjust their travel and lifestyle behavior so that they are less dependent on car travel in the face of increased congestion. Over time, more people will choose to live closer to their destinations, and increasingly walk, use transit, bicycle or carpool.


FUNCTIONAL CLASSIFICATION OF STREETS
Arterials & Collectors
Legend
Arterials
Collectors
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
April 2000
N
Newnans Lake
Paynes Prairie
See Inset
Inset


LIMITED AND CONTROLLED ACCESS FACILITIES
Existing Traffic Circulation
Legend
Intrastate System
Gainesville City Limits
Notes:
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
February 2000
N
Newnans Lake
Paynes Prairie

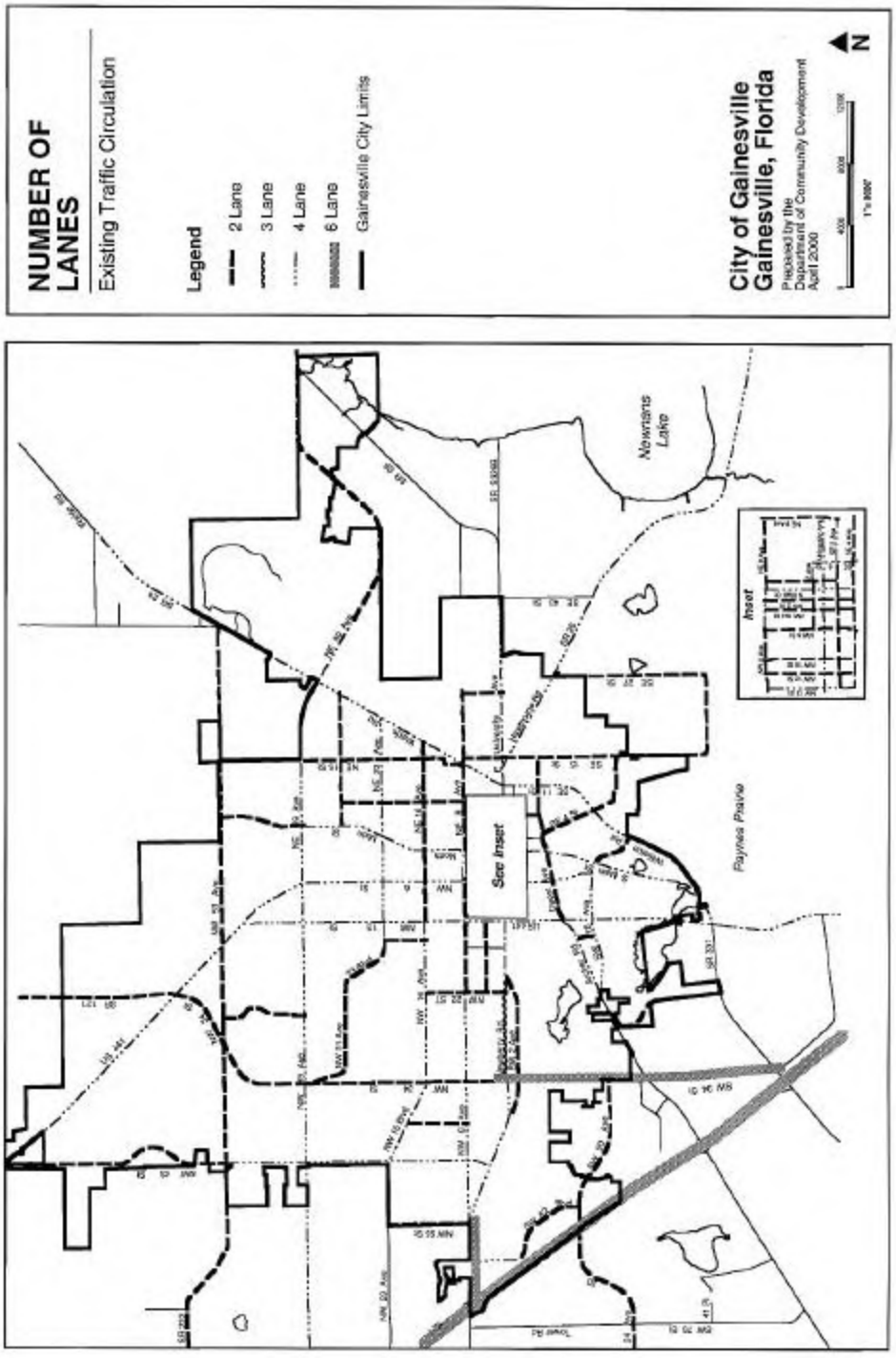
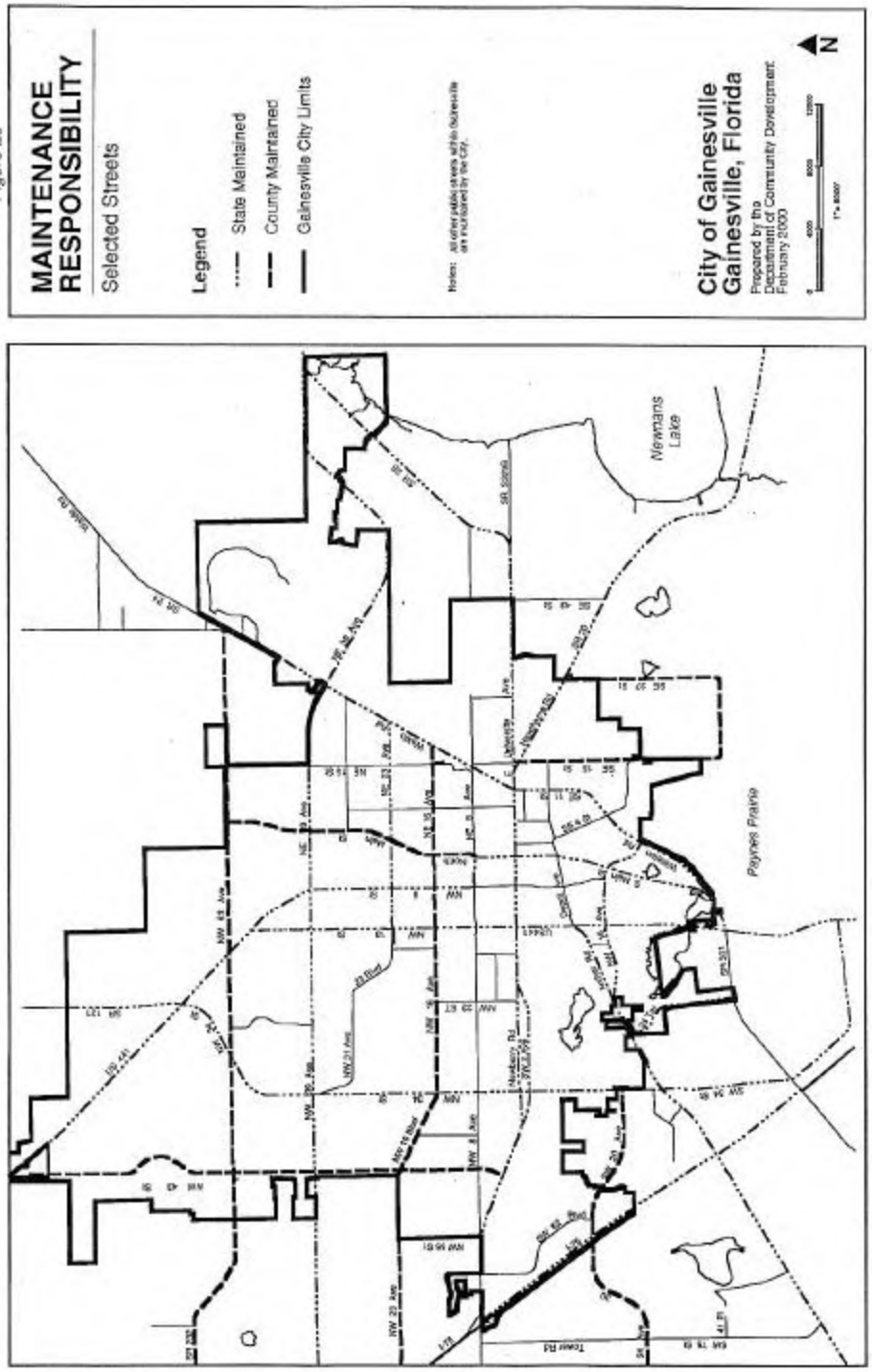
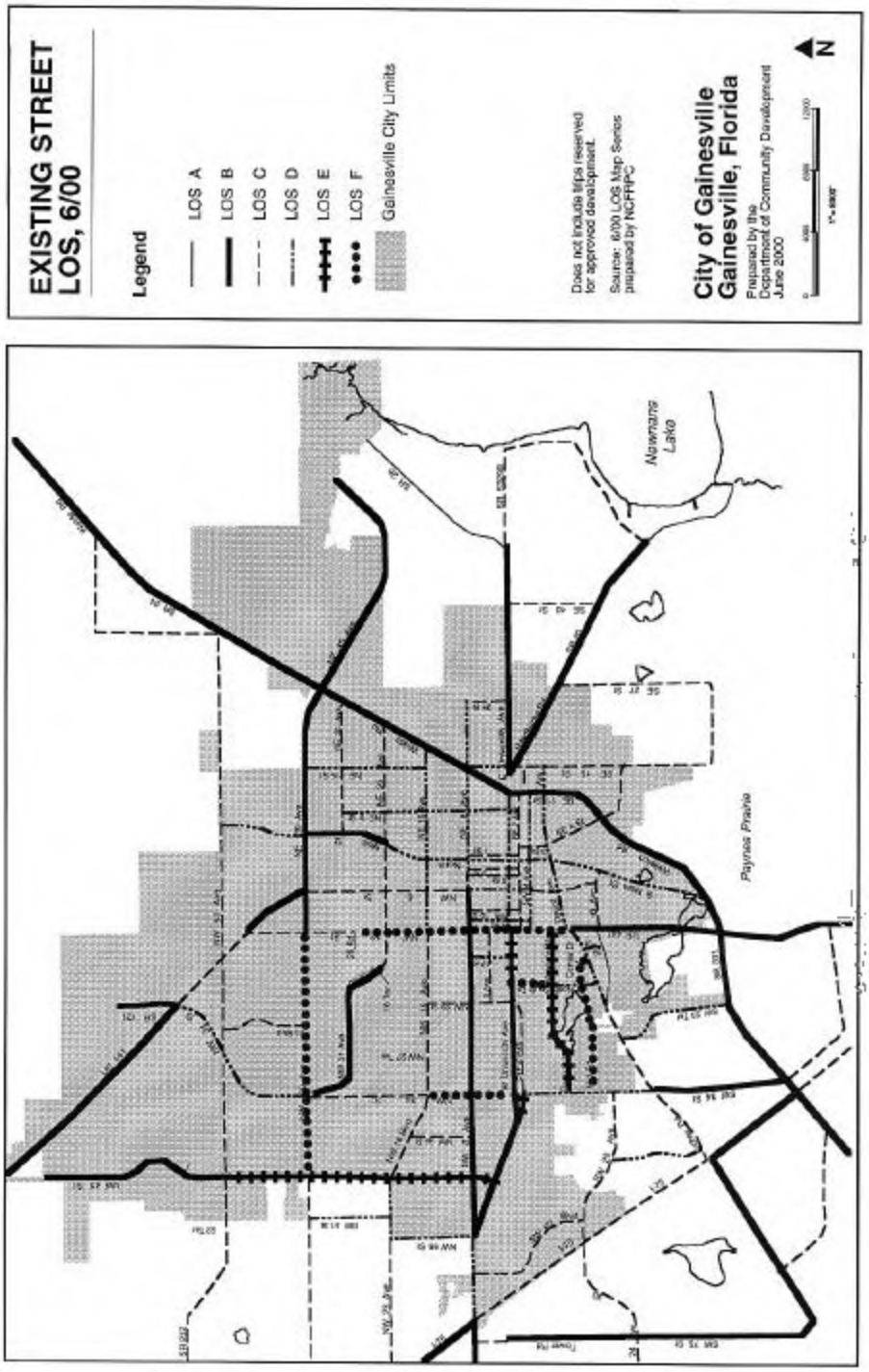

NUMBER OF LANES
Existing Traffic Circulation
Legend
2 Lane
3 Lane
4 Lane
6 Lane
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the
Department of Community Development
April 2000
N
Newnans Lake
Paynes Prairie
See Inset
Inset

Figure 23


MAINTENANCE RESPONSIBILITY
Selected Streets
Legend
State Maintained
County Maintained
Gainesville City Limits
Notes: All other public streets within Gainesville are maintained by the City.
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development
February 2000
N
Newnans Lake
Paynes Prairie


EXISTING STREET
LOS, 6/00
Legend
LOS A
LOS B
LOS C
LOS D
LOS E
LOS F
Gainesville City Limits
Does not include trips reserved for approved development.
Source: 6/00 LOS Map Series prepared by NCFRPC
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development June 2000
N
Newnans Lake
Paynes Prairie

In addition to the above, conventional level-of-service standards for streets suffer from the fact that they do not take into account street conditions that would protect and promote healthy conditions for adjacent land uses, the needs of forms of travel other than by motor vehicle, and the many potential uses of the street (access, aesthetics, celebration, shopping, socializing, etc.). In other words, the condition of streets within the city goes far beyond evaluating average motor vehicle speeds, average motor vehicle delays, and average travel time for motorists.

Examples of this theoretical and policy shift away from free-flowing, higher speed motor vehicle travel are plans to redesign a portion of University Avenue from West 34th Street to Waldo Road, the adoption of a transportation concurrency exception area (TCEA), and citywide efforts to install traffic calming features.

To balance this de-emphasis on conventional level-of-service street concurrency measures, the City has established a TCEA for nearly all of the city. The City will nevertheless continue to monitor motor vehicle traffic volumes and level of service for motor vehicles on streets within the city as one way to evaluate the effectiveness of the TCEA measures, to keep track of levels of service for car travel, to satisfy state requirements, and as a way to require motor vehicle traffic reduction measures from proposed new developments within the city.

For the small portions of city that are outside of the TCEA, the City intends to establish a relatively low level-of-service (LOS E). At a minimum, the standard must be lower than those adopted in the unincorporated urban area.

The Transportation Concurrency Exception Area (TCEA – see "Exception Areas" section below) requires the City to annually monitor and evaluate the impacts of developments in the TCEA on the Florida Intrastate Highway System (FIHS) and share that information with FDOT. The Intrastate System serving Gainesville consists of 3 routes:

Intrastate Street	Existing Level of Service	Maximum Service Volume
I-75	B	73,400
Hawthorne Road	B	33,300
Williston Road	B	33,300

None of the Intrastate (FIHS) streets are projected to exceed the maximum service volume (LOS C) for the adopted level of service standard within the TCEA. Since there are no major land use amendments, which potentially would change development density, being considered or proposed for these street segments, the TCEA will have a minimal impact on these streets. The City will engage in an annual review and monitoring of these street segments. Thus, an early warning system has been instituted to evaluate potential level of service problems on these streets.

Land Use

The transportation system has a profound influence on future land use patterns. The City recognizes that transportation drives land use and the feasibility of transportation choice. Street modifications in the city should therefore support land use, housing choice, and transportation choice objectives.

For example, transportation system modifications that promote free-flowing motor vehicle traffic encourage longer motor vehicle trip distances and more frequent motor vehicle trips. This tends, over time, to make it more feasible to live in more remote, outlying residential areas, and to separate land uses into single-use pods. Therefore, the following modifications effectively promote urban sprawl:

Transportation Modifications and Attributes that Promote Urban Sprawl:

- Adding travel lanes (street widening)
- Adding turn lanes
- Adding free and abundant parking for cars
- Removal of on-street parking for cars, or removal of raised medians
- Installation of one-way streets, unless doing so is necessary to create more space for on-street parking or sidewalk widening.

The Future Land Use Map Series (see FLUE) shows a multi-centered land use pattern based on a network of neighborhood (activity) centers throughout the city. This contrasts with a "single downtown center" land use pattern. Figure 3 (see FLUE) shows the existing neighborhood (activity) center pattern. The intent of the City, to achieve several transportation and livability objectives, is to increase the density and intensity of the neighborhood (activity) centers through redevelopment and other forms of in-town development. Table 14 shows designated future land use by acreage and percentage of the city.

Table 14 shows acreages and percent of total city acreage for each land use category. Since 1991, due to annexation, there is now 9 times more agriculture land within city limits, and more than twice as much conservation land (only the single family, industrial, and public facilities land use categories have greater proportions of land within the city than conservation land). Industrial land nearly tripled since 1991, office land nearly doubled, and the amount of planned unit development land is now 7 times greater than in 1991.

Table 14: Acreage and Percent of Total for City Land Uses

Land Use	Acreage	Percent of Total
Single Family	7,952	29
Public Facilities	4,157	15
Industrial	2,496	9
Conservation	2,468	9
Education	2,263	8
Residential Low Density	1,617	6
Agriculture	1,486	5
Residential Medium Density	1,231	4
Planned Use District	982	4
Commercial	591	2
Recreation	556	2
Mixed Use Low	537	2
Mixed Use Medium	427	2
Office	422	2
Residential High Density	294	1
Mixed Use High	131	<1
Mixed Use Residential	36	<1
Total	**27,647**	**100**

Source: Gainesville Department of Community Development, March 1999.

Housing and Employment Patterns

The City designates land for single- and multi-family residential development, and mixed use (residential and non-residential) development. Office designations also allow multi-family development.

The City seeks to have the highest residential density in the areas immediately surrounding the UF campus and the downtown area, which is an effective way to reduce trip lengths and increase transportation choice, but in a manner that preserves single-family neighborhood stability and quality of life. This land use objective is reflected in land use designations. Additional multi-family designations are found along arterial streets and surrounding neighborhood (activity) centers. Nearly all neighborhood (activity) centers contain land which has been designated for mixed use development. The existing mixed use designated lands are primarily commercial, retail, and office. These mixed use lands are significant employers that could have a positive impact on reducing car trips if residential development were incorporated into them. The largest employment concentrations, however, are found in the downtown/UF area, which contains the main UF campus, Shands Hospital, Veterans Administration Hospital, Alachua General Hospital and various City, County and other government offices. Each of these significant employment areas can have a beneficial impact on reducing car trips if various tools (such as parking management, site design, or transportation demand management) are incorporated.

Projected Levels of Service for Cars

Methodology. Projected service volumes for 2020 are based on the Gainesville 2020 Long-Range Transportation Plan (see Table 15).

Projected Transportation System Needs for Cars. Several factors shape the City's need for future transportation facilities for motor vehicle traffic with regard to the Future Land Uses shown on the Future Land Use Map. These factors are:

1. **Amount of vacant land**. As of April 1999, 93 percent of the land area of the City was developed. Only 3,569 acres of unimproved land remains. Most of the vacant land is limited in its development potential by site constraints, such as floodplains, creeks, wetlands, uplands and irregular shape. It is unreasonable to expect any significant change in the current pace of development. The 1980-2000 plan also included land use designations at greater density than the actual built condition. While the 1991-2001 Plan provided some incentive for redevelopment as result of the relatively high allowable densities, it is not expected that the amount of redevelopment will significantly alter the straight line projections used in the current 2020 Gainesville Long Range Plan to predict level of service conditions for motor vehicle traffic circulation in 2020.

2. **Rate of growth**. The population projections indicate a 1.18 percent annual growth rate from 2000-2010. In the 1980s, the growth rate in the City was less than 1.00 percent per year.

3. **Development areas**. The Future Land Use Map is similar to the 1980-2000 Land Use Map. The differences between the two can be summarized as increased flexibility in non-residential areas (mixed use) and greater allowable densities in the central city core (including College Park & University Heights). A Transportation Concurrency Exception Area is included in this plan to promote City land use and transportation objectives.

4. **Existing Capacity**. There is existing capacity to put more motor vehicle trips on many of the streets serving the city. However, City land use and transportation objectives, as expressed through such mechanisms as the TCEA, makes available capacity for motor vehicle trips less necessary to achieving the goals of this Plan. Sufficient developable area, which allow a variety of land uses, can be accessed by streets with capacity for more motor vehicle trips. Table 15 provides an assessment of motor vehicle trip volumes expected in year 2020 if current trends continue.

Transportation Element
Petition 146CPA-00 PB
January 25, 2001

Table 15. Street Segment Car Traffic Volume

Street	From	To	2020 Projected Traffic Volume (ADT)	2020 Projected Volume/Capacity Ratio*
Center Dr.	Archer Rd.	Museum Rd.	7,100	0.60
Depot Ave./SE 7th Ave.	Main St.	SE 15th St.	6,100	0.52
Depot Ave./SE 7th Ave.	SW 13th St.	6th St.	9,500	0.81
Depot Ave./SE 7th Ave.	6th St.	Main St.	5,300	0.45
E 1st St.	SE 2nd Pl.	NE 8th Ave.	1,400	0.12
E 3rd St.	SE Depot Ave.	NE 2nd Ave.	1,600	0.14
Hull Rd.	Mowry Rd.	SW 34th St.	4,600	0.18
Hull Rd. extention	SW 62nd Blvd.	SW 34th St.	16000 (1)	0.61
Hull Rd. extention	Mowry Rd.	SW 16th Ave.	2,800	0.11
Inner Rd.	NW 13th St.	Newell Dr.	400	0.04
Interstate 75	Archer Rd.	Newberry Rd.	46,200	0.57
Mowry Rd.	Center Dr.	Hull Rd.	1,000	0.10
Mowry Rd.	Hull Rd.	Archer Rd.	1,200	0.12
Museum Rd.	Radio Rd.	Hull Rd.	1,000	0.10
Museum Rd./Radio Rd.	S 34th St.	S 13th St.	6,600	0.45
N 53rd Ave.	W 13th St.	Waldo Rd.	3,800	0.20
N 8th Ave	Waldo Road	NE 25th St.	3,900	0.34
N 8th Ave.	NW 34th St.	W 22nd St.	16,900	0.55
N 8th Ave.	Newberry Rd.	NW 43rd St.	20,200	0.67
N 8th Ave.	NW 43rd St.	NW 34th St.	17,000	0.56
N 8th Ave.	NW 22nd St.	NW 6th St.	12,700	0.57
N 8th Ave.	N Main St.	Waldo Rd.	8,200	0.53
N Main St.	NW 16th Ave.	NW 23rd Ave.	12,400	0.55
N Main St.	NW 6th Ave.	NW 16th Ave.	17,000	0.76
N Main St.	NW 23rd Ave.	N 39th Ave.	8,100	0.25
N Main St.	NW 39th Ave.	NW 53rd Ave.	2,800	0.23
NE 11th Terr.	NE 23rd Ave.	NE 39th Ave.	800	0.08
NE 15th St.	E University Ave.	NE 8th Ave.	7,600	0.77
NE 15th St.	NE 16th Ave.	NE 39th Ave.	3,800	0.33
NE 15th St.	NE 8th Ave.	SE 16th Ave.	900	0.09
NE 15th St.	NE 39th Ave.	NE 53rd Ave.	400	0.04
NE 25th St.	E University Ave.	NE 8th Ave.	600	0.06
NE 2nd St.	NE 2nd Ave.	NE 16th Ave.	1,300	0.13
NE 2nd St.	NE 23rd Ave.	NE 16th Ave.	200	0.02
NE 31st Ave.	N Main St.	Waldo Road	4,500	0.45
NE 5th Ave.	NE 2nd St.	Waldo Rd.	400	0.04
NE 6th Ave.	NE Blvd.	NE 9th St.	3,000	0.30
NE 6th Terr.	NW 16th St.	NW 23rd Blvd.	1,600	0.16
NE 9th St.	SE 2nd Ave.	NE 31st Ave.	5,900	0.50
NE Blvd.	NE 8th Ave.	NE 10th Ave.	900	0.09
NE Blvd.	NE 2nd Ave.	NE 4th Blvd.	2,800	0.29
NW 10th Ave.	NW 13th Ave.	NE 9th St.	1,300	0.11
NW 10th St.	NW 8th Ave.	NW 16th Ave.	3,400	0.34
NW 14th Ave.	NW 2nd St.	Main St.	8,700	0.42
NW 16th Ave.	NW 34th St.	W 13th St.	22,500	0.69
NW 16th Ave.	NW 34th St.	NW 43rd St.	21,200	0.65

7/31/00

Transportation Element
Petition 146CPA-00 PB
January 25, 2001

Table 15. Street Segment Car Traffic Volume

Street	From	To	2020 Projected Traffic Volume (ADT)	2020 Projected Volume/Capacity Ratio*
NW 16th Ave.	W. 13th St.	Main St.	19,800	1.23
NW 16th Ave.	Main St.	Waldo Rd.	10,200	0.64
NW 16th Terr.	NW 16th Ave.	NW 23rd Ave.	10,800	0.92
NW 17th St.	University Ave.	NW 16th Ave.	9,000	0.77
NW 17th St.	W University Ave.	NW 8th Ave.	9,800	0.98
NW 21st St.	NW 31st Ave.	NW 39th Ave.	1,700	0.17
NW 22nd St	University Ave.	NW 16th Ave.	10,900	0.74
NW 23rd Ave.	NW 55th St.	NW 43rd St.	12,700	0.45
NW 23rd Blvd.	NW 16th Terr.	W 13th St.	11,200	0.42
NW 23rd St.	University Ave.	NW 8th Ave.	1,400	0.14
NW 24th Blvd.	NW 39th Ave.	NW 53rd Ave.	4,300	0.43
NW 2nd Ave.	NW 6th St.	NE Blvd.	6,900	0.70
NW 2nd Ave.	NW 2nd St.	Main St.	0	0.09
NW 2nd St.	NW 8th Ave.	NW 23rd Blvd.	5,500	0.55
NW 30th Ave.	NW 13th St.	Main St.	1,700	0.17
NW 31st Ave/Glen Spgs Rd	W 34th St.	NW 16th Terr.	10,100	0.53
NW 38th St.	NW 8th Ave.	NW 16th Ave	4,500	0.38
NW 3rd Ave.	NW 6th St.	NW 13th St.	5,300	0.53
NW 43rd St.	NW 39th Ave.	NW 53rd Ave.	24,500	0.75
NW 43rd St.	Newberry Rd.	NW 8th Ave.	25,300	0.78
NW 43rd St.	NW 8th Ave.	NW 23rd Ave.	18,200	0.56
NW 43rd St.	NW 23rd Ave.	NW 39th Ave.	14,800	0.46
NW 43rd St.	NW 53rd Ave.	NW 13th St.	9,300	0.49
NW 51st St.	NW 23rd Ave.	NW 39th Ave.	9,400	0.70
NW 53rd Ave.	NW 52nd Terr.	W 13th St.	12,100	0.79
NW 55th Ave.	NW 53rd Ave	NW 13th St.	600	0.06
NW 5th Ave.	NW 8th St.	NW 13th St.	5,100	0.51
NW 5th Ave.	NW 22nd St.	NW 13th St.	8,600	0.87
Newell Dr.	Archer Rd.	Museum Rd.	10,400	0.89
Newell Dr.	Museum Rd.	University Ave.	5,800	0.49
North-South Dr.	Museum Rd.	Archer Rd.	6,500	0.25
North/South Dr.	University Ave.	Museum Rd.	11,300	0.77
S 2nd Ave.	SE 7th St.	Williston Rd.	4,500	0.18
S 2nd Ave.	W 13th St.	SE 7th St.	7,100	0.46
S 4th Ave.	SW 13th St.	SE 15th St.	2,400	0.20
SE 11th Ave./SE 9th St.	Depot Ave.	SE 15th St.	3,600	0.36
SE 15th St.	Hawthorne Rd	University Ave.	8,600	0.86
SE 21st Ave.	SE 27th St.	SE 35th Ave.	200	0.02
SE 3rd St.	Depot Ave.	SE 1st Ave.	900	0.09
SE 4th St./SE 22nd Ave.	Depot Ave.	Williston Rd.	3,900	0.39
SE 4th St./SE 22nd Ave.	Williston Rd.	SE 15th St.	1,400	0.14
N 23rd Ave.	W 13th St.	Waldo Rd.	15,100	0.55
W 34th St.	Archer Rd.	University Ave.	40,400	0.83
W 34th St.	University Ave.	NW 16th Ave.	19,000	0.87
W 34th St.	NW 16th Ave.	W 39th Ave.	10,600	0.47
W 34th St.	W 39th Ave.	W 13th St.	12,600	0.84

7/31/00

Transportation Element
Petition 146CPA-00 PB
January 25, 2001

Table 15. Street Segment Car Traffic Volume

Street	From	To	2020 Projected Traffic Volume (ADT)	2020 Projected Volume/Capacity Ratio*
Hawthorne Rd.	Waldo Rd.	SE 43rd St.	20,100	0.83
NW 6th St.	N.W. 8th Ave.	N 39th Ave.	16,300	0.50
NW 6th St.	N 39th Ave.	W. 13th St.	12,700	0.39
NW 8th Ave.	NW 6th St.	N Main St.	9,800	0.39
N 39th Ave.	Interstate 75 (East)	NW 43rd St.	16,500	0.54
N 39th Ave.	NW 43rd St.	NW 34th St.	26,500	0.78
N 39th Ave.	NW 34th St.	NW 13th St.	20,500	0.60
N 39th Ave.	NW 13th St.	Waldo Rd.	14,700	0.43
S 16th Ave	Archer Rd.	W 13th St.	23,600	0.52
S 16th Ave	W 13th St.	Main St.	16,500	0.56
S 16th Ave	Main St.	Williston Rd.	7,000	0.44
Archer Rd.	SW 34th St.	SW 16th Ave.	53,500	1.05
Archer Rd.	SW 16th Ave.	W 13th St.	32,500	1.02
Waldo Rd.	University Ave.	E 39th Ave.	18,900	0.55
Waldo Rd.	E 39th Ave.	NE 77th Ave.	22,200	0.52
Newberry Rd.	Interstate 75	NW 8th Ave.	56,800	1.11
Newberry Rd.	NW 8th Ave.	W 34th St.	27,100	0.76
University Ave.	W 34th St.	North/South Dr.	19,400	0.86
University Ave.	North/South Dr.	W 13th St.	31,800	0.88
University Ave.	W 13th St.	Waldo Rd.	24,400	0.76
University Ave.	Hawthorne Rd.	Lakeshore Dr.	9,700	0.28
University Ave.	Lake Shore Dr	N.E. 27th Ave.	4,500	0.23
SW 2nd Ave.	Newberry Rd.	W 34th St.	17,700	0.30
SW 2nd Ave.	W 34th St.	University Ave.	12,400	0.55
Main St.	Williston Rd.	Depot Ave.	18,200	0.70
Main St.	Depot Ave.	N. 8th Ave.	13,700	0.53
Williston Rd.	Interstate 75 (south)	SW 13th St.	25,200	0.53
Williston Rd.	SW 13th St.	University Ave.	11,300	0.35
SW 11th St./SW 11th Ave.	SW 13th St.	Archer Rd.	2,200	0.22
SW 12th St.	SW 9th Ave.	SW 4th Ave.	11,200	1.13
SW 16th St.	SW 16th Ave.	Archer Rd.	12,100	0.98
SW 20th Ave.	SW 62nd Blvd.	W 34th St.	23,900	0.70
SW 21st Ave.	SW 13th St.	Main St.	2,200	0.22
SW 23rd Terr.	Williston Rd.	Archer Rd.	3,700	0.27
SW 27th St.	Williston Rd.	SW 35th Pl.	2,700	0.20
SW 2nd Ave.	SW 1st St.	SE Blvd.	1,900	0.19
SW 33rd Pl./SW 37th St.	SW 42nd St.	SR 24	3,000	0.22
SW 62nd Blvd.	End of 4 lanes	SW 20th Ave.	18,800	0.55
SW 62nd Blvd.	Newberry Rd.	End of 4 lanes	19,400	0.57
SW 8th Ave./SW 9th Ave.	SW 13th St.	Depot Ave.	7,900	0.80
SW 9th/10th St.	SW 8th Ave.	SW 4th Ave.	5,400	0.54
Stadium Rd.	Museum Rd.	University Rd.	5,000	0.43
Stadium Rd.	Buchman Dr.	Newell Dr.	5,400	0.55
NW 13th St.	Williston Rd.	SW 16th Ave.	25,100	0.73
NW 13th St.	SW 16th Ave.	Archer Rd.	28,800	0.56
NW 13th St.	Archer Rd.	University Ave.	42,300	1.29

7/31/00

Transportation Element
Petition 146CPA-00 PB
January 25, 2001

Table 15. Street Segment Car Traffic Volume

Street	From	To	2020 Projected Traffic Volume (ADT)	2020 Projected Volume/Capacity Ratio*
NW 13th St.	NW 16th Ave.	NW 23rd Ave.	28,900	0.84
NW 13th St.	NW 23rd Ave.	NW 39th Ave.	20,200	0.59
NW 13th St.	NW 39th Ave.	NW 6th St.	32,400	0.95
NW 13th St.	NW 6th St.	NW 53rd Ave.	25,100	0.74
NW 13th St.	NW 53rd Ave.	NW 34th St.	24,800	0.72
NW 13th St.	NW 34th St.	Buck Bay	14,600	0.43
Village Dr.	Stadium Rd.	University Ave.	3,300	0.28
W 10th St.	SW 4th Ave.	NW 8th Ave.	3,600	0.31
W 12th St.	SW 4th Ave.	NW 8th Ave.	4,700	0.47
W 6th St.	SW 16th Ave.	SW 4th Ave.	9,200	0.36
W 6th St.	SW 4th Ave.	NW 8th Ave.	20,700	0.82
W 6th St.	University Ave.	SW 4th Ave.	14,300	1.22
W. 2nd St.	SW 4th Ave.	NW 8th Ave.	300	0.02
W. 3rd St.	SW 4th Ave.	NW 8th Ave.	700	0.05
Windmeadows Blvd.	SW 33rd Pl.	SW 34th St.	3,700	0.27
Woodlawn Dr.	University Ave.	Museum Rd.	1,300	

Notes:

(1) Volume on Hull Road extension taken from the Technical Advisory Committee Alternative 1. The Hull Road extension was not included in the Needs Plan model run; instead, SW 20th Avenue was shown as having four lanes.

*A Ratio that exceeds 1.00 shows that the volume is projected to exceed the street capacity in 2020.

Source: Gainesville 2020 Transportation Plan, North Central Florida Regional Planning Council, 11/30/95

7/31/00

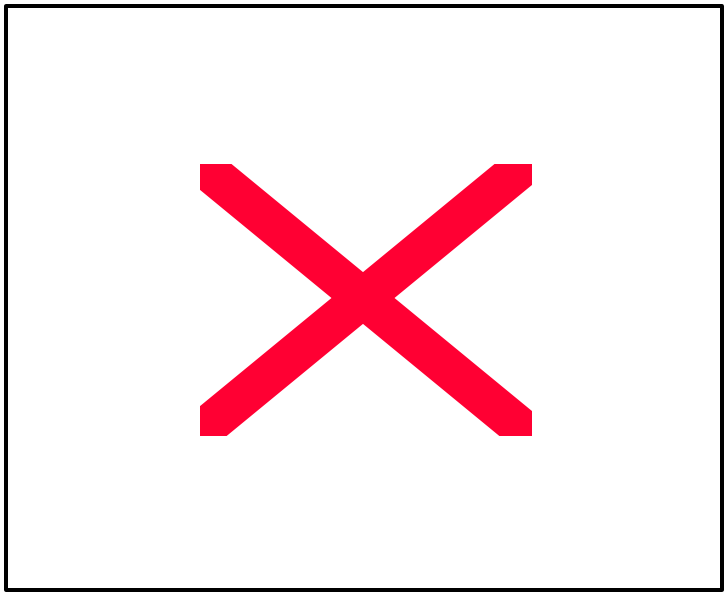
Street Needs for Cars

The MTPO's FY 99/00-03/04 Transportation Improvement Program (TIP) indicates those streets that are consistent with the Gainesville Metropolitan Area Year 2020 Transportation Plan.

Outside the TCEA, state streets designated by FDOT as backlogged or constrained and functioning below the adopted level of service for cars must maintain current operating conditions for car travel. The City intends to reduce or moderate the negative impacts of car travel, or reduce the number of car trips when new development is proposed. These moderation efforts are necessary to return the facility to acceptable (as defined by FDOT) operating standards for free-flowing car travel. Moderation efforts can include closing poorly located curb cuts, installation of pedestrian and bicycle access to the site, and transportation demand management strategies for employees and clients if significant impacts are expected.

Traffic calming

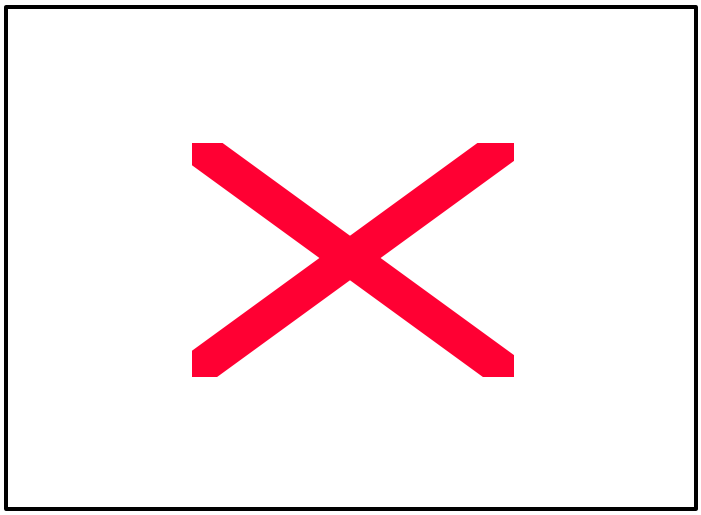
Traffic calming uses street design strategies to reduce the dominance and speed of motor vehicles. Traffic calming makes streets mixed use rather than single [car]-use.[71] When done effectively, traffic calming reduces average vehicle speed, noise, crashes, and air pollution.[72] It can also make neighborhoods and commercial areas more livable.



"The right-of-way width for a residential subdivision street as specified by the Institute of Transportation Engineers has remained at 50 to 60 feet for the last 30 years. Constructing relatively wide cross sections in residential streets where there is little motor vehicle traffic (fewer than 1,000 trips per day) permits and even encourages high speeds. High speeds are also encouraged by…good sight distance called for by street standards. These relationships between design speed and sight distance, curve radius, and width were established for vehicular efficiency, but are incompatible with residential livability. The function of a residential area street as a facilitator of social interaction has often been diminished by the priority accorded to traffic performance…'It is often forgotten that residential streets become part of the neighborhood and are eventually used for a variety of purposes for which they were not designed. Residential streets do not only provide direct auto access for the occupants to their homes, but they also provide a visual setting; an entryway for each house; a pedestrian circulation system; a meeting place for residents; a play area (whether one likes it or not) for children, etc. To design

and engineer residential streets solely for the convenience of easy automobile movement overlooks the many overlapping uses of residential streets.'"[73]

In Europe, the beneficial effects of traffic calming have been astounding. A study of 30 German neighborhoods found that traffic injuries declined by 44 percent and serious injuries and deaths declined by 53 percent. In another German study,[74] fatalities fell by 43 to 53 percent and injuries by 60 percent. Air pollution declined by 10 to 50 percent, noise pollution fell by 14 decibels, fuel use was cut by 10 percent, pedestrian crashes fell by 43 percent, bicycle crashes fell by 16 percent, motor vehicle crash costs fell by 16 percent, child crashes fell by 66 percent, and bicycle use doubled. And whereas 27 percent of motorists and 39 percent of the neighbors approved of the changes before installation, 67 percent and 75 percent approved of the changes after they were installed.



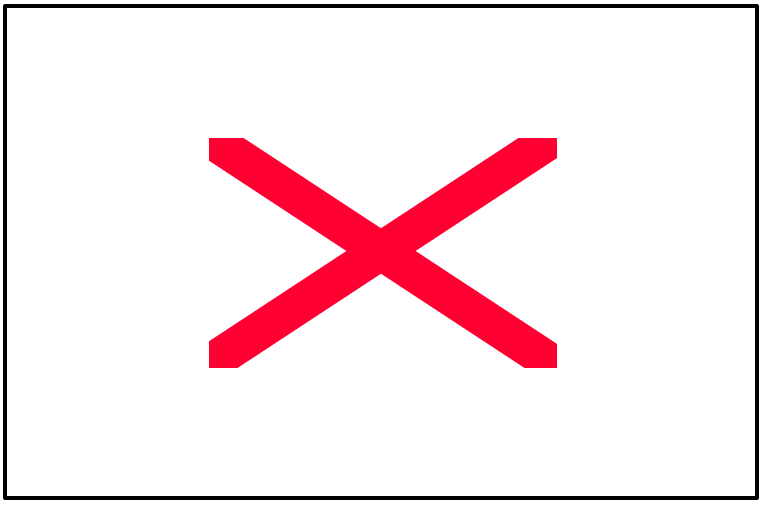
These substantial benefits, in addition, were achieved by increasing motorist trip time by an average of only 33 seconds. Motorists who found the 18 mile-per-hour speed limit acceptable grew from 27 percent before the streets were calmed to 67 percent after the program began. Receptive residents along the streets grew from 30 percent before to 75 percent after.[75]

Similar results have been found in Denmark, Japan, Sweden, Italy, and France.

Conventional streets

Motorists are more likely to collide with pedestrians at higher speeds. At 60 miles per hour, the field of vision of the motorist is two-thirds less than at 30 miles per hour. In addition, the probability of a pedestrian being killed is only 3.5 percent when a vehicle is traveling at 15 miles per hour, but jumps to 37 percent at 31 miles per hour and 83 percent at 44 miles per hour.[76]

Traditional Connected Streets



Street geometry in safety-sensitive areas, such as schools, should keep motor vehicle speeds within 15 to 20 miles per hour.[77]

A German study found that traffic calming reduces vehicle idling time by 15 percent, gear changing by 12 percent, brake use by 14 percent, and gasoline use by 12 percent.[78] Similarly, a study in Portland, Oregon found that a pedestrian-friendly environment can reduce vehicle miles traveled by 10 percent.[79] Other studies show up to a 114-percent increase in non-motorized travel on traffic-calmed streets.[80]

Calming also helps reduce neighborhood noise pollution. From a distance of 48 feet, a motor vehicle traveling at 56 miles per hour makes 10 times more noise than a motor vehicle traveling at 31 miles per hour. Reducing average speed from 25 miles per hour to 12 miles per hour reduces noise levels by 14 decibels (ten times quieter). At higher speeds, every 12 to 15 miles per hour in speed increases results in a 4 to 5 decibel noise increase.[81]

The City of Oakland CA recently budgeted $1 million to install traffic calming measures throughout the city in response to citizen petitions for safer streets. The City has already installed speed humps and is pursuing street narrowing and barriers to through traffic. A similar strategy in Menlo Park CA has reduced through traffic by 66 percent, has reduced top speeds by 40 percent, and has reduced average speed by 20 percent.[82]

Traffic calming in Gainesville.

The City has been involved in traffic calming since the mid-1980s. Since that time, traffic calming strategies have been used nearly always on local residential streets. The City has used traffic diverters, roundabouts, street closings, mini traffic circles and speed humps to reduce traffic problems in neighborhoods.

Traffic calming is distinguished from other measures such as route modification, traffic control devices such as "stop" and "speed limit" signs, and streetscaping. These devices require enforcement while traffic calming devices are intended to be self-enforcing. Traffic calming devices rely on the laws of physics rather than human psychology to slow traffic. Items such as street furniture, street trees, etc., complement traffic calming, but do not by themselves compel drivers to slow down.

The Public Works Department uses the following traffic calming devices on city-maintained streets:

Traffic Diverter. Only one diverter location has been constructed. Traffic is forced to turn left or right at the diverter. Diverters are intended and designed to reduce motor vehicle volumes and speeds.

Mini Traffic Circle. Mini traffic circles are installed at intersections in conjunction with 4-way stop control. They are used only on local streets because vehicles are allowed to turn left in front of the mini traffic circle. The curb radius at the intersection is not modified. Mini traffic circles are most effective when used in conjunction with curb and gutter streets. The City landscapes the mini traffic circle provided a sponsor agrees to perform regular maintenance Mini circles are intended and designed to reduce motor vehicle speeds. Numerous mini circles have been installed in the City.

Speed Hump. Speed humps are installed at mid-block locations (between intersections) to reduce motor vehicle speeds. To be effective, speed humps are spaced at intervals of approximately 600 feet. Numerous speed humps have been installed. The City Commission has adopted a formal policy relating to speed humps.

Speed Table. Speed tables are flat-topped speed humps often constructed with concrete or textured materials on the flat portion. Speed tables are typically long enough for the wheelbase of a passenger car to rest on the flat section. The speed table used by the City is 22 feet long with a 10 foot flat top. Speed tables can be located mid-block or at intersections.

Choker. Chokers are curb extensions placed at mid-block locations that achieve speed reductions by reducing the width of the street. The street curb is extended into the street to create the choker. Chokers are typically 20 feet in length and can be landscaped or constructed with bricks or other hard surface materials. Chokers at intersections are called "intersection bulbouts." The intersection of SE 1st Avenue and 1st Street is a good example of an intersection bulbout. Chokers work very well with on-street parking because the choker "shadows" the on-street parking, provided the choker is at least six feet in width. Chokers with on-street parking have been installed on the north side of NE 13th Avenue, 500 block (on the south side of Northeast Park).

Choker with Speed Table. A choker and speed table can be constructed at the same location. The choker is normally the same length as the speed table. The choker provides a convenient location for traffic control signs and it can be landscaped.

Center Island Narrowing. A center island narrowing achieves a reduction in vehicle speeds by constructing an island in the center of the street to reduce the width of the travel lanes. The center island can either be short (20 feet) or long in length. The center islands constructed on NE 8th Avenue just east of Northeast Boulevard is an example of this device. The islands can be landscaped or constructed with bricks or other hard surfaced material. On-street parking is prohibited at and near the center island because the travel lanes are deflected from the center of the street to adjacent to the curb line of the street.

Center Island Narrowing with Speed Table. A center island narrowing and a speed table can be constructed at the same location. The center island is normally longer than the speed table. The center island provides a convenient location for traffic control signs and it can be landscaped.

Street Narrowing with Pavement Markings Only. Changing the pavement markings can narrow the street. Typically bike lanes, parking lanes, or both are added to reduce the width of the travel lanes. Examples of this technique in the City are NW 55th Street between Newberry Road and NW 23rd Avenue and NE 9th Street between NE 3rd Avenue and NE 23rd Avenue.

Chicane. Chicanes are curb extensions that alternate from one side of the street to the other, forming 'S' shaped curves in the street. They can improve the ability to provide on-street parking. With a chicane, the on-street parking would alternate on each side of the street. A major problem with a chicane is if only one vehicle is passing through the chicane, the vehicle can follow a straight line with little reduction in speed. Chicanes can also be more expensive than other devices due to the amount of curb required. Another major problem with chicanes is that it is sometimes difficult to locate a section of street that does not have driveways and intersecting streets that will conflict with the chicane.

Lateral Shift. Lateral shifts are curb extensions on straight streets that cause travel lanes to bend one way and then bend back to the original direction of travel. Lateral shifts work best with a center island that prevents motorists from passing straight through the device. Lateral shifts require 200 to 300 linear feet of street with no intersecting streets or driveways. This distance can be difficult to find on most urban streets due to driveways. Lateral shifts also require 300 to 400 linear feet of curbing, which significantly increases the cost of the device.

Traffic Circle. Traffic circles are rotary intersections that require traffic to drive counterclockwise around the circle. They have a circular raised island that is normally landscaped. In order for the design vehicle to negotiate the traffic circle, the outside diameter should be a minimum of 90 feet, with 100 feet desired. Traffic circles require significant

construction and frequently require purchase of right-of-way. This results in significant costs compared to other traffic calming devices. The rotary intersection on NW 31st Drive east of Westside Park is a good example of a traffic circle. Traffic circles are typically controlled by stop signs and can be either all-way stop or two-way stop controlled.

Modern Roundabout. Modern roundabouts are installed at major intersections instead of traffic signals. Like traffic circles, traffic flows counterclockwise in the roundabout. The features that distinguish roundabouts from traffic circles are yield upon entry, splinter islands on the approaches that separate traffic flows from each other and pedestrians and geometric features to slow traffic. The outside diameter of the roundabout should be a minimum of 90 feet, with 100 feet desired. Roundabouts require significant construction and frequently require purchase of right-of-way. This results in significant costs compared to other traffic calming devices.

Combination of Strategies. It is not uncommon to install several devices to calm traffic in neighborhoods. The City has used a combination of speed humps and mini traffic circles in several neighborhoods. When traffic calming is installed either on a single street or in a neighborhood, more than one type of device is frequently used. In the Duval Neighborhood (NE 10th Avenue, 2300 block), Libby Heights (NW 10th Avenue, 3400 block) and Northwood Pines Subdivision (NW 34th Street, 5500 block), speed humps and mini traffic circles were used. The streets in these neighborhoods are all local streets. On NE 8th Avenue between Northeast Boulevard and Waldo Road, center islands and a modern roundabout were used. The preference of the neighborhood and the cost of the various devices ultimately determine the types of traffic calming devices used.

Recently and for the first time, traffic calming was used to calm motor vehicle traffic on a collector street. This was done on NE 8th Ave between NE Blvd and Waldo Road. Medians were installed to reduce travel lane width and a modern roundabout was installed at the intersection of NE 8th Avenue and 9th Street. Additional projects on collector streets are anticipated.

Turn Lanes

Like adding travel lanes, turn lanes (particularly additional turn lanes) can have undesirable land use and transportation impacts. The undesirable impacts of turn lanes often include:

- Increasing the exposure time of pedestrians crossing the street to moving motor vehicles when no refuge island is provided.
- Increasing the average speed of motor vehicles, which endangers pedestrians, bicyclists and transit users.
- By adding motor vehicle traffic volume capacity, turn lanes can indirectly promote land use sprawl.
- Often, the turn lane is installed in situations where there is not enough right-of-way to retain sidewalks or bicycle lanes along the segment (which results in such features being removed), or installation of the turn lane prevents future installation of such features due to lack of right-of-way.
- By adding motor vehicle traffic volume capacity, turning lanes encourage trips by motor vehicle, which increases the motor vehicle traffic volume in the area.

For these reasons, the City should not install a turn lane, unless:

1. It is possible to do so without discouraging pedestrian, bicycle, or transit trips;
2. Special pedestrian safety features are installed; and/or
3. If a turn lane is needed to allow travel lane removal or to avoid adding travel lanes.

In addition, the City should evaluate existing turn lanes within the City to determine the feasibility of removing lanes that, on balance, discourage transportation choice.

Narrow Streets

One recent study[83] has determined that the safest residential street width is 24 feet wide -- curbface to curbface. Streets that were 36 feet wide had 400 percent more crashes -- especially those with low motor vehicle traffic volumes. The study suggested that the wider streets often called for by fire and emergency service personnel provide only minimal public safety benefits in comparison to the significant public safety benefits provided by relatively narrow residential streets. The "life safety" benefits delivered by more narrow streets provide a more substantial health and safety payoff than the more narrow "fire safety" objective delivered by faster fire truck response times to fires.[84]

Transportation Demand Management

Demand management strategies are now being used for transportation, where rising demand cannot be met (or sustained) through continued construction of new and very costly street capacity supply increases such as widenings.

An important reason for the need to use Transportation Demand Management (TDM) is that the demand for travel by motor vehicle is quite distorted by the significant public subsidies for motor vehicles. TDM is therefore a way to at least partly correct this distortion.

TDM is a program, usually involving a partnership of local employers and local government, to reduce single-occupant vehicle (SOV) trips. Local governments around the nation have adopted a TDM ordinance that requires the employer to meet SOV trip reduction targets, and usually includes a menu of strategies to reach the targets, such as:

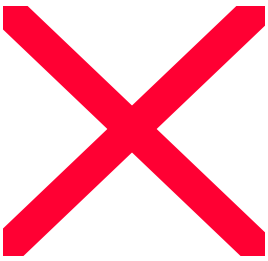
- Flexible work hours or other modification of the work schedule
- Establishment of a trip reduction coordinator for the employer
- Telecommuting
- Increased fees for SOV parking
- Monetary incentives for van pooling, use of public transit (usually with transit passes), bicycling, and walking
- Parking cash-out to encourage non-SOV trips by removing the large subsidy for free employee parking, while still allowing the option of making such trips
- Institution of shuttle services
- Provide showers and lockers at job sites
- Provide a "guaranteed ride home" program
- Park-n-ride services
- Restrictions on number of travel lanes or number of parking spaces provided

On-Street Parking

Curb-side, on-street parking downtown is preferred to off-street parking because it:

- minimizes pedestrian-motor vehicle conflicts;
- minimizes the need for off-street parking (off-street parking reduces the compactness of the downtown);
- acts as a buffer, or physical barrier, between pedestrians and moving motor vehicle traffic;
- increases usable sidewalk space; and
- provides "friction" that reduces the speed of moving motor vehicles.

Each of these benefits of on-street parking promote a safe, convenient, and pleasant environment downtown for the pedestrian and the emerging trend toward sustainable, smart transportation.



On-Street Parking:

- Creates a buffer between pedestrians and moving cars.
- Provides convenient public parking.
- Reduces need for parking lots.
- Slows cars.
- Makes it easier for pedestrians to cross street.
- Improves health of retail shops.

Non-street access points

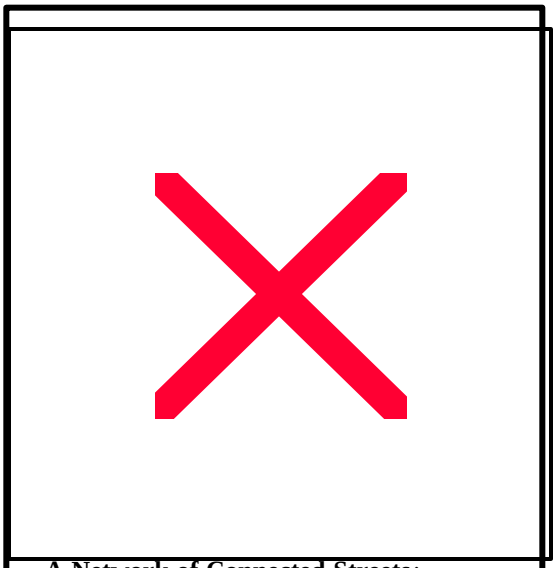
Often, development patterns are compact enough to allow convenient travel by bicycle or on foot. However, travel by bicycle or on foot is often not possible due to barriers. Examples of barriers are fences, walls, and ditches that separate a school or shopping center from nearby neighborhoods -- which force bicyclists and pedestrians to travel significant distances to get around the barrier in order to get to the school or center via a major street.

This site design problem illustrates importance of allowing non-car movement between adjacent land uses so that smart travel can be encouraged. In fact, Ewing[85] defines sprawl as "any development pattern with poor accessibility among related land uses." Development with barriers separating it from nearby land uses, in other words, represent sprawl even if the development is within the urban core. Cul-de-sacs similarly create such inconvenient barriers. Barriers created by cul-de-sacs increase the number of trips made by motor vehicle and concentrates them all on a few arterial streets.[86]

Creating side and rear pedestrian and bicycle path connections between land uses such as schools, shopping centers, parks, and neighborhoods (as well as at the end of cul-de-sacs) encourages such smart forms of travel as bicycling and walking by significantly reducing travel distances and increasing convenience.[87]

Connected Streets

Traditionally, at a time when motor vehicles were less dominant, our street network was, typically, designed so all streets were connected to other streets. Today, however, because the motor vehicle makes distance nearly irrelevant, cul-de-sacs, dead-ends, and large block face lengths are built. Unfortunately, such street network design reduces transportation choice, because trip distances are often significantly longer when streets are disconnected in such a way, which makes it necessary to make a much larger number of trips by motor vehicle. A common, related problem in Gainesville is the construction of new subdivisions, and commercial areas near residential areas. Usually, there are not any interconnections between such land uses except by major streets, which are hostile, inconvenient and dangerous except by motor vehicle.



A Network of Connected Streets:

- Creates pedestrian-scaled block sizes.
- Gives pedestrians, cyclists, and drivers more route choices, and reduces response time for emergency vehicles.
- Discourages speeding in neighborhoods.

Without adequate street connections, there is not only a discouragement of sustainable forms of travel. The lack of connections also reduces “real time” trip choices. Adequate street connectivity offers a positive alternative. For example, if an emergency vehicle or passenger car comes upon a street where there are obstructions, a connected street network provides immediate choices of alternative routes to travel to the desired destination.

In addition, there is more dispersal of motor vehicle traffic when the streets are connected, because there are a number of ways to travel -- not all trips are forced to use one or a couple of collectors or arterials. As a result, connected street networks are better "ventilated" (or more "permeable") and less prone to motor vehicle traffic problems.

Connected street networks are make services such as transit, garbage, school bus and postal service more efficient, since there is less need to "backtrack." Connected streets also provide transit users with more convenient access to transit stops.

Finally, a connected street pattern, by offering more direct routes to destinations, is able to reduce vehic le miles traveled. Such a pattern reduces average vehicle speed while reducing average trip time.

There are various ways to determine how "connected" a street network is.[88] The most common and objective method is through use of a "connectivity index."

Over the past several decades, Gainesville's street network has become less connected. A number of local streets are disconnected cul-de-sacs, which creates substantial increases in travel distances for all forms of travel. The density of disconnected, cul-de-sac'd streets is particularly high in the more recently developed northwest quadrant of the city.

Adoption of the Transportation Concurrency Exception Area

Sec. 163.3180, F.S., and Rule 9J-5.0055, F.A.C., require that jurisdictions establish a concurrency management system throughout the city to ensure that public facilities and services needed to support development are available concurrent with the impacts of such development. To comply with this provision, level of service standards are adopted. In practice, past transportation concurrency requirements for cars encouraged development to locate in outlying areas. These concurrency requirements have resulted in urban sprawl and have often prevented development in close proximity to existing government, employment, and shopping facilities.

Sec. 163.3180, F.S. and Rule 9J-5, F.A.C. also provide guidelines for establishing Transportation Concurrency Exception Areas (TCEAs). This option allows exceptions to the transportation concurrency requirements for all types of development within specifically defined areas. The TCEA regulations are intended to reduce the adverse impact that transportation concurrency requirements had on several city goals and objectives, such as development, redevelopment, and transportation choice.

The following criteria were used to designate the TCEA in the city:

- A specific geographic area delineated in the local government comprehensive plan for urban redevelopment
- The redevelopment area is within an urban infill area within an existing urban service area
- The specific geographic area does not contain more than 40 percent developable vacant land

The TCEA establishes a set of pedestrian- and transit-friendly design features based on magnitude of motor vehicle traffic impact and of development which have the intent of creating

transportation choices – choices that enable those living in the TCEA to have a choice about how to travel, instead of being forced to make every trip – no matter how trivial – by car.

The design features are implemented through a flexible, menu-driven system which allows the developer to select those design features which are most feasible and appropriate for the site. The features include such elements as bus shelters, transit payments, enhanced landscaping to increase pedestrian and transit appeal, improved sidewalks and crosswalks, and bicycle lanes.

The TCEA also temporarily applies pre-existing overlay regulations that currently apply to the "Central Corridors" – main entryway streets to the traditional city core – which similarly have a "transportation choice" intent by reducing off-street car parking requirements, pulling buildings closer to the street, and ensuring that buildings face the street, among other things. These temporary regulations will be supplanted by implementing regulations in the future.

The portions of the city which comply with the TCEA criteria are shown in Figure 19 above. This area has been adopted by the City as a TCEA and approved by the state. Level of service standards for transit, bicycle and pedestrian travel continue to apply both inside and outside the TCEA. This transportation concurrency exception will not relieve UF from meeting requirements of 240.155 F.S. and the levels of service established for streets within the UF transportation impact area.

In Zone A, the City would provide the funding for certain components of the needed motor vehicle traffic moderation efforts as a means of further encouraging development in downtown and east Gainesville. The developer will continue to be responsible for moderation efforts in Zone B.

Maintenance of Level of Service Standards for Car Travel

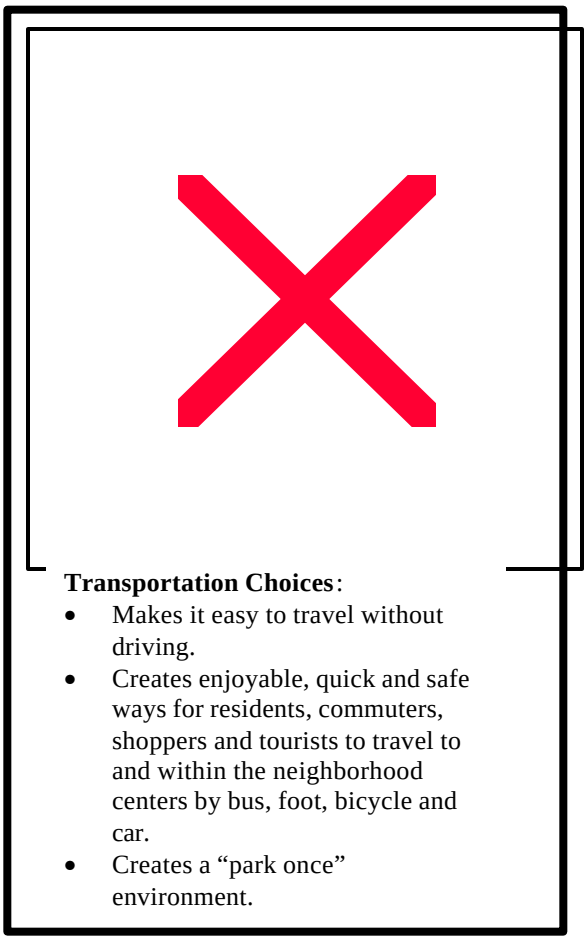
As noted elsewhere, the City seeks the maximum amount of relief from transportation concurrency requirements, and therefore adopted a TCEA for most of the city. Maintenance of level-of-service standards for single-occupant car travel is inconsistent with several City transportation objectives because maintaining street capacity for car travel promotes:

- Low-density residential and non-residential sprawl
- Increased air pollution, noise pollution and wildlife habitat loss
- Increased vehicle trips due to increased dependence on car travel
- Strip commercial development
- Higher public infrastructure and public service costs
- Less affordable housing (due to the costs of owning more cars than might otherwise be needed)
- Less development and redevelopment within the city
- Higher average motor vehicle speeds
- Less transportation choice since transit, walking and bicycling are less viable

Nevertheless, despite moving away from standards which narrowly strive to promote free-flowing traffic, in TCEA Zone A the City is requiring new development to maintain levels-of-service that promote transportation choices, such as providing sidewalk connections, cross-access when feasible, bus shelters, and closure of curb cuts.

Outside Transportation Concurrency Exception Areas, streets will be maintained at the adopted Level of Service standard (set in the Comprehensive Plan) for car travel. This will be accomplished through the City transportation concurrency management system. The City should also explore the following strategies that discourage car trips, such as:

- Parking cash-out
- A trip reduction ordinance (TDM)
- The City transit enhancement program, as described elsewhere
- The City pedestrian and bicycle enhancement programs, as described elsewhere, and including such strategies as construction of sidewalks, non-car and non-major street connections to adjacent land uses, mixed uses, higher densities, development and redevelopment, construction of a trail network, and new land development regulations (such as the Traditional City and TND ordinances, and the City Buildings Design Manual) that promote transportation choices
- Construction of in-street bicycle lanes
- Parking space maximums and fees
- Restrictions on drive-through's
- Revised, more modest street design specifications
- Enhancement of the downtown to make it more of a destination, in part by building more downtown residential units
- Revised, more modest building setbacks
- Restrictions and prohibitions on cul-de-sacs
- Promotion of a connected street pattern
- Maintenance of alternative, by-pass routes for drive-through, non-local trips on the Intrastate Highway System, such as Williston Road and North 39th Avenue
- Acceptance of a modest level of congestion for transportation and land use



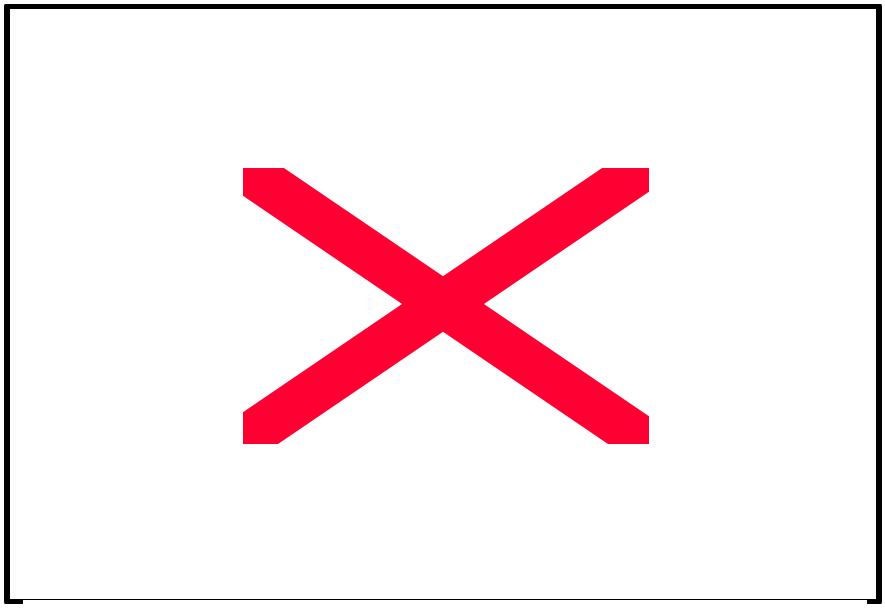
Transportation Choices:

- Makes it easy to travel without driving.
- Creates enjoyable, quick and safe ways for residents, commuters, shoppers and tourists to travel to and within the neighborhood centers by bus, foot, bicycle and car.
- Creates a "park once" environment.

Sustainability Indicators for Car Travel

An important indicator of how dependent this City is on car travel, and the overall trend in car use, is a chart showing gasoline consumption over time. Since cars are the leading source of air pollution in the city, a key indicator of city air quality is the amount of gasoline burned by car trips. As can be seen in Figure 25, there is an upward trend in gasoline consumption since 1982. This trend is especially noteworthy in light of the fact that the fuel efficiency of cars has improved dramatically during that time period. Clearly, gasoline consumption increases show that city drivers (households) are following the national trend of making substantially more trips by car than previously, and driving longer distances.

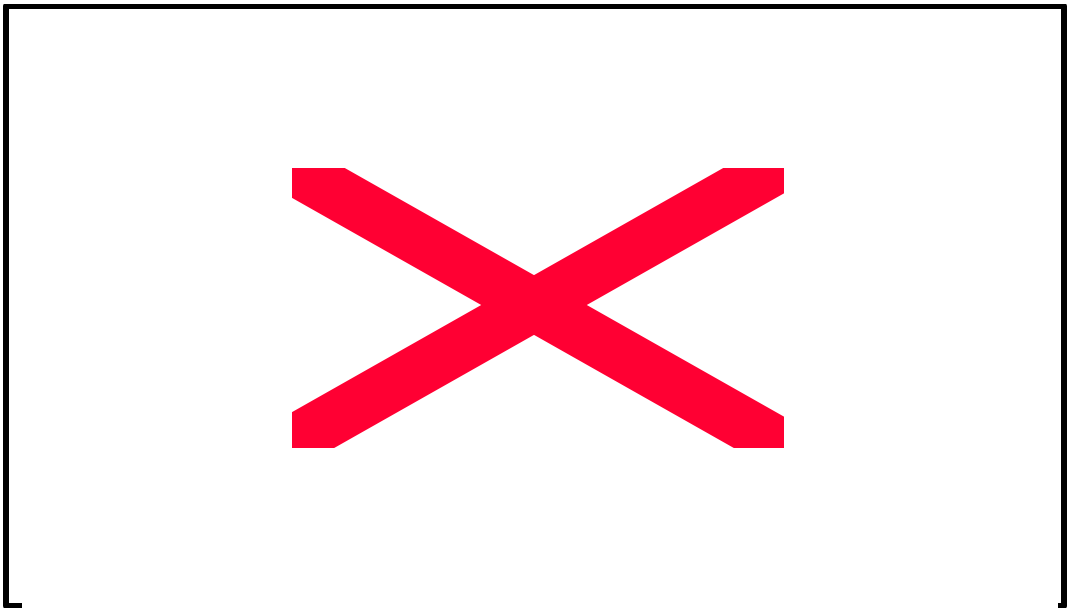
Figure 25. Estimated Gas Consumption in Gainesville (1982-1985)



Source: UF Bureau of Economic & Business Research. Florida Statistical Abstract. Table 15.67. Assumes proportional consumption within city is same as city population as a proportion of county.

Another important indicator for how much the city has developed transportation choices is the trend in motor vehicle traffic volume on major city streets. Like gasoline consumption, motor vehicle traffic volume trends can show how dependent the City is on car travel, and the overall trend in motor vehicle use. As can be seen in Figure 26, motor vehicle traffic volume on NW 43rd Street – a major north-south arterial in the city -- has risen substantially

Figure 26. NW 43rd St Traffic Volume (1980-1997)
(NW 8th Ave to NW 39th Ave)



Source: City of Gainesville Traffic Engineering

since 1980. It should be noted that a significant increase in volume corresponds to the time at which this street was widened from 2 to 4 travel lanes – indicating that this widening has created "induced traffic," as described previously. In addition, the new development at Blues Creek, Millhopper Station, and other projects along 43rd Street indicate an example of transportation driving land use and development along this corridor. As traffic engineer Walter Kulash recently noted,[89] Gainesville must make a choice about whether it will accept streets and congestion on its own terms. Which "flavor" is preferred? A congested 2-lane street, a congested 4-lane, congested 6-lane, or a congested 8-lane street? In other words, as noted above, adding lanes will not eliminate congestion. It therefore becomes a choice about how wide of a congested street is preferred.

At high motor vehicle traffic volumes, residential land uses become unviable and incrementally are abandoned, rented, or converted to retail or office uses. As indicated by Kulash, it is important to avoid creating a street that is designed for and accommodates high-volume, high-speed car trips, since to do so inevitably creates a "sellscape" of garish signs, glaring lights, car-oriented architecture, drive-throughs, and other "anywhere USA" strip commercial, "parking lot architecture" features. It is inevitable because the large number of cars passing by on the street each day are potential customers that most retailers have a strong desire to "shout" to in order to attract their business.

Figure 27. UF Campus Parking Spaces

Source: UF Transportation & Parking Services. 1999.

A critically important sustainability, compact development, and livability indicator for Gainesville is the trend in the number of parking spaces on the UF campus. A declining trend is essential for healthy transit, walking, and bicycling, a healthy number of students and staff living reasonably close to campus, and reduced political pressure to widen streets. As can be seen in Figure 27, the upward trend over the past decade is a negative trend for the City that must be stabilized or reversed.

Attributes of Sustainable, "Smart" Transportation

Sustainable, "smart" transportation is characterized by the following:

- Low fuel or energy consumption
- Low harmful air emissions

- Low water pollution impacts
- Affordable, modest costs for households, governments
- Safe for the traveler and those near the travel route
- Benign for wildlife and wildlife habitat
- Quiet
- Promotes interaction with fellow citizens and with buildings
- Available for use regardless of age, skill, physical condition, financial status

Given such attributes, the following constitute sustainable, "smart" forms of travel, in order of decreasing desirability:

1. walking
2. bicycling
3. bus
4. carpool
5. single-occupant car

Biased Transportation Terminology

The City, through the MTPO, recently (8/17/99) adopted a policy that removes the biases inherent in some of the current transportation language used for street projects associated with the city.[90] This change is consistent with the shift in philosophy as the City works towards becoming a sustainable community. Objective language should be used for all correspondences, resolutions, ordinances, plans, language at meetings, etc. and when updating past work.

Background. Much of the current transportation language was developed several decades ago at a time when the car was the major priority in the city. However, an important contemporary City objective is creating a balanced, equitable, and sustainable transportation system characterized by freedom of travel choice. Unfortunately, transportation language has not evolved to comply with this objective, and much of it still carries a pro-car bias. Continued use of biased language is not in keeping with the objective of a balanced, equitable, sustainable, "smart" transportation system.

Language Changes. There are several biased words and phrases that are still commonly used, and which should be phased out as a way to achieve this objective.

The word *improvements* is often used when referring to the addition of through lanes, turn lanes, channelization, or other means of increasing motor vehicle capacity, speeds or both. Though these changes may indeed be improvements from the perspective of those driving a car, they would not be considered improvements by those using a sustainable form of travel. For example, a resident may not think that adding more lanes in front of the resident's house is an improvement. A parent may not think that a channelized right turn lane is an improvement on their child's pedestrian route to school. By City staff referring to these changes as improvements, it indicates that the City is biased in favor of one group at the expense of others. Suggested objective language includes being descriptive (e.g., use through lanes, turn lanes, etc.) or using language such as *modifications* or *changes*.

Examples:

Biased --
The following street *improvements* are recommended.
The intersection *improvement* will cost $5,000.00.
The motor vehicle capacity will be *improved*.

Objective--
The following street *modifications* are recommended.
The *right turn channel* will cost $5,000,00.
The motor vehicle capacity will be *changed.*

Like improved and improvement, there are similarly biased words such as *enhance*, *enhancement,* and *deteriorate*. Suggested objective language is shown in the examples below.

Examples:

Biased --
The level of service was *enhanced*.
The level of service *deteriorated*.
The capacity *enhancements* will cost $40,000.00.

Objective --
The level of service for cars was *changed*.
The level of service for cars was *decreased.*
The level of service for cars was *increased*.
The *increases* to car capacity will cost $40,000.00.

Upgrade is a term that is currently used to describe what happens when a local street is reconstructed as a collector, or when a two-lane street is expanded to four lanes. *Upgrade* implies a change for the better. Though this may be the case for one constituent, others may disagree. Again, using upgrade in this way indicates that the City has a bias that favors one group over other groups. Objective language includes *expansion*, *reconstruction*, *widened*, or *changed.*

Examples:

Biased --
Upgrading the street will require a wider right of way.
The *upgrades* will lengthen sight distances.

Objective --
Widening the street will require a wider right of way.
The *changes* will lengthen sight distances.

Promoting *alternative* modes of transportation is generally considered a good thing at the City. However, the word alternative begs the question "*Alternative* to what?" The assumption is alternative to cars. *Alternative* also implies that these *alternative* modes are nontraditional or nonconventional, which is not the case with the pedestrian, bicycle, nor transit forms of travel. In addition, the term *alternative* disparagingly implies that it is a form of travel only used by

undesirable or unusual people, and will therefore never be a form of mainstream transportation used by us "normal" people.

If we are discussing *alternative* modes of transportation in the City, direct and objective language or modifiers such as "non-automobile" or “sustainable” forms of transportation should be used.

Examples:

Biased --
Alternative modes of transportation are important to downtown.

Objective --
Non-automobile forms of transportation are important to the downtown.
Non-motorized forms of transportation are important to the downtown.
Alternative forms of transportation *to the car* are important to the downtown.
Sustainable forms of transportation are important to the downtown.

Accidents are events during which something harmful or unlucky happens unexpectedly or by chance. Accident implies no fault. It is well known that the vast majority of accidents are preventable and that fault can be assigned. The use of *accident* also reduces the degree of responsibility and severity associated with the situation and invokes a inherent degree of sympathy for the person responsible. Objective language includes *collision* and *crash.*

Examples:

Biased --
Motor vehicle *accidents* kill 200 people every year in the County.
He had an *accident* with a light pole.
Here is the *accident* report.

Objective --
Motor vehicle *collisions* kill 200 people every year in the County.
He *crashed* into a light pole.
Here is the *collision* report.

Everyone at the City should strive to make the transportation systems operate as *efficiently* as possible. However, we must be careful how we use efficient because that word is frequently confused with the word “faster.” Typically, efficiency issues are raised when dealing with motor vehicles operating at slow speeds. The assumption is that if changes were made that increase the speeds of the motor vehicles, then efficiency rises. However, this assumption is highly debatable. For example, high motor vehicle speeds lead to urban sprawl, motor vehicle dependence, and high resource use (land, metal, rubber, etc.) which reduces efficiency. Motor vehicles burn the least fuel at about 30 miles per hour, and the capacity of a street to carry cars is maximized at this modest speed; speeds above this result in inefficiencies. In urban areas, accelerating and decelerating from stopped conditions to high speeds results in inefficiencies when compared to slow and steady speeds. There are also efficiency debates about people's travel time and other issues as well. Therefore, it is important that if the intent is “faster,” the term faster should be used. Faster is not necessarily more efficient. Similarly, if slower is meant, the term slower should be used.

Examples:

Biased --
The traffic signal timings were adjusted to increase motor vehicle *efficiency*.
Let us widen the street so that cars operate more *efficiently*.

Objective --
The traffic signal timings were adjusted to *increase* motor vehicle speeds.
Let us widen the street so that it cars operate *faster*.

Summary

Biased Terms	**Objective Terms**
Improve	change, modify
Enhance, deteriorate	change, increase, decrease
Upgrade	change, redesignate, expand, widen, replace
Alternative	[bus, bicycle, and walking] sustainable, non-car
level of service	level of service for …
Traffic	motor vehicles
traffic demand	motor vehicles use
Accident	collision, crash
Protect	purchase, designate
Efficient	Fast

Need for New Facilities for All Forms of Transportation

The Gainesville Metropolitan Area Year 2020 ("Livable Community Reinvestment Plan") Transportation Plan identified long-range transportation needs throughout the urban area that are anticipated to be needed by 2020 and that can be funded over the next 20 years (see Table 16). This Metropolitan Planning Organization (MTPO) adopted the Plan on December 14, 2000.

The projects in the 2020 Plan were identified by the Gainesville MTPO as the major transportation network modifications needed by the year 2020 to address projected patterns and volumes of travel. The vision statement adopted by the MPTO states that the Livable Community Reinvestment Plan would "make transportation investments that support livable community centers and neighborhoods by:

1. re-investing in the traditional core areas of Gainesville and the towns of Alachua County to develop walkable downtown centers;
2. connecting a limited number of highly developed mixed use centers, and
3. providing a high level of premium transit service in a linear Archer Road corridor."

The Transportation Improvements Program (TIP) for Fiscal Years 2001/2 – 2005/6 was adopted by the MTPO on June 7, 2001. As with the 2020 Plan, the TIP is for the Gainesville Metropolitan Area, not just the City of Gainesville, so projects outside of Gainesville's city limits are included. Table 16A shows the funded road construction projects in the adopted TIP.

Both the TIP and the 2020 Plan are subject to revision by the MTPO, so the projects listed in Tables 16 and 16A are subject to change. The TIP is subject to revision by the MTPO at a regular business meeting, whereas the 2020 Plan can only be amended after an advertised public hearing.

Table 16: Adopted 2020 Cost Feasible Plan for the Gainesville Urban Area

Long-Range Transportation Needs for which Funding has been Identified

[shaded areas of table are not currently funded]

riority Rank	Project	From	To	Description	Estimated Cost (millions)
1	SW 20th Avenue Charrette Projects (excluding committed projects and priorities 2 and 22)				$12.1
2	SW 24th Avenue Extension	SW 34th Street	Archer Road	new 2-lane divided road (2LD)	$1.8
3	SE 16th Avenue	Main Street	Williston Road	corridor capacity enhancements	$2.1
4	SE Connector	Williston Road	SE 27th Street	corridor planning study and charrette	$0.3
5	Depot Avenue Corridor	SW 13th Street	Williston Road	reconstruct 2LD w/ bikelanes & sidewalks	$6.0
6	Archer Road	AT: SW 16th Avenue		realign intersection	$1.4
		SW 16th Avenue	Shands Hospital	limit vehicular access at SW 16th Avenue and create dedicated bus lanes	
7	University Avenue	W 13th Street	Waldo Road	reduce to 2-lane divided with bus bays	$0.8
8	W 6th Street	SW 4th Avenue	NW 8th Avenue	enhanced multimodal capacity	$2.8
9	Archer Rd / SW 23rd Tr Rail-Trail	SR 121-Depot Ave Trail / SR 331-SR 24		offroad bike / pedestrian trail	$0.5
10	Bicycle Master Plan	AT: Countywide		placeholder for $3.7 million in dedicated bike / pedestrian projects	$3.7
11	Intermodal Center	Archer Road @ Interstate 75		transit transfer facility with park-n-ride lot	$0.1
12	Archer Road Enhanced Transit	Interstate 75	Shands / VA area	increased transit headways	$6.2
13	NW 34th Street	NW 16th Avenue	US 441	widen to add center turnlane	$10.7
14	Park-and-Ride / Express Bus-Alachua	City of Alachua	NW 43rd Street	express bus to transfer facilities in GMA	$7.7
15	Park-and-Ride / Express Bus- Archer	City of Archer	Tower Square IC	express bus to transfer facilities in GMA	$6.5
16	NW 83rd Street	NW 23rd Avenue	NW 39th Avenue	corridor capacity enhancements	$0.4
17	NW 83rd Street Extension	NW 39th Avenue	Millhopper Road	new 2-lane divided road	$3.6
18	Park-n-Ride / Express Bus-Hawthorne	City of Hawthorne	SE 50th Street	express bus to transfer facilities in GMA	$8.0
19	Park-n-Ride / Express Bus- Newberry	City of Newberry	Jonesville	express bus to transfer facilities in GMA	$6.2
20	Park-n-Ride / Express Bus- Waldo	City of Waldo	NE 50th Avenue	express bus to transfer facilities in GMA	$8.0
21	Tower Road Enhanced Transit	Archer Road	Newberry Road	increased transit headways	$6.0
22	Hull Road Extension	SW 62nd Boulevard	SW 34th Street	new 2-lane divided road (IF NEEDED)	$5.3

23	SW 40th Boulevard Extension	Archer Road	SW 62nd Boulevard	new 2-lane divided road	$1.8
24	Transit - Town / Village Center (TV) Transit Projects (excluding priorities 11, 14, 15, 18, 19, 20 and 21)				$123.0
25	Tower Road Charrette Projects (except for the Tower Road enhanced transit service)				$22.7
26	NW 24th Boulevard Extension	NW 31st Avenue	NW 39th Avenue	new 2-lane divided road	$1.8
27	NW 8th Avenue	NW 31st Drive	NW 23rd Street	reduce to 2-lane divided road	$0.4
28	E 27th Street Extension	Hawthorne Road	NW 39th Avenue	new 2-lane divided road	$10.7
				TOTAL	$260.6

Source: Year 2020 Liveable Communities Reinvestment Cost Feasible Plan, December 2000.

Table 16A: Five-Year Federal, State and Local Funded Road Construction Projects

Adopted FY 2001/2—FY 2005/6 Transportation Improvement Program

(Page 112a and b in Transportation Data & Analysis)

Airports and Freight Rail Lines

Introduction

Figure 28 shows the freight rail lines and the location of the airport. The Gainesville Regional Airport is operated by the Gainesville-Alachua County Airport Authority.

The Airport serves a vital role in the City. It encourages industrial growth, promotes trade, expands travel opportunities, and provides employment. The viability of the Airport directly affects the health of the community. It is therefore in the interest of the City to maintain a healthy airport and to be able to expand airport facilities when necessary.

In an effort to achieve this objective in the long term, the "Gainesville Regional Airport Master Plan Update 1987"[91] and the "FAR Part 150 Study 1986" were both prepared for the Gainesville-Alachua County Regional Airport Authority by CH2M Hill consultants.

Background

The Gainesville Regional Airport is located in the northeast quadrant of the city (see Figure 28). The airport served as an Army base during World War II, after which it became City property. The Gainesville Regional Airport was later established by the State as a dependent special district operated by the Gainesville-Alachua County Regional Airport Authority. The Authority is comprised of 9 members--5 from the City, 3 appointed by the Governor and one from the County. The City owns the land and airport improvements and the Authority leases and operates the airport facilities.

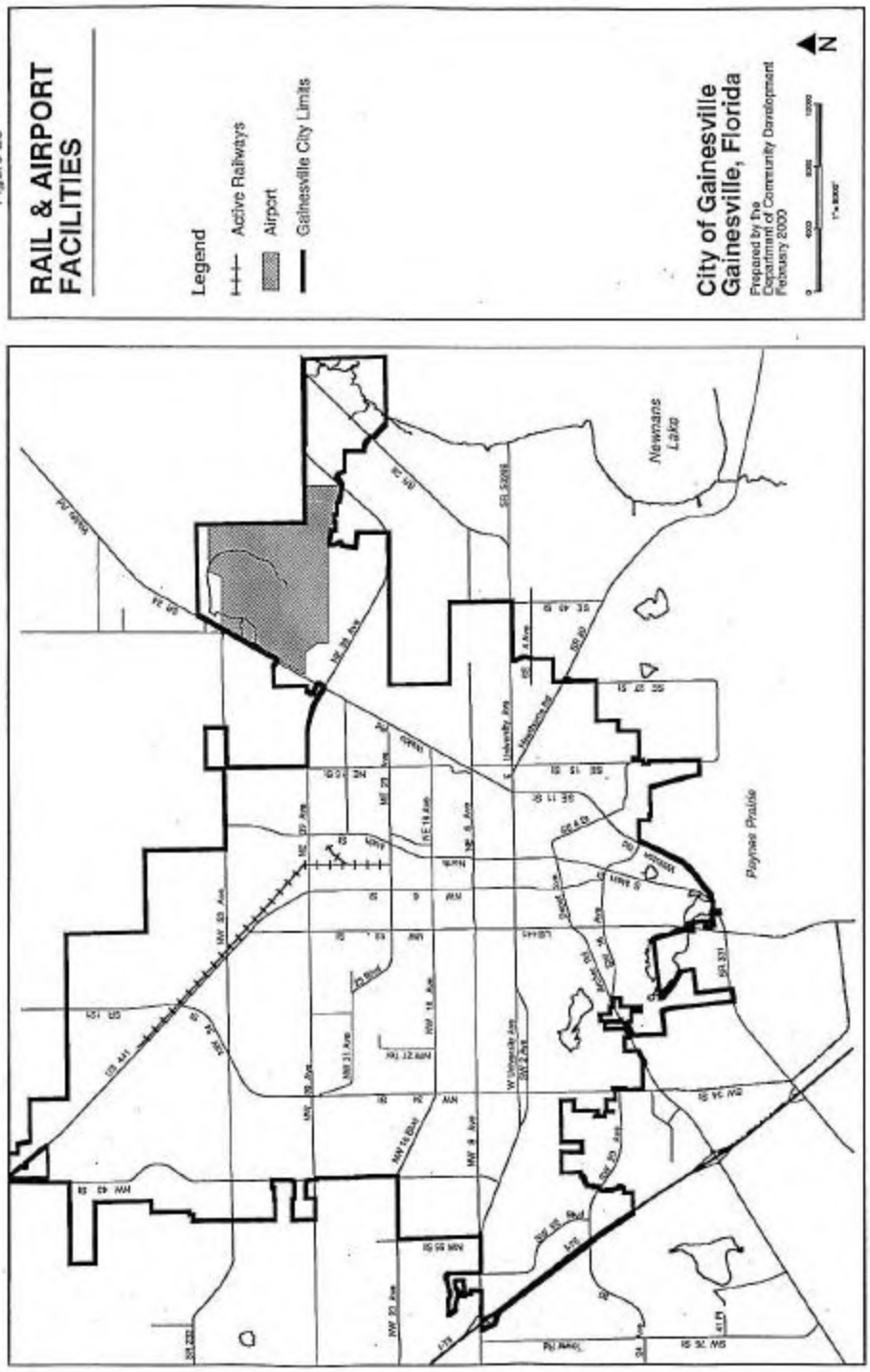
The Airport is defined as a primary commercial service facility by the Federal Aviation Administration (FAA) and as a commercial service airport by the FDOT. The Airport also attracts a sizable number of general aviation aircraft and is one of several airports for general aviation in north central Florida.

Existing Airport Facilities

Gainesville Regional Airport (GNV) is located in northeast Gainesville. The Airport is operated and maintained by the Gainesville-Alachua County Regional Airport Authority (GACRAA). The airport has a primary 7,503-foot long runway and a secondary 4,147-foot long runway. All runways and taxiways are lighted. The Airport has a category I Instrument Landing System, and several non-precision approaches. GNV's Airport Surveillance Radar (ASR-9) was commissioned in August 1996.

The principal terminal area facilities at the Airport include a passenger terminal complex at 3880 NE 39th Avenue on the south side and general aviation facilities on the north side. The passenger terminal complex includes a passenger building and supporting airline apron and motor vehicle parking facilities. GACRAA is currently involved in a phased, multi-year expansion of the passenger terminal complex to meet current and projected facility requirements. The general aviation fixed base operator areas include hangars and apron areas for aircraft storage and tiedown and support facilities located on approximately 48 acres of land.

Figure 28


RAIL & AIRPORT FACILITIES
Legend
Active Railways
Airport
Gainesville City Limits
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development February 2000
N
Newnans Lake
Paynes Prairie

Other key facilities at the Airport include an air traffic control tower and an FAA Automated Flight Service Station. The control tower is in operation from 6:45 a.m. to 10:30 p.m. while the flight service station is operated around the clock. FAA also operates an airways facilities office at the Airport.

The Airport occupies a total of about 2,000 acres of land. Of this, 1,715 acres are designated for aeronautical purposes such as runways, terminal facilities, and clear zones, and 285 acres are designated for the development of the Gainesville Regional Airport Industrial Park.

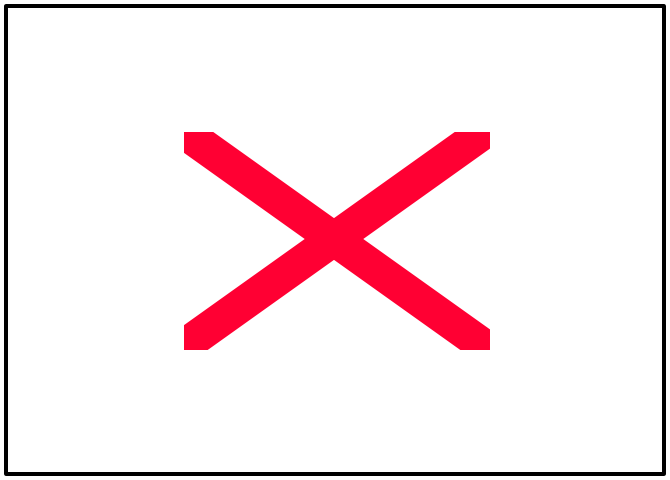
Other Aviation Facilities

Flying Ten Airport is located about 12.5 nautical miles away from GNV. Low Altitude Airways will pass over GNV when new VORTAC is commissioned. The nearest public-use airport is located in Keystone Heights, about 15.5 nautical miles to the northeast. The relatively low amount of activity at that facility offers no constraint to operations at the Gainesville Regional Airport. However, 3 hospitals within the city have helicopter flight pads (Shands, the Veterans Administration, and Shands at AGH), which add to aviation activity. North Florida Regional Medical Center has been granted City approval to install a new helistop within the Center.

Airport Operations

Aircraft Operations and Passengers. All aircraft operations are classified by functional activity into one of the following categories: air carrier, air taxi, general aviation and military. General aviation operations at the Airport are the most dominant and account for between 85 percent and 94 percent of total operations. General aviation consists of both business and personal aircraft which includes air taxi service and charter air service. This includes everything other than military or scheduled commercial airline traffic.

Figure 29. GNV Airport Passengers, 1961-1998



Source: Gainesville Regional Airport Records, 8/99.

The Airport does not contain a base for military aircraft. The military aircraft activity which does occur at the Airport consists of pilot proficiency training flights from neighboring military installations and accounts for less than 2 percent of total activity in recent years.

The remaining aircraft activity comes from commercial air carriers and commuter air carriers consisting of the following: Comair, Atlantic Southeast Airlines, Continental Connection (Gulfstream International Airlines), and US Airways Express (CCAIR).

Table 19 and Figure 29 show total annual enplaned and deplaned passengers at GNV from 1961-1998.

By 1993, the Airport hoped to achieve a 300,000 annual passenger enplanement level with annual growth rates of 14 percent. This could only have been attained with an aggressive and strong marketing program. Table 17 provides a forecast of passenger demand on both air carriers and air commuters to the year 2003.

Table 17: Enplaned Passenger Demand Forecast for 2003

Year	Air Carrier	Air Commuters	Total
2003	338,000	85,000	423,000

Source: The Gainesville Regional Airport Master Plan, 1987.

The forecast for general aviation (Table 18) was based on an average ratio of about 630 general aviation operations per based aircraft and increasing to about 700 by the year 2003. The forecast reflects the increased use of based multi-engine aircraft for business, and the Airport's continued ability to attract general aviation engaged in transient activity.

Table 18: General Aviation Operations Forecast

Year	Local	Itinerant	Total
2003	65,200	121,000	186,200

Source: The Gainesville Regional Airport Master Plan, 1987.

Table 19: Gainesville Airport Deplanements and Emplanements

Year	Deplaned and Enplaned Passengers	Year	Deplaned and Enplaned Passengers
1961	12,623	1980	363,910
1962	7,225	1981	325,421
1963	9,397	1982	283,244
1964	5,630	1983	248,066
1965	8,848	1984	272,077
1966	10,701	1985	313,723
1967	13,738	1986	373,197
1968	19,129	1987	393,829
1969	39,764	1988	395,425
1970	66,912	1989	349,172
1971	90,998	1990	437,219
1972	116,639	1991	349,850
1973	130,916	1992	396,207
1974	183,101	1993	368,564
1975	206,998	1994	385,655
1976	240,259	1995	362,588
1977	276,439	1996	328,076
1978	352,814	1997	358,044
1979	404,363	1998	300,707

Air Cargo. Cargo volumes for mail has been steadily decreasing in recent years (see Table 20). Mail has plummeted from a high of 549 tons in 1987 to a low of 13 tons in 1997 due to the loss of mail contracts. Express cargo, on the other hand, has risen from 12 tons in 1983 to 113 tons in 1997. Freight has experienced a constant decrease from 1980. Much of the problem is attributable to the lack of industries to form the "critical mass" needed to make cargo transport viable. In addition, the lack of cargo space on passenger aircraft serving the Airport is limiting volumes being served. Until Gainesville and Alachua County attract more industry, designated space for cargo aircraft will not be needed at the Airport.

Table 20: Total Airport Freight, Mail and Express Cargo, in Tons, (1983-1997)

Year	Mail	Freight	Express	Total
1983	46	337	12	395
1984	101	340	11	451
1985	295	266	11	572
1986	173	226	16	415
1987	549	186	20	755
1988	69	180	19	269
1989	40	102	21	163
1990	58	190	28	276
1991	11	248	25	284
1992	18	408	25	451
1993	16	441	26	484
1994	8	369	96	473
1995	14	313	81	409
1996	16	319	84	419
1997	13	243	133	389

Source: City of Gainesville Regional Airport records, August 1999.

Local Factors Affecting Airport Growth and Operations

Population. The demand for aviation facilities and services depends on the number of people using them. In this case, the Gainesville Regional Airport marketing program has identified 3 counties (Alachua, Bradford, and Marion) that account for the majority of population which use air carrier services. The Airport is in direct competition with Jacksonville, Orlando, and Tampa Airports, which offer a variety of services. According to a 1984 Gainesville passenger traffic survey, 55 percent of travel was for pleasure purposes by passengers who could afford to wait for the cheaper fares for flights from larger airports.

Alachua County is the general aviation service area for the Airport. Almost all of the owners of aircraft based at the Airport reside in the City limits, with remaining owners residing in Alachua County.

The Airport is expected to experience a growth in passengers due to the population growth in the air service area shown in Table 21. Marion County is one of the fastest population growth areas in the country and Alachua County is expected to keep pace with the State and exceed that of the nation. The trend for Alachua County is expected to continue into the future. Table 21 compares projected population growth between Alachua County, the Tri-County air service area, and the State of Florida.

Table 21: Projected Population (2000-2010)

Year	Alachua County	Alachua, Marion, Bradford Countys	Florida
2000	218,000	498,000	15,524,000
2005	234,000	543,000	16,773,000
2010	249,000	586,000	17,942,000

(rounded to nearest 1,000)
Source: Population Projections Table 1.40, 1999 Florida Statistical Abstract.

Local Economy. Gainesville is the largest city in Alachua County and the center of economic activity. The City's population comprises about half of the County's population. The Alachua County labor force is heavily employed in the service industry due to the presence of UF, Santa Fe Community College, and 4 major hospitals (Shands, Veterans Administration, Shands at AGH, and North Florida Regional). Many of the employment positions provided by these employers are filled by professional and skilled workers whose disposable incomes provide them with the opportunity to travel. Unemployment is lower in Alachua County than state and national levels due to the stability of these major employers.

Socioeconomic factors, such as population and employment characteristics indicate that the economy of the region will continue to grow at a moderate rate. Thus, demand for commercial and private air transportation is also expected to grow moderately in relation to this growth.

Natural Features. The Airport and surroundings have natural areas which must be protected. More specifically, the airport area contains several environmentally important features (see Figure 30) including Little Hatchet Creek, wetlands, and Gum Root Swamp east of the airport. The airport also lies partially within the floodplain zone and falls within the Murphree Wellfield designated secondary and tertiary management zones.

All of these conditions may make certain types of development inappropriate for environmentally sensitive areas surrounding the Airport. Alachua County has adopted a Murphree Well Field Management Code to protect the community water supply. Development in the Airport Industrial Park must be in compliance with the code's requirements and restrictions. The City's "Regulation of Development Near Creeks" Ordinance provides standards for development along Little Hatchet Creek. It prohibits any activity within 35 feet of the centerline and requires prior approval for construction within 150 feet. Floodplain characteristics place further restrictions on development activity by limiting density and requiring sometimes costly moderation measures.

Land Use. All designated existing and proposed future land uses within city boundaries are compatible with the airport (see Future Land Use Map and Figure 31). There are no residential land uses that fall within the airport noise contours. Future land use designations within city limits near the airport are industrial, transportation, public service, residential, agriculture and unimproved. The City's revised Airport Hazard Zoning regulations creates 3 "airport zones of influence" regulating height limitations, permits for development, noise zones, prohibited uses, bird strike hazard zone, visual and electrical interference zone, education restrictions, and nonconforming uses.

Figure 30

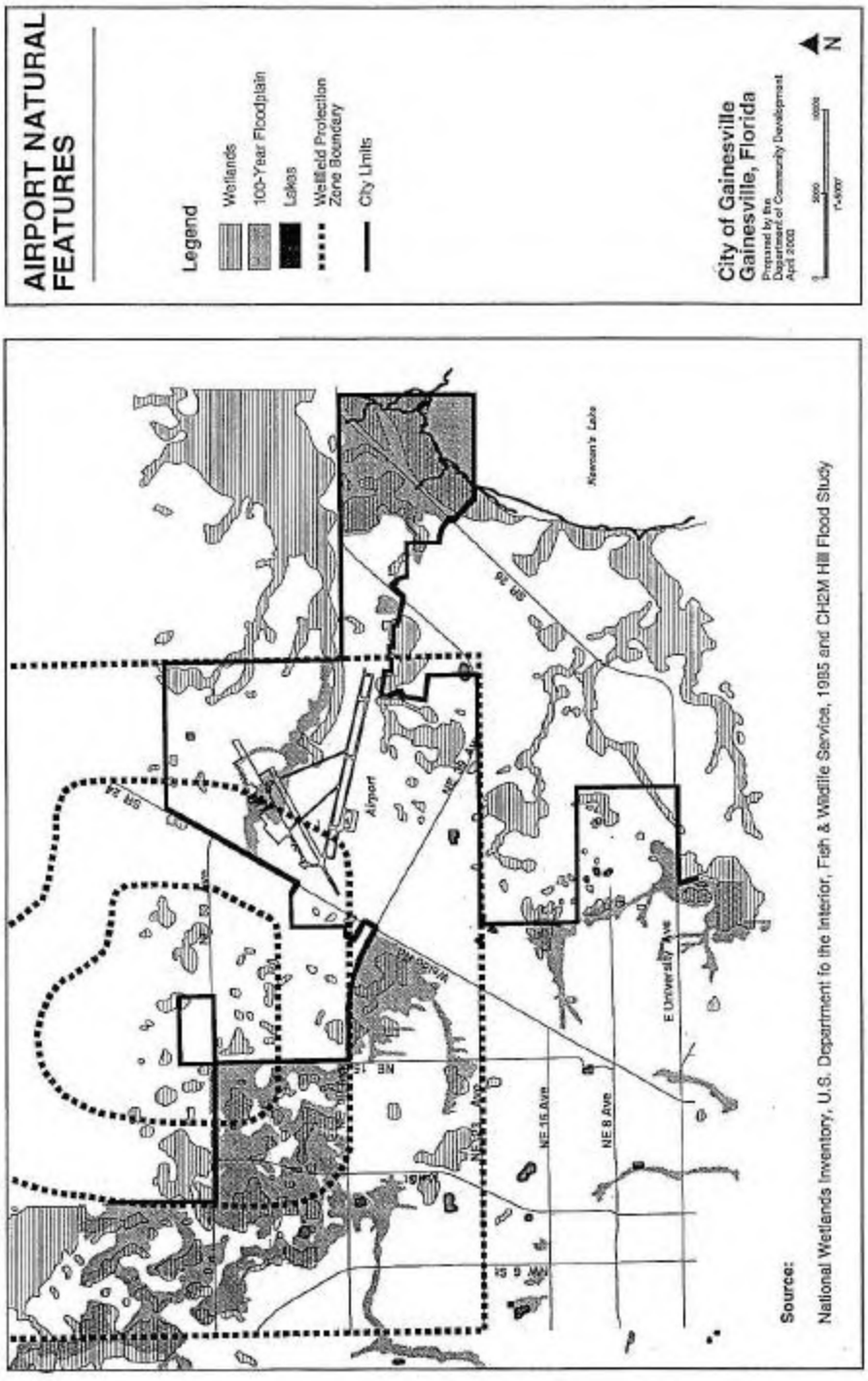
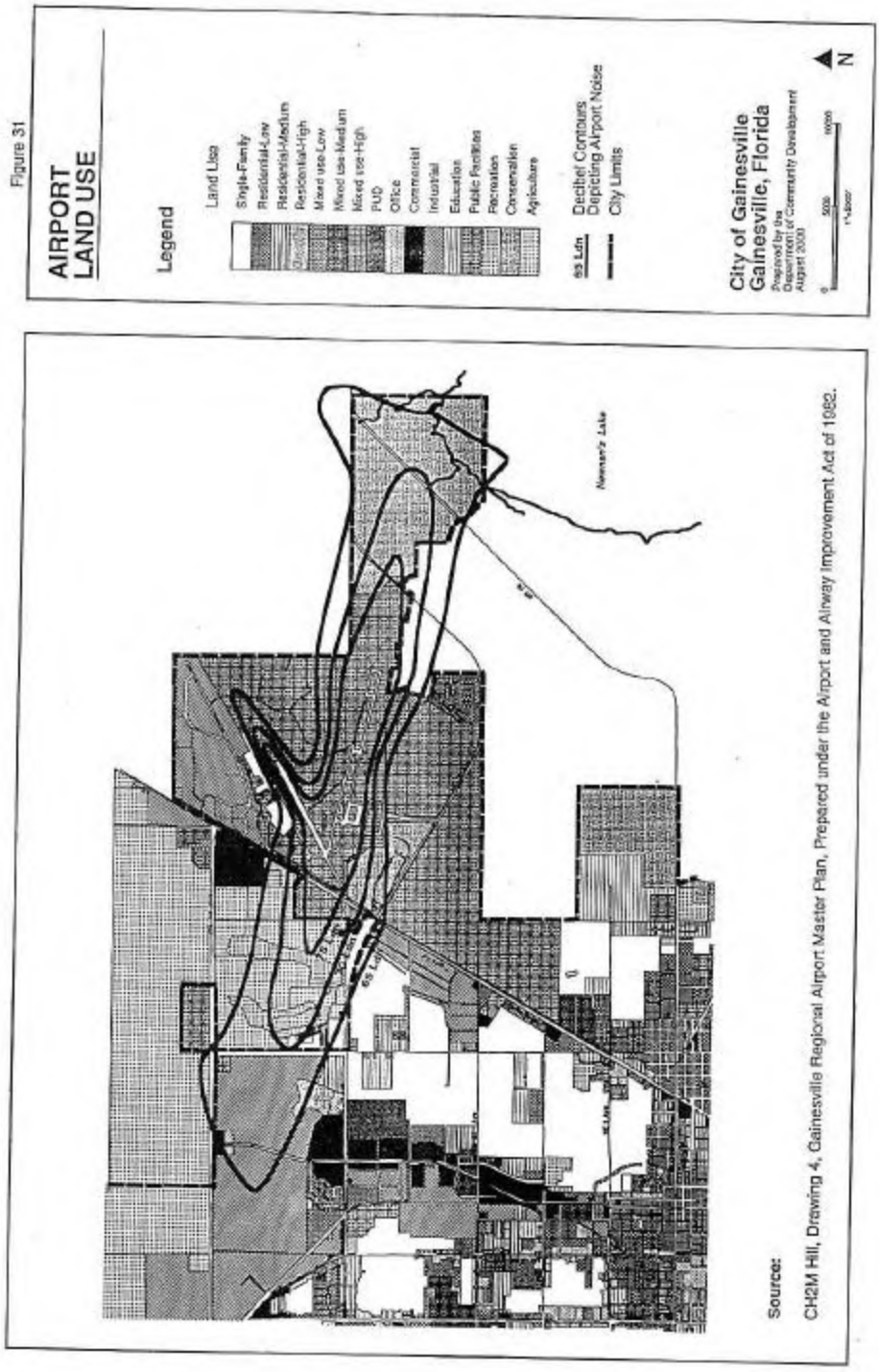

AIRPORT NATURAL FEATURES
Legend
Wetlands
100-Year Floodplain
Lakes
Wellfield Protection Zone Boundary
City Limits
City of Gainesville
Gainesville, Florida
Prepared by the Department of Community Development April 2000
N
Source:
National Wetlands Inventory, U.S. Department fo the Interior, Fish & Wildlife Service, 1985 and CH2M Hill Flood Study
Airport
Newnans Lake
NE 15 Ave
NE 8 Ave
E University Ave

Figure 31. Airport land use



The Gainesville Land Development Code, Sec. 30-76, establishes the AF (airport facility) zoning district. This section makes provisions for airport growth, development and management, in accordance with environmental concerns and public safety. An airport layout zoning map designating permitted uses has not yet been adopted and amended by ordinance. The future intent is to adopt the Gainesville Regional Airport Master Plan as the guide for future development in and around the airport. Included in the Master Plan is the Off-Airport Land Use Plan 2003 which indicates future land uses within and near the noise contours. For this element, the figure has been renamed Airport Land Use (Figure 31). This figure illustrates future land uses in Alachua County, which include industrial, warehouse, tourist/entertainment, hotel, and recreation, to the west and north of the Airport, and residential to the east and south.

Essentially, all the land uses beyond the airport boundary affected by aircraft noise are within the jurisdiction of Alachua County. No residential land uses are located within the airport noise contours. Industrial uses in the vicinity of the airport fall within the 65 Ldn sound contour. Much of the land area east and west of the airport is unsuitable for significant development due to its flood prone characteristics.

The Gainesville Regional Airport Master Plan identifies land targeted for acquisition to eliminate incompatible land uses and to allow airfield and terminal improvements. Land acquisitions are planned for parcels south of the airport. Alachua County has cooperated with the City to minimize the potential for the development of incompatible land uses in the vicinity of the airport. The County has defined a noise attenuation area and a noise sensitive district to preclude detrimental noise impact on land uses and to protect the public's investment in the airport. These provisions are contained in Sec. 392.91.d of the Alachua County Unified Land Development Code.

Airport Noise Impacts. The subject of aircraft noise impact, noise reduction actions, and surrounding land use was evaluated in detail in a Federal Aviation regulations (FAR) Part 150 Study, conducted in March 1986 for Airport. The existing and projected Ldn noise contours (year 2001) can be found on Figure 31. By the year 2001, the size of the Ldn contours will have increased.

The Part 150 study indicated that the City has implemented appropriate noise abatement procedures to reduce aircraft noise. Airplane pilots are cooperating by modifying their flight tracks using Newnans Lake and Gum Root Swamp as a noise buffer when operating east of the Airport. The Airport has implemented a preferential runway system, and has purchased most of the land with incompatible uses. The County discourages housing and building east and west of the Airport due to floodplain characteristics. Sewer and water are not available in that location and any potential landowner in this flood plain is required to have at least 5 acres per housing unit.

Airport Clear Zones and Obstructions. FAA regulations in Part 77, Subpart C (Objects Affecting Navigable Airspace), provides standards for determining obstructions to air navigation. These regulations were utilized by the Gainesville-Alachua County Regional Airport Authority to define and provide for the establishment of various zones and the prescribed height limitations within them. The City and Alachua County have both adopted ordinances to provide height regulations in and around the airport.

The zones designated in the Gainesville Land Development Code, Appendix F, Airport Hazard Zoning ordinance, includes the following:

- Airport Height Notification Zone
- Airport Runway Clear Zone
- Airport Noise Zone

Obstructions to Local Air Traffic. There are 15 human-built obstructions within the "Horizontal Zone" of the Gainesville Regional Airport (see Figure 32). All are lighted.

Traffic Circulation. Two principal arterials provide access to the airport, Waldo Road (SR 24), and NE 39th Avenue (SR 222). NE 39th Avenue serves as the main terminal entrance (see Figure 33). Waldo Road primarily services General Aviation and the Airport Industrial Park from the following three points: NE 40th Terrace, NE 49th Avenue, and NE 54th Avenue. Both Waldo Road and NE 39th Avenue are 4-lane streets and have a level of service of B.

No motor vehicle travel modifications are proposed by the City for this area through the year 2001. In 1989, the widening of 39th Avenue, a major east-west corridor to the airport, was completed.

Future Airport Needs

Table 22 provides the Airport Capital Improvements Plan.

Table 22: Gainesville Regional Airport Capital Improvements Plan, 1999-2000

Project	Cost
General aviation terminal building renovations	$500,000
General aviation terminal. Reconstruction of vehicle parking lots	$119,694
Corporate hanger project	$500,000
"T" hanger project	$450,000
Airfield painting	$218,850
Recondition baggage conveyor	$25,000
Passenger terminal. Mobile passenger walkway	$80,000
General aviation aprons. Pavement rehabilitation & installation of airport wash rack	$500,000

Source: Gene Clerkin, Gainesville-Alachua County Regional Airport Authority, 1999.

Figure 32. Airport clear zones

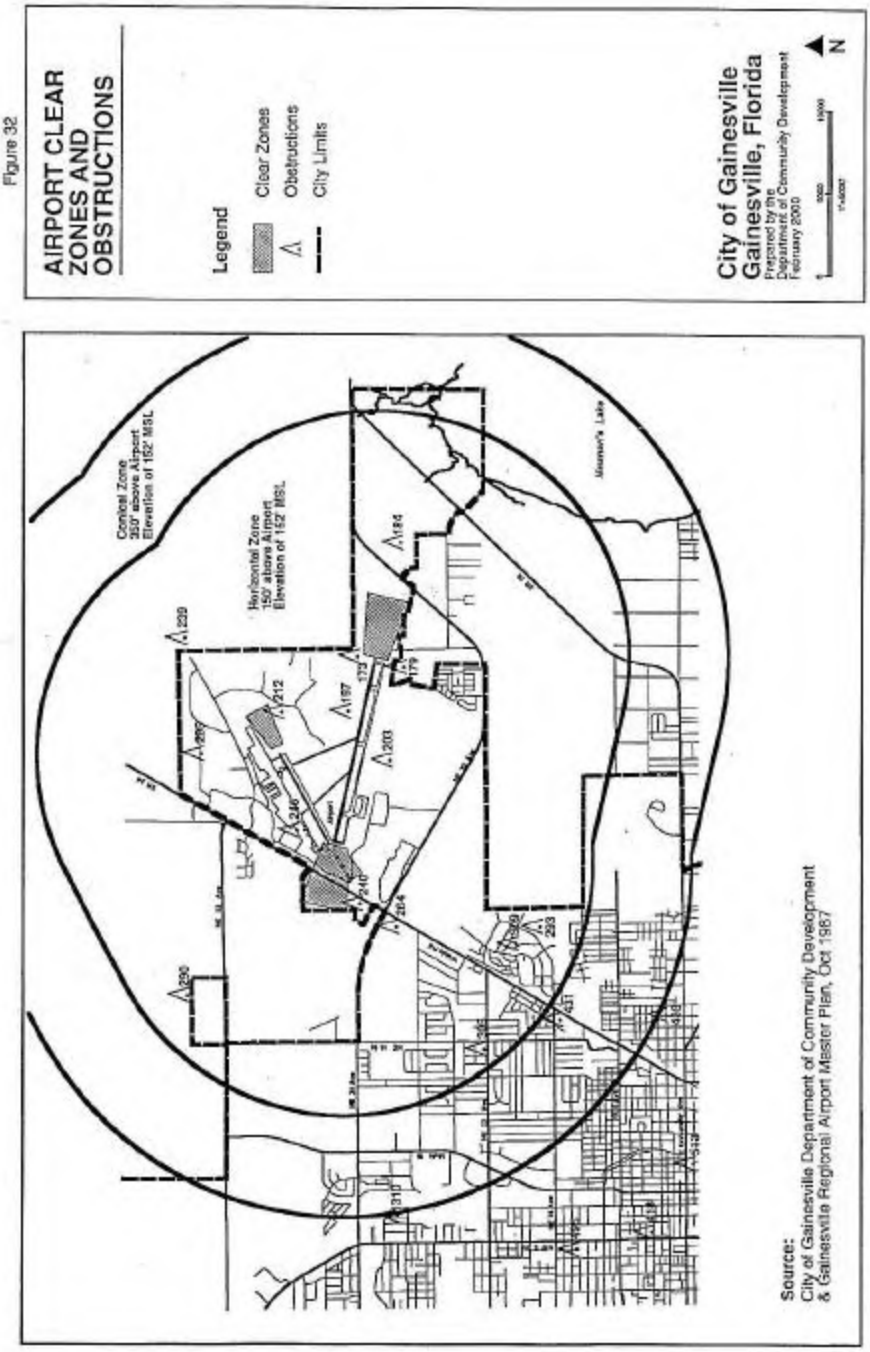
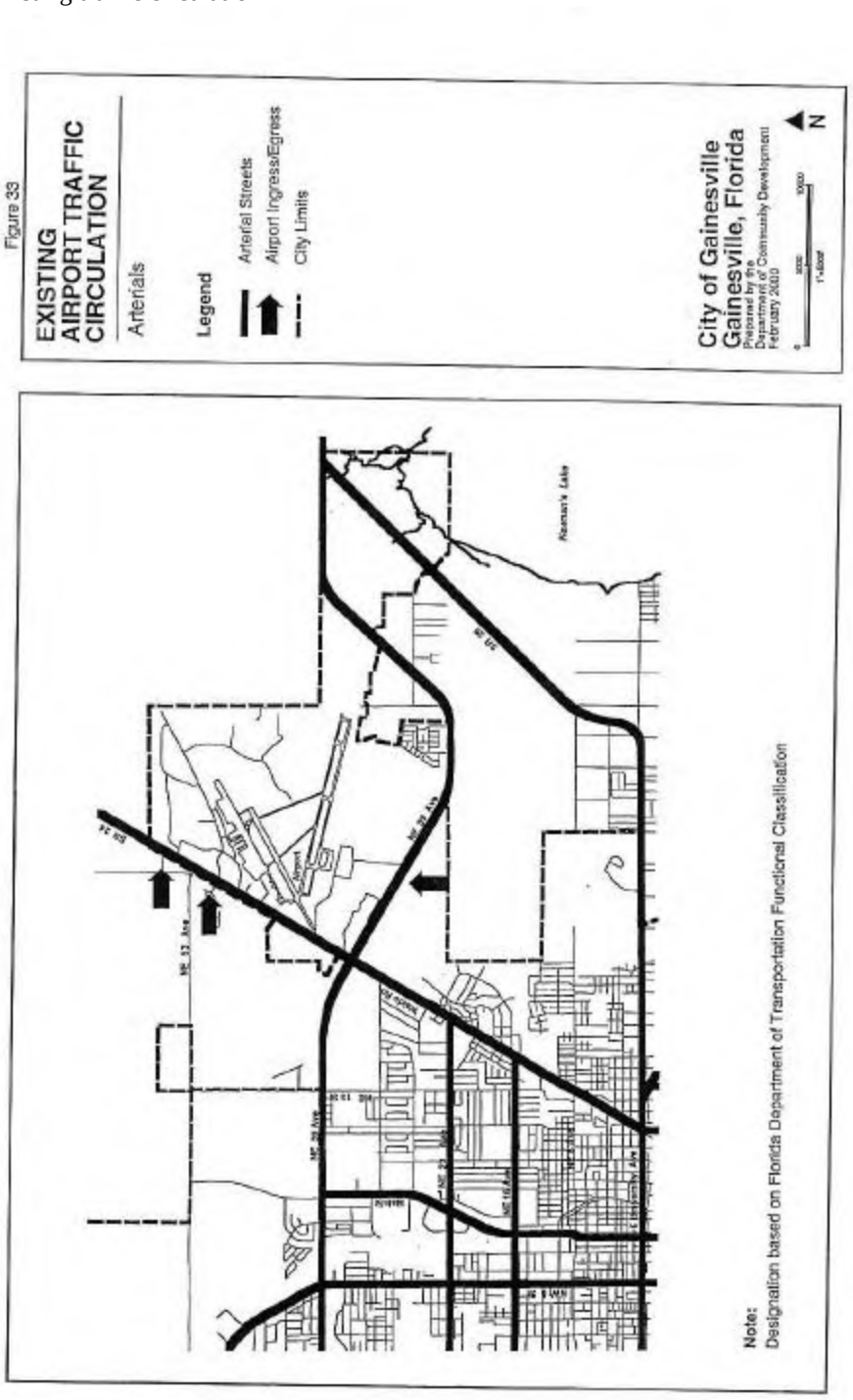


Figure 33. Existing traffic circulation



Emergency Management

Evacuation for Impending Natural Disasters. The city contains emergency evacuation routes in the event of an impending natural disaster, as designated by the Florida Division of Emergency Management (see Figure 34).

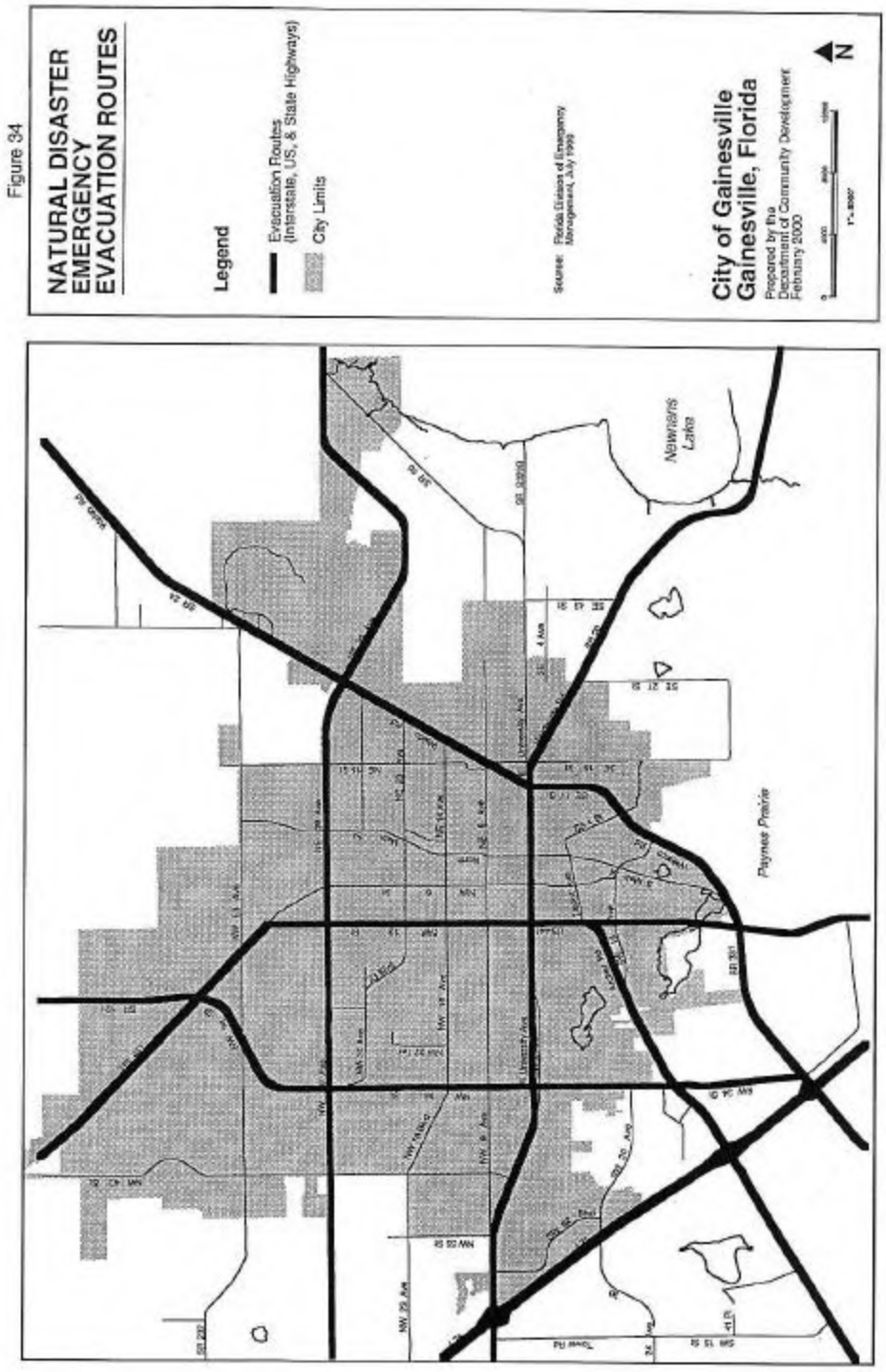
According to Michelle Pope of the Florida Division of Emergency Management, there are no "critical intersections or roadways" that are found within the city. However, Gainesville is heavily used by evacuees, whether it be in designated shelters or in hotels and motels.

According to Lt. Donnie Love of the Alachua County Sheriff's Office, and Eddie Williams, Director of Communications for the Gainesville Police Department (GPD), the Florida Highway Patrol staffs the four I-75 intersections in the Gainesville Urban Area to guide traffic movement during an evacuation. Under the "Florida Emergency Management Act," the Sheriff's Office becomes the "Central Service Functions" agency (the "Emergency Operations Center) to coordinate deployment of law enforcement officers to street intersections during an evacuation. Typically, deputies are deployed to intersections outside the city and GPD officers are deployed to intersections within the city.

Officers also provide shelter site security.

Currently, evacuation capabilities are deemed by GPD and the Sheriff's Office to be adequate.

Figure 34. Evac Routes



Funding

The long term strategies discussed in the Data and Analysis portion of the Transportation Mobility Element have a number of funding sources.

(1) TEA-21 enhancement dollars are available for pedestrian and bicycle improvements. Many of the improvements needed to complete the sidewalk system have been identified and can be scheduled as funds become available. The concepts proposed for University Avenue would need to be presented through the MTPO planning process and placed in the 5-year Transportation Plan. TEA-21 is also the major Federal funding source for other local transportation projects.

(2) Existing gasoline tax revenue is used for RTS and other transportation projects.

(3) Sidewalk improvements and construction and maintenance on City streets is the responsibility of the City. The City will need to reconsider its present allocation of general fund dollars in this area.

(4) A state committee has recommended use of a transportation impact fee with "variable rates that encourage urban infill and redevelopment, discourage urban sprawl, and reward transit oriented developments and developments with low vehicle miles of travel (VMT) generation characteristics." The City should support this recommendation.

(5) Public-Private (developer financed) funding is occasionally available for various local transportation projects.

(6) The Campus Development Agreement between UF and the City of Gainesville has provided funding for various transportation projects.

(7) Interlocal agreements between Gainesville and Alachua County sometimes provides funding for City transportation projects.

(8) The Transportation Funding Advisory Committee (TFAC) was convened to identify funding sources for transportation modifications. In 1999, TFAC recommended that Alachua County adopt a 5-cent local option gasoline tax increase and transportation impact fees.

Evaluation and Appraisal Report—Major Issues

The evaluation and appraisal process for the City's Comprehensive Plan, as required by Florida Statutes, offers an opportunity to identify major issues affecting the community as they relate to the Plan. These major issues inform the City and its citizens of what the most important challenges are that must be handled in the update of the Plan to ensure a better future for the community. Identification of these major issues came through the interactive process of presentation of element evaluations at public hearings and board meetings.

Major issues identified:

- The loss of the street should not foreclose the future installation of bicycle/pedestrian trails, non-car connections to adjacent land uses, or a transit line.
- Site plans for new developments should be required to show any existing bicycle and pedestrian access to adjacent properties and transit stops, and not show a design which forecloses future links for bicycle and pedestrian access to adjacent property.
- Modify University Avenue between downtown and UF to enhance the connection between these two neighborhood (activity) centers – including consideration of taking west University Avenue to 2 travel lanes. The City should also encourage additional residential units near University Avenue. This project should include identification of alternative routes that can be used for non-local, non-destination trips along S.R. 26 (University Avenue).
- The City should coordinate with the University of Florida to ensure that the Campus Master Plan is consistent with the goals, objectives and policies of the Transportation Element of the City Comprehensive Plan.
- The City should request that the Metropolitan Transportation Planning Organization (MTPO) boundaries be adjusted to include all street segments within city limits.
- The City should request that Archer Road be re-routed to reduce through trips, especially trips by large trucks.
- The City should request that the threshold for requiring Art-Plan analysis be lowered so that it is consistent with the lower threshold for requiring transportation moderation strategies.
- The City should encourage the installation of structured parking garages and shared parking lots within neighborhood (activity) centers, employment centers, and the downtown/UF area. The Gainesville Land Development Code should be amended to require a special use permit to ensure that such parking meets performance objectives when near multi-family housing.
- The Future Land Use Map should continue to show areas for housing which serve the needs of employees and students within walking distance of the University and the downtown.
- The City should inventory and prioritize street segments with sidewalk gaps.
- The City should complete an inventory of sidewalks on all arterial, collector and local streets, and place such an inventory on the city Geographic Information System to assist in the identification of gaps and priorities.
- All new streets within the city should include sidewalks on both sides.

- The City should increase the amount of land designated for multi-family development on the Future Land Use Map along arterials and collectors – especially when near important transit stops.
- Establish retail, office, civic, recreation, school, and higher density residential near transit stops.
- The City should evaluate the citywide bus stops to identify needs for bus stop improvements – especially ADA improvements.
- Higher density residential (at least 8 du/ac) should be located close to a transit stop, carpooling and park-n-ride should be promoted, and bus service should be enhanced -- especially in the southwest -- to increase the frequency of service.
- To reduce reliance on major streets, and promote transportation choice, the City should encourage street connectivity, gridded streets, and trails.
- Establish exception flexibility from transportation levels of service. Such an exception approach will promote infill and discourage sprawl.
- Increase funding for better service and facilities for travel by bus, walking, and bicycling. A higher level-of-service standard should be adopted for transit.

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areas of new development. ..More congestion would make it easier to implement mass transit in an area. Mass transit could improve levels of service without direct roadway improvements...Economic principles suggest that people should pay for the infrastructure they use. This imposes costs on users, causing them to take account of the costs of their own actions...One implication is that gasoline taxes are a better source of revenue for roadway improvements than other sources such as sales (or income) taxes...the last development built that adds traffic to a road is not the development that causes the congestion. All traffic on the road, whether from new or old developments, are equally responsible for the congestion on roads...If this principle is not adhered to, it creates a common pool problem (with the arterial road being the common pool). Everyone has an incentive to develop property too fast so as not to be the one who is charged for congestion on the roads. Thus, a policy of taxing new development more than existing developments for common infrastructure will lead to overly rapid development, helping to cause congestion problems that the policy is intended to solve...This will make it impossible in some areas to alleviate congestion by enlarging capacity. There is a fallacy that sometimes creeps into highway planning that a given amount of development will create a given amount of traffic. In fact, the amount of traffic created by a given development depends upon how costly it is to use the roads. The mere act of enlarging capacity will create congestion without additional development by reducing the incentive to avoid peak hour travel, creating the incentive to take more trips, and reducing the incentive to live close to work. Congestion is a cost that rations roadway use, and it follows that unless tolls are charged, congestion cannot be eliminated from intensely populated areas by enlarging roads." See also: Remak, R. & S. Rosenbloom. (1976). "Peak Period Traffic Congestion. Transportation Research Board Special Report 169, p. 62; American Association of State Highway and Transportation Officials. (1978). "A Manual on User Benefit Analysis of Highway and Bus-Transit Improvements." Washington DC pp. 18-19; Dowling. R.G. (1994). "A Framework for Understanding the Demand Inducing Effects of Highway Capacity;" Pells, S.R. (1989). "User Response to New Road Capacity: A Review of Published Evidence." Institute for Transport Studies, Univ. of Leeds; Standing Advisory Committee on Trunk Road Assessment. (1994). "Trunk Roads and the Generation of Traffic." p. 47; Moore, Terry and Paul Thorsnes. (1994). "The Transportation-Land Use Connection." Planners Advisory Service Report No. 448/449. American Planning Association, pg. 23; Surface Transportation Policy Project. 1998. "An Analysis of the Relationship Between Highway Expansion and Congestion in Metropolitan Areas." Pg. 5, Washington DC; Hansen, Mark. (1995). "Do New Highways Generate Traffic?". Access No. 7, at 16, 19-20; Transportation Research Board, National Research Council. (1995). "Expanding Metropolitan Highways: Implications for Air Quality and Energy Use." Special Report 245, pg 162.

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