



13th Street

University Avenue

City of
Gainesville

Corridor Study

University of
Florida

Downtown
Gainesville

Study Overview



Analyze and develop **concepts**



Recommend **interim & ultimate use of the street & right of way** to **improve safety & prioritize people**



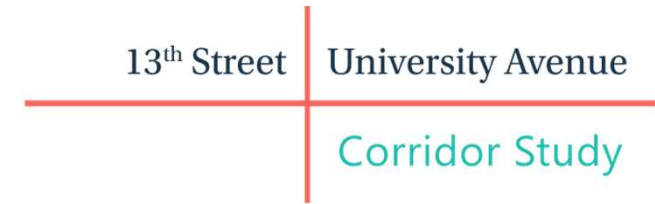
Partnership between City of Gainesville, University of Florida and Florida Department of Transportation

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Scope of Work & Steps



We Are Planning A Complete Street

Complete Streets Reallocate Street Space To Be Designed For People And Used By Everyone

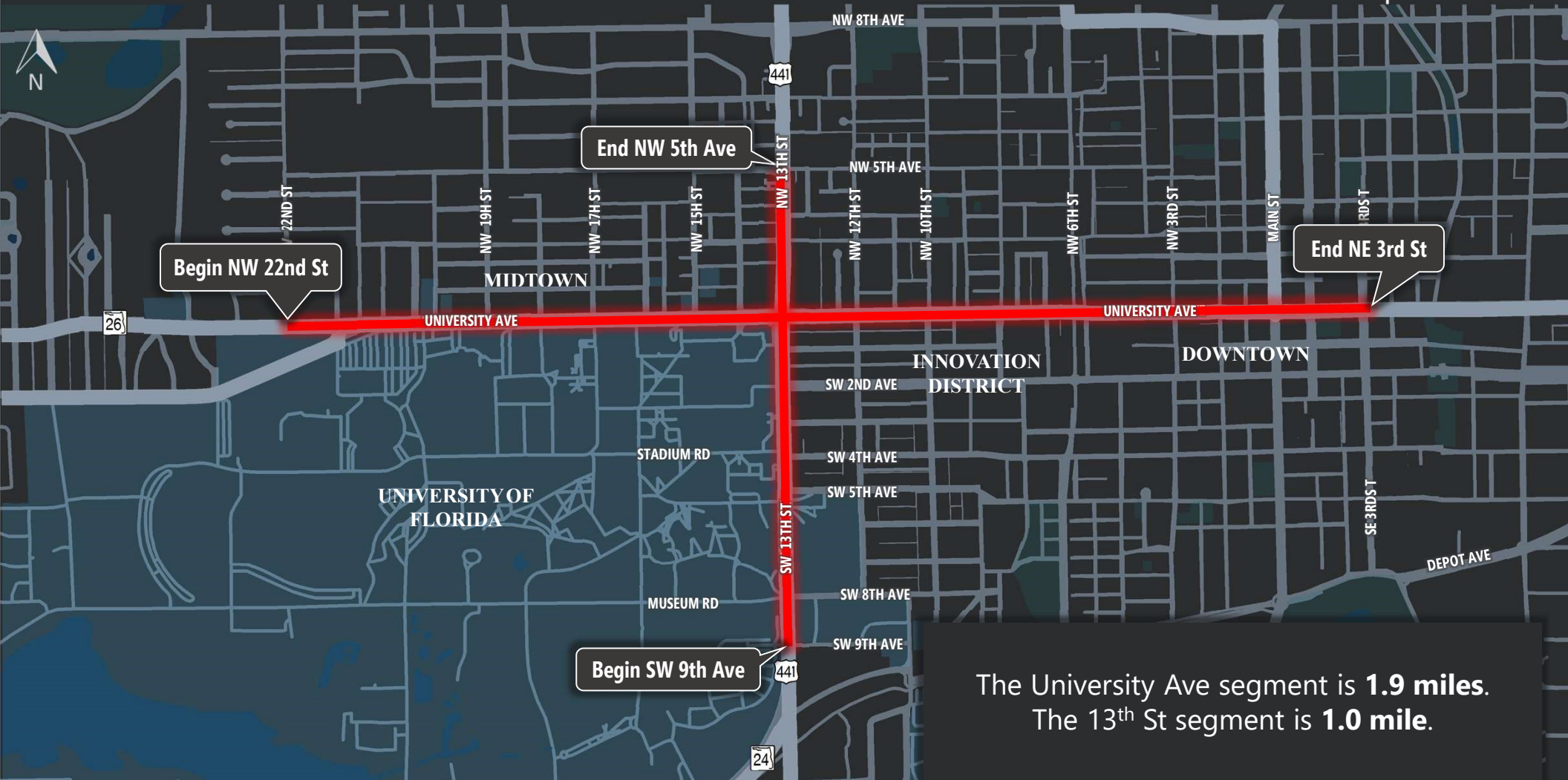
Including Vehicles, Transit, Pedestrians, & Cyclists Of All Ages & Abilities

1 Identify potential design solutions based on corridor safety needs and context

2 Conduct an alternatives assessment to compare corridor solutions

3 Draw concept plans and recommend the ultimate use of the street

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	Corridor Study



1 | Existing Conditions

Bicycle and Pedestrian Counts

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4 Highest Hours of the Day

2,415

 Pedestrians

366

 Bicyclists

4 Highest Hours of the Day

180

 Pedestrians

4 Highest Hours of the Day

3,171

 Pedestrians

309

 Bicyclists

4 Highest Hours of the Day

184

 Pedestrians

160

 Bicyclists

 Future Development



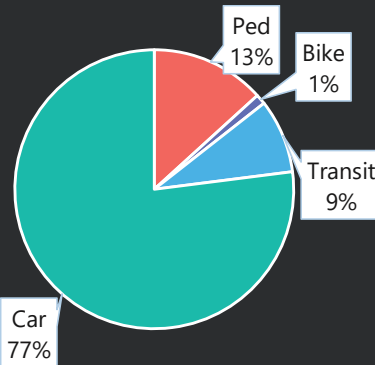
Pedestrian and bicycle movement is expected to increase with the new developments.

Overlap of Modes at 5 PM

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University Ave @ 13th St Intersection 5 PM – 6 PM



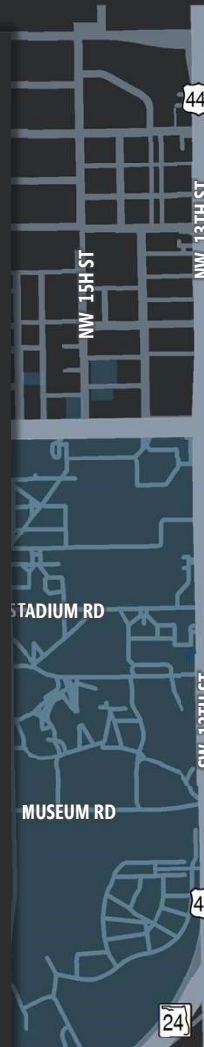
851 people

75 people

~22 buses

4,950 vehicles

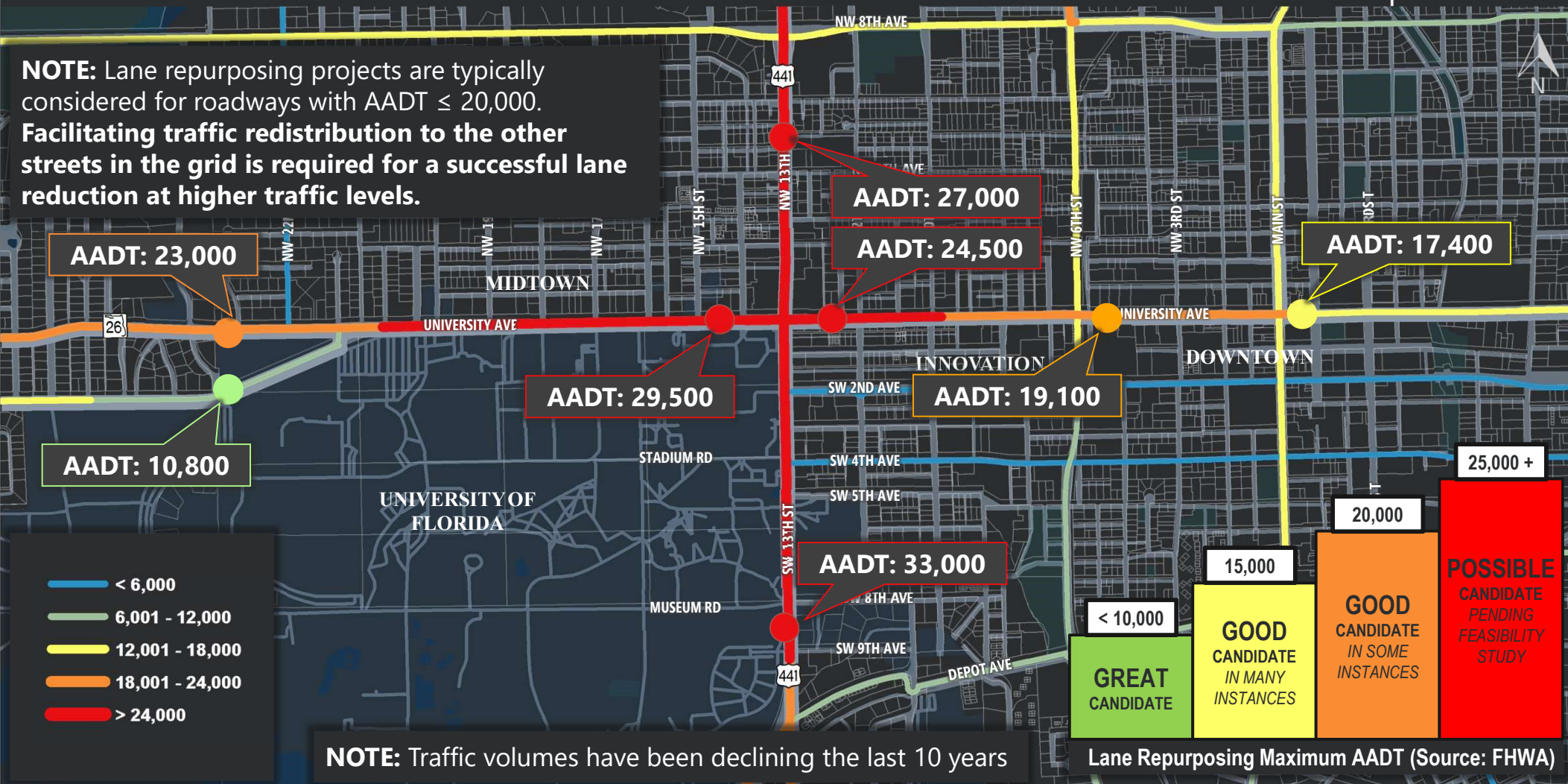
While vehicle capacity is constrained at the intersection, vehicles still dominate the intersection creating challenges for other modes.



Daily Traffic Map – AADT (Annual Average Daily Traffic)

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NOTE: Lane repurposing projects are typically considered for roadways with AADT ≤ 20,000. Facilitating traffic redistribution to the other streets in the grid is required for a successful lane reduction at higher traffic levels.



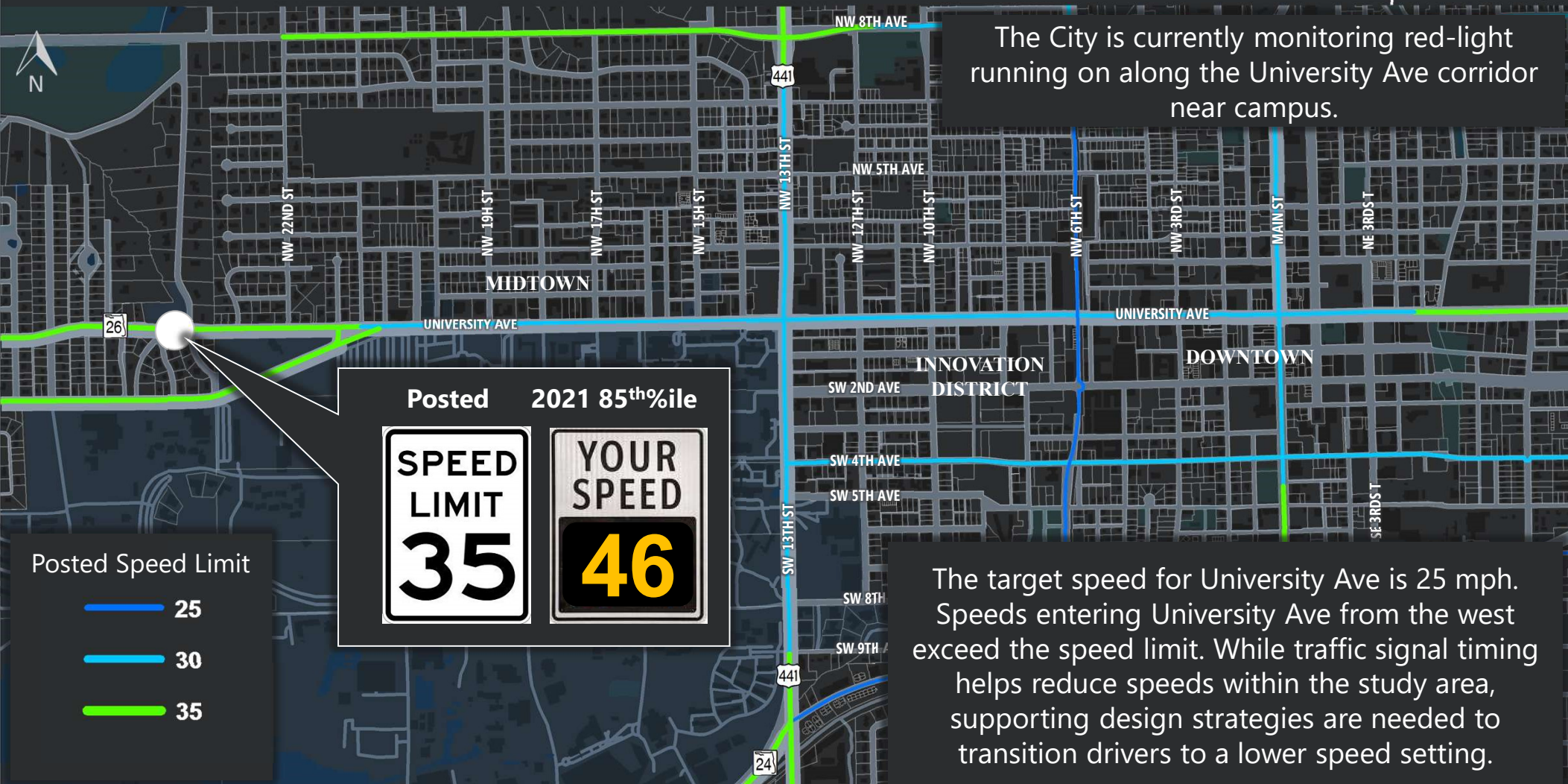
NOTE: Traffic volumes have been declining the last 10 years

Lane Repurposing Maximum AADT (Source: FHWA)

Speed Limits

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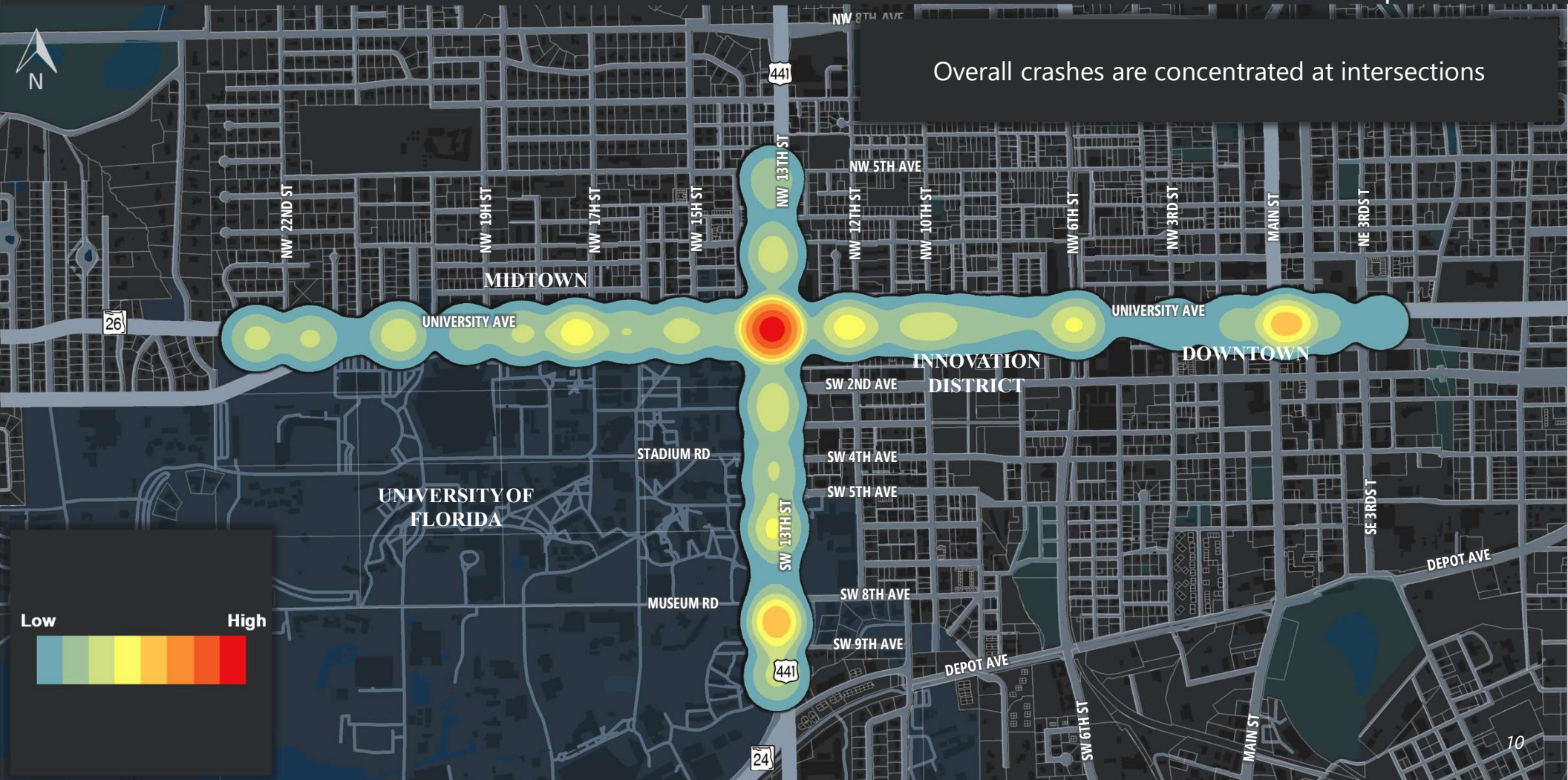


Overall Crashes (2015 – 2020)

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Overall crashes are concentrated at intersections



Pedestrian Crashes (2015 – 2020)

with 2021 Fatalities

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2020 Hit and Run Fatality at 10:49PM.
Student struck by driver while
crossing University Ave.

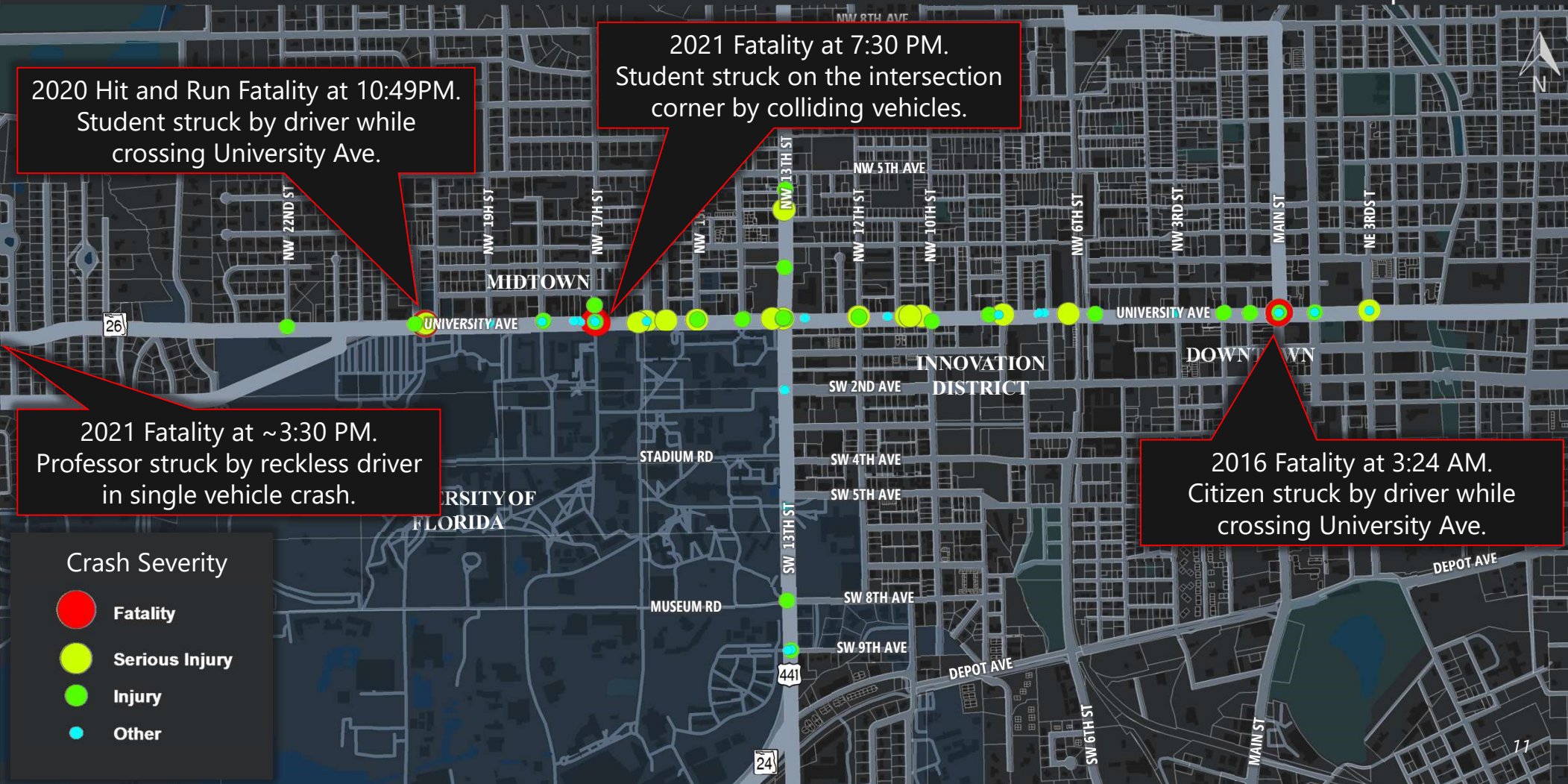
2021 Fatality at 7:30 PM.
Student struck on the intersection
corner by colliding vehicles.

2021 Fatality at ~3:30 PM.
Professor struck by reckless driver
in single vehicle crash.

2016 Fatality at 3:24 AM.
Citizen struck by driver while
crossing University Ave.

Crash Severity

- Fatality
- Serious Injury
- Injury
- Other



Pedestrian/Bicyclist Crash Analysis

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SPEED

20
MPH

CONE OF VISION



STATISTICAL OUTCOME OF A PEDESTRIAN STRUCK BY A VEHICLE:



**9 OUT OF 10
PEDESTRIANS SURVIVE**

30
MPH



**5 OUT OF 10
PEDESTRIANS SURVIVE**

40
MPH



**1 OUT OF 10
PEDESTRIANS SURVIVE**

Source: UNC Highway Safety Research Center

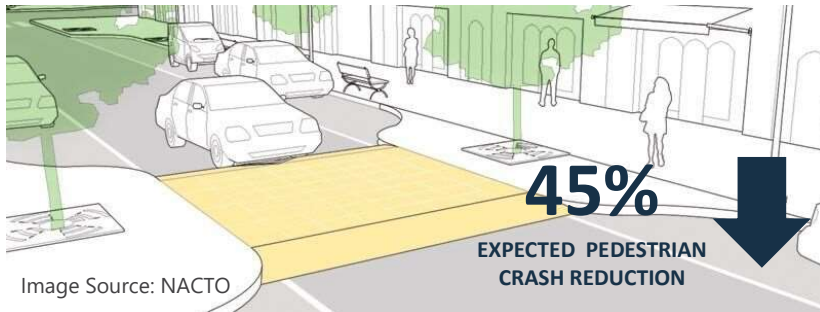
2 | Potential Design Strategies & Similar Studies

Expected Crash Reduction

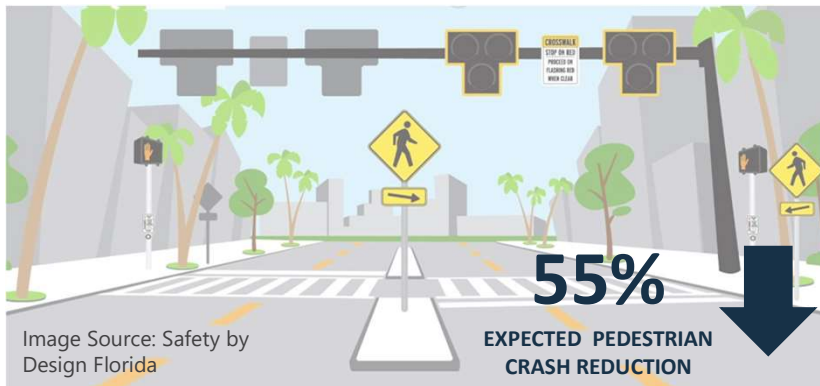
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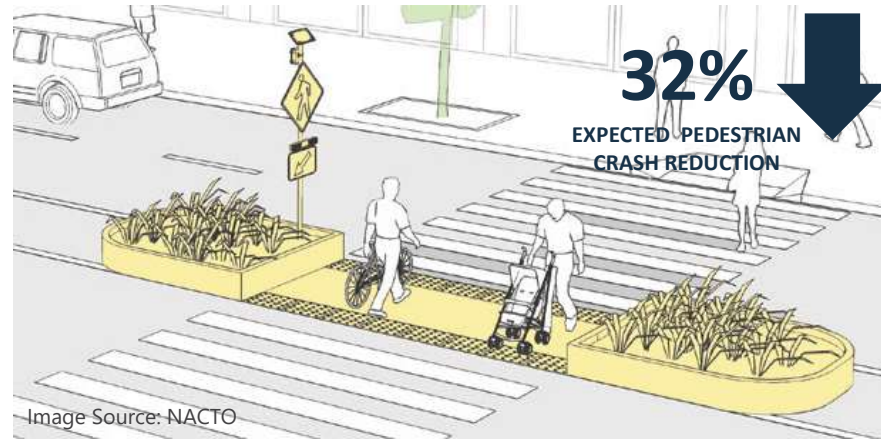
RAISED CROSSWALK (SPEED TABLES)



PEDESTRIAN HYBRID BEACON



PEDESTRIAN REFUGE ISLAND



SINGLE LANE ROUNDABOUT



78%
EXPECTED
REDUCTION IN
SEVERE CRASHES

RAISED MEDIANS



46%
EXPECTED PEDESTRIAN
CRASH REDUCTION

RAPID RECTANGULAR FLASHING BEACON



47%
EXPECTED PEDESTRIAN
CRASH REDUCTION

Example Corridor

Hillsborough St in Raleigh, North Carolina

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BEFORE



Source of Images: City of Raleigh

AFTER



Improvements: Roundabouts, median additions, landscaping, on-street parking on both sides of roadway, wide sidewalks,

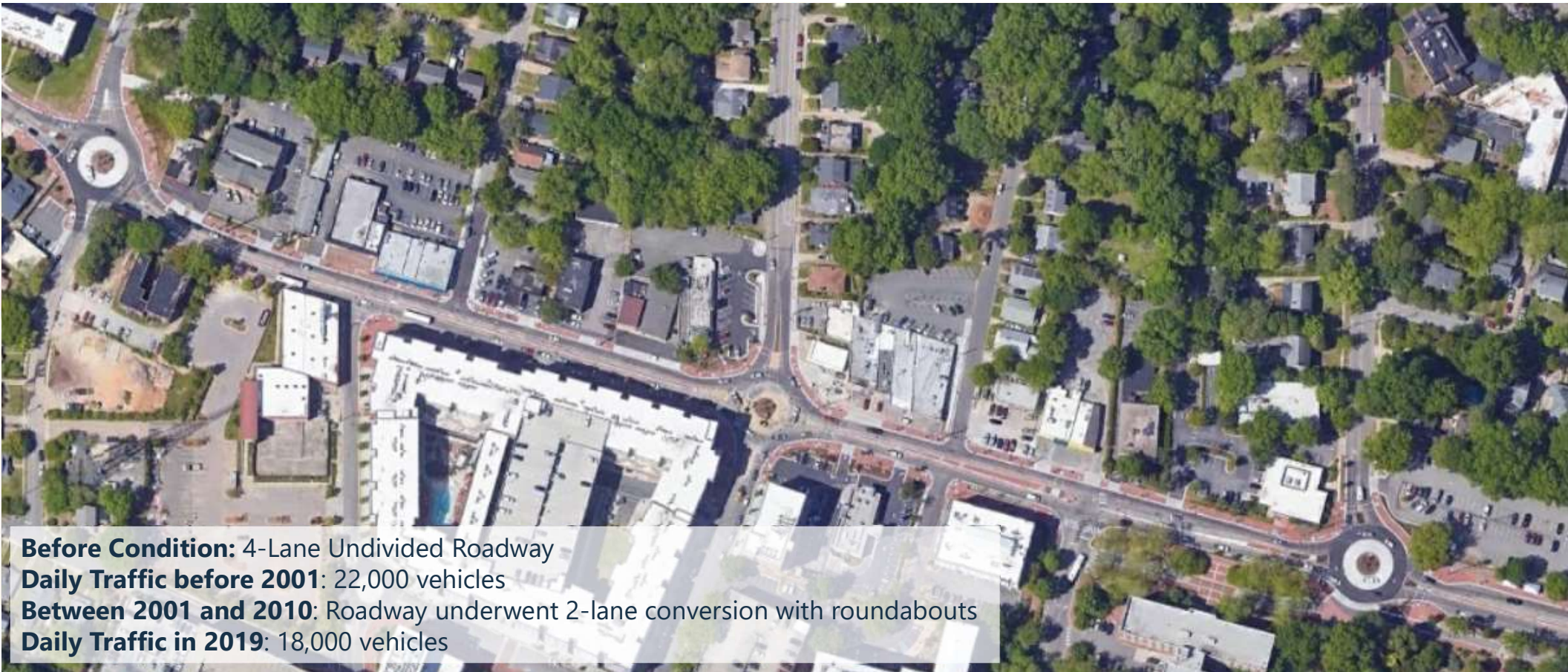
Example Corridor

Hillsborough St in Raleigh, North Carolina

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Before Condition: 4-Lane Undivided Roadway

Daily Traffic before 2001: 22,000 vehicles

Between 2001 and 2010: Roadway underwent 2-lane conversion with roundabouts

Daily Traffic in 2019: 18,000 vehicles

Example Corridor

Mill Avenue in Tempe, Arizona

PEDESTRIAN-FIRST DESIGN

SPEED



AVERAGE DAILY TRAFFIC

19,000 **16,000**
BEFORE AFTER



COLLEGE TOWN NIGHT LIFE



After



Before

Mill Avenue serves as the interface between Downtown Tempe and nearby Arizona State University.

- Two lanes of traffic were replaced with on street parallel parking.
- Bike lanes were widened and sidewalks redesigned.

Source: Rethinking Streets Book

Example Corridor

Dr Martin Luther King Jr Street in St. Pete, Florida

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BEFORE – 5-lane roadway



Daily Traffic in 2018: 14,100 to 18,500 vehicles



AFTER – 3-lane roadway with buffered bike lanes & pedestrian crossings



Daily Traffic in 2019: 14,100 to 18,500 vehicles



Example Corridor

Edgewater Drive in Orlando, Florida

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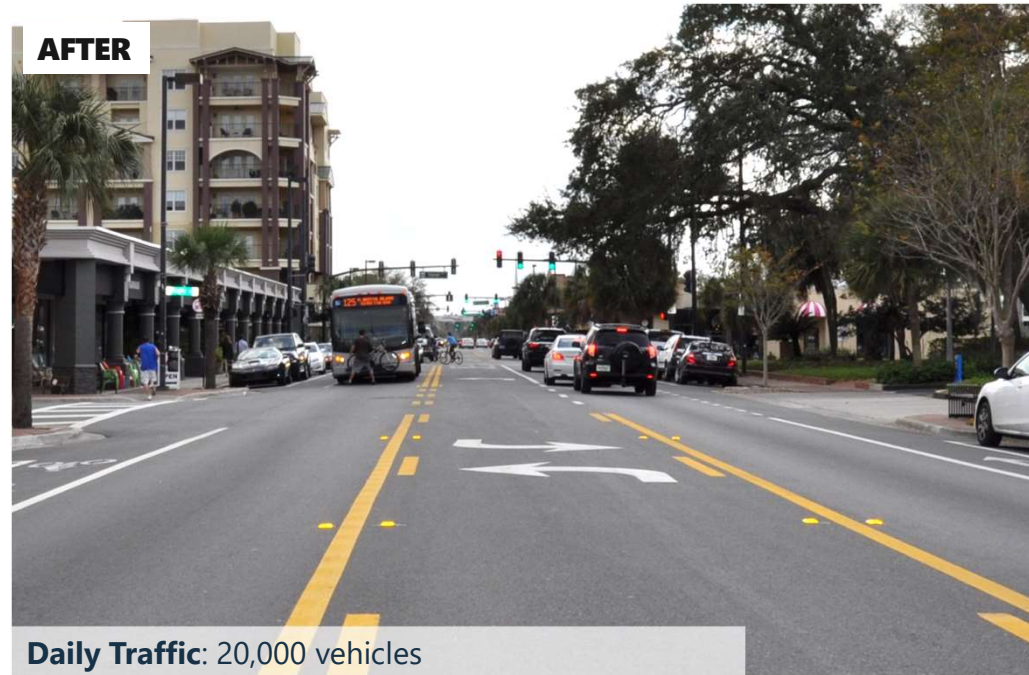
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BEFORE



Daily Traffic: 20,500 vehicles

AFTER



Daily Traffic: 20,000 vehicles

44-45%

REDUCTION IN CRASH AND INJURY
RATE



Example Corridors

in Fort Lauderdale, Florida

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13th STREET



Before Condition: 4-Lane Undivided Roadway
Daily Traffic in 2016: 17,400 vehicles
Between 2017 and 2018: 2-lane implementation
Daily Traffic in 2019: 13,300 vehicles

WILTON DRIVE



Before Condition: 4-Lane Undivided Roadway
Daily Traffic in 2017: 13,400 vehicles
In 2018: 2-lane implementation
Daily Traffic in 2019: 14,700 vehicles

Example Corridor

A1A in North Fort Lauderdale, Florida

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2-Lane Roadway with Bike Lanes and Parking

Before Condition: 4-Lane Undivided Roadway
Daily Traffic between 2004 and 2012: 27,500 to 32,500 vehicles
Between 2013 and Today: Roadway segments underwent 2-lane conversion
Daily Traffic in 2019: 18,800 vehicles

30
MPH

Project Goals

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Safety and Speed Management

Promote safety, reduce speeds, and prioritize vulnerable users

Mobility and Access

Directness, travel times, and convenience

Placemaking and Community Development

Use street space for people

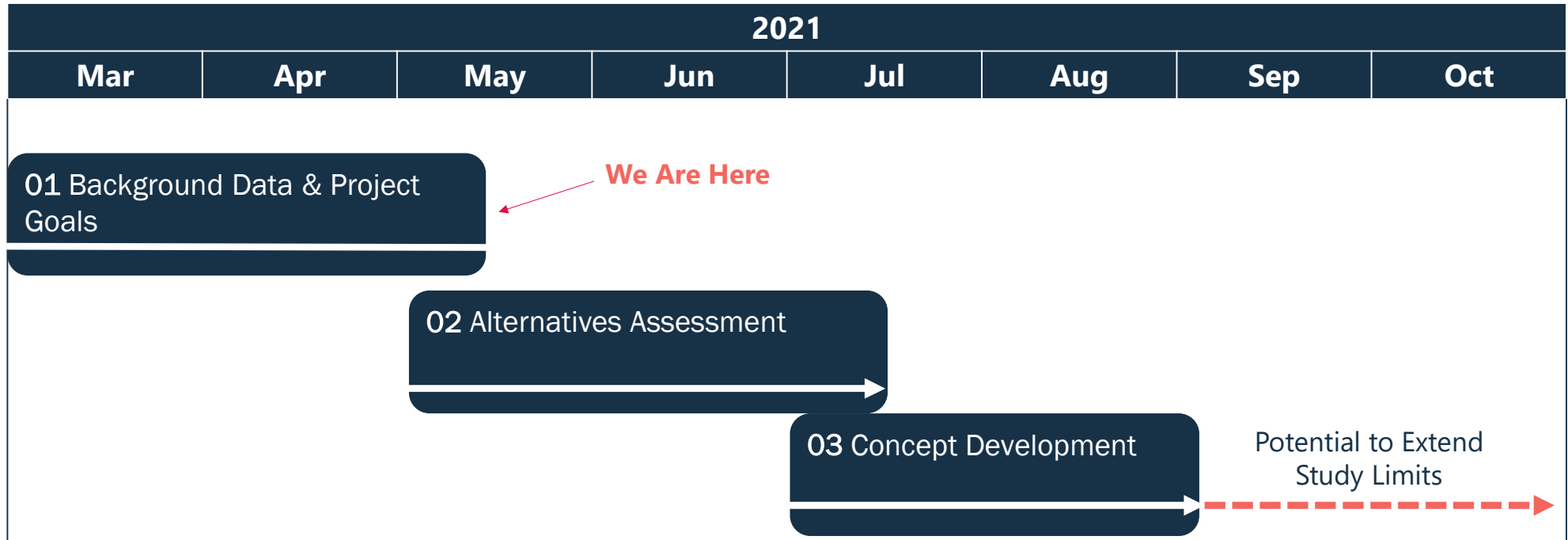
Cost and Ease of Implementation

Rapid cost-effective changes

Study Schedule

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Deliverables

- 01 – Presentation for Background Data & Potential Design Strategies
- 02 – Alternatives Assessment Documentation
- 03 – Final Concept Plans and Visualizations