

*Orange County Public Works Department*

**University Boulevard  
Pedestrian/Cyclist Safety Study  
Board of County Commissioners  
Public Hearing**

**August 26, 2025**



# Presentation Outline

- **Background**
- **Pedestrian/Cyclist Study**
- **Alternative Analysis and Recommendation**
- **Public Involvement**
- **Project Schedule**
- **Summary and Action Requested**





# Presentation Outline

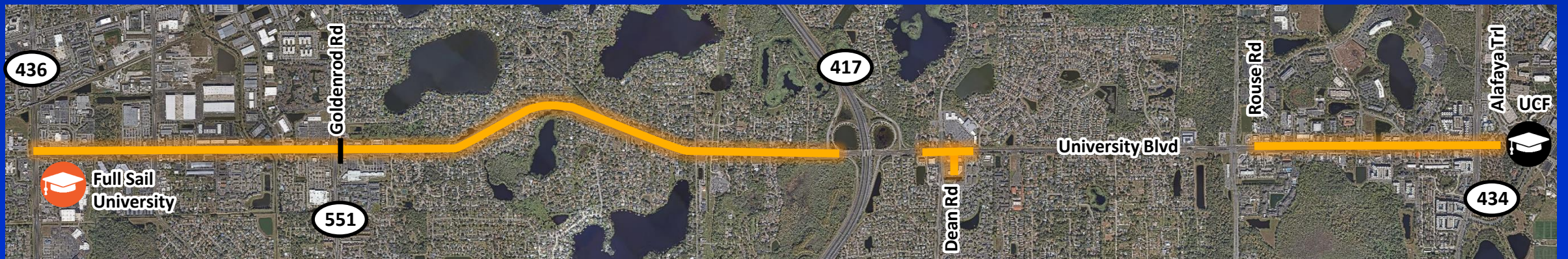
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# Background

## Project History

- University Boulevard connects UCF and Full Sail University
- Improvement projects along University Boulevard
  - UCF Pedestrian Safety Study - Rouse Road to Alafaya Trail
  - Intersection Improvements Dean Road
  - Resurfacing - Goldenrod Road to SR 417
  - Study covers western portion of University Boulevard



# Background

## Project Purpose

- Project recommended for study by former District 5 Commissioner
- 18 of Top 30 on Vision Zero High Injury Network
- Large pedestrian/cyclist presence
- Notable increase of micro-mobility devices



**VISION ZERO**  
**CENTRAL FLORIDA**  
Counting down to zero traffic deaths

# Background

## Project Location



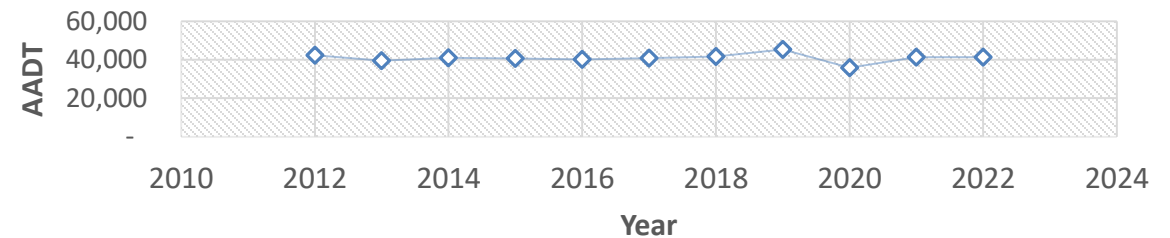
# Background

## Existing Roadway Conditions

- A six-lane minor arterial
- 45-mph posted speed
- Sidewalks along both sides
- No bicycle lanes
- Right-of-way 128' to 162'
- 5 major intersections
- Recently resurfaced
- Traffic volumes have been stable



Traffic Volume Trend between 2012 and 2022





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# Pedestrian/Cyclist Study

## Context Classification C3C Suburban Commercial



**Allows for 35-45 mph design speed according to context**  
**Allows for flexibility of enhancing multimodal facilities**

# Pedestrian/Cyclist Study

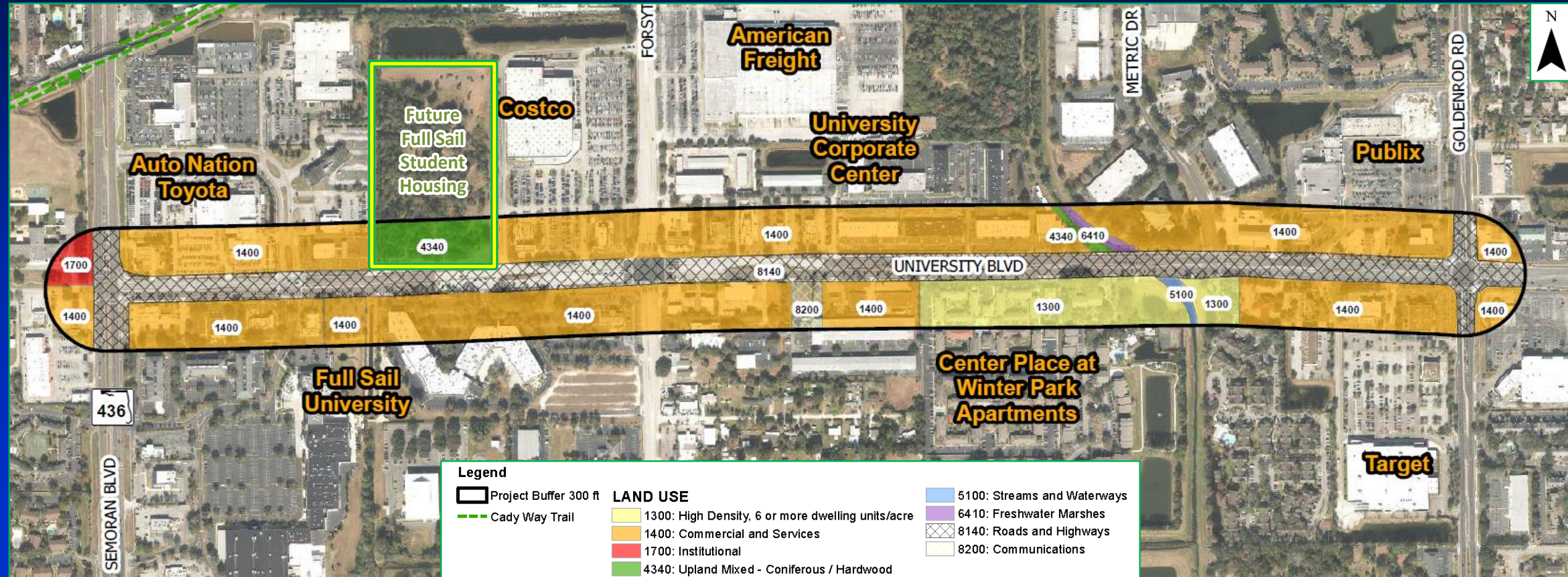
- **Project limits mostly commercial**
  - Full Sail University
  - Multi-Family Housing
  - Commercial Developments
- **Community primarily built-out**
  - Full Sail Student Housing proposed
    - Pedestrian Bridge required as a condition of approval
    - In process of evaluation





# Pedestrian/Cyclist Study

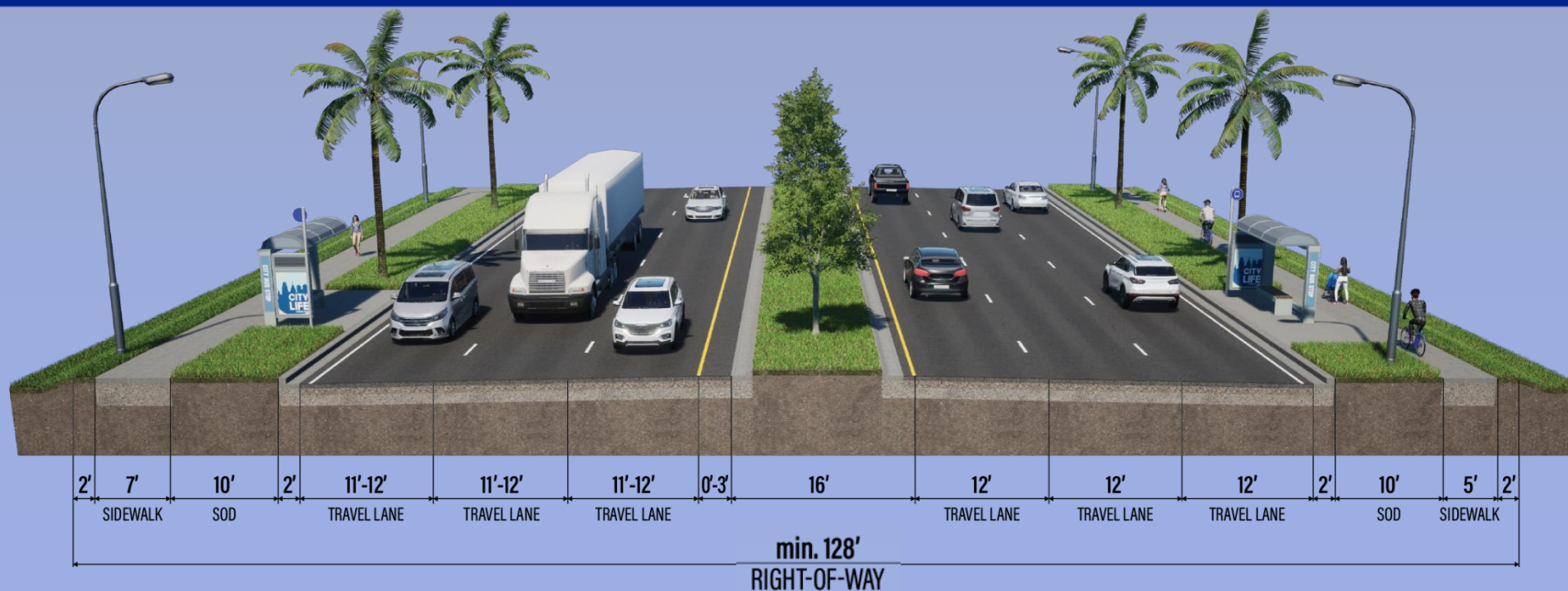
## Existing Land Use/Major Developments



# Pedestrian/Cyclist Study

## Existing Typical Section

- 11-12' wide travel lane
- 5-foot-wide sidewalk on the south side
- 7-foot-wide sidewalk on the north side

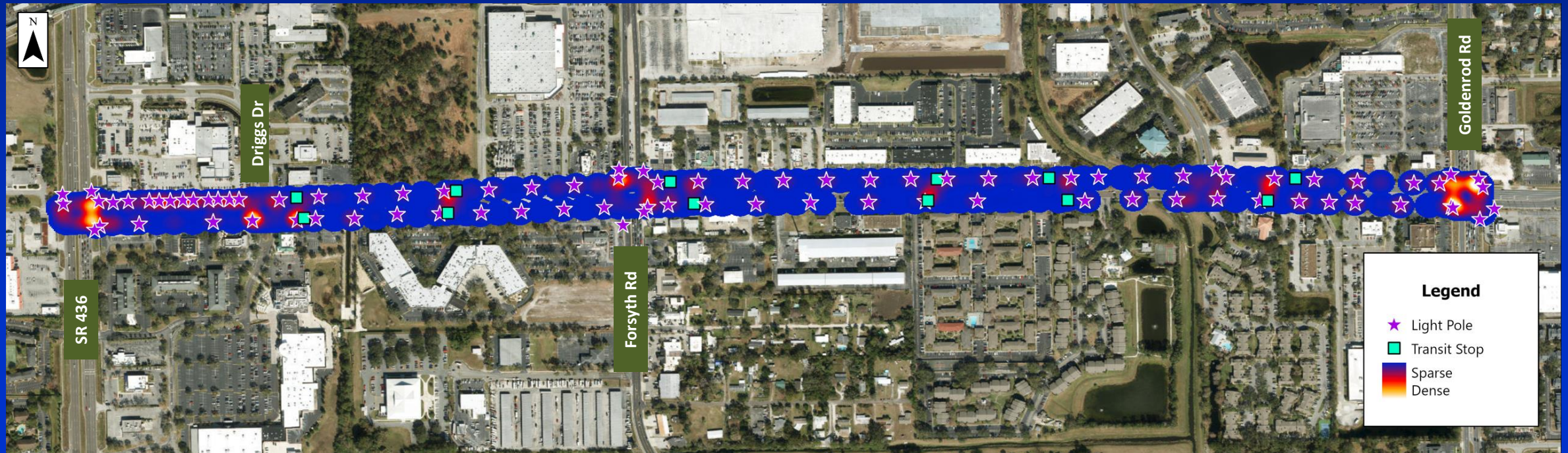


# Pedestrian/Cyclist Study

## Lighting

### University Boulevard Luminosity

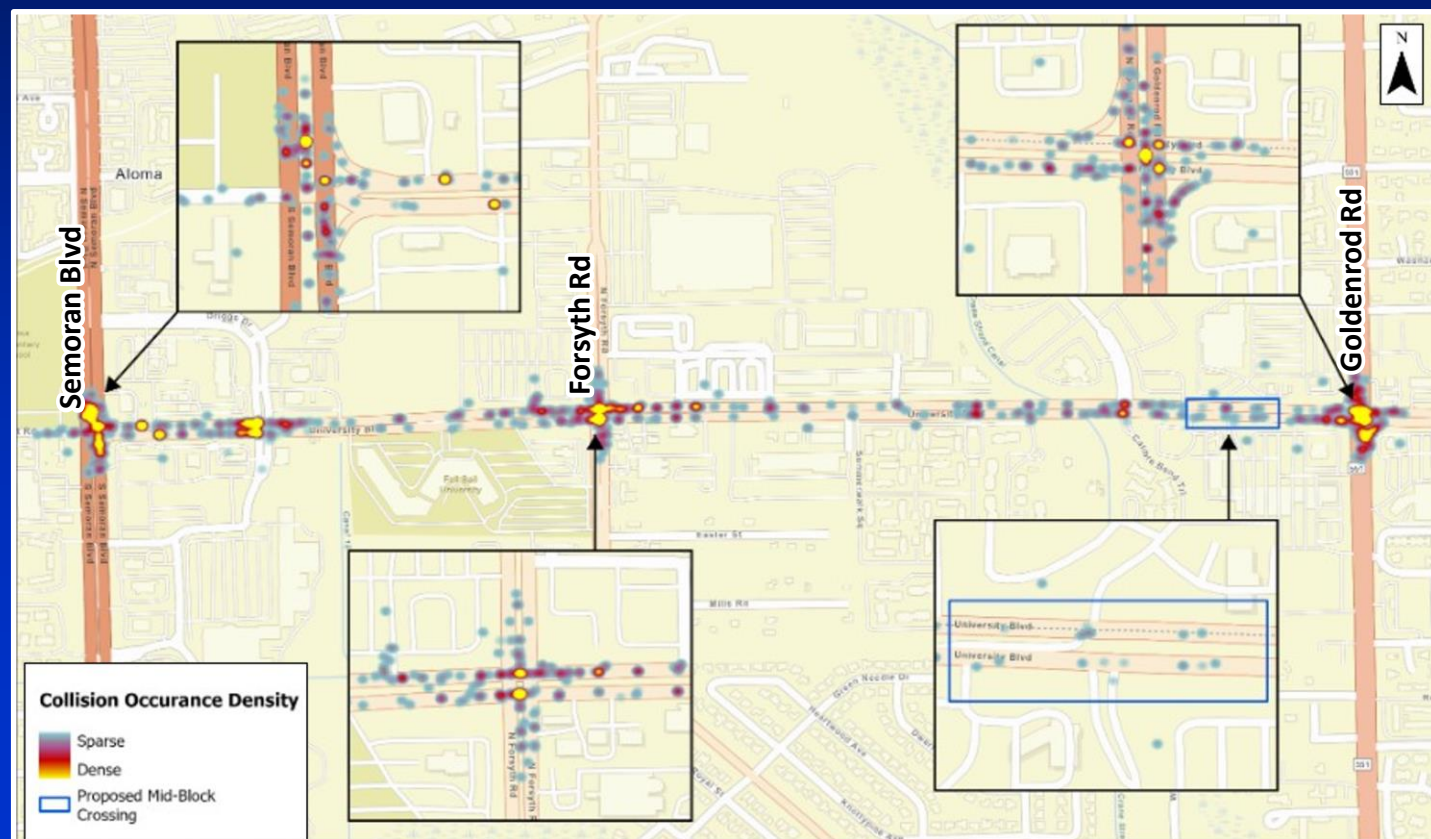
- Existing lighting below FDOT standard
- Insufficient lighting at transit stops and pedestrian crossings
- Blue represents insufficient lighting levels



# Pedestrian/Cyclist Study

## Crash Analysis August 2018 – August 2023

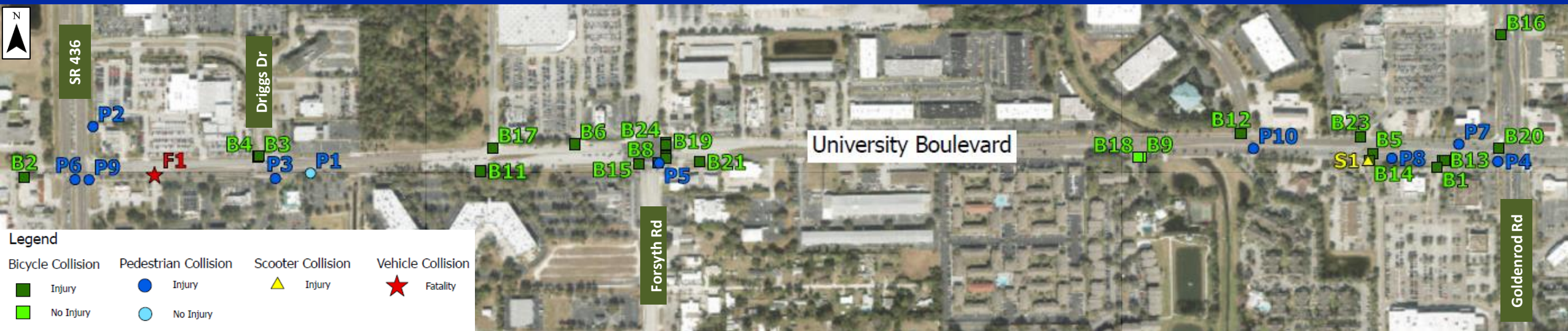
- 813 Total crashes
  - 741 at signalized intersection
  - 72 roadway
  - 35 Pedestrian/Bicycle
  - 1 Fatality (Off-road crash)
  - Most vehicle crashes - within intersections
  - Most ped/bike crashes - side streets or driveways
  - 22% nighttime



# Pedestrian/Cyclist Study

## Pedestrian/Bicycle Related Crashes

- 35 Pedestrian/Bicycle related
  - 10 pedestrian
  - 1 scooter
  - 24 bicycle
  - 91% resulting in injuries, 17% resulting in serious injuries, and 17% nighttime

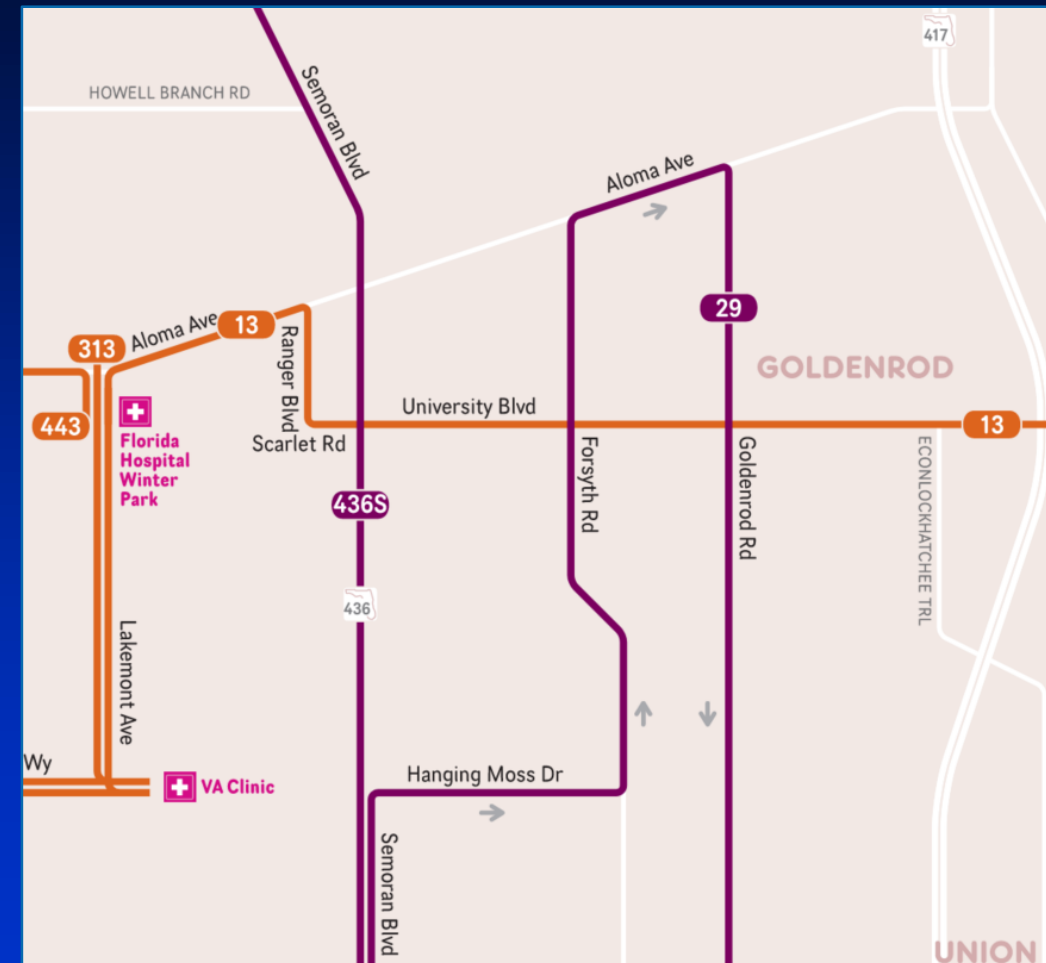




# Pedestrian/Cyclist Study

## Transit Services (LYNX)

- Link 13 (4 stops between SR 436 & Forsyth Rd)
  - 2022 Yearly Ridership: 149,254
  - Frequency – 60 minutes
- Link 29
  - 2022 Yearly Ridership: 241,294
  - Frequency – 30 minutes
- Link 436S
  - 2021 Yearly Ridership: 604,410
  - Frequency – 30 minutes
  - ATSP investment of \$201,958 to reduce headway time



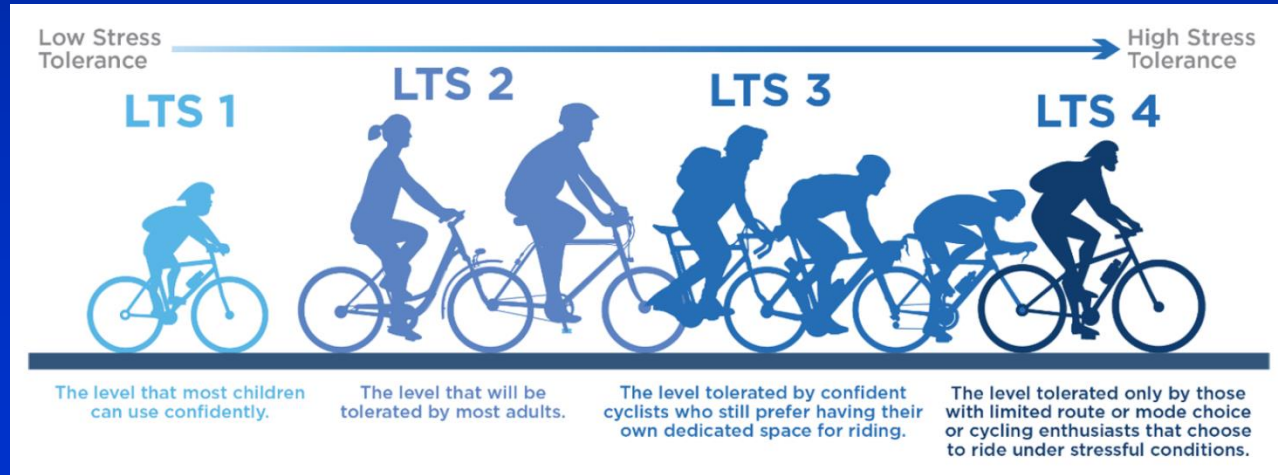
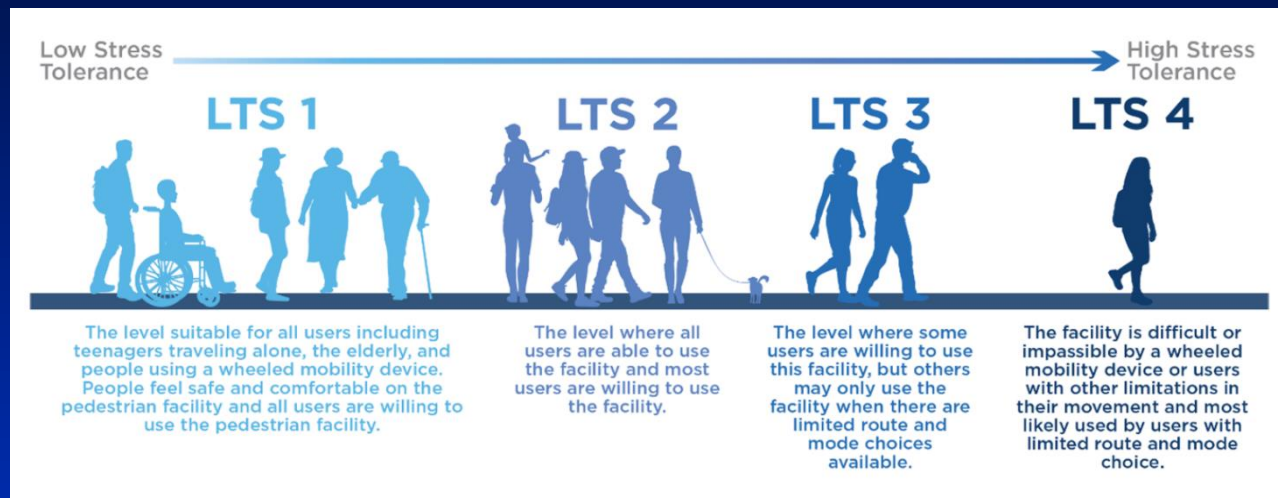
Source: LYNX



# Pedestrian/Cyclist Study

## Existing Multimodal Level of Service

University Boulevard	Value
Number of Lanes	6 Lanes
Posted Speed	45 mph
AADT	41,000
Roadway Segment LOS (Auto)	LOS D or better
Pedestrian Level of Stress (LTS)	<b>LTS 4</b> Sidewalk Width and speed limit
Bicycle LTS	<b>LTS 4</b> Sidewalk Width and speed limit
Transit LOS	<b>LOS E</b> Route headway





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# Alternative Analysis

- Roadway Safety Walking Audit
- Review of Alternatives
- Evaluation Matrix
- Recommended Improvements
  - Design
  - Interim Measures



# Alternative Analysis

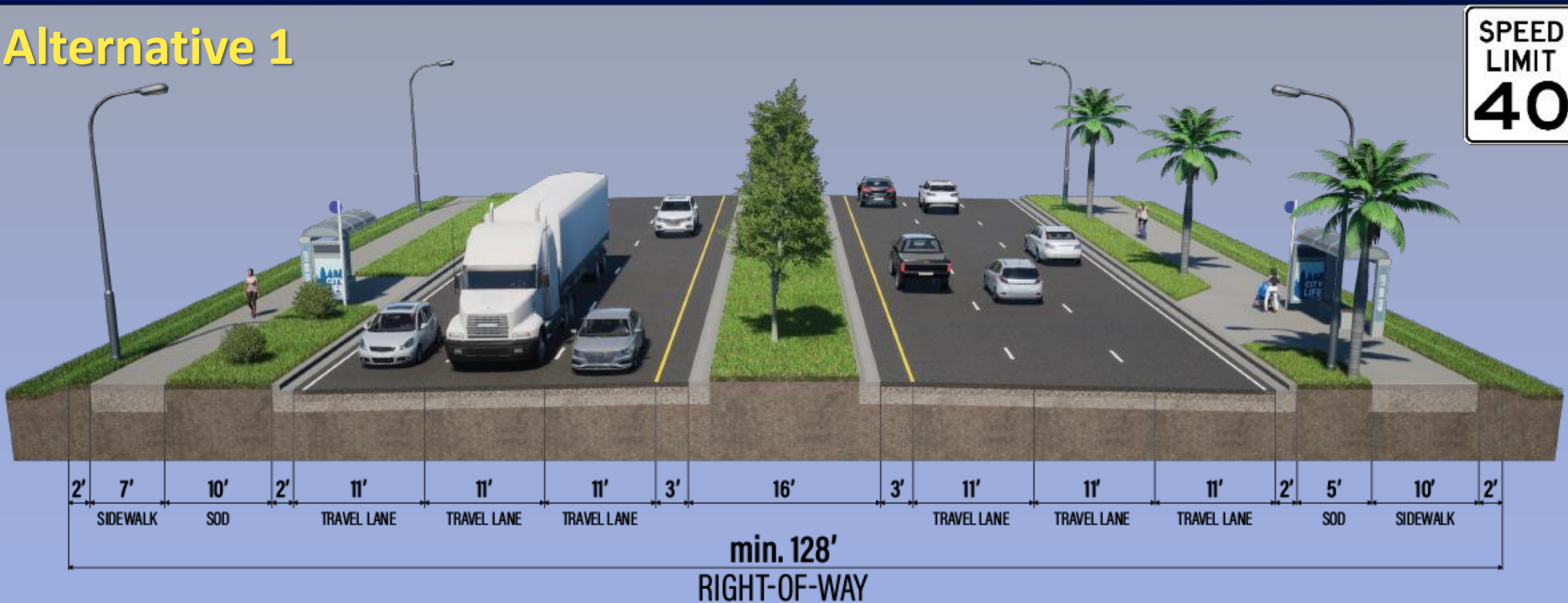
## Roadway Safety Walking Audit

- Thursday, April 18, 2024
- 25 Representatives
  - Orange County Public Works
  - MetroPlan Orlando
  - FDOT
  - LYNX
  - Aloma Elementary PTA
  - OC Sheriff's Office
  - Bike-Walk Central Florida
  - Consulting firms



# Alternative Analysis

## Alternative 1



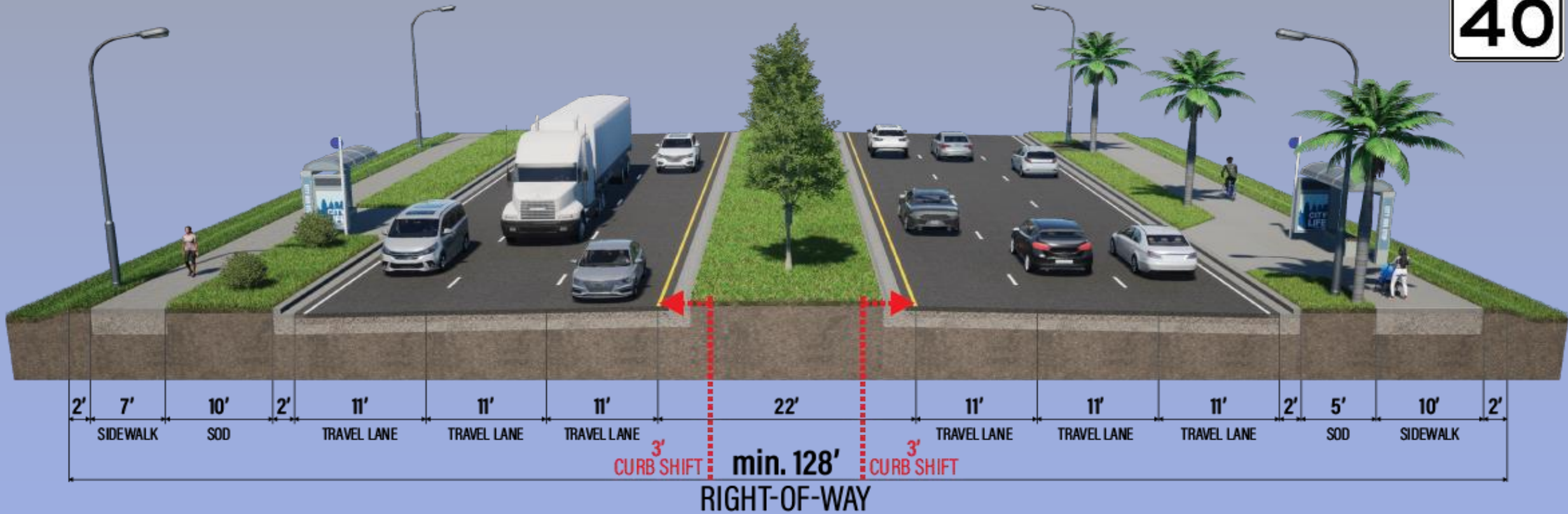
- New 10' sidewalk on the south side
- Maintain 7' sidewalk on the north side

- Reduce lane width and posted speed limit
- Maintain existing median and curb & gutter

# Alternative Analysis

## Alternative 2

SPEED  
LIMIT  
**40**

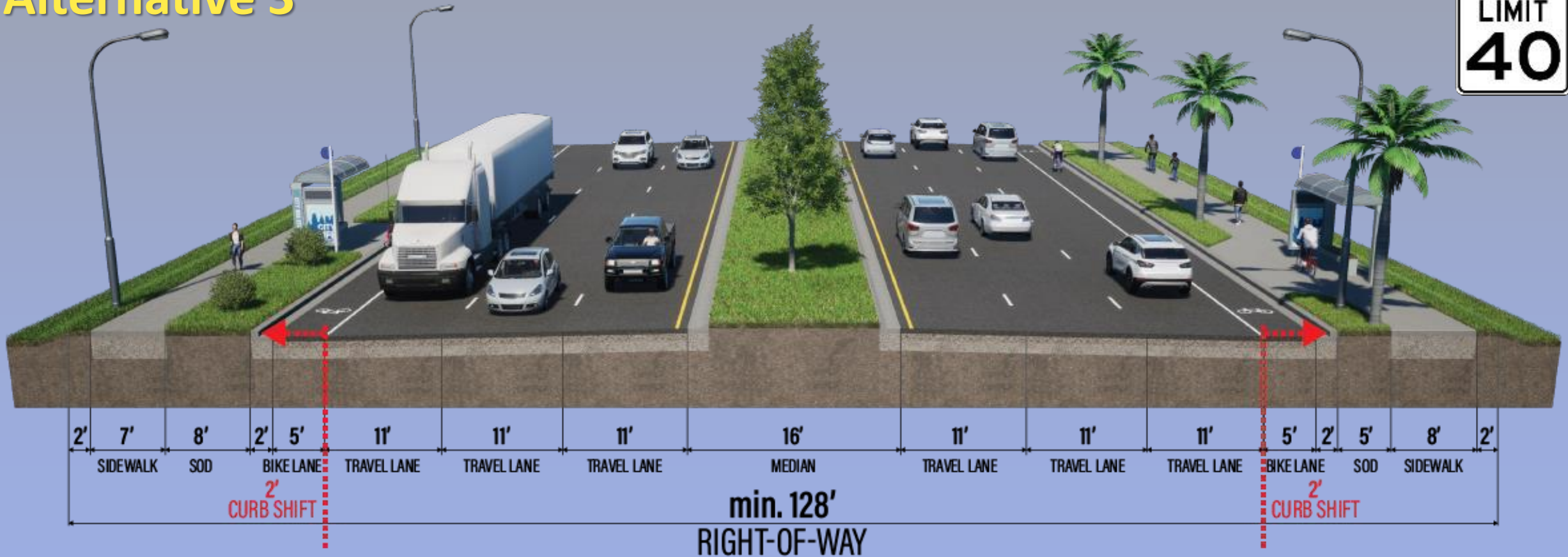


- New 10' sidewalk on the south
- Widen the median to 22'
- Reduce lane width and posted speed limit
- Move inside curb & gutter out 3' on both sides

# Alternative Analysis

## Alternative 3

SPEED  
LIMIT  
40

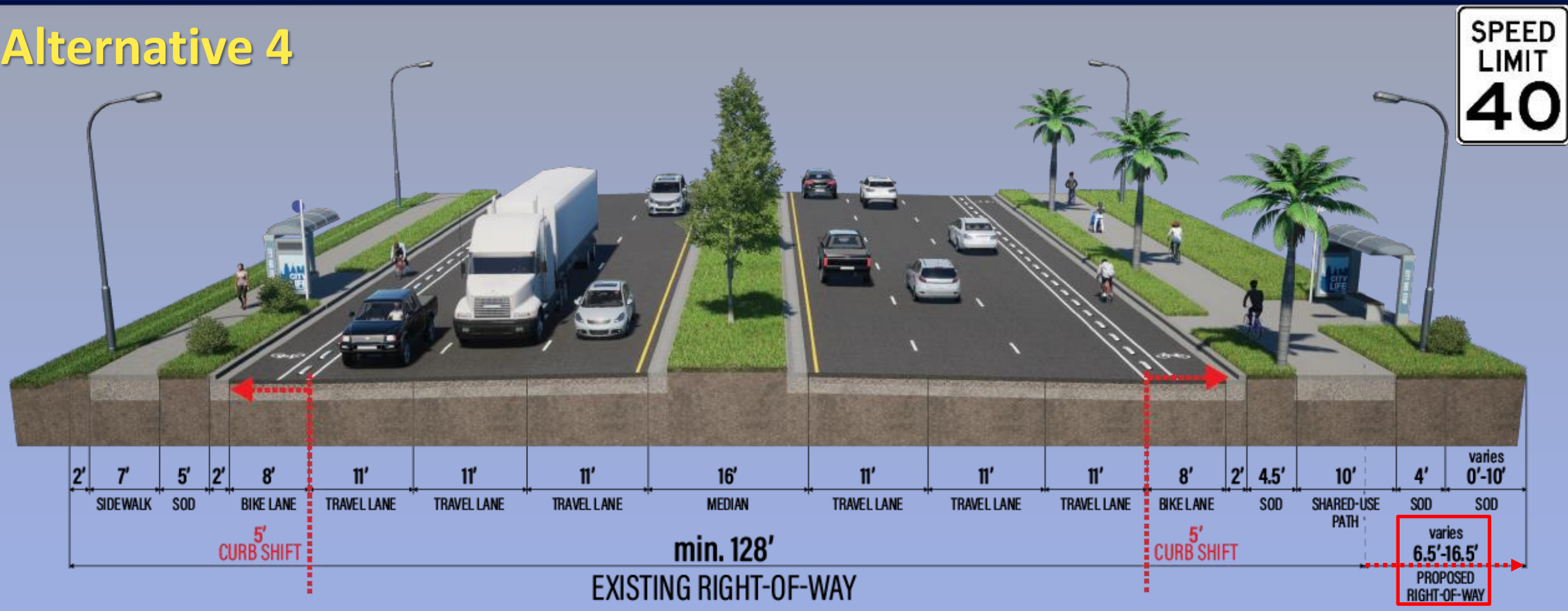


- 8' sidewalk on the south
- 5' bike lane on outside lanes on both sides

- Move outside curb and gutter out 2' on both sides

# Alternative Analysis

## Alternative 4



- 10' shared-use path on the south
- 8' protected bike lane on both sides
- Requires 6.5'-16.5' of additional right of way
- Move curb and gutter out 5' on both sides



# Alternative Analysis

Evaluation Matrix	No Build	Alternative 1	Alternative 2	Alternative 3	Alternative 4
<b>Roadway Safety &amp; Social Impacts</b>					
Right-of-Way Potentially Needed (acres)	0.00	0.00	0.00	0.00	0.79
Potential # of Parcels Impacted (#)	0	0	0	0	22
Roadway Utility Impacts (Low/Med/High)	None	Medium	Medium	High	High
Roadway Drainage Impacts (Low/Med/High)	None	Low	Low	High	High
Vision Zero Safety Improvements (Low/Med/High)	Low	Medium	Medium	High	High
<b>Improvement Costs</b>					
Estimated Design Costs	\$0	\$0.76	\$0.81	\$1.61	\$1.72
Estimated Right-of-Way Cost	None	None	None	None	\$6.40
Estimated Construction Cost	\$0	\$5.31	\$5.66	\$11.18	\$11.99
CEI (15% of Construction Costs)	\$0	\$0.80	\$0.85	\$1.68	\$1.80
Estimated Total Cost Including Right-of-Way	\$0M	\$6.87M	\$7.32M	\$14.47M	\$21.91M

# Alternative Analysis

## Recommended Alternative – Alternative 1

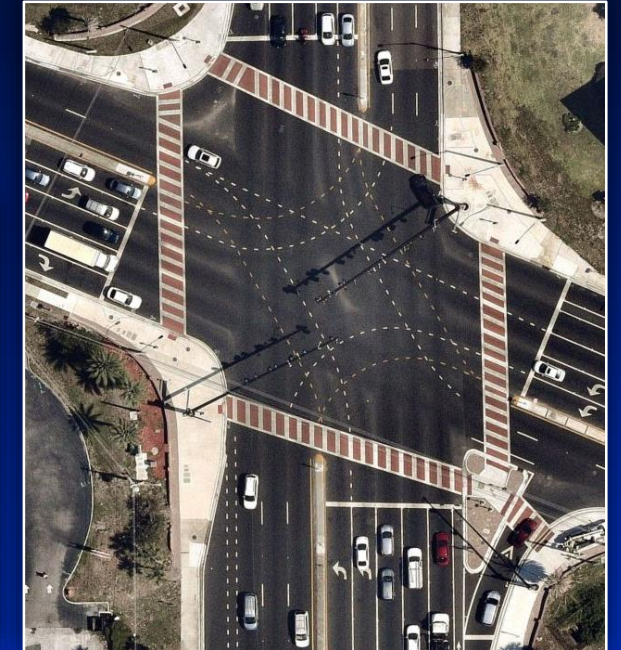


- **Three 11-foot-wide travel lanes in each direction with 16-foot raised median**
  - 10-foot-wide sidewalk on the south side of the roadway
  - Maintain 7-foot-wide sidewalk on the north side of the roadway
  - Maintain existing median and curb and gutter

# Alternative Analysis

## Additional Recommended

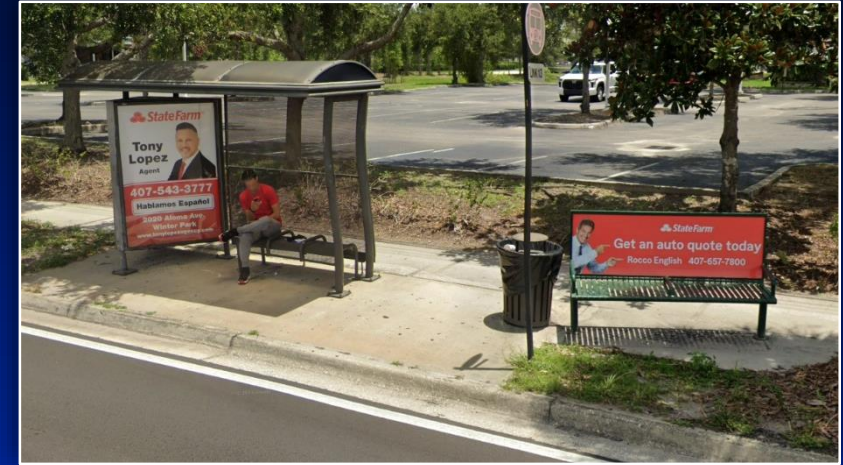
- Midblock crosswalks with Pedestrian Hybrid Beacon (PHB)
- Pedestrian fencing in the median
- High visibility crosswalks
- ADA upgrades
- Pedestrian safety intersection improvements
  - Reduced curb radius
  - Leading Pedestrian Intervals at signalized intersections
  - Protected left & right lanes



# Alternative Analysis

## Additional Recommended

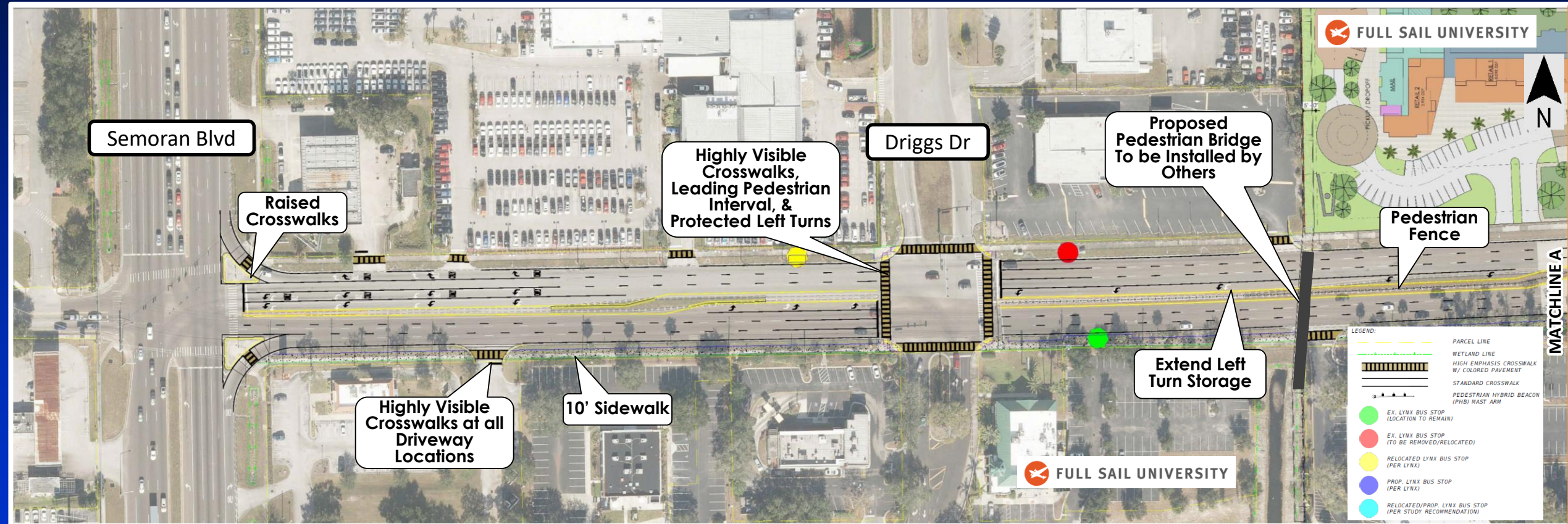
- Bus stop relocation and consolidation
- Access management improvements
- Speed management
- Lighting enhancements
- Landscaping





# Alternative Analysis

## Recommended Alternative



Semoran Blvd/ SR 436

Driggs Dr

Forsyth Rd

Metric Dr

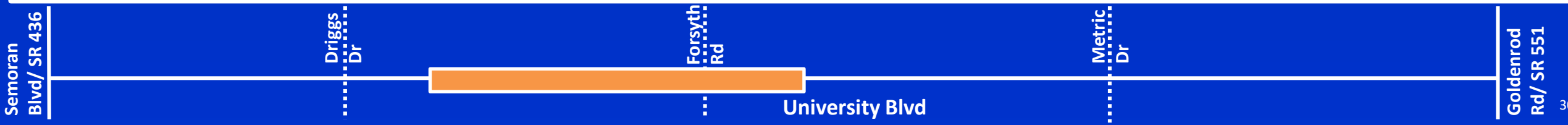
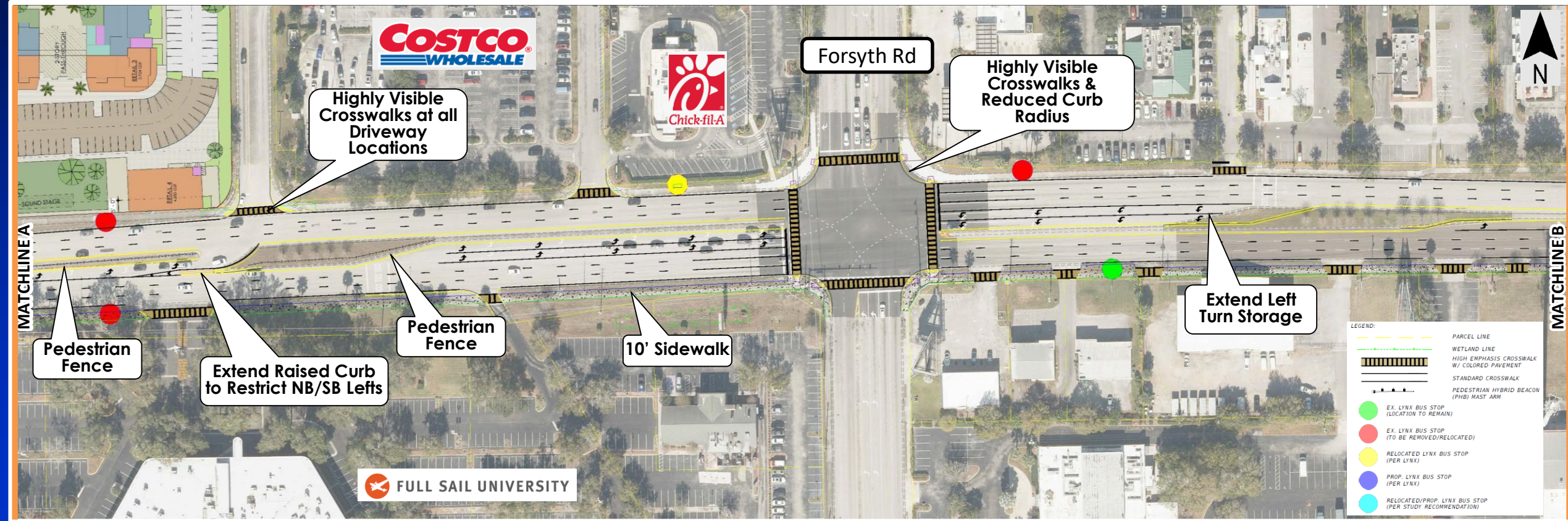
University Blvd

Goldenrod Rd/ SR 551



# Alternative Analysis

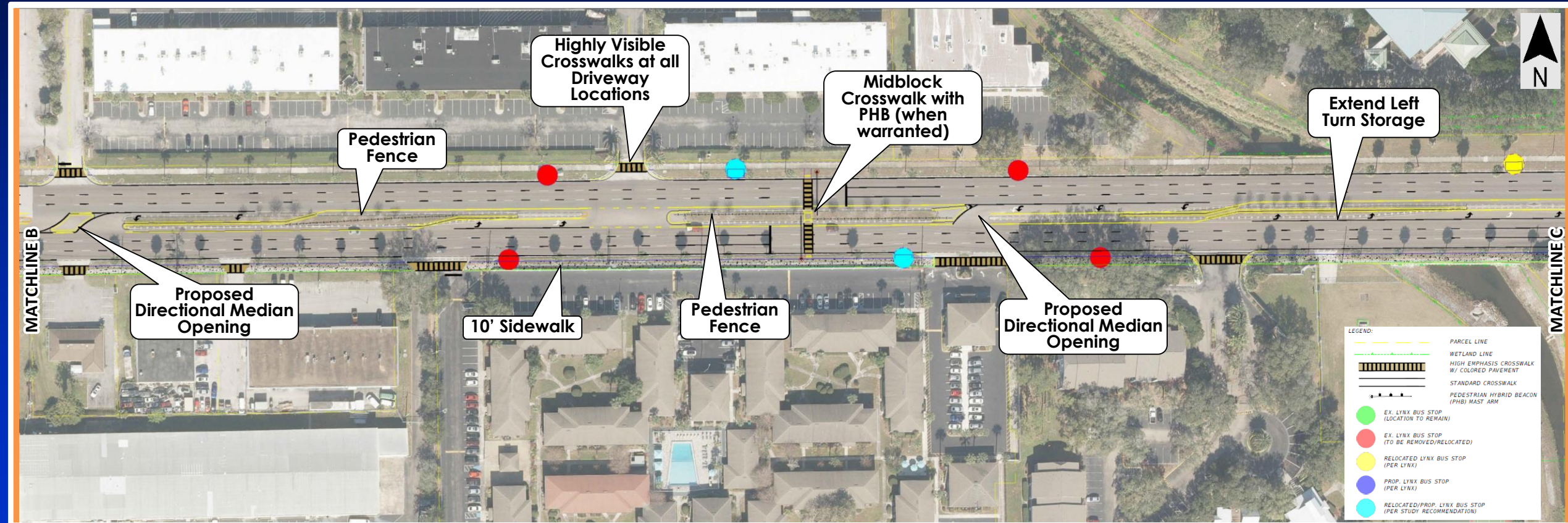
## Recommended Alternative





# Alternative Analysis

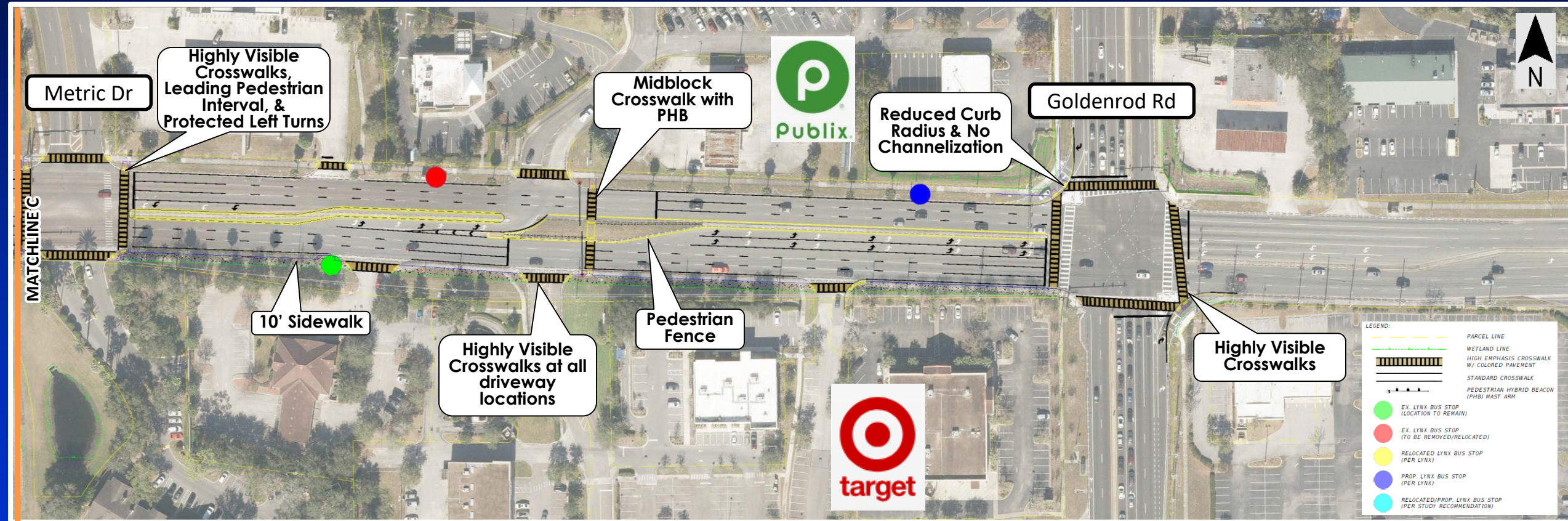
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# Alternative Analysis

## Recommended Alternative

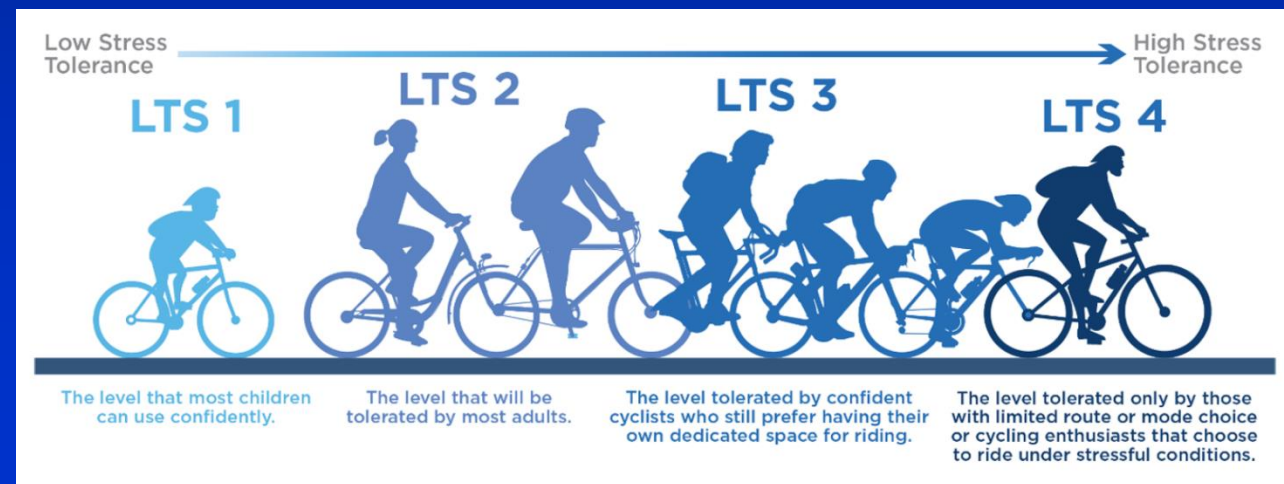
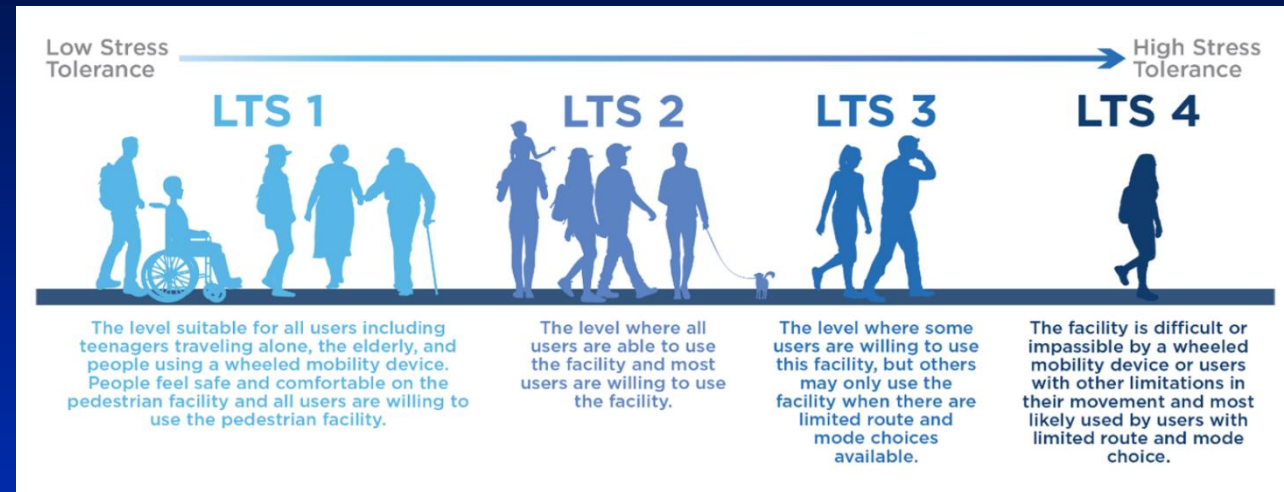




# Alternative Analysis

## Proposed Multimodal Level of Service

University Boulevard	Value
Number of Lanes	6 Lanes
Posted Speed	40 mph
AADT	52,000
Roadway Segment LOS (Auto)	LOS E
Pedestrian Level of Stress (LTS)	LTS 2 (Higher comfort level) Sidewalk Width, reduced speed limit and added Vertical Separation
Bicycle LTS	LTS 1 (Highest comfort level) Sidewalk Width, reduced speed limit and added Vertical Separation
Transit LOS	LOS D Four proposed routes with 15 to 30-minute headway)



# Alternative Analysis

## Interim Measures (2-4 Yrs)

- Convert permitted southbound left turn phases to protected when pedestrians are present at Driggs Drive and Metric Drive intersections
- No right-turn on red when pedestrians are present blank out signs at Driggs Drive, Forsyth Road, and Metric Drive intersections



# Alternative Analysis

## Interim Measures (2-4 Yrs)

- Temporary installation of flex stakes at Costco driveway and permanent installation of separator at Design
- Install/refresh high emphasis pedestrian crossing markings at driveways





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# Public Involvement

## Study Website:

<https://universityboulevardpedestriancyclistsafetystudy.com>

## 14 Stakeholder Meetings

## 2 Community Meetings

## 2 Newsletters mailed

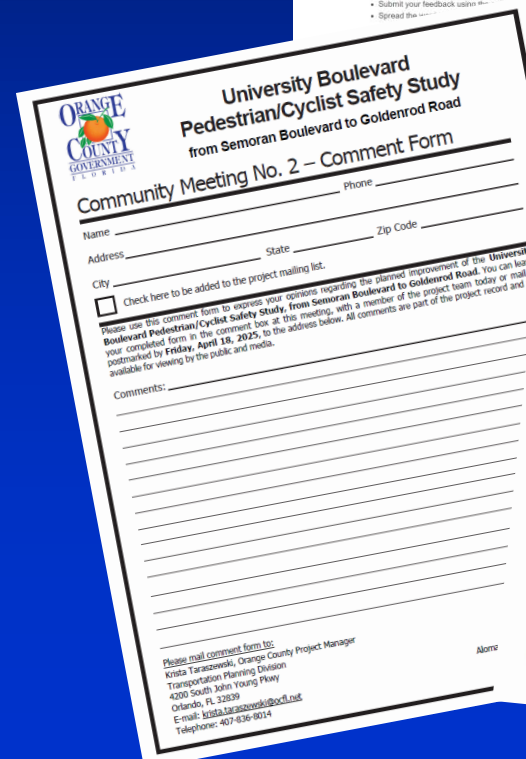
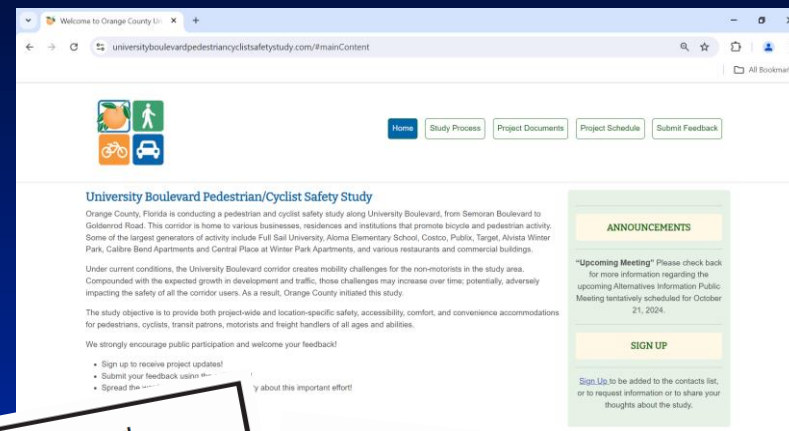
– 756 newsletters distributed CM#1

– 783 newsletters distributed CM#2

## 2 Surveys

– 148 participants from Full Sail

– 16 participants from general public





# Public Involvement

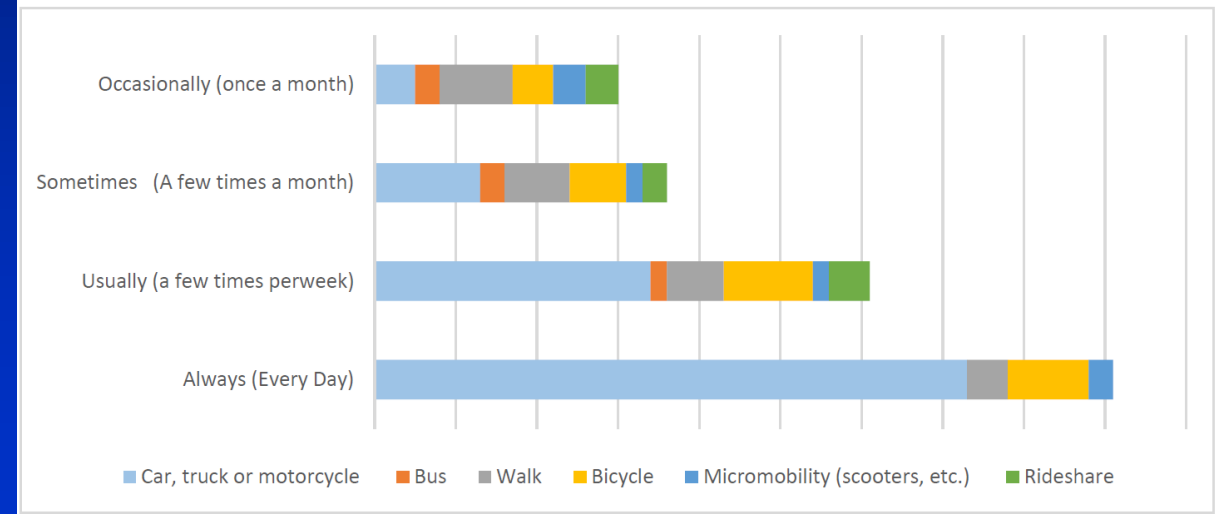
## Feedback from Full Sail University Staff/Student Survey 148 participants

### Priority of Improvement Category

- Improved sidewalks, wider sidewalks and/or shared use path
- Protected pedestrian intersections (setback or offset intersections)
- More crossing opportunities along University Boulevard (Marked midblock crosswalks, pedestrian bridge, etc.)
- Connections to trails in the area
- More bus routes or improved bus stops
- Lighting Upgrades

## 86 out of 148 surveyed use a bicycle or scooter to travel to/from Full Sail University

4. How often do you use each of the following modes of transportation to travel to or from the Full Sail University Campus?





# Public Involvement

## Feedback from the First Community Meeting Survey

16 participants

Rank	Preferred Alternative from Survey	Number of Responses
1	Alternative 4 – Protected Bike Lane	9
2	Alternative 1 – Shared Use Path	5
3	Alternative 2 – Widened Median	2
4	Alternative 3 – On-Street Bike Lane	0

Responders in Favor of	Percent	Alt. 1
Wider sidewalks	81%	✓
Pedestrian Hybrid Beacons at midblock crosswalks	76%	✓
Marked crosswalks or designated crossing locations	75%	✓
More landscaping	69%	✓
Narrow travel lanes to reduce vehicle speeds	66%	✓
Add bicycle lanes	63%	

# Public Involvement

## Feedback from the public

- “It is important all road users feel safe, comfortable, and confident while getting around”
- “I’m happy to see the incorporation of past public comments!”
- “This is the perfect place to support pedestrian and bicyclist infrastructure since there is heavy student population”
- “I prefer Alternative 1 because it prioritizes the widened sidewalk, which can accommodate pedestrians and bicyclists”





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# Project Schedule



Task	2023	2024			2025			
	Sep-Dec	Jan-Apr	May-Aug	Sep-Dec	Jan-Feb	Mar-Apr	May-Jun	July-Sep
Project Kick-Off	●							
Stakeholder Coordination		■						
Public Outreach Meetings				①		②		
Local Planning Agency (LPA) Public Hearing								●
Board of County Commissioners (BCC) Public Hearing								●
Final Report							■	■

① Public Outreach Meeting #1      ② Public Outreach Meeting #2      ● LPA Public Hearing      ● BCC Public Hearing

\* Project currently not funded for design or construction



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# Summary and Action Requested

- High pedestrian and bicycle activity
- Full Sail Student Housing will increase demand
- Vision Zero Action Plan High Injury Network (HIN)
- Supports County Multimodal & Vision Zero goals
- Recommends enhanced multimodal facilities/lighting/ access
- Improvements within existing right-of-way
- Positive public support



# Summary and Action Requested

## ■ Comprehensive Plan

- Implement financially-feasible multimodal transportation system (Obj. T1.3)
- Support strategies which promote convenient & efficient mobility system for all modes (Obj. T3.1)
- Build street, pedestrian and bicycle networks that provide interconnectivity and access to multimodal transportation facilities (Obj. T3.2)



## Summary and Action Requested

- Find the University Boulevard Pedestrian and Bicycle Safety Study consistent with the Comprehensive Plan and
- Approve the study and direct staff to move forward with interim measures, design, and construction