



Concept Development and Evaluation

Project Visioning Team

Meeting #2



June 27, 2018

Meeting Agenda

- **Introduction & Updates**
 - Project Visioning Team Meeting format
 - Project background
 - Concept Development & Evaluation process overview
- **US 1 & SR 406 Project Concepts**
 - PVT Meeting #1
 - Progress since last PVT Meeting
 - Presentation of final recommendations
- **Next Steps & Project Schedule**
- **Open Discussion**
 - Concept discussion at roll plots



PVT Meeting Format

- **Who is the Project Visioning Team (PVT)?**
 - Identified stakeholders for continuous engagement throughout the planning process
 - PVT Meetings serve as a forum for PVT members and study team
- **Others in attendance**
 - PVT Meeting is open for all members of the public to observe.
 - Comment forms available for comments about the projects
 - Study team will respond to questions in writing following the PVT Meeting



Public Comment Form 
U.S. 1 & State Road (S.R.) 406
Concept Development and Evaluation Studies
Project Visioning Team Meeting #2
June 27, 2018

Your comments are important! Please use the space below to express your input about these projects.

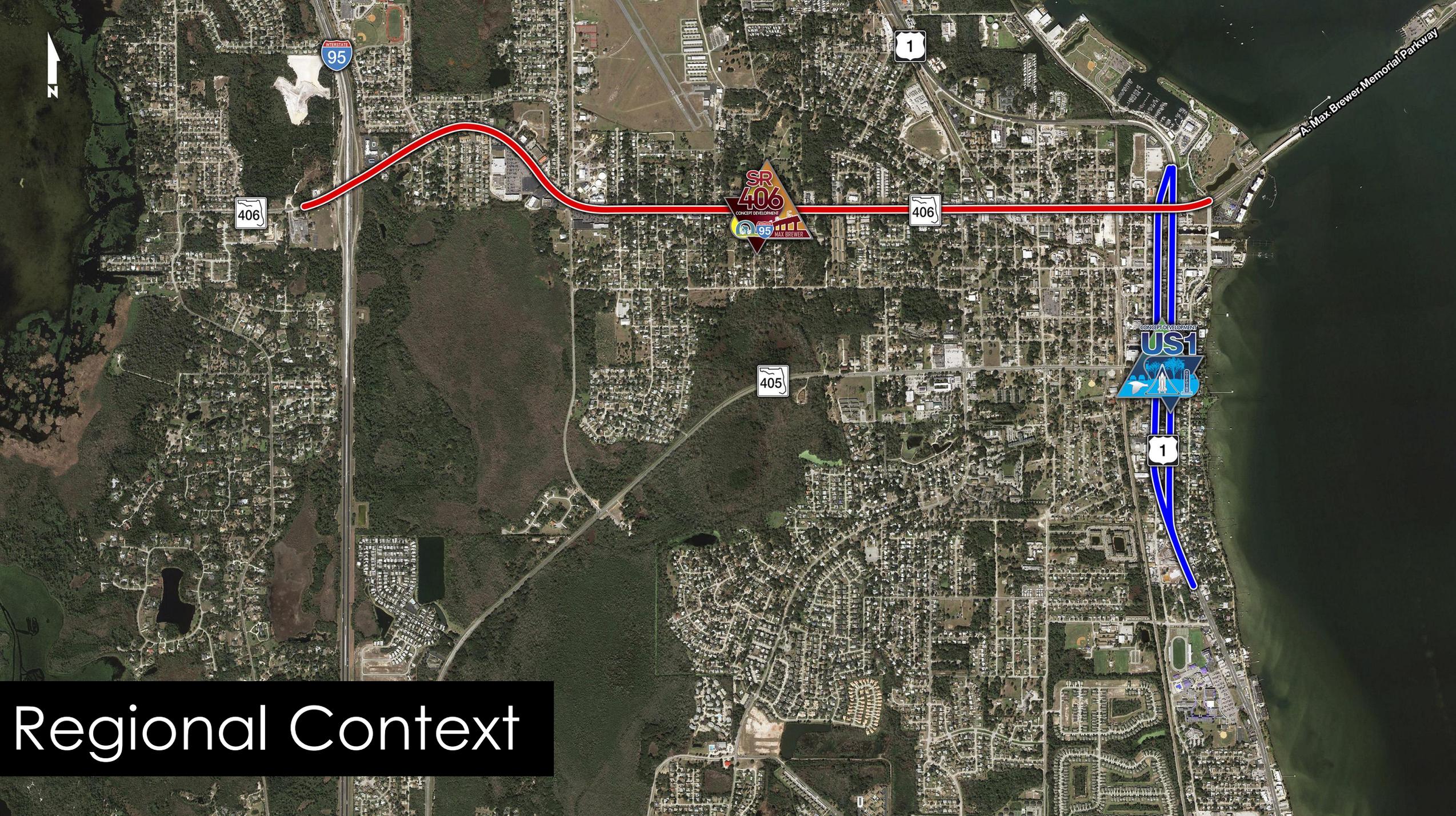
My comment is regarding (check all that apply):
 U.S. 1 from Grace Street to Indian River Avenue
 S.R. 406 from North Area Adult Education Center to Indian River Avenue

Name: _____
Company: _____
Address: _____
City/State/Zip: _____
Email: _____
Phone: _____

Please complete and place this form in the "Comments" box or mail before July 7, 2018 to:
Judy Pizzo, MSURP
FDOT Project Manager
719 S. Woodland Boulevard
DeLand, Florida 32720

Public Meeting
Scheduled for
August 23, 2018

Regional Context



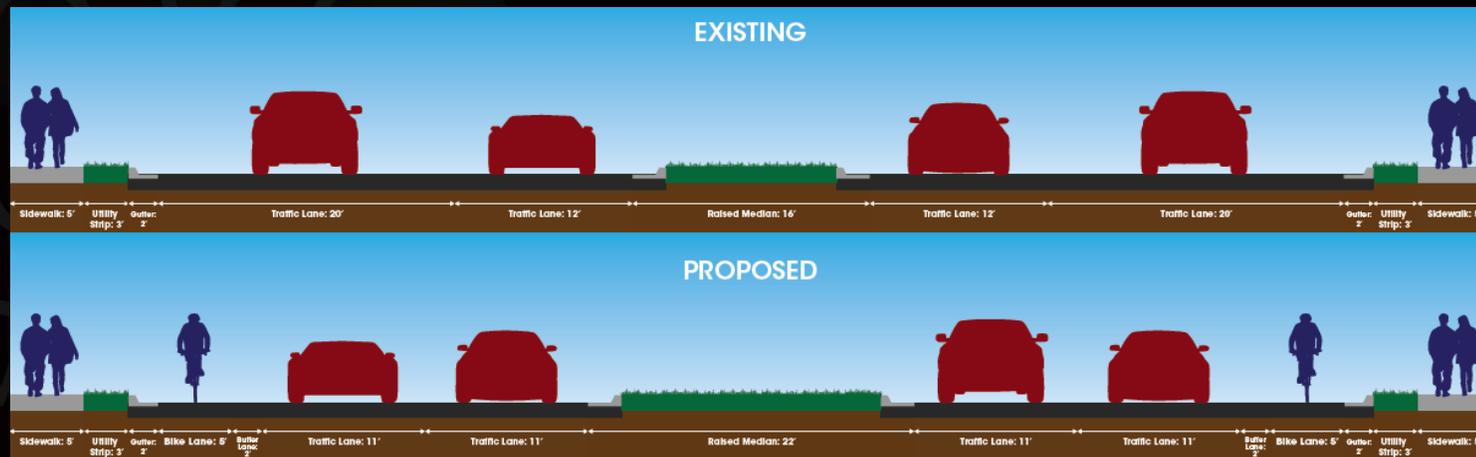
Project Background

- **Project requested by the City of Titusville**
 - Objective: To develop a future vision for US 1 and SR 406 that establishes a **multimodal approach** to providing for future transportation needs
- **Corridor Planning Studies completed in September 2016:**
 - Identified Issues & Opportunities
 - Defined Purpose & Need / Goals & Objectives
 - Engaged local agencies / stakeholders
 - Conducted public outreach activities
 - Selected viable improvement strategies for Concept Development phase
- **Concept Development and Evaluation Studies began in June 2017:**
 - Review and update Issues & Opportunities / Purpose & Need
 - Continue local agency / stakeholder coordination
 - Conduct public outreach activities
 - Further analysis of potential improvement strategies
 - Develop detailed concept plans and Corridor Development Plan



PVT Meeting #1 Recap | November 2017

- Provided update on existing conditions
- Presented initial findings for future conditions report
- Summarized viable improvement strategies to move forward to concept development



SR 406

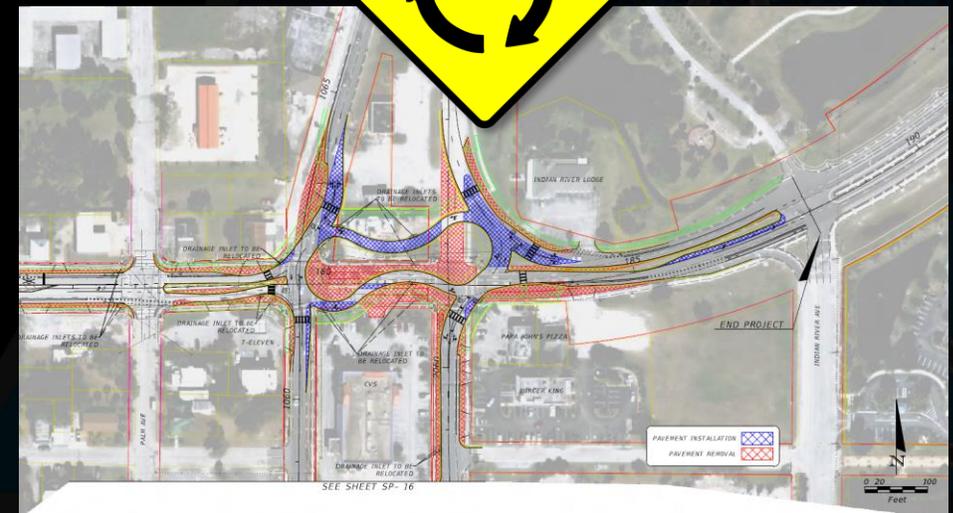
- Corridor wide typical section enhancements/
addition of bicycle lanes
- Road diet
- Roundabout at Singleton Avenue

US 1

- Roundabout at SR 406
- Roundabout at Grace Street

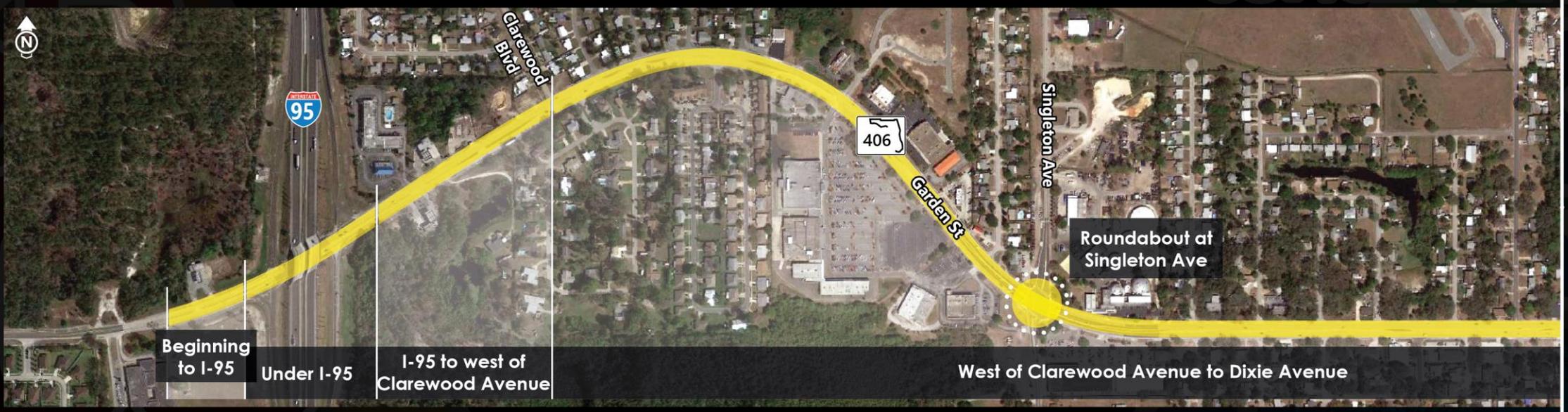
Progress since PVT Meeting #1

- Finalized future conditions report
 - Reports available for review
- Met with City of Titusville to discuss the preferred alternatives
- Refined concept plans
- Began roundabout screening evaluation process
- Conducted initial round of FDOT internal concept review meetings



Typical Section Breakdown

CONCEPT DEVELOPMENT



SR 406 from Beginning of Project to I-95



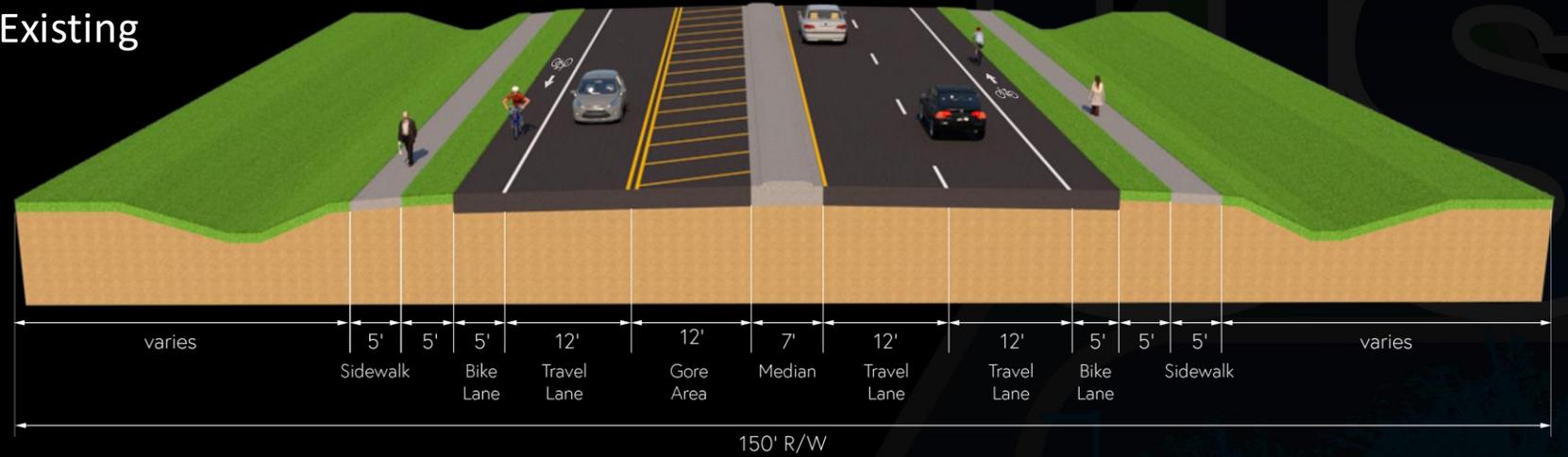
SR 406 from Beginning of Project to I-95

Typical Section Improvement

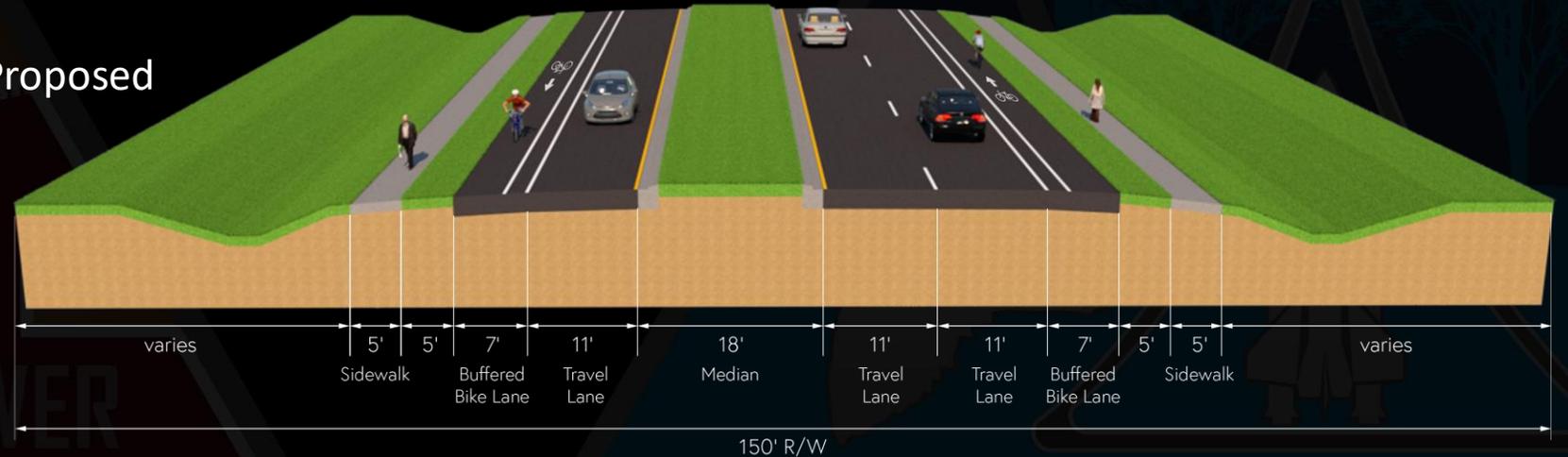
Proposed Typical Section Changes

- Addition of buffered bicycle lanes
- Reduce travel lane widths
- Convert gore area and traffic separator to raised median
- Maintain existing edge of pavement
- Maintain existing sidewalks
- Maintain existing R/W

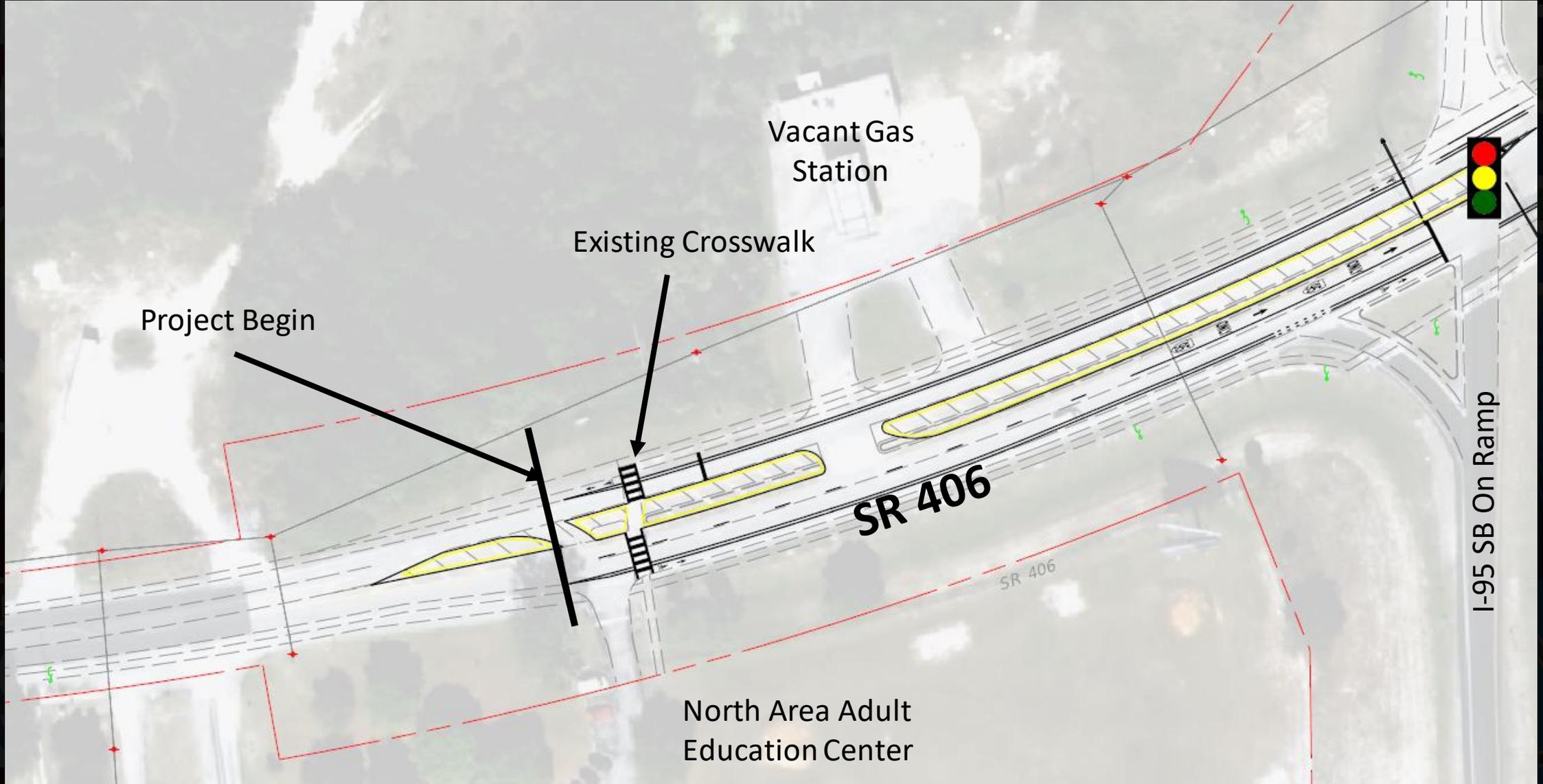
Existing



Proposed



SR 406 from Beginning of Project to I-95 Concept Layout



SR 406 Under I-95

CONCEPT DEVELOPMENT



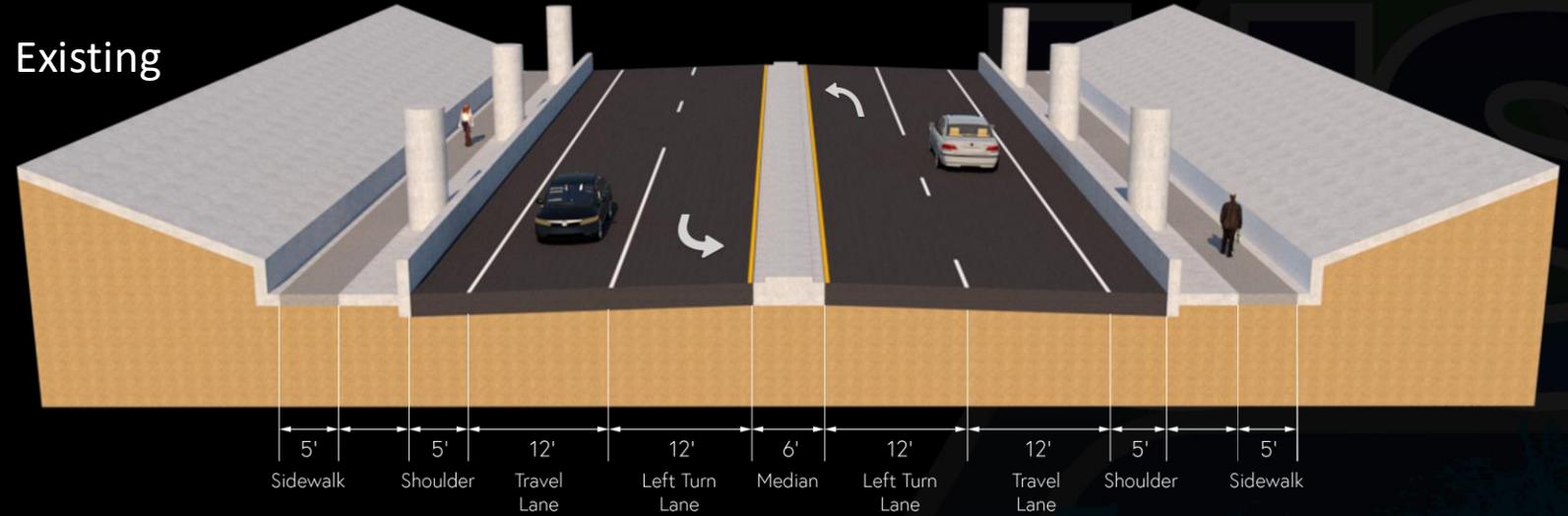
SR 406 Under I-95

Typical Section Improvement

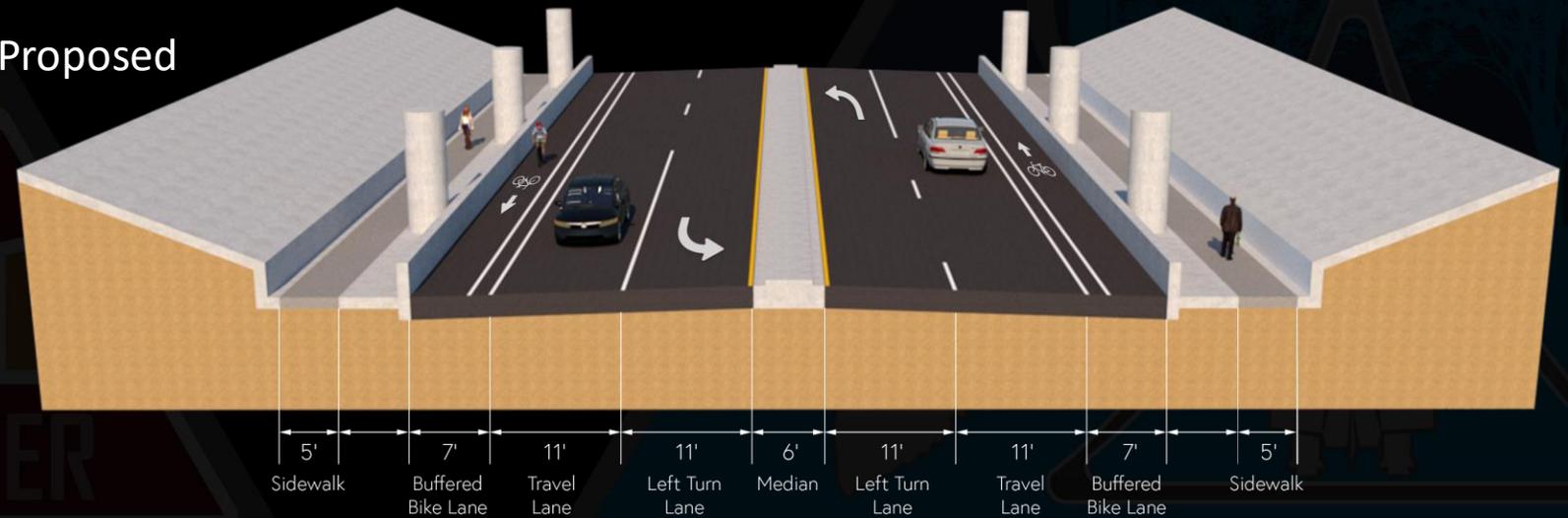
Proposed Typical Section Changes

- Addition of buffered bicycle lanes
- Reduction of travel lane widths
- Maintain existing curb line
- Maintain existing traffic separator
- Maintain existing sidewalks

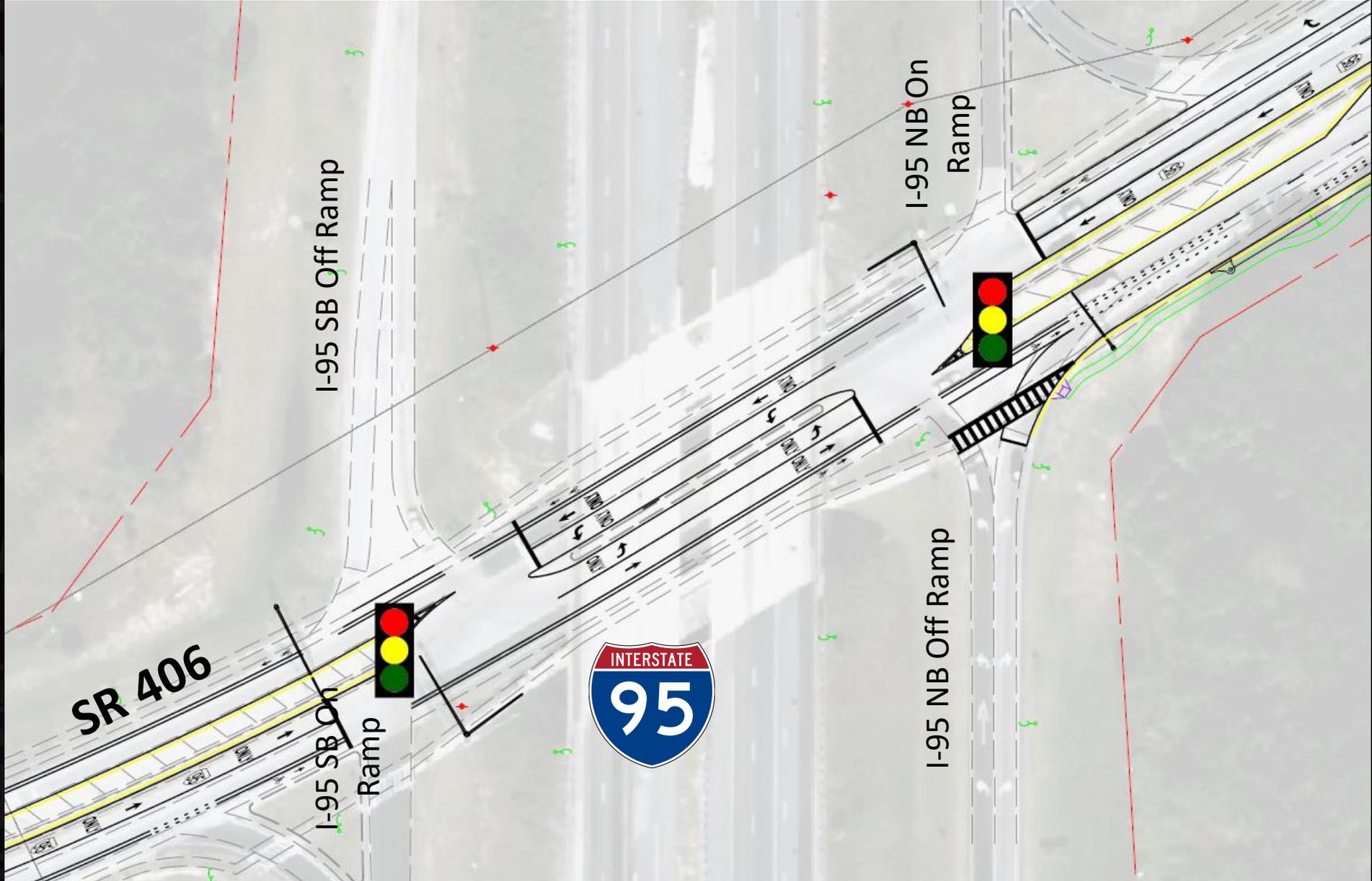
Existing



Proposed



SR 406 Under I-95 | Concept Layout



SR 406 from I-95 to west of Clarewood Ave.



I-95 to west of
Clarewood Avenue



Continued...

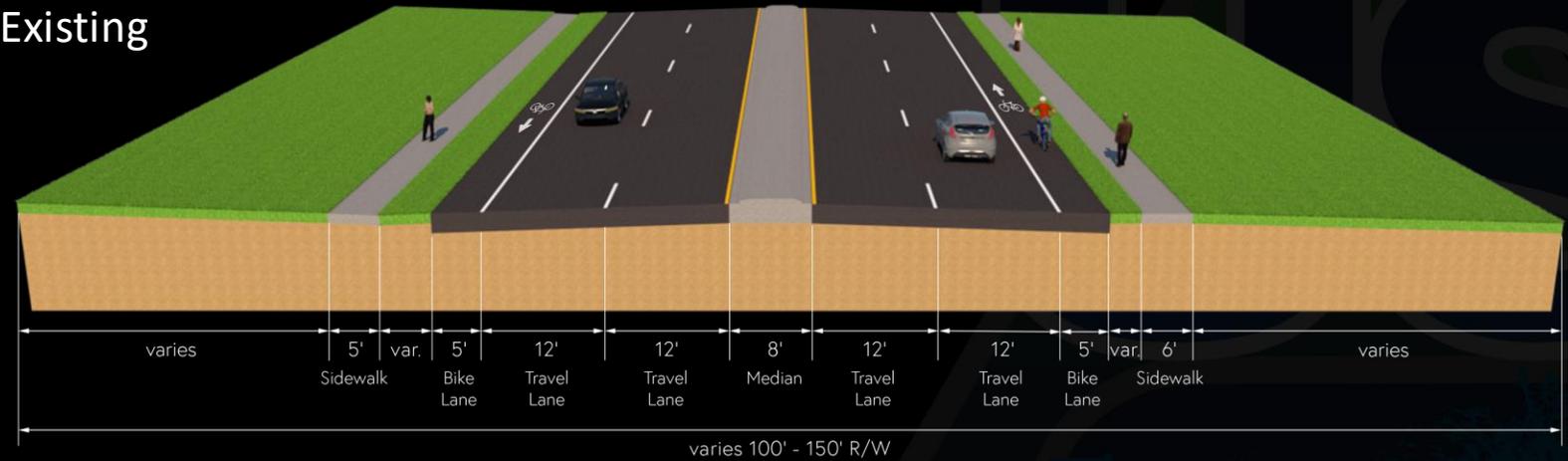
SR 406 from I-95 to west of Clarewood Avenue

Typical Section Improvement

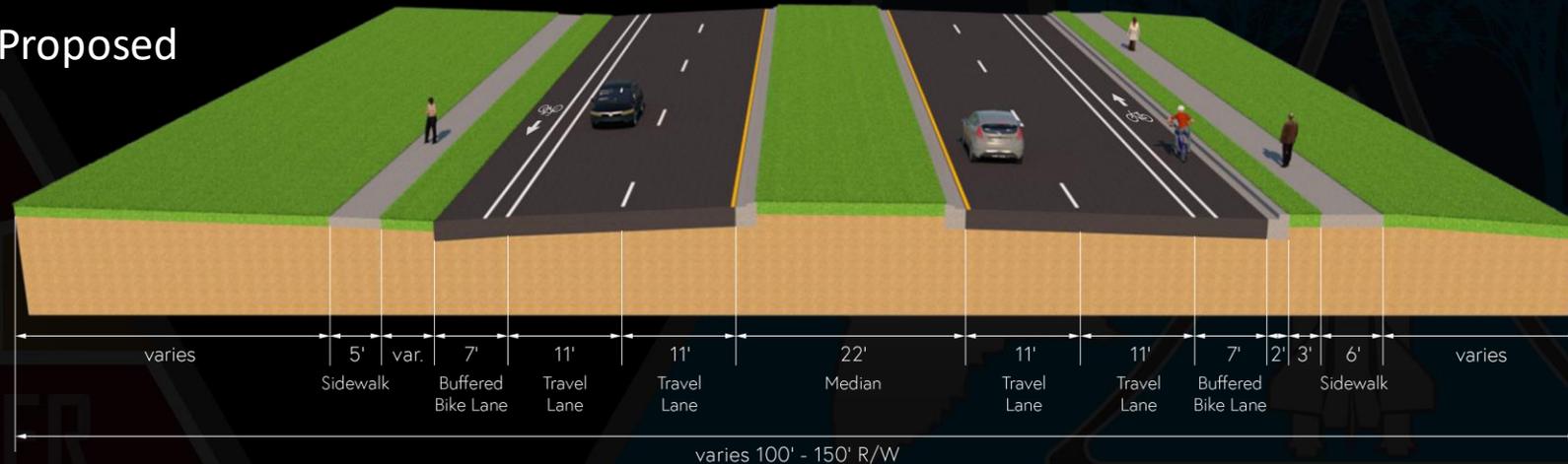
Proposed Typical Section Changes

- Addition of buffered bicycle lanes
- Reduction of travel lane widths
- Maintain existing curb line on north side, widen to the south
- Replace 8' median with standard 22' median
- Maintain existing sidewalks on north side, reconstruct 6' sidewalks on south
- Maintain existing R/W

Existing

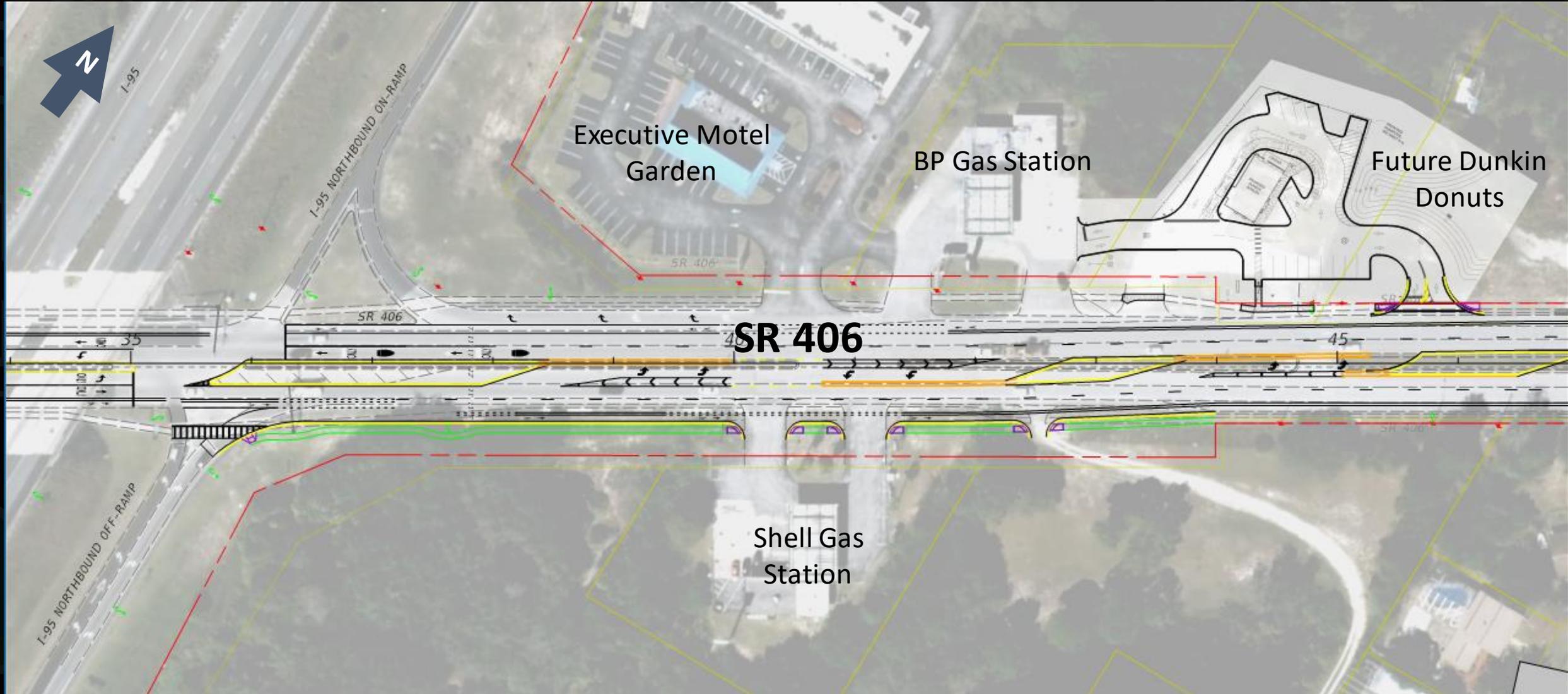


Proposed

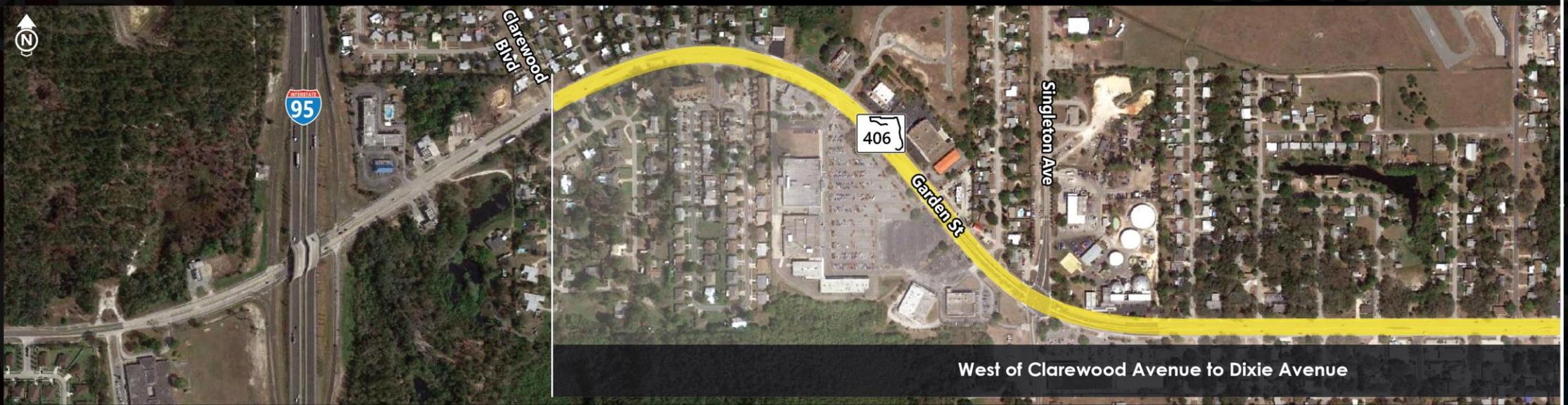


SR 406 from I-95 to west of Clarewood Avenue Concept Layout

CEPT DEVELOPMENT



SR 406 from west of Clarewood Ave. to Dixie Ave.



SR 406 from west of Clarewood Avenue to Dixie Avenue

Typical Section Improvement

Proposed Typical Section Changes

- Replace 8.5' parking lanes with 7' of buffered bicycle lanes
- Reduction of travel lane width
- Widened raised median
- Maintains existing curb line
- Maintain existing sidewalks
- Maintain existing right of way
- Introduce an access management plan

Existing

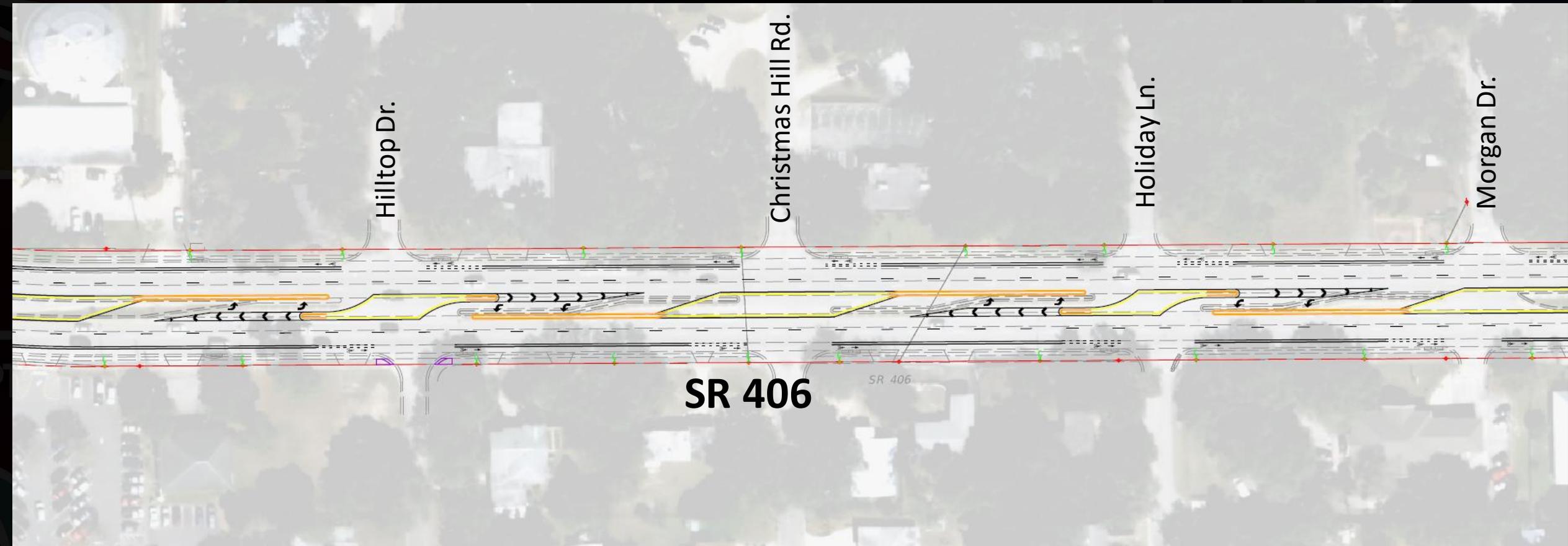


Proposed



SR 406 from west of Clarewood Avenue to Dixie Avenue Concept Layout

CONCEPT DEVELOPMENT



95
MAX BREWER

SR 406 at Singleton Ave Roundabout

CONCEPT DEVELOPMENT



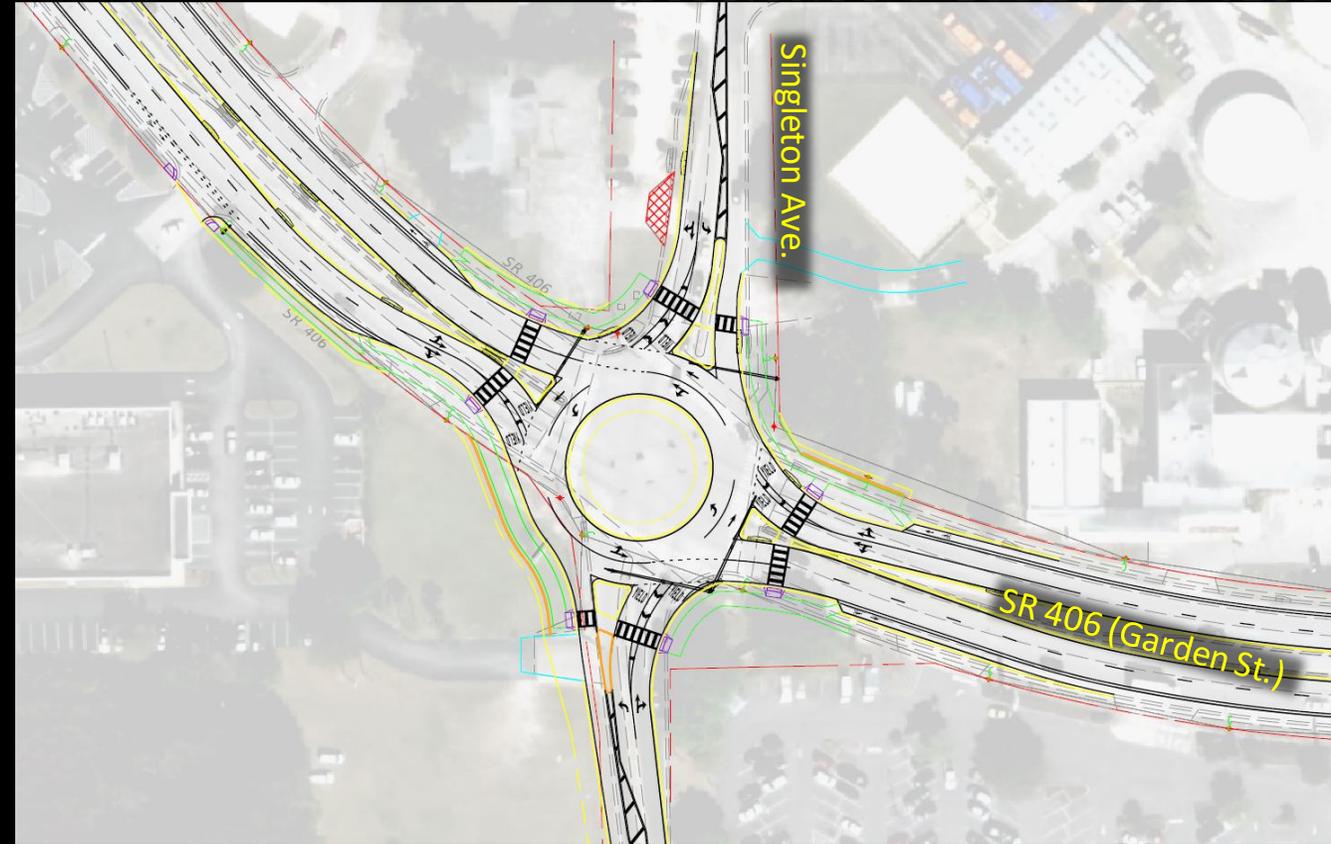
SR 406 at Singleton Ave Roundabout

Purpose:

- To reduce number of crashes at intersection
- Slow speeds into downtown Titusville
- Potential gateway feature into the City of Titusville

2040 projected operations:

Control	AM Peak (Delay/LOS)	PM Peak (Delay/LOS)
Signalized	16.8/B	23.7/C
Roundabout	9.9/A	22.5/C



Costs

- 0.18 Ac. of ROW needed
- Construction Cost – \$1.4 million
- Design/ROW Costs - Under Development

Benefits

- \$6,295,193 in Crash Cost Reduction over 20 years
- \$358,275 in Delay Reduction savings over 20 years

SR 406 from Dixie Ave. to Park Ave. (Road Diet)



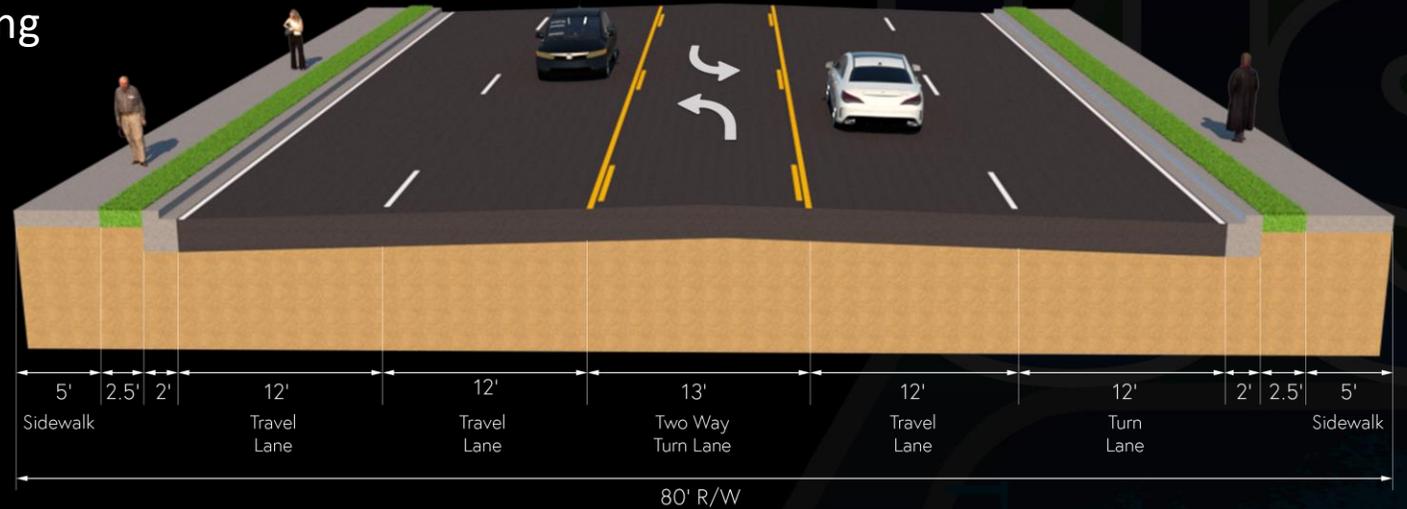
SR 406 from Dixie Avenue to Park Avenue (Road Diet)

Typical Section Improvement

Proposed Typical Section Changes

- Repurpose existing roadway
- Transition section from 5-lane to 4-lane section
- Reduction of travel lane width
- Addition of buffered bicycle lanes
- Move in existing curbs, but retain existing drainage system
- Maintain existing sidewalks
- Introduce an access management plan

Existing

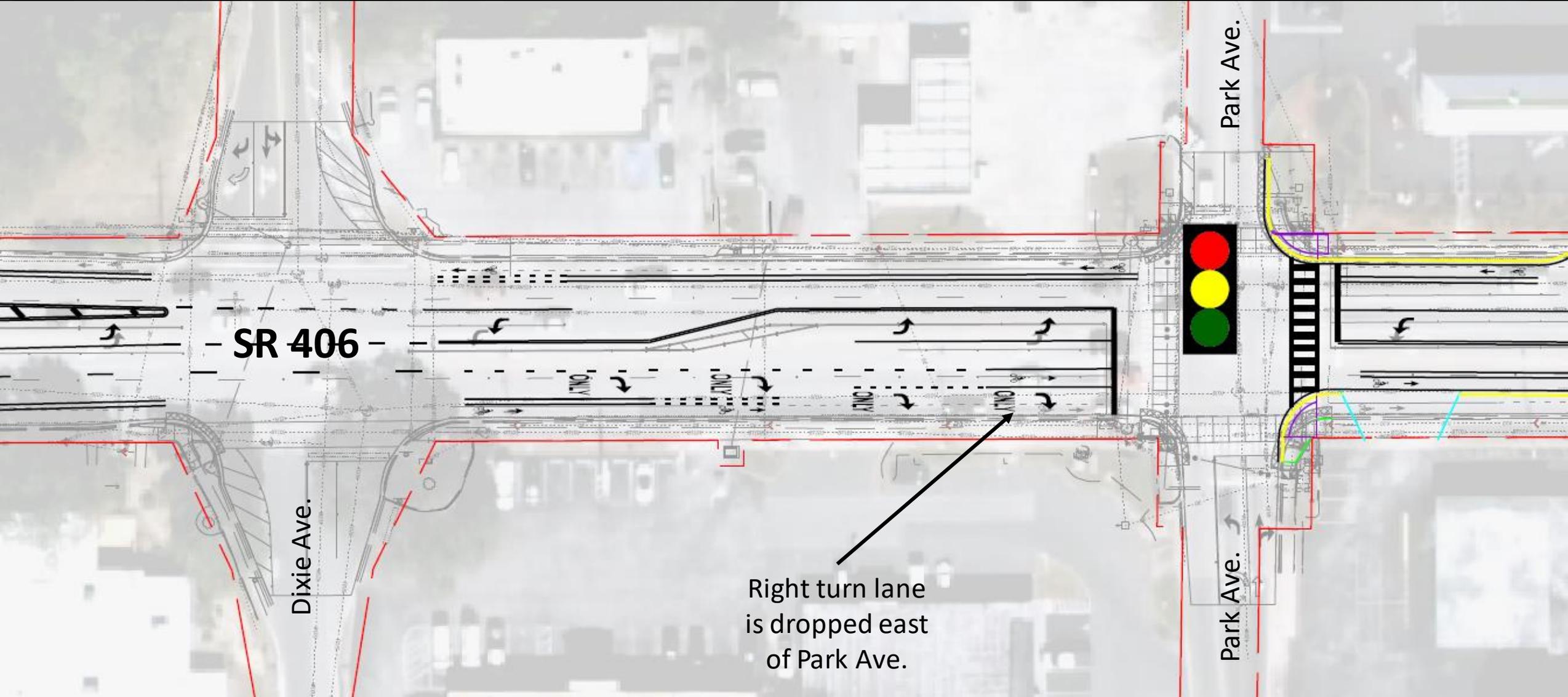


Proposed



SR 406 from Dixie Ave to Park Avenue (Road Diet) Concept Layout

CONCEPT DEVELOPMENT



SR 406 from Park Ave. to US 1 SB (Road Diet)



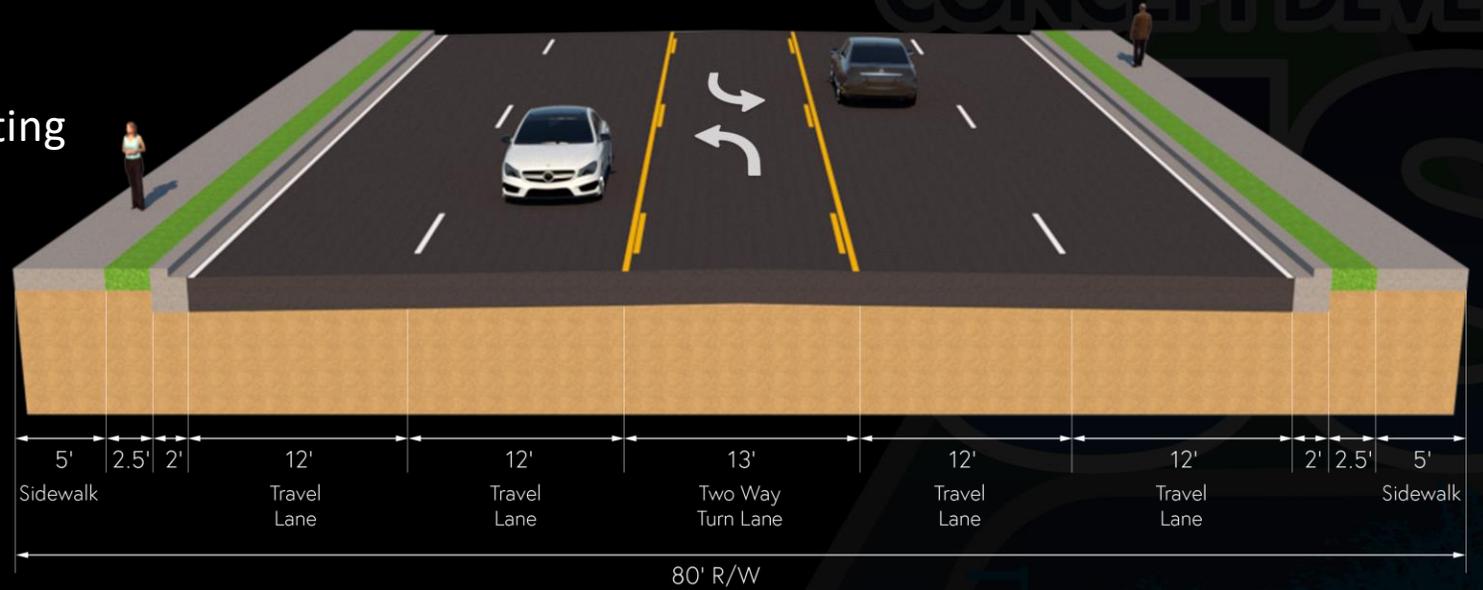
SR 406 from Park Avenue to US 1 SB (Road Diet)

Typical Section Improvement

Proposed Typical Section Changes

- Repurpose existing roadway
- Reduce from 5-lane to 3-lane typical section: 2 travel lanes and 1 center turn lane
- Reduction of travel lane width
- Addition of buffered bicycle lanes
- Move in existing curbs, but retain existing drainage system
- Maintain existing sidewalks
- Provides wider utility strip

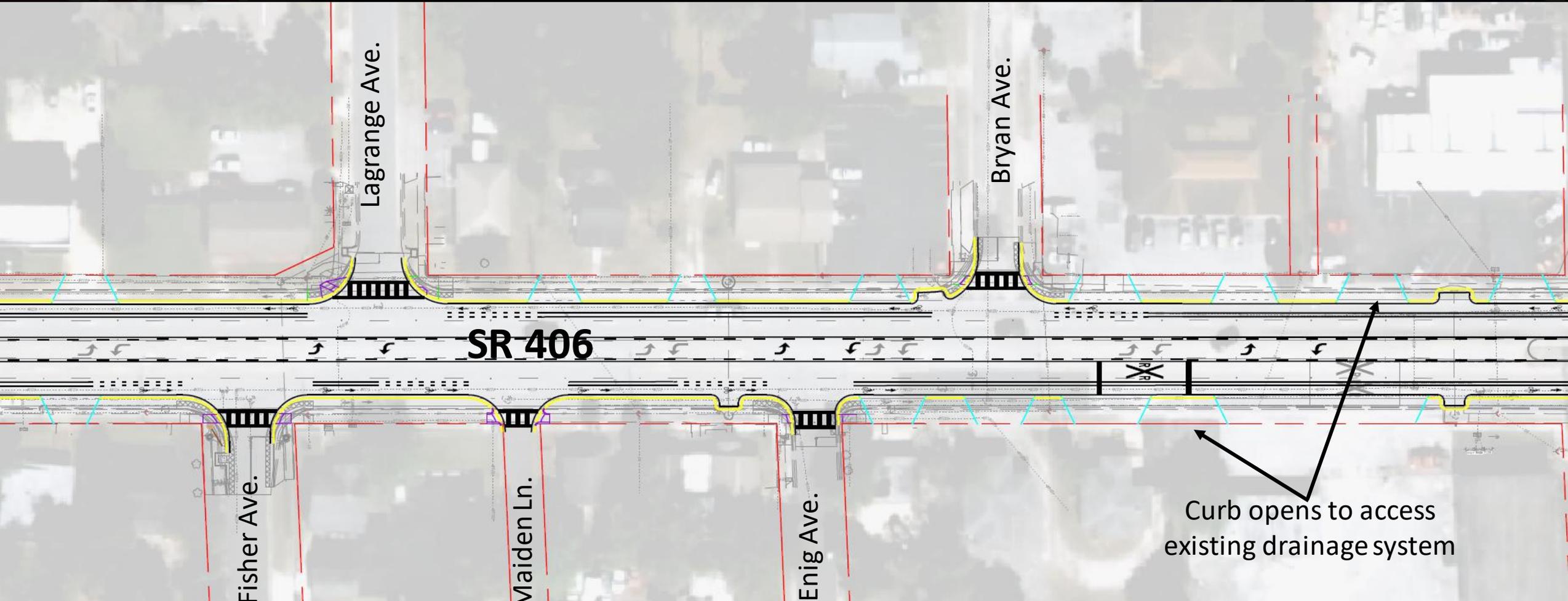
Existing



Proposed

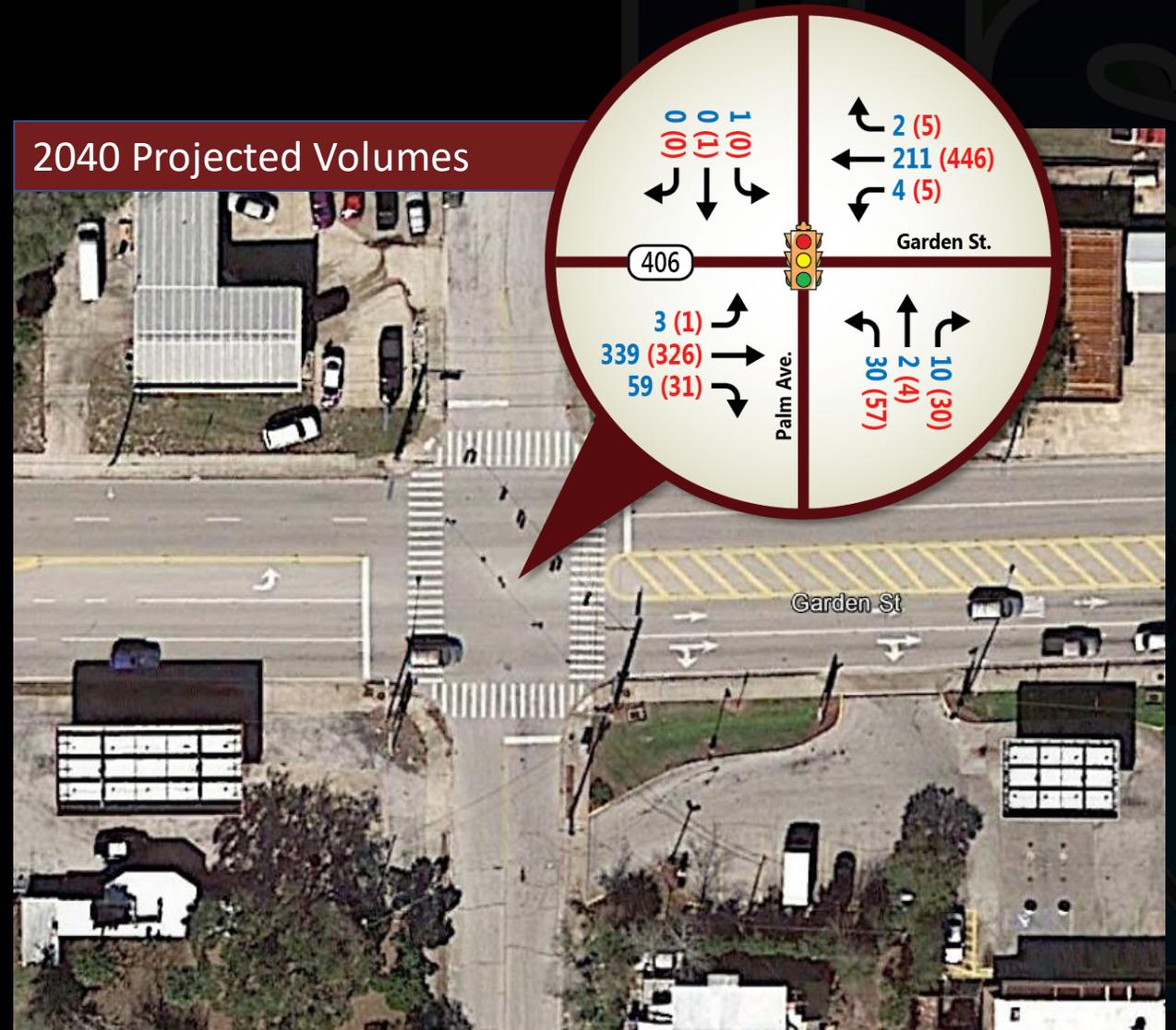


SR 406 from Park Avenue to US 1 SB (Road Diet) Concept Layout



SR 406 at Palm Avenue Signal Removal

- Signal not warranted
- Does not meet spacing standards with Hopkins Avenue signal
- **Being removed with resurfacing project scheduled this year**



SR 406 from US 1 SB to US 1 NB (Road Diet)



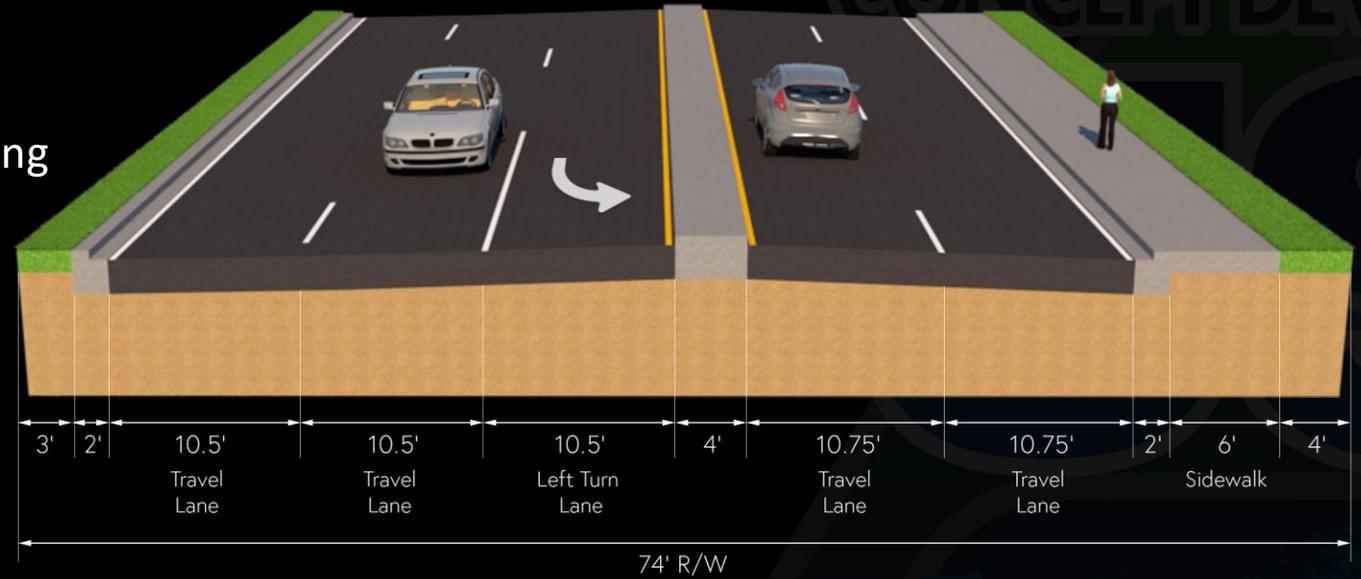
SR 406 from US 1 SB to US 1 NB (Road Diet)

Typical Section Improvement

Proposed Typical Section Changes

- Repurpose existing roadway
- 3-lane typical section: 2 travel lanes and 1 center turn lane
- Addition of buffered bicycle lanes
- Move in existing curb on the northside to provide 6' sidewalk
- Widen travel lanes to 11'

Existing

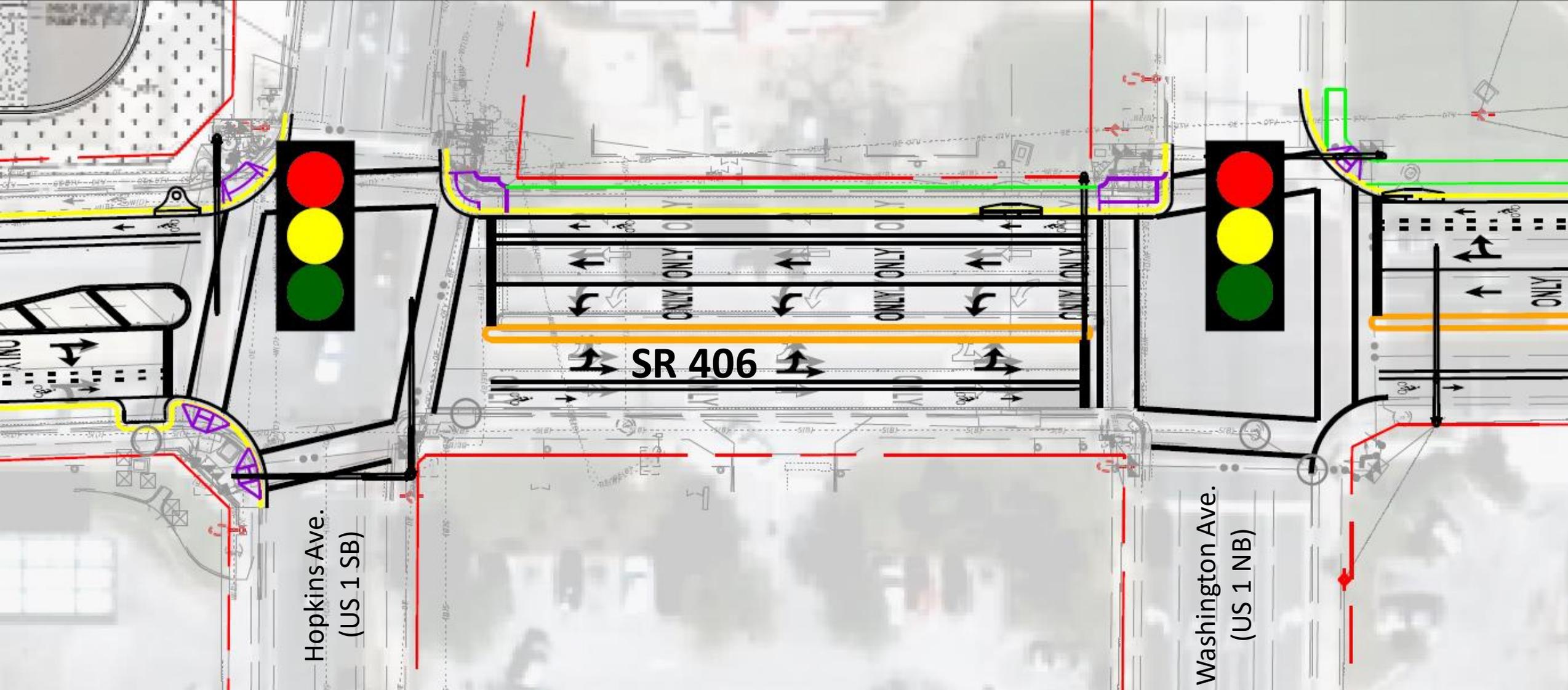


Proposed



SR 406 from US 1 SB to US 1 NB (Road Diet) Concept Layout

CONCEPT DEVELOPMENT



Roundabout at US 1 / SR 406 Intersections



Roundabout at US 1/SR 406 Intersections

Purpose:

- To reduce number of severe crashes
- Potential gateway feature into the City of Titusville

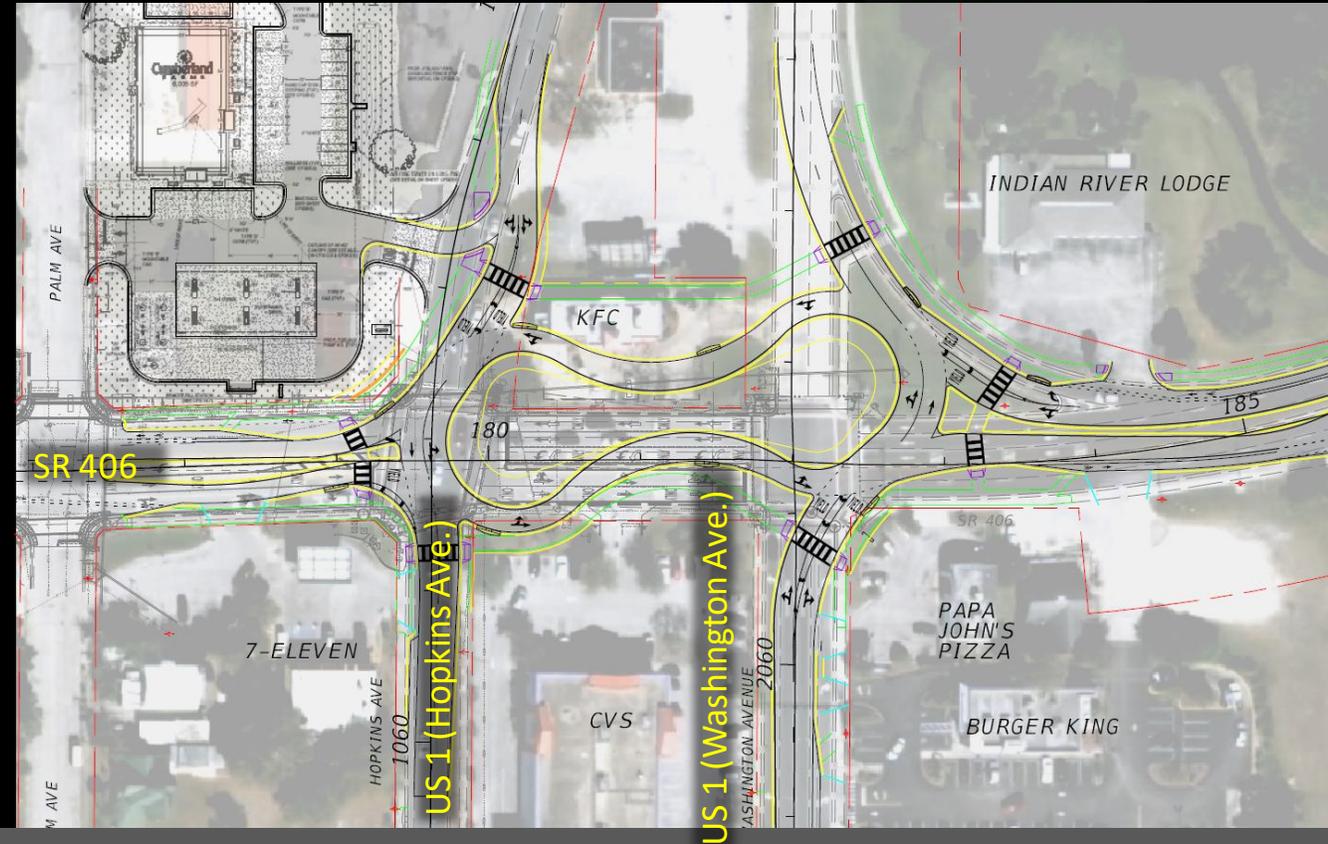
2040 projected operations:

Control	AM Peak (Delay/LOS)	PM Peak (Delay/LOS)
Signalized	22.8/C	26.8/C
Roundabout	6.9/A	10.2/B

PD&E Study required due to ROW requirements

Costs

- 15,358 FT² of ROW
- Construction Cost - \$2.2 Million
- Design/ ROW Costs – Under Development



Benefits

- \$21,974,605 in Crash Cost Reduction over 20 years
- \$1,490,789 savings in Delay Reduction over 20 years

US 1 and Grace Street Roundabout

Purpose:

- Provide crossing for parallel bicycle/pedestrian routes
- Reduces severe crashes at intersection
- Potential gateway feature into the City of Titusville and promotes slower speeds

2040 projected operations:

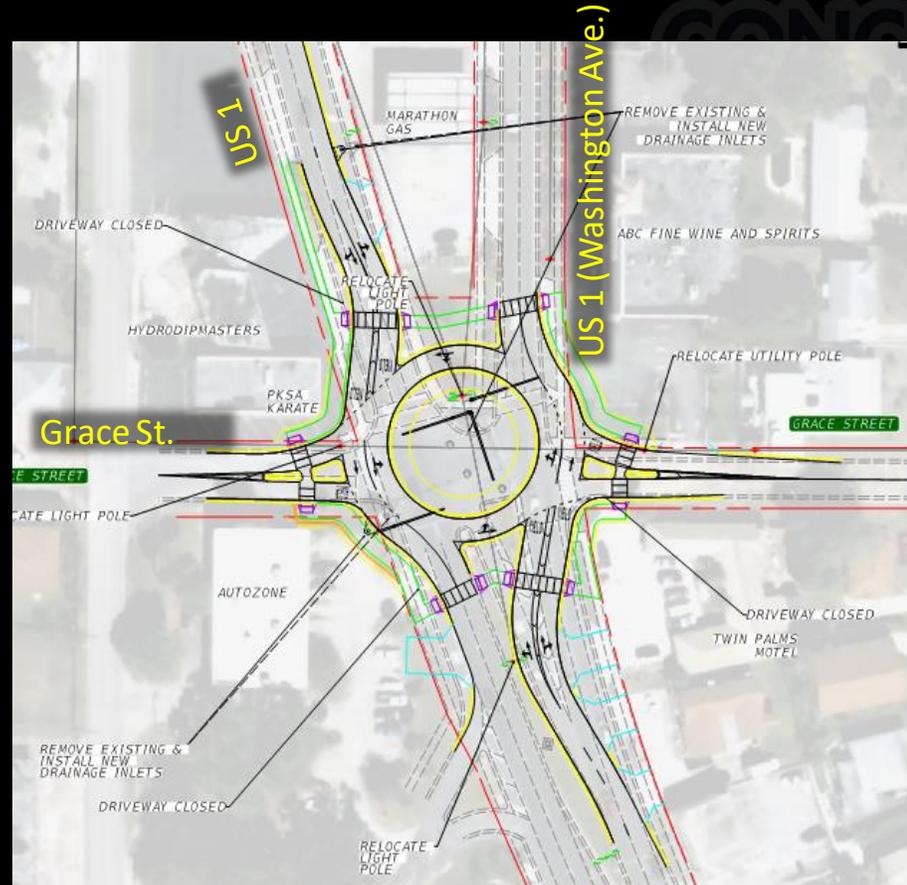
Control	AM Peak (Delay/LOS)	PM Peak (Delay/LOS)
Signalized	5.5/A	6.3/A
Roundabout	5.6/A	6.8/A

Costs

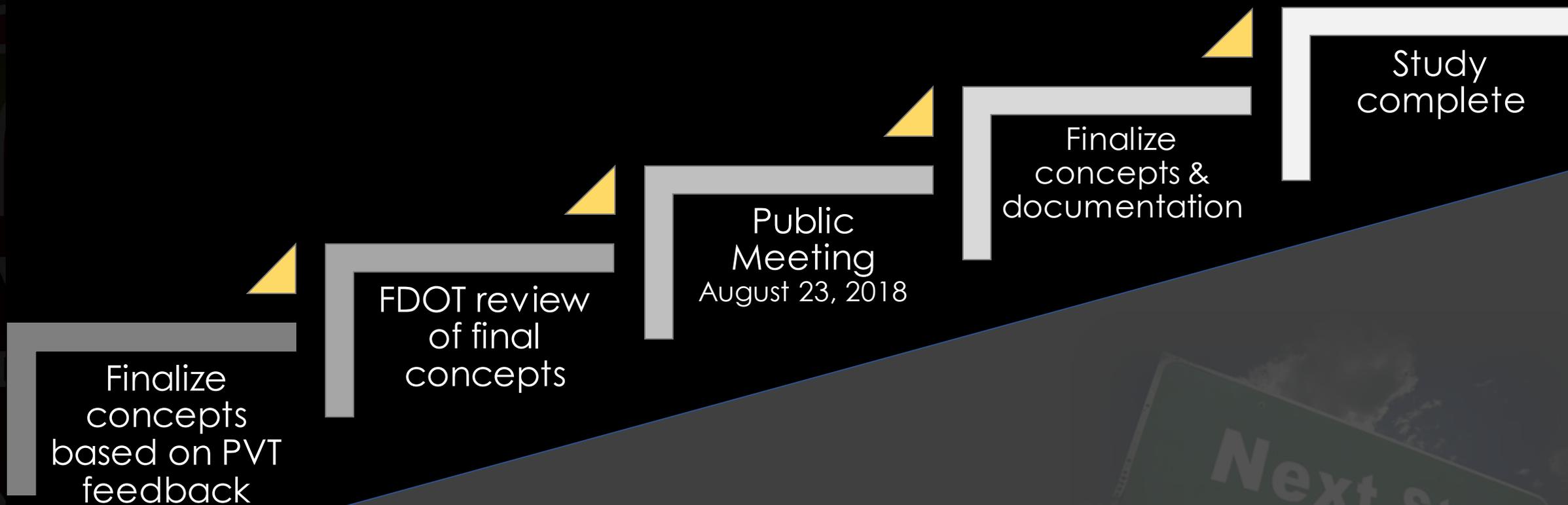
- 3,994 FT² of ROW needed
- Construction Cost – \$1.1 Million
- Design and ROW Costs - Underdevelopment

Benefits

- \$4,628,366 Crash Cost Reduction over 20 years



Next Step



Schedule

Activity	2017							2018									
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	
Project Kickoff	■																
Field Reviews / Report Updates		■										■					
Project Visioning Team Meeting						★							★				
Concept Development					■												
Public Meeting															★		
Final Report													■				
Project Completion																★	

Public Meeting: August 23rd 5:30 pm

Project Development Process



Questions/Comments?

Judy Pizzo, MSURP

Planning Project Manager
FDOT District 5

Judy.pizzo@dot.state.fl.us
386-943-5167

Kevin Freeman, PE

Consultant Team Project Manager
VHB

KFreeman@vhb.com
407-839-4006

Visit our website at: cflroads.com

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability or family status. Persons wishing to express their concerns relative to FDOT compliance with Title VI may do so by contacting Jennifer Smith, FDOT District Five Title VI Coordinator by phone at (386) 943-5367, or via email at Jennifer.Smith2@dot.state.fl.us

Open discussion at roll plots

SR
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CONCEPT DEVELOPMENT



CONCEPT DEVELOPMENT

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