



# Alternatives Development Meeting Project Visioning Team *SR 434 Corridor Study*

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SEPTEMBER 29, 2016



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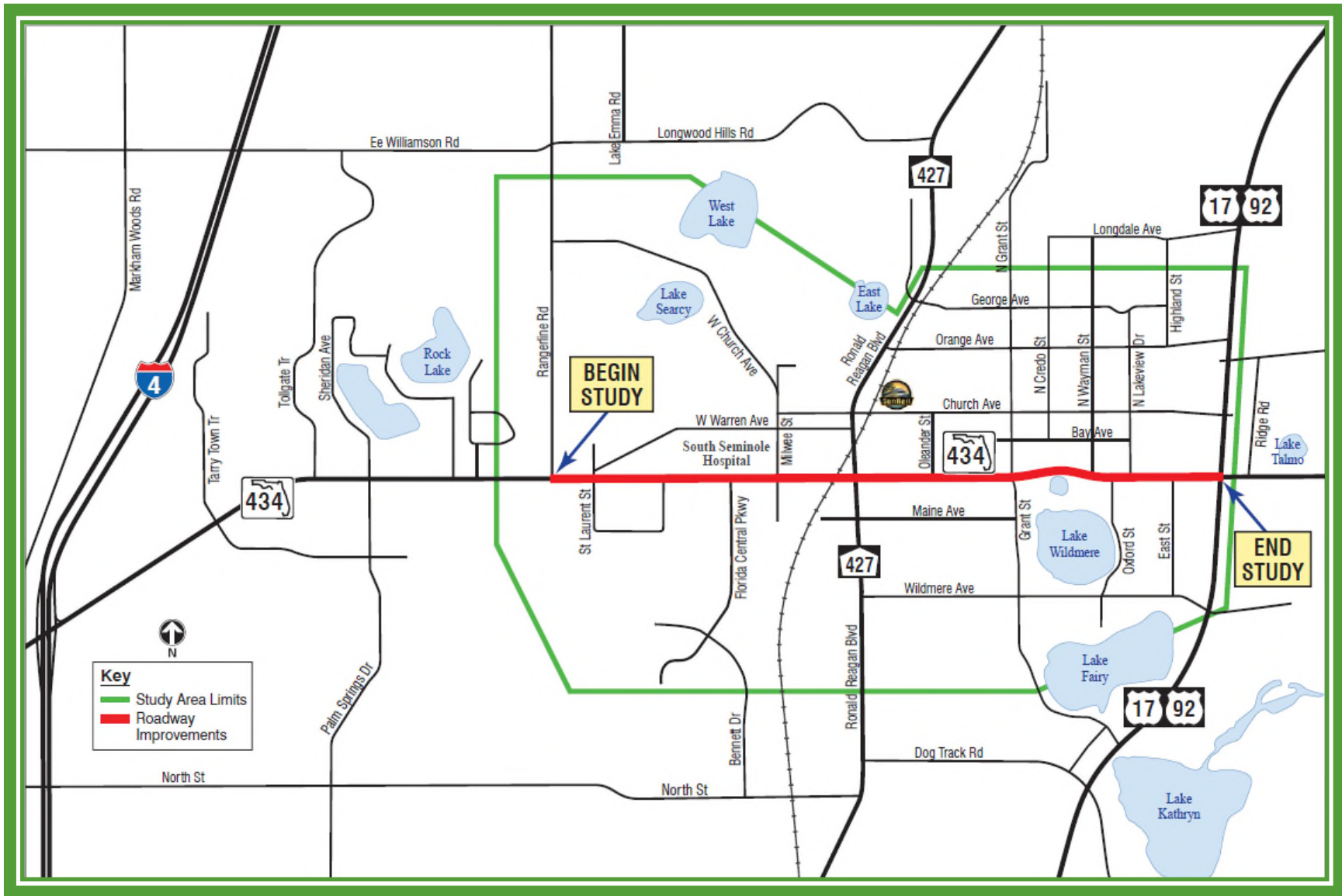
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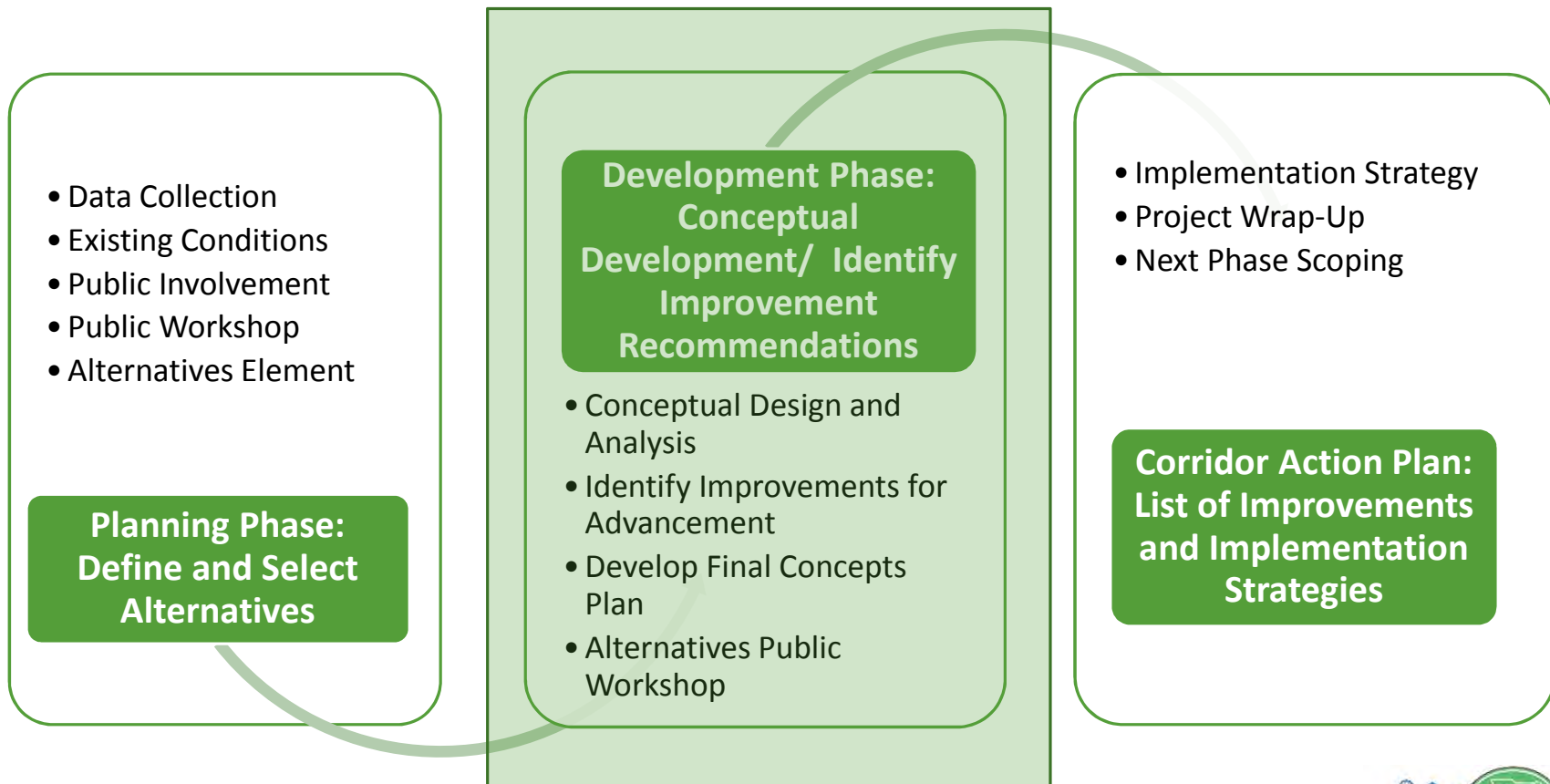


# Presentation Summary

- Study process
- Recap of Corridor History
- Current Projects
- Existing Conditions
- Preliminary Concepts
- Evaluation Matrices
- Schedule



# Study Process

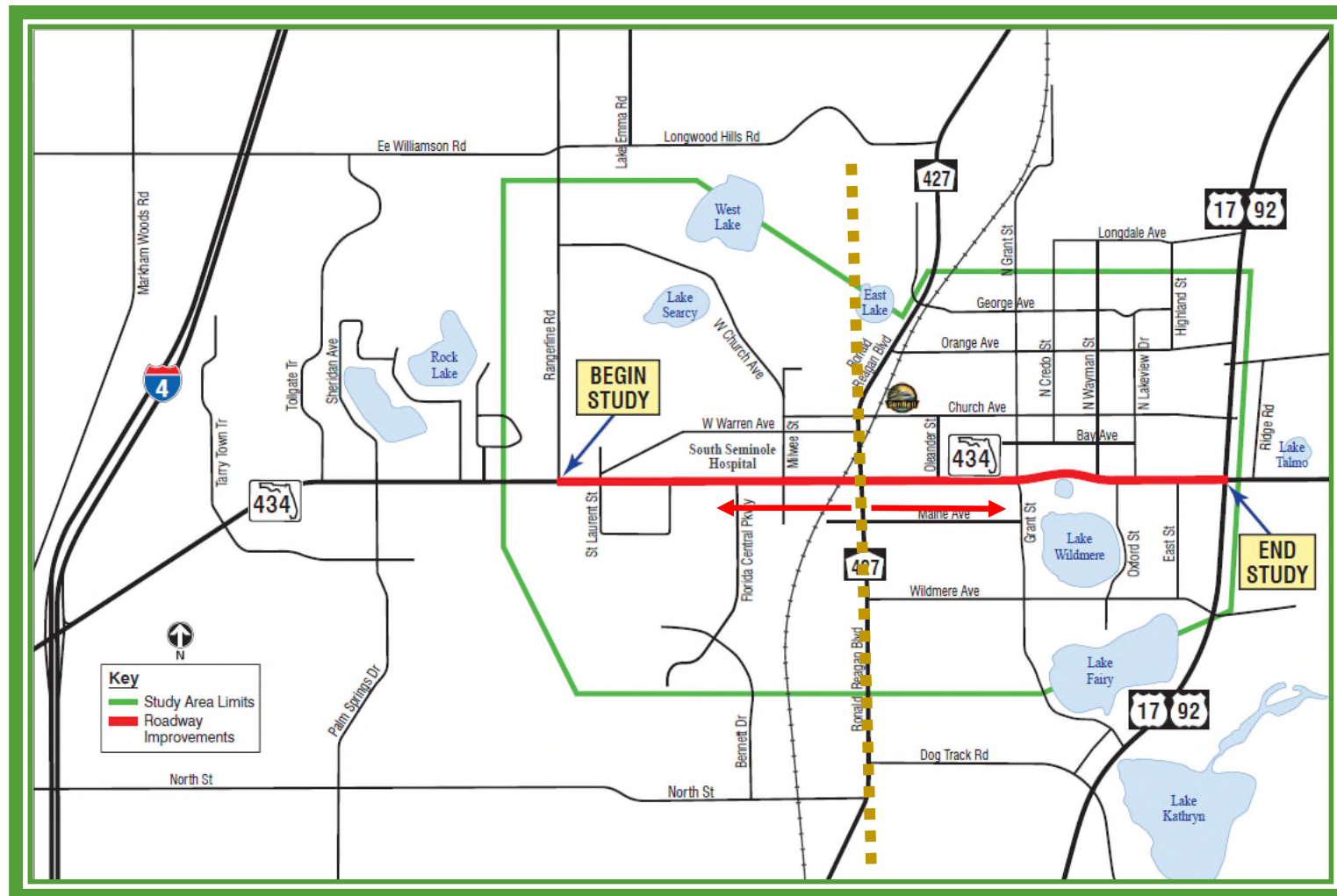


# Recap of SR 434 Corridor History

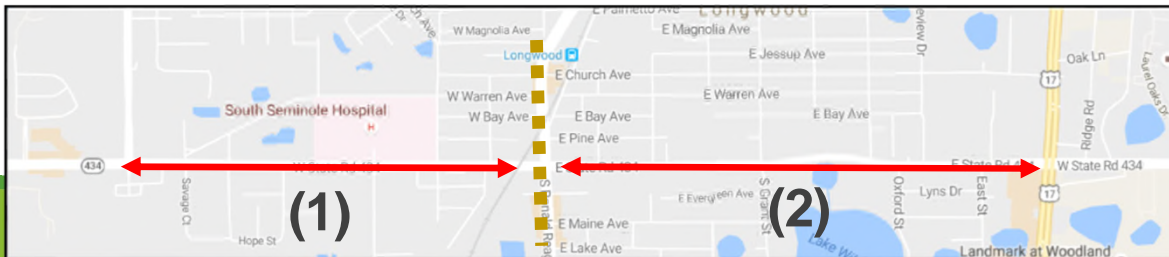
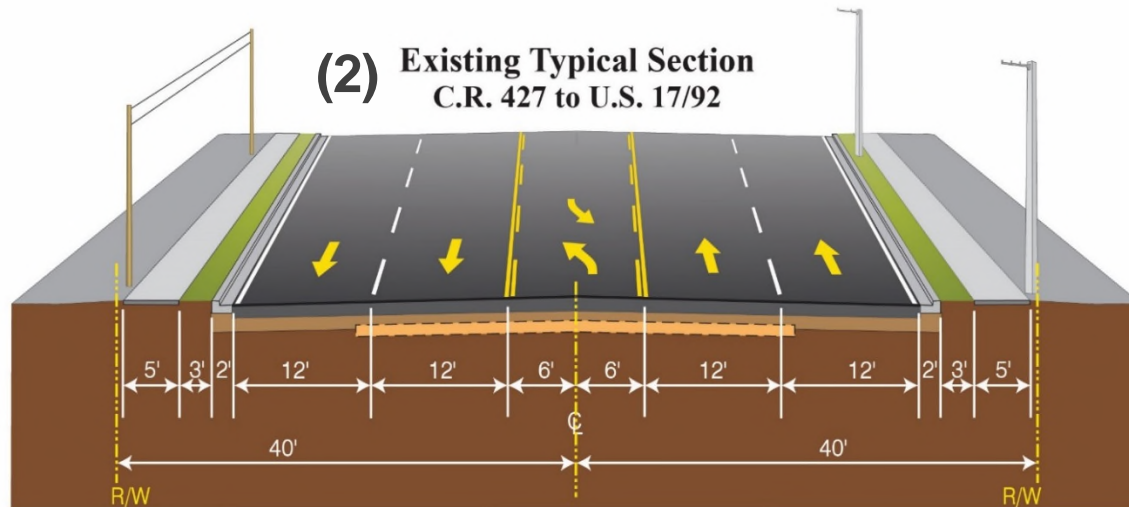
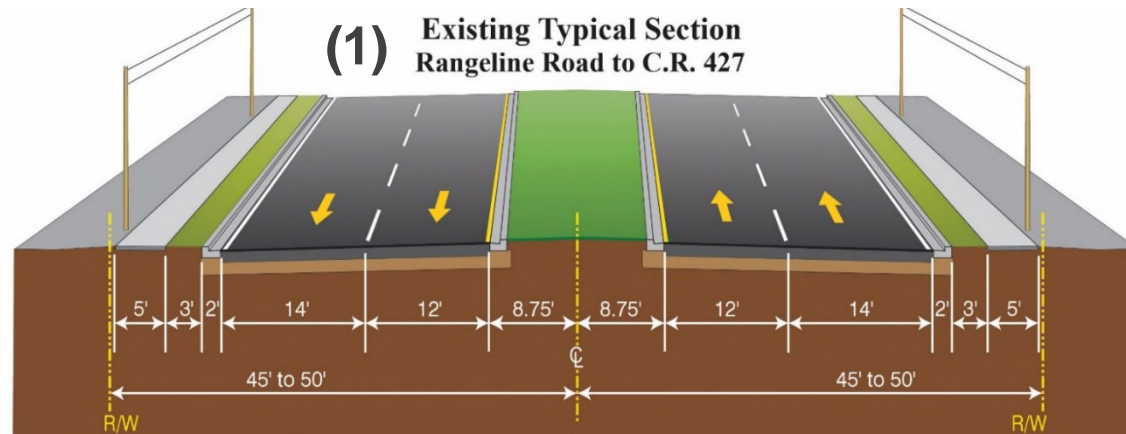
- 2001 Project Development & Environment Study (PD&E)
  - 4 to 6 lane from west of Interstate 4 to County Road (CR) 427
    - Includes section from Rangeline Road to CR 427 in study area
  - Intersection improvements and multimodal improvements CR 427 to US 17/92
- State Road (SR) 434 widened to 6-lanes from west of Interstate 4 to Rangeline Road
- Supported in 2015 MetroPlan Metropolitan Planning Organization (MPO) Priority list as Multimodal/Context Sensitive Solutions - # 1
- Support of local stakeholders to not widen to 6-lanes
- Corridor Study Public Kick-Off Meeting – November 9, 2015



# Study Location Map

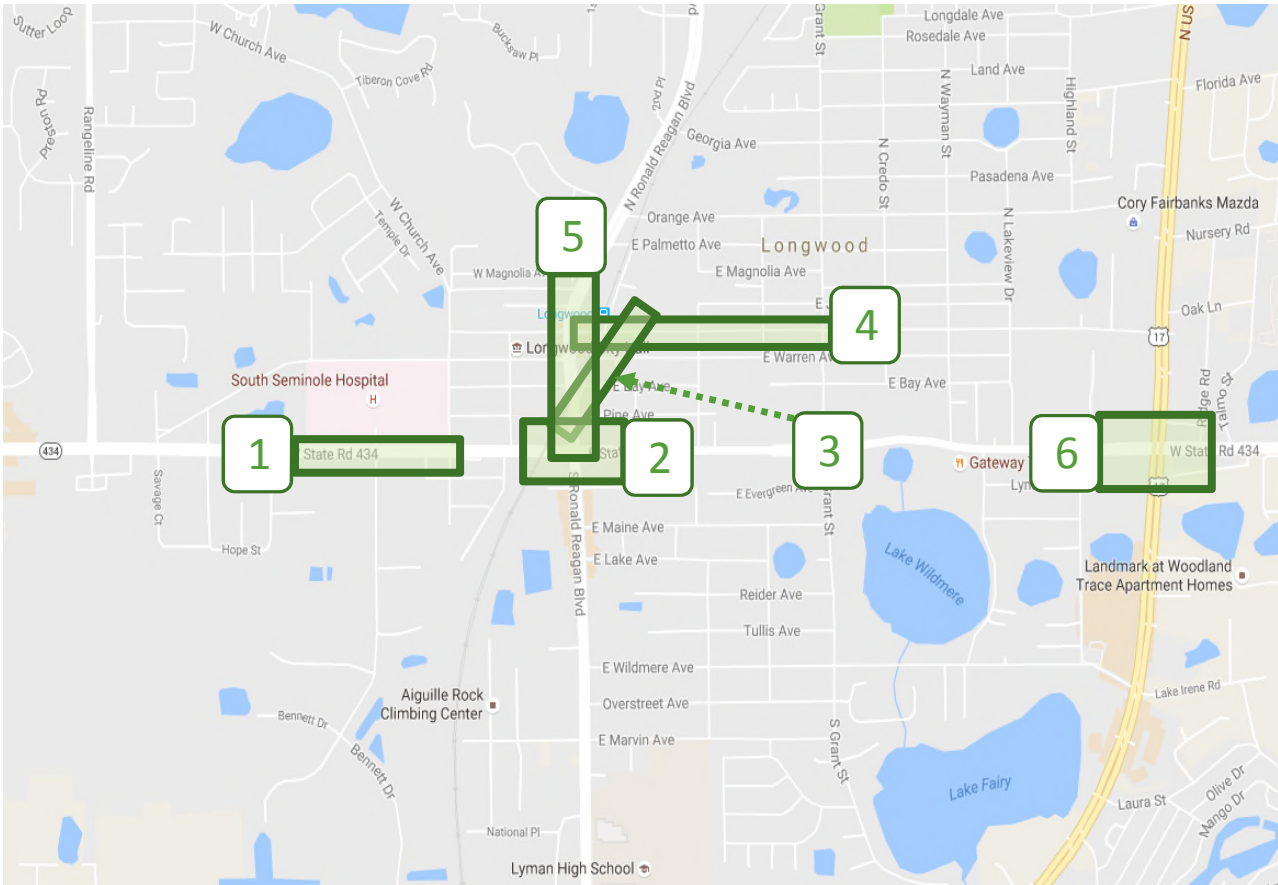


# Existing Typical Sections



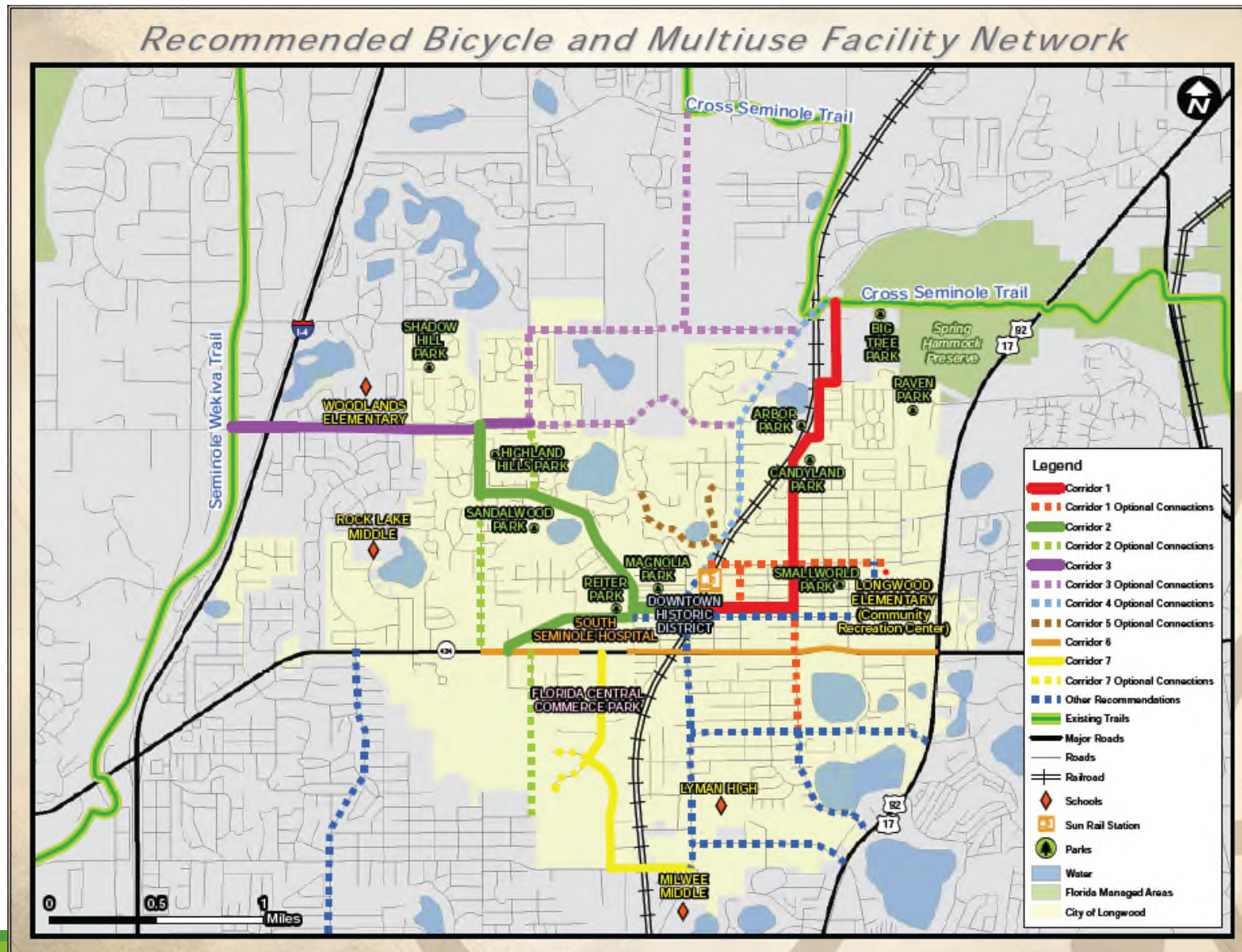


# Planned & Programmed Projects

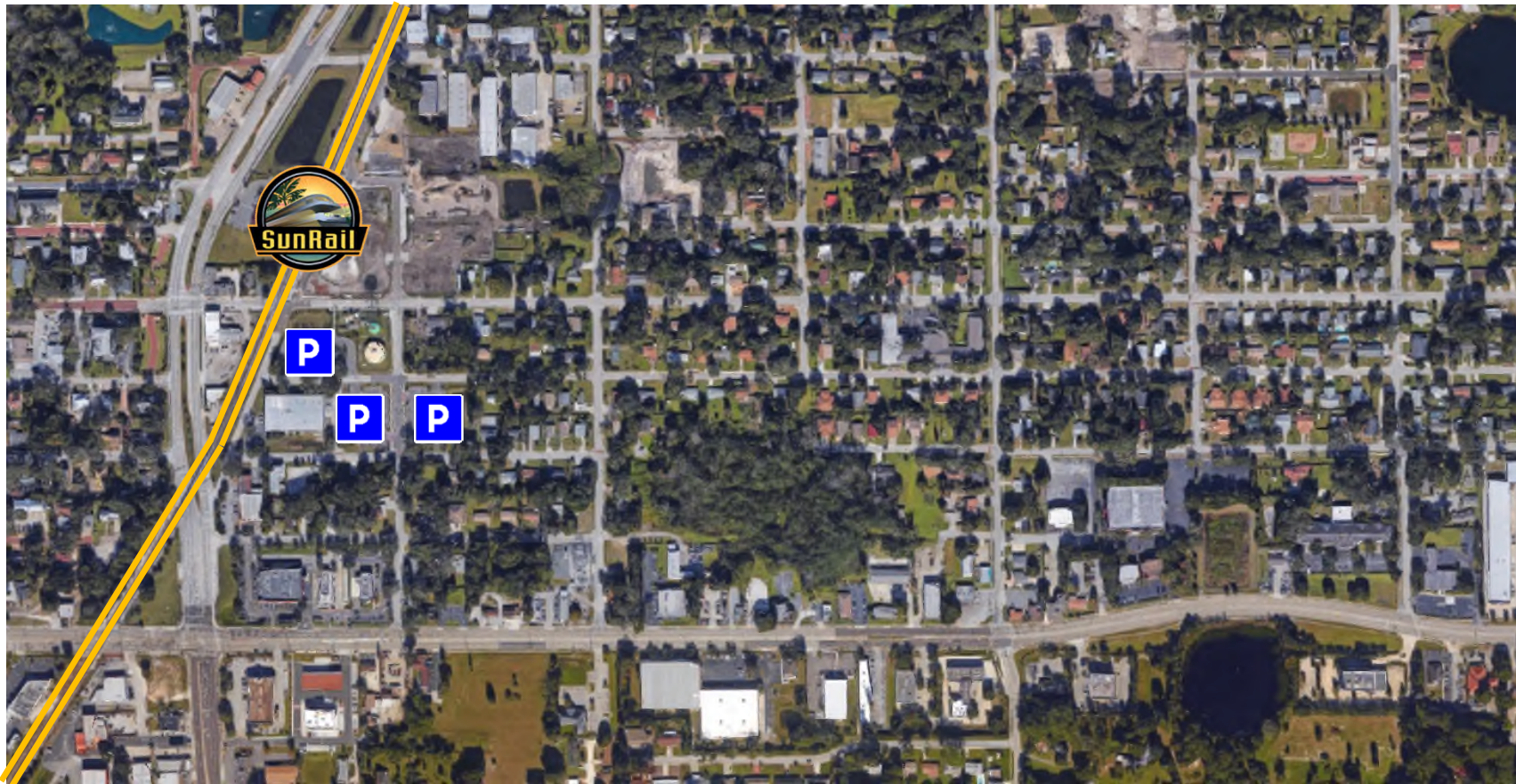


1. SR 434 @ Florida Central Parkway
  - Intersection Improvements
  - Right-of-Way previously purchased from Hospital
  - Currently under construction (County)
2. SR 434 @ Ronald Reagan Boulevard
  - In procurement for Design (County)
  - No funding programmed beyond Design
3. Longwood Avenue Sidewalk (County)
4. Church Avenue Multimodal Enhancements (City)
5. CR 427/Ronald Reagan Boulevard Complete Street Enhancements (City)
6. SR 434 @ U.S. 17/92 Gateway / Streetscape

# Bike and Multiuse Network



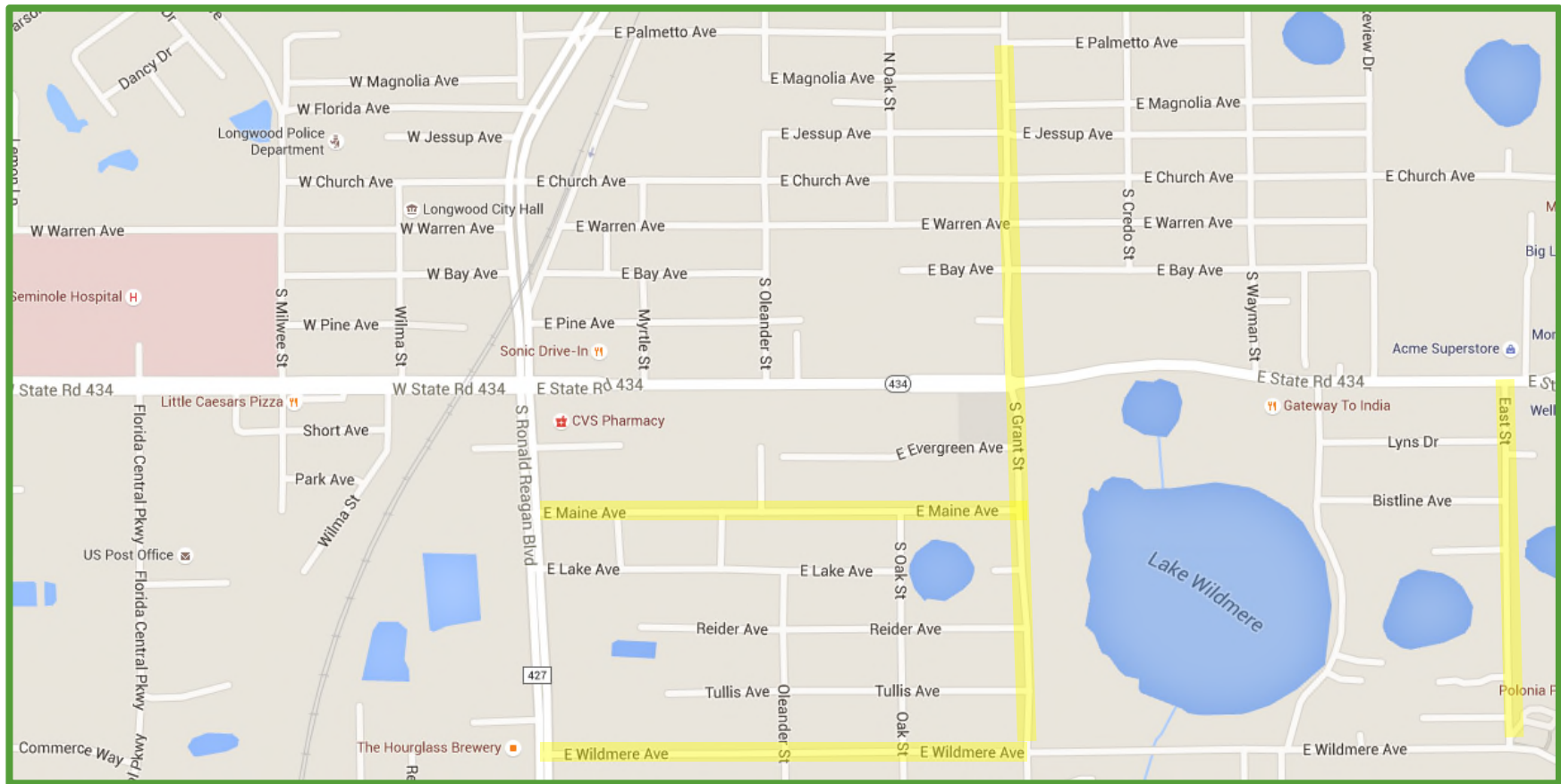
# Close Proximity to SunRail



**P** SunRail Parking Lots

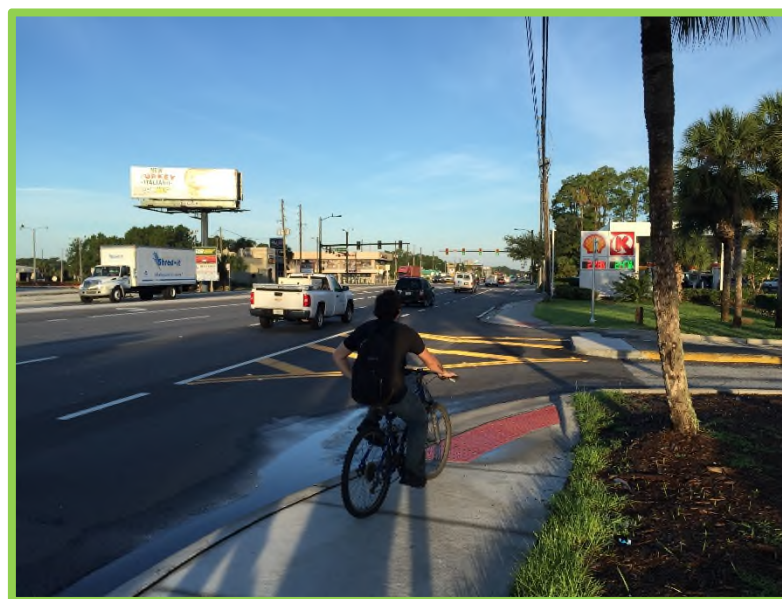


# Parallel Network Concerns



# Existing Conditions (Data Collection)

- Field review
- Existing Plans / Studies
- Traffic Counts
  - Intersection Turning Movements Counts
  - Pedestrian / Bicycle Video Counts
- Crash Data (2009-2016)
- Transit Data
- SunRail Surveys



# Preliminary Concepts

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# Potential Modifications

- Intersection modifications
- Bike lanes
- Bus shelters/bus stop relocations
- Medians/center turn lanes
- Pedestrian crossings
- 8-foot and 6-foot sidewalks
- Parallel networks
- Pedestrian boardwalk
- Park at CR 427 and SR 434
- Widening to 6 lanes
- SunRail coordination



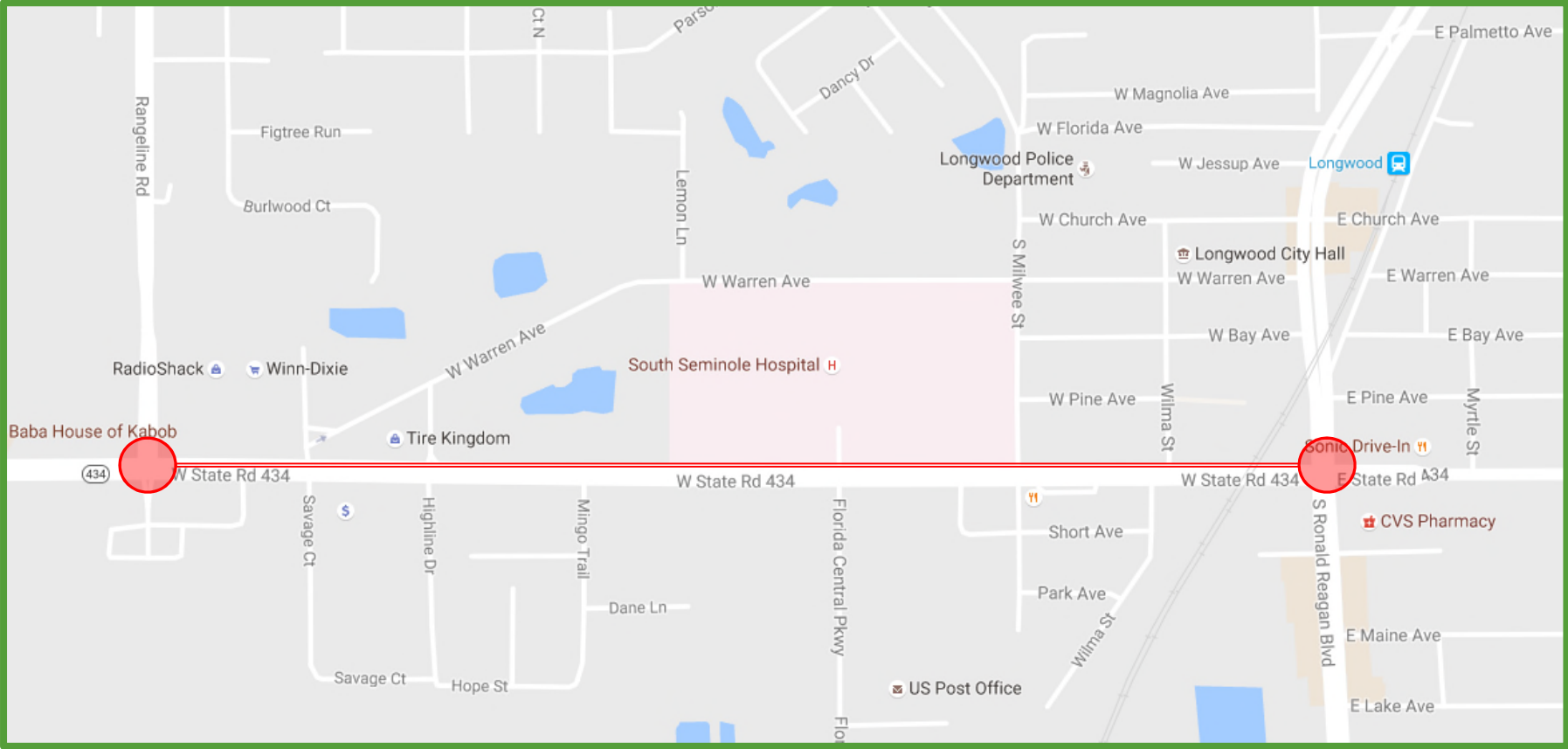
# Preliminary Concepts

- Western/Eastern Typical Sections
- SR 434 at CR 427 – Dual south-bound right turn lanes
- SR 434 at CR 427 – New south-bound road west of railroad tracks
- Median modifications
- Pedestrian crossings – Potentially on west and east
- Bus stop modifications
- SR 434 bridge over CR 427 concept
- Widen SR 434 to 6 lanes

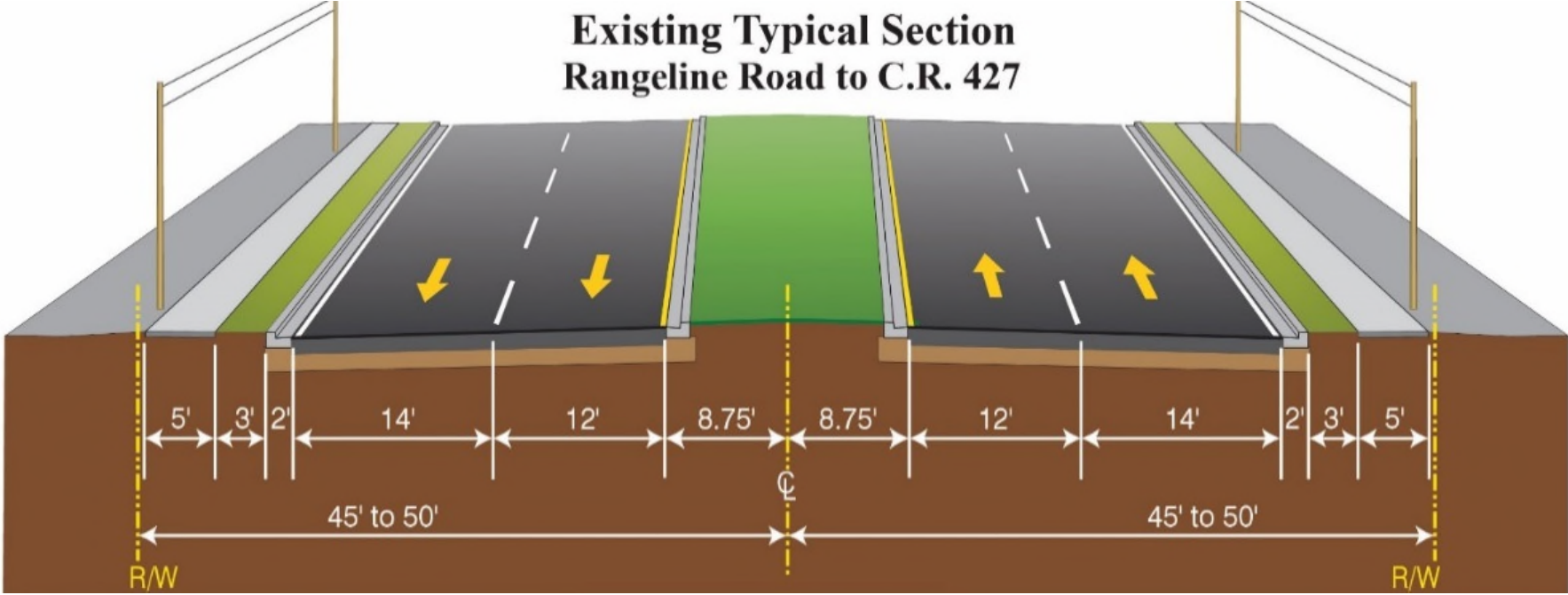




# SR 434 from Rangeline Road to CR 427

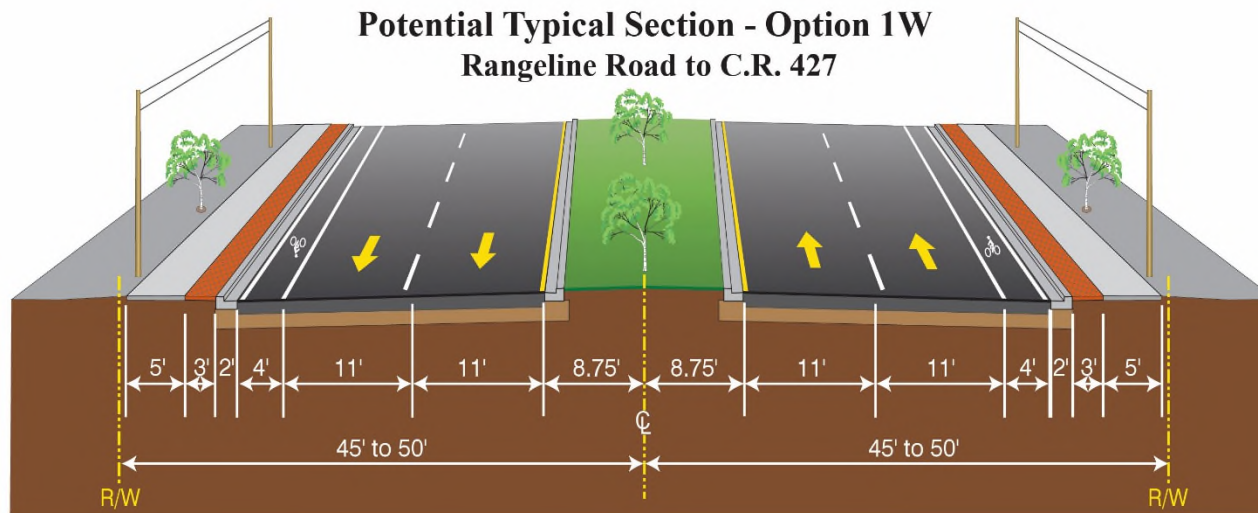
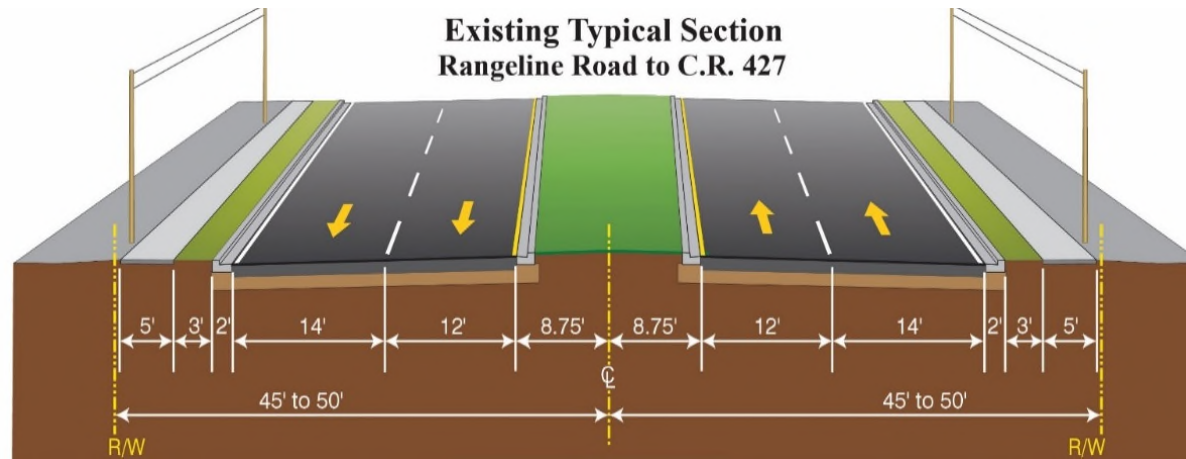


# SR 434 from Rangeline Road to CR 427



# Potential Typical Section – Option 1W

Rangeline Road to CR 427 (Ronald Reagan Blvd)

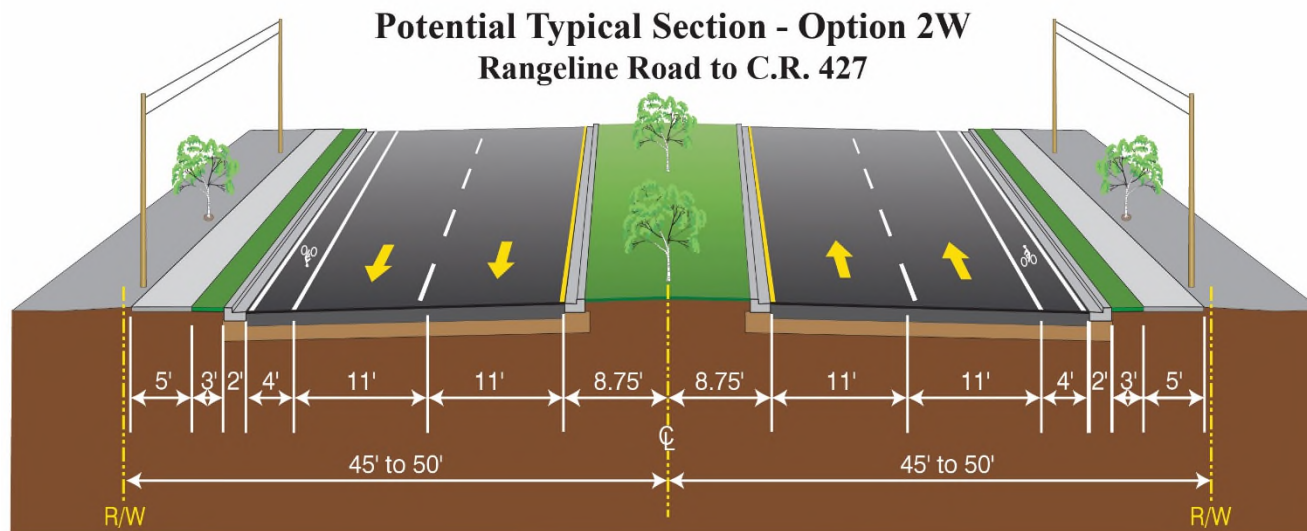
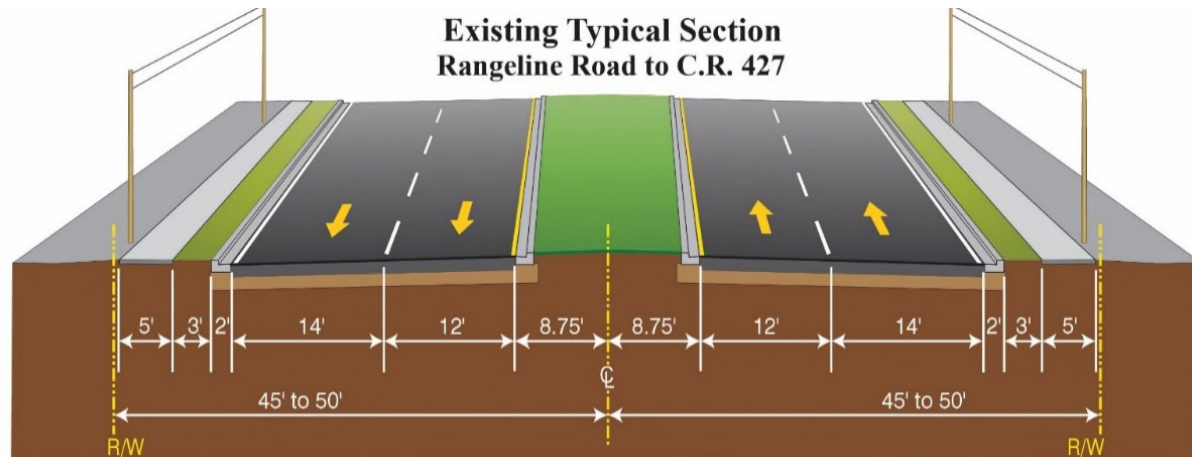


# Wider Sidewalks Options



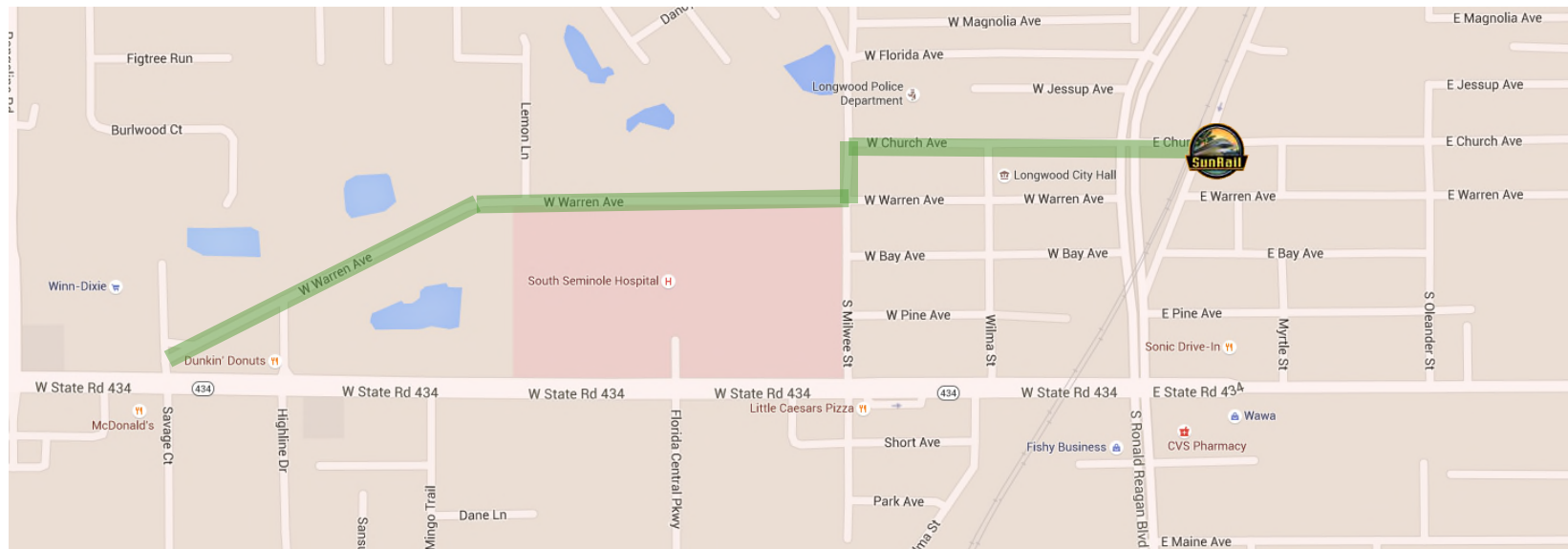
# Potential Typical Section – Option 2W

## Rangeline Road to CR 427 (Ronald Reagan Blvd)

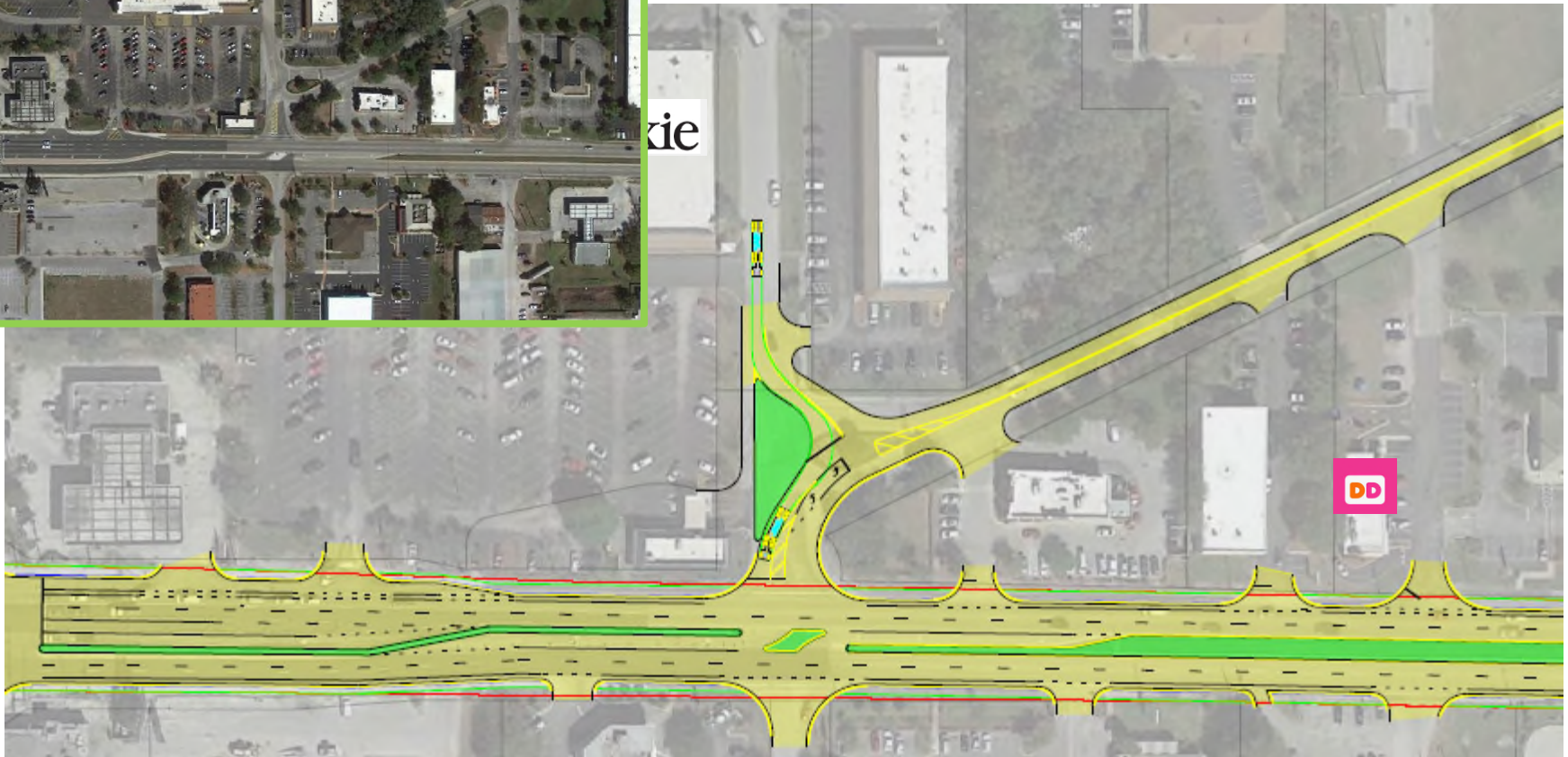


# Potential Parallel Network

- North of SR 434
  - Warren Avenue
  - Church Avenue
  - Better connectivity to SunRail station and downtown Longwood



# Warren Avenue Realignment



# SR 434 / CR 427 Intersection – Option 1

Seminole County project (in design) – Intersection Improvements



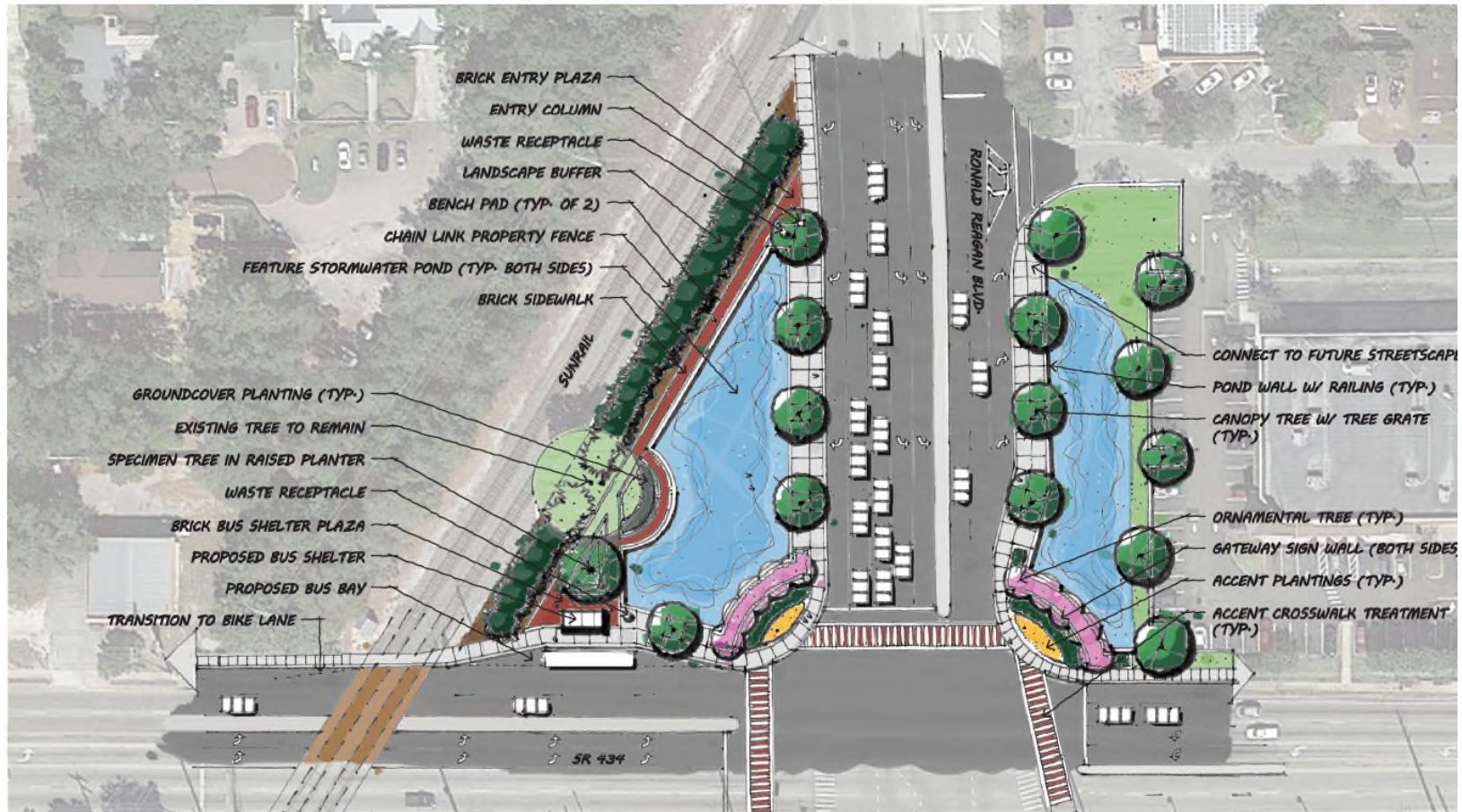


# SR 434 / CR 427 Intersection - Option 2

Modified Seminole County project – new right turn lane west of railroad



# Potential Park at SR 434 and CR 427



# Bike Lane to Sidewalk Transitions



# SR 434 / CR 427 Rail Crossing Modifications

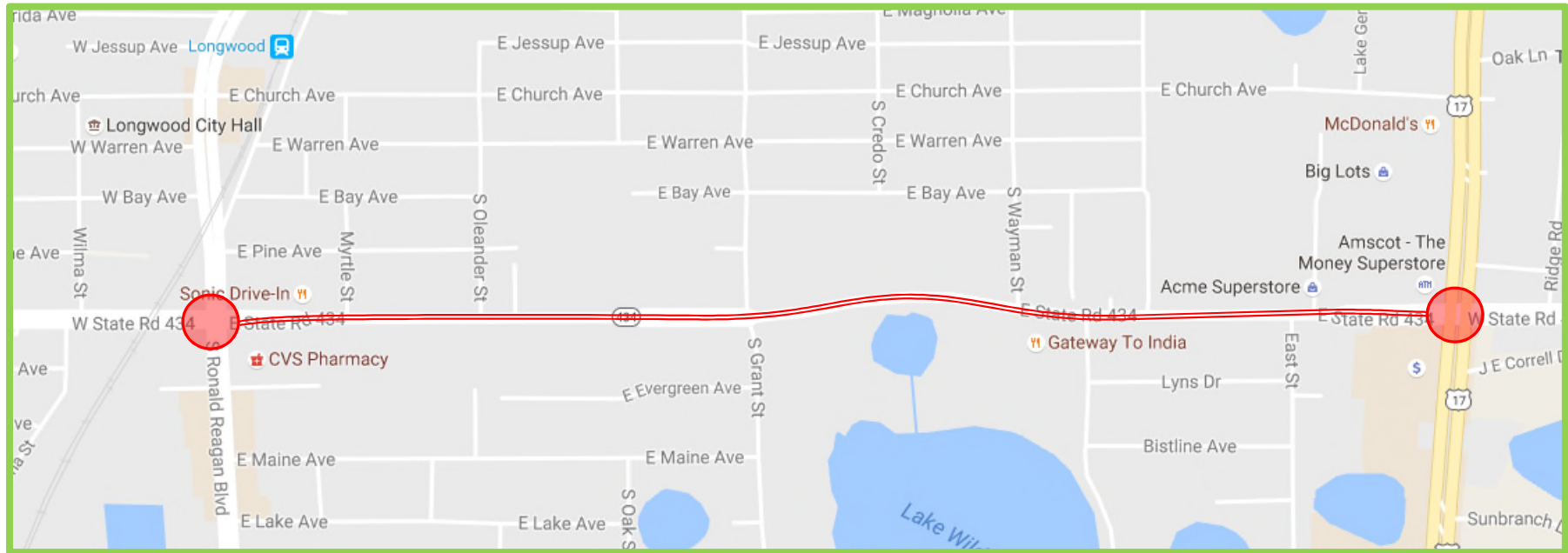
## Dynamic Envelope for Rail Crossings



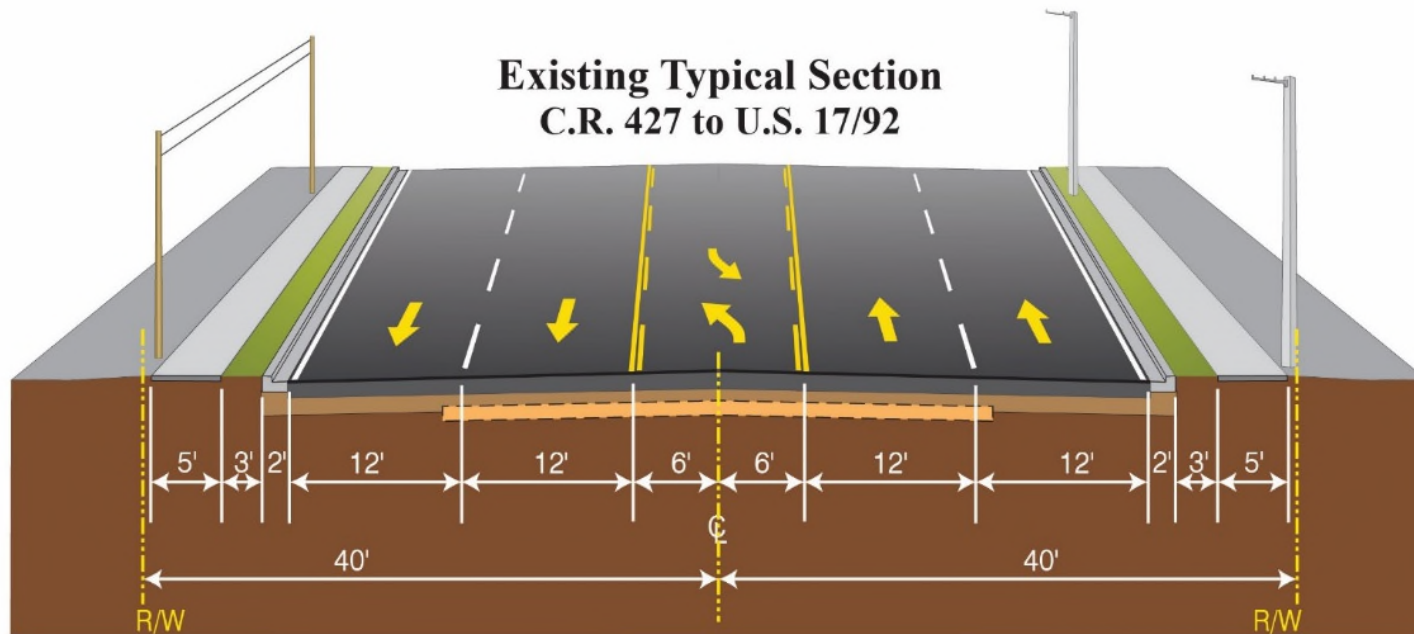
- Installed on Commercial Boulevard in Ft. Lauderdale
  - Cars stopping prior to stop bar increased from 62% to 67% (reference)
  - Cars stopping on railroad tracks decreased from 11% to 6%
  - Construction Cost was \$67,000
- Would require further coordination with SunRail and FDOT Rail



# SR 434 from CR 427 to US 17/92

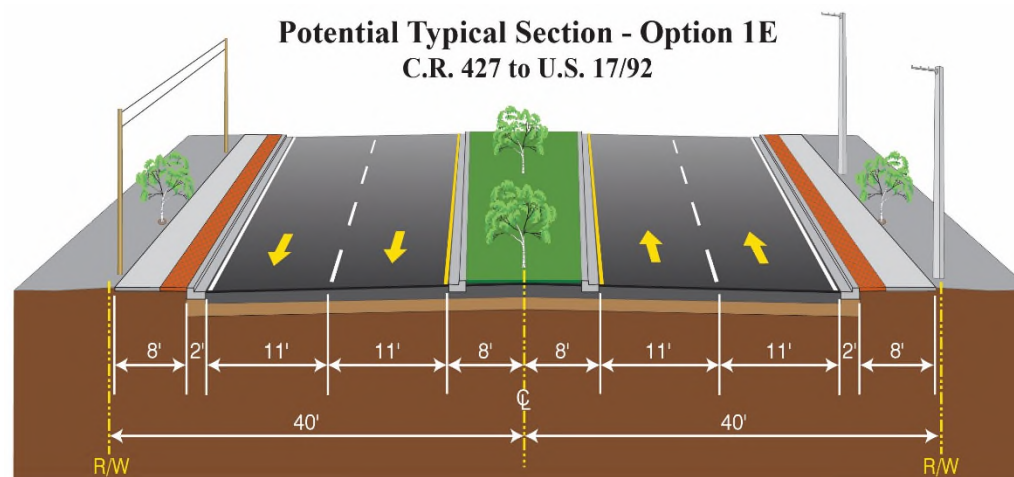
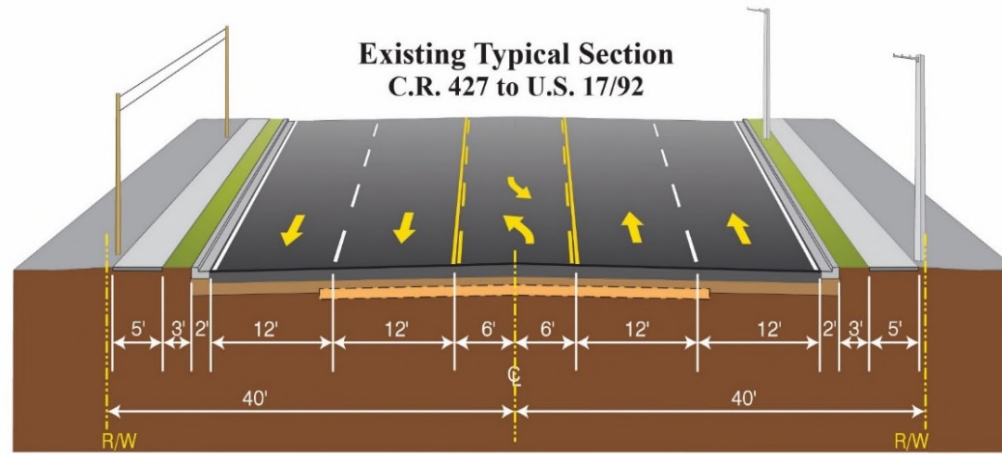


# SR 434 from CR 427 to US 17-92



# Potential Typical Section – Option 1E

## Raised Median



# Potential Median Modifications – CR 427 to US 17/92

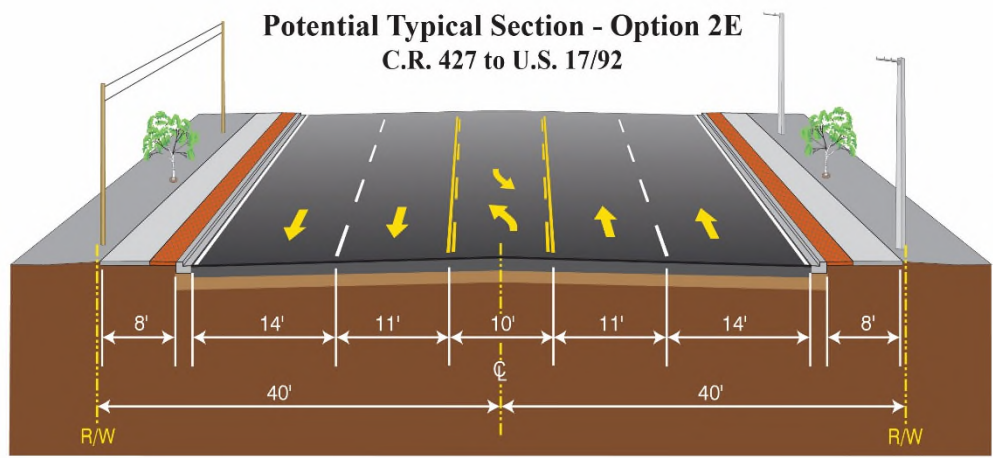
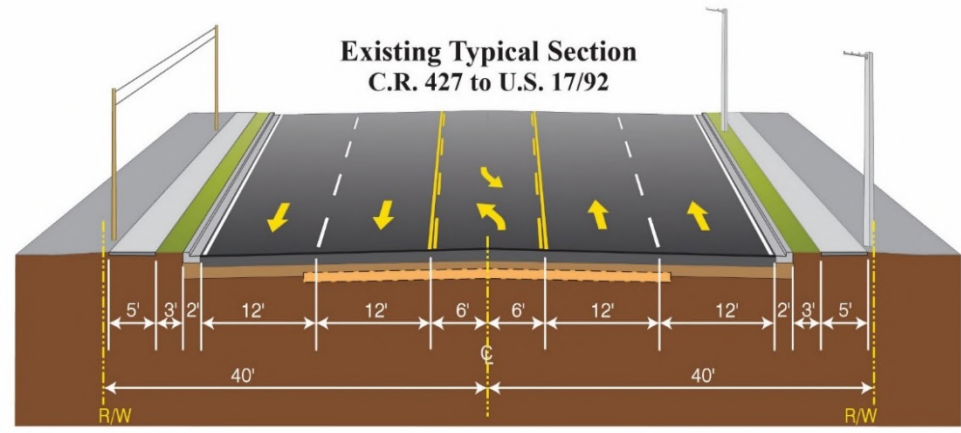
- Potential for raised median throughout corridor
- Flare-outs where necessary for U-turns
- Aesthetic treatments where appropriate
- Pedestrian crossings





# Potential Typical Section – Option 2E

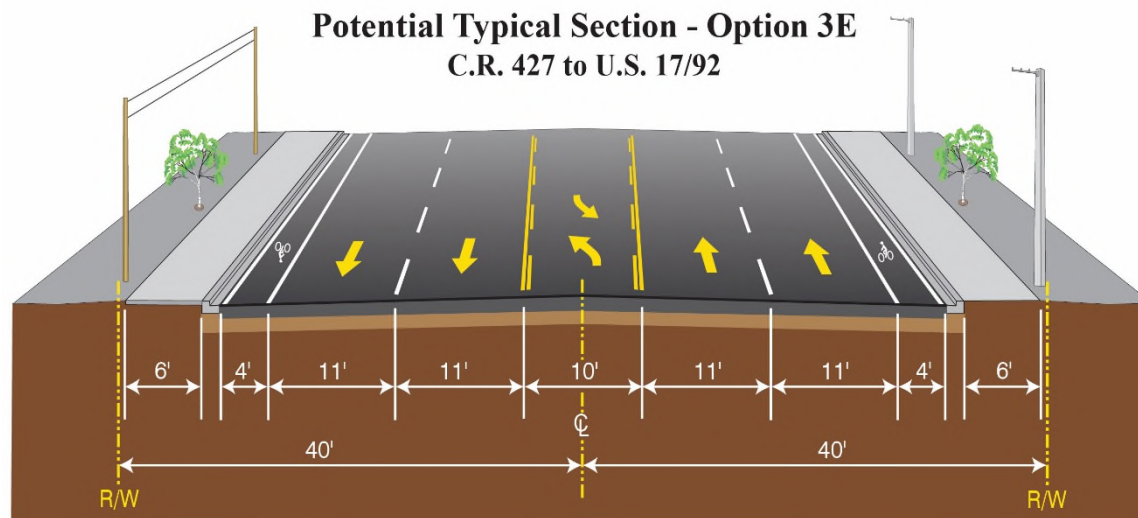
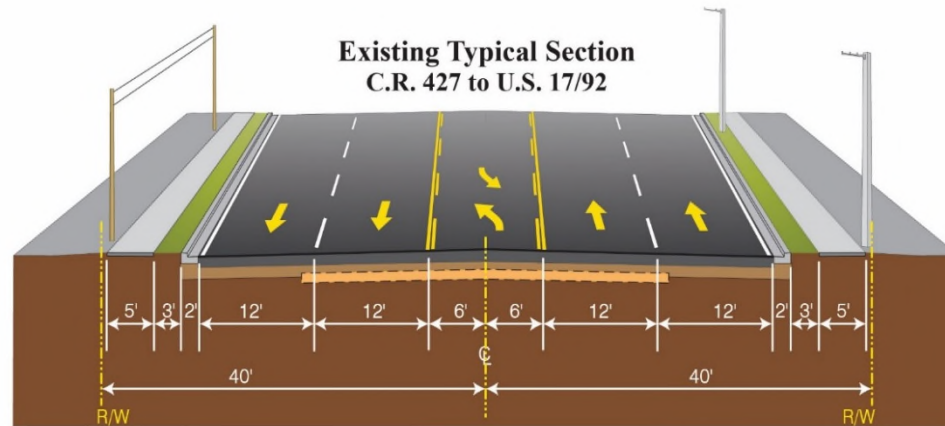
## Center Turn Lane & Wide Outside Lanes



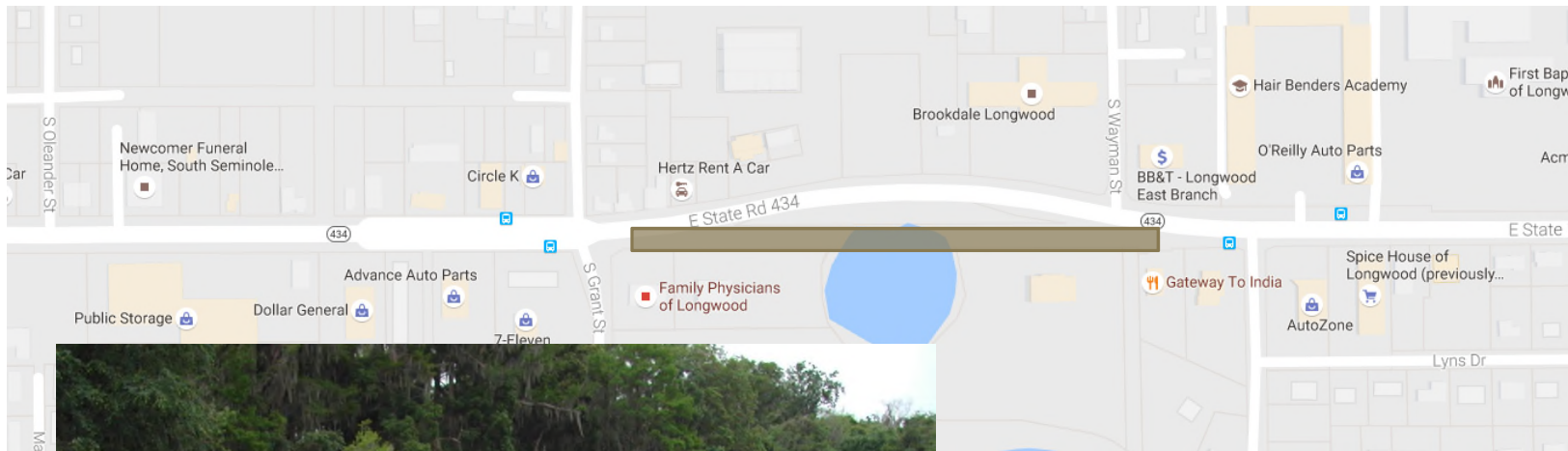
# Potential Typical Section – Option 3E

## Center Turn Lane & Bike Lanes

*(moves curb and gutter within existing right-of-way)*



# Pedestrian Boardwalk



- Within existing FDOT Right-of-Way
- Maintenance agreement with locals

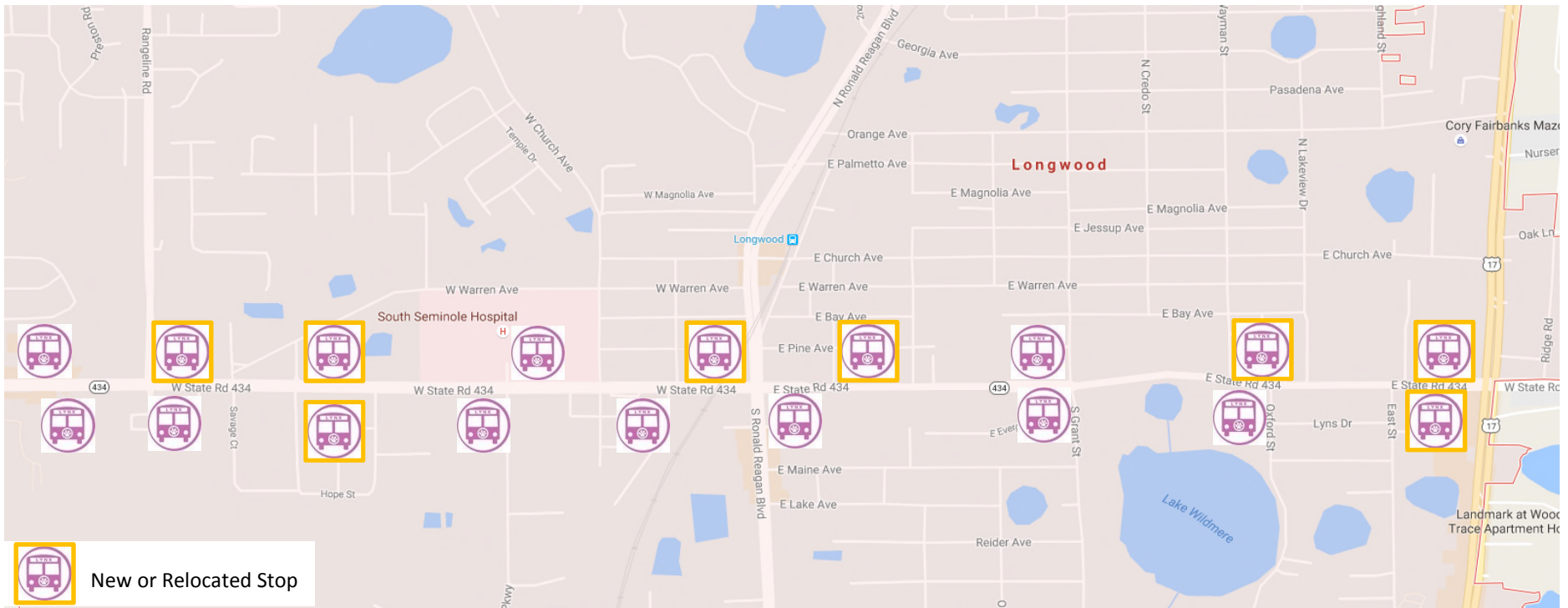


# Potential Bus Shelters





# Potential Lynx Bus Stop Locations



Further coordination needed with LYNX



# Potential Pedestrain Crossing

Potential pedestrian crossing at Oleander Street



Potential transit oriented development (TOD) property



# Potential SR 434 Bridge Over Railroad and CR 427 (Example: Proposed Selmon Connector in Tampa)

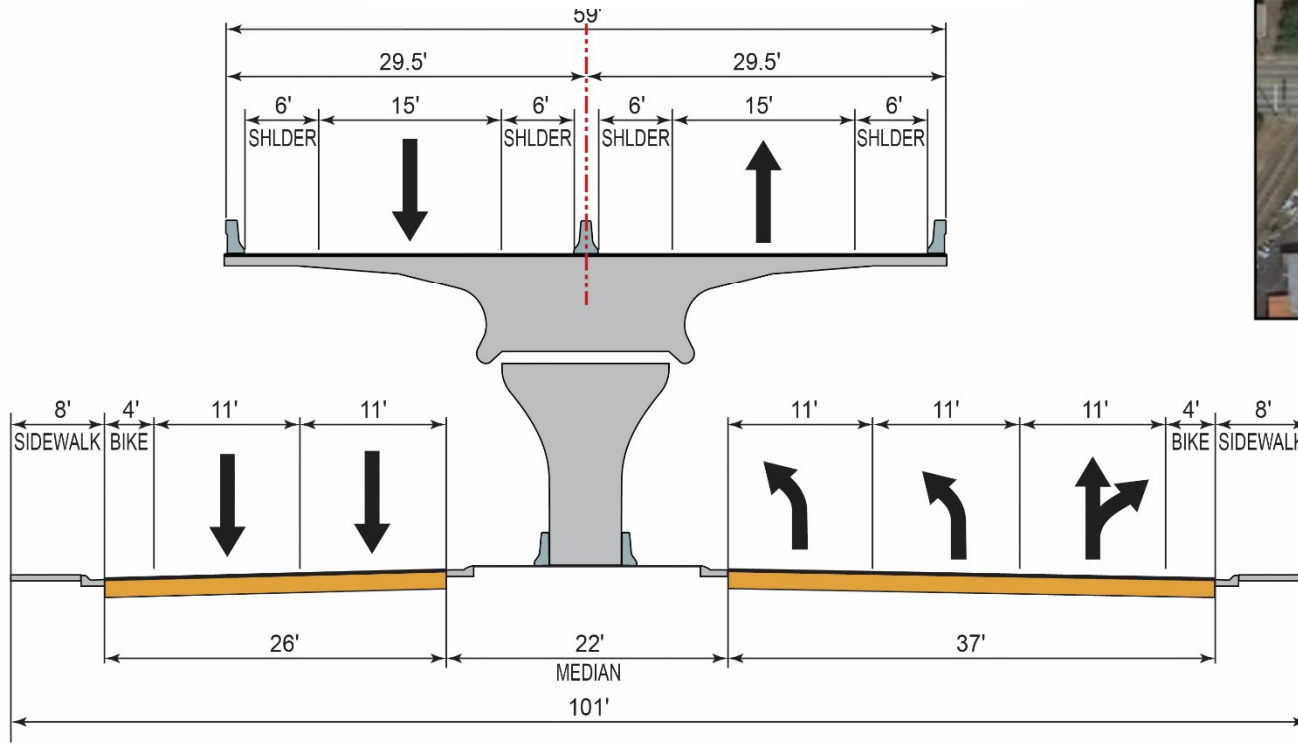






# Potential SR 434 Flyover Bridge over Railroad Tracks and CR 427

## SR 434 West of CR 427



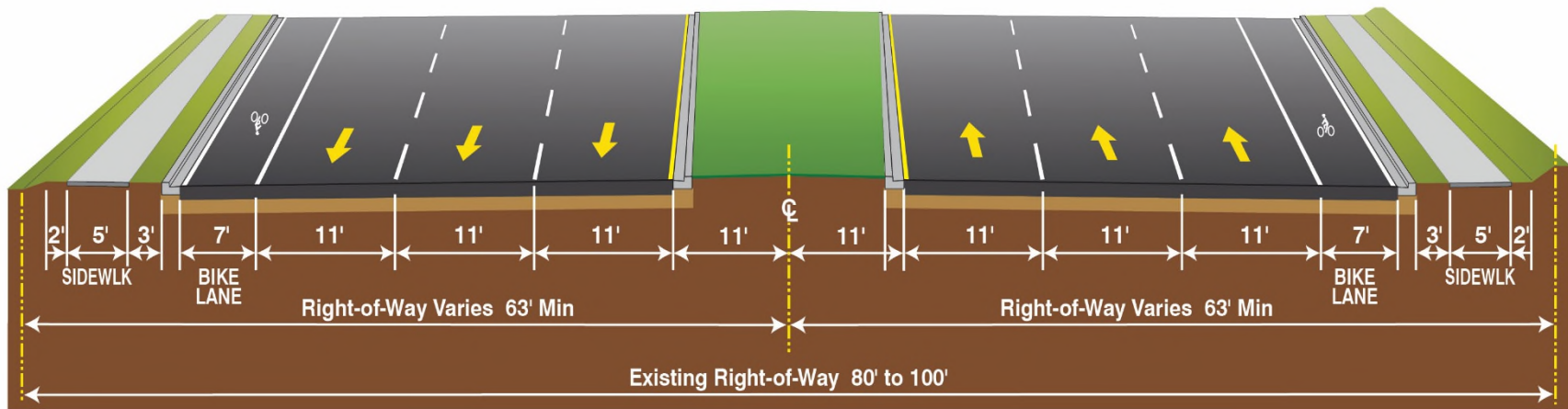
Western leg of SR 434 at intersection

Within existing right-of-way after Seminole County Intersection Improvements

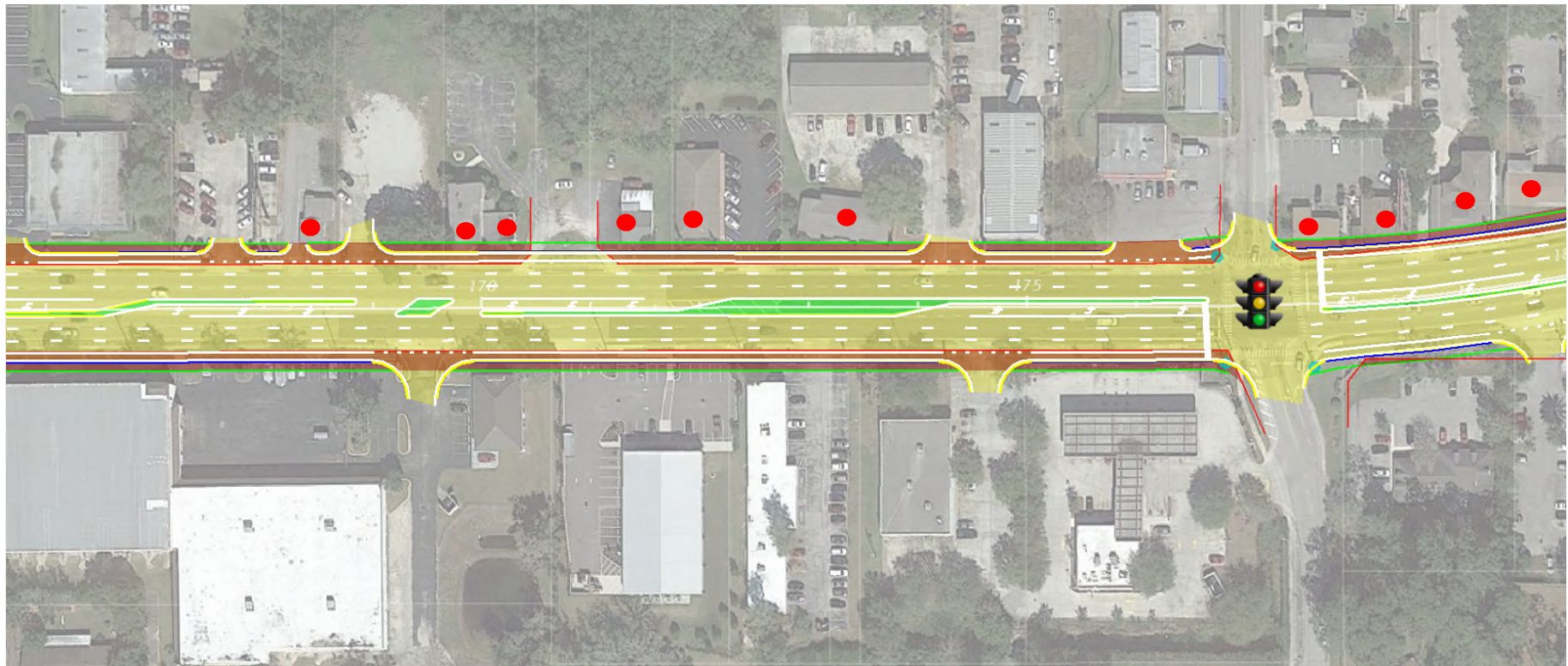


# 6-Lane SR 434

**Potential Typical Section - 6 Lane Option**  
Rangeline Road to US 17/92



# Impacts from 6-Lane SR 434



Existing right-of-way (ROW)



Proposed right-of-way (ROW)



Potential full acquisitions



# Future Corridor Travel Times with improvements to intersection of SR 434 at CR 427

Travel Time by Alternative	2040 PM Peak Eastbound	2040 PM Peak Westbound
No-Build Option	19:57	5:50
Option 1 (I)	20:27	5:31
Option 2 (I)	20:02	5:28
Flyover Bridge Option	12:50	3:55
6-Lane Option	19:51	5:12



# Matrix – Rangeline Road to CR 427

Evaluation Measure	West - Rangeline Road to CR 427			
	No-Build Option	Option 1W	Option 2W	6 Lane Option
1: Construction Cost	●	◐	◑	○
2: Drainage Impacts	●	●	●	○
3: Sustainable Design	◑	◑	◑	○
4: Pedestrian Mobility	◑	◑	◑	◑
5: Bicyclist Mobility	○	◑	◑	◑
6: 2040 Travel Time	◑	◑	◑	●
7: Vehicular Access / Safety	◑	◑	◑	◑
8: Ease of Implementation	●	◑	◑	○
9: Landscaping / Beautification	○	◑	◑	◑
10: Development / Redevelopment Potential	◑	◑	◑	◑
11: Right Of Way Impacts	●	●	●	○
12: Environmental Impacts	◑	◑	◑	◑

Legend		
Symbol	Meaning	Points
○	Least Desirable	Highest Overall Scores by Segment
◑	Neutral	
◐		
◑		
●	Most Desirable	



# Matrix – CR 427 to US 17-92

Evaluation Measure	East - CR 427 to US 17-92				
	No-Build Option	Option 1E	Option 2E	Option 3E	6 Lane Option
1: Construction Cost	●	◐	◐	◐	○
2: Drainage Impacts	●	◐	◐	◐	◐
3: Sustainable Design	◐	◐	◐	◐	○
4: Pedestrian Mobility	◐	◐	◐	◐	◐
5: Bicyclist Mobility	○	○	◐	◐	◐
6: 2040 Travel Time	◐	◐	◐	◐	◐
7: Vehicular Access / Safety	◐	◐	◐	◐	◐
8: Ease of Implementation	●	◐	◐	◐	○
9: Landscaping / Beautification	○	◐	◐	◐	◐
10: Development / Redevelopment Potential	◐	◐	◐	◐	◐
11: Right Of Way Impacts	●	◐	●	●	○
12: Environmental Impacts	◐	◐	◐	◐	◐

Legend		
Symbol	Meaning	Points
○	Least Desirable	Highest Overall Scores by Segment
◐		
◐	Neutral	
◐		
●	Most Desirable	



# Matrix – SR 434 at CR 427

Evaluation Measure	CR 427 and SR 434 Intersection				
	No-Build Option	Option 1(l)	Option 2(l)	Bridge Option	6 Lane Option
1: Construction Cost	●	◐	◐	○	○
2: Drainage Impacts	●	◐	◐	◐	◑
3: Sustainable Design	◑	◐	◐	◑	○
4: Pedestrian Mobility	◑	◐	◐	●	◑
5: Bicyclist Mobility	◑	◐	◐	●	◐
6: 2040 Travel Time	○	◑	◑	●	◐
7: Vehicular Access / Safety	○	◐	●	◐	◐
8: Ease of Implementation	●	●	◐	◑	◑
9: Landscaping / Beautification	○	◐	◐	◐	◐
10: Development / Redevelopment Potential	○	◐	◐	◐	○
11: Right Of Way Impacts	●	◐	◐	◐	○
12: Environmental Impacts	●	●	●	●	◐

Legend		
Symbol	Meaning	Points
○	Least Desirable	Highest Overall Scores by Segment
◑		
◐	Neutral	
●		
●	Most Desirable	





# Schedule

TASK	2015					2016								2017										
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
Begin Study	★																							
Public Involvement Kick-off Meeting							★																	
Public Input		[Green bar from Jun to Dec]																						
Data Collection		[Green bar from Jun to Oct]																						
Project Visioning Team Meetings						★										★					★			
Identify & Analyze Alternatives						[Green bar from Oct to Sep]																		
Alternatives Public Meeting																	📅							
Alternatives and Strategies Report																				★				
Concept Development Evaluation																					★			
Corridor Action Plan																						★		
Study Complete																							★	



# Ways to Comment

- Ask a question or provide a comment here today
- Contact us by email
- Website at <http://www.cflroads.com/> under Future Projects – Planning



## Project Website

[http://www.cflroads.com/project/435777-1/SR\\_434\\_Longwood\\_Corridor\\_Study](http://www.cflroads.com/project/435777-1/SR_434_Longwood_Corridor_Study)



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