

Municipal Advisory Committee

July 1, 2021



- I. Call to Order and Pledge of Allegiance
- II. Chairman's Comments
- III. Agenda Review
- IV. Roll Call and Confirmation of Quorum
- V. Public Comments on Action Items
- VI. Agency Reports
- VII. Action Items
- VIII. Presentations and Status Reports**
- IX. General Information
- X. Upcoming Meetings
- XI. Member Comments
- XII. Public Comments
- XIII. Adjournment



AGENDA

FY 2019-2020 Signal Retiming Travel Time & Delay Study

June/July 2021



Why signal retiming?

2019-2020

30
corridors

17
independent
intersections

14
school
intersections

Increase traffic flow

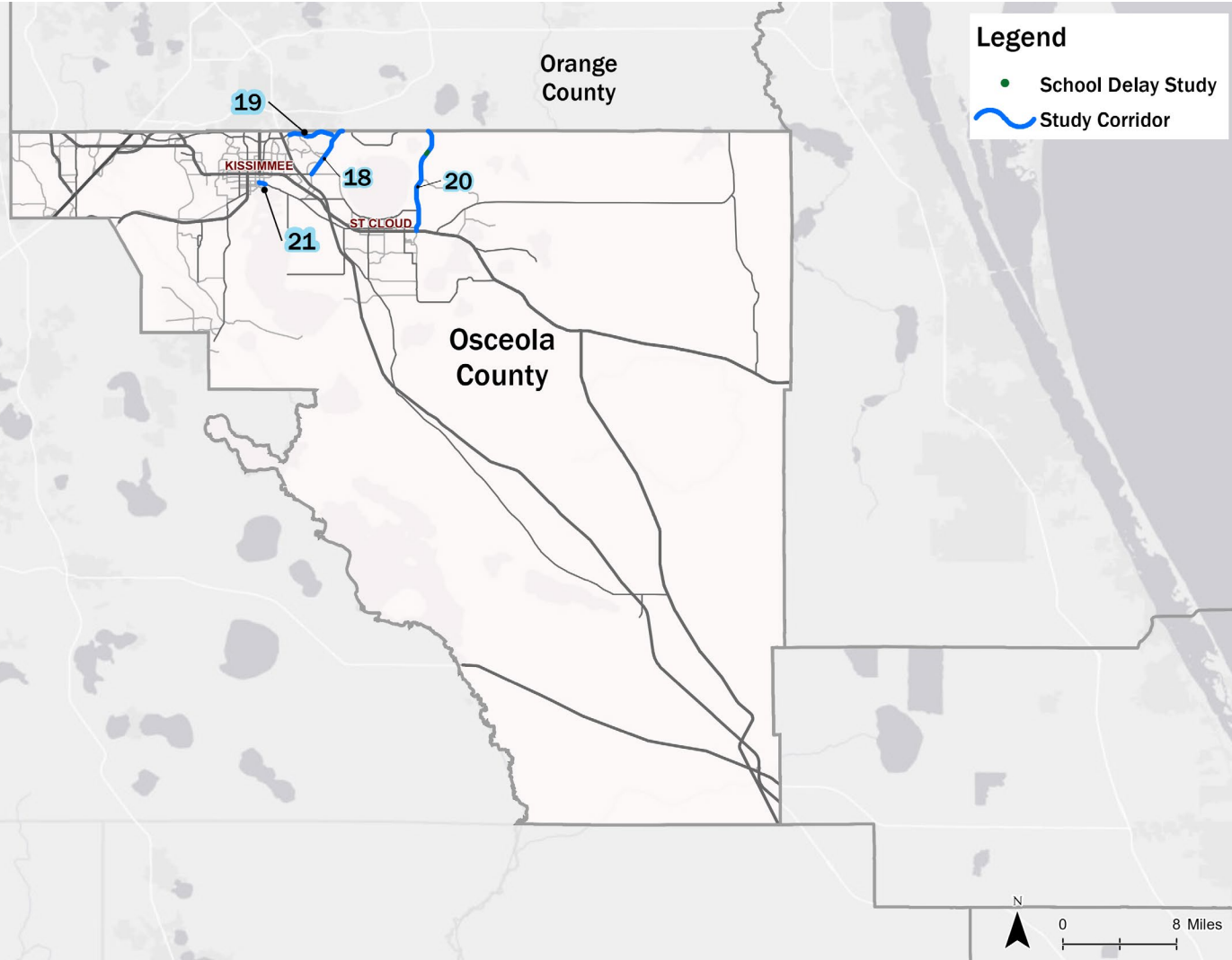
Account for changes in traffic patterns

Reduce driver delay, vehicle emissions, and fuel consumption

Osceola County



4 projects



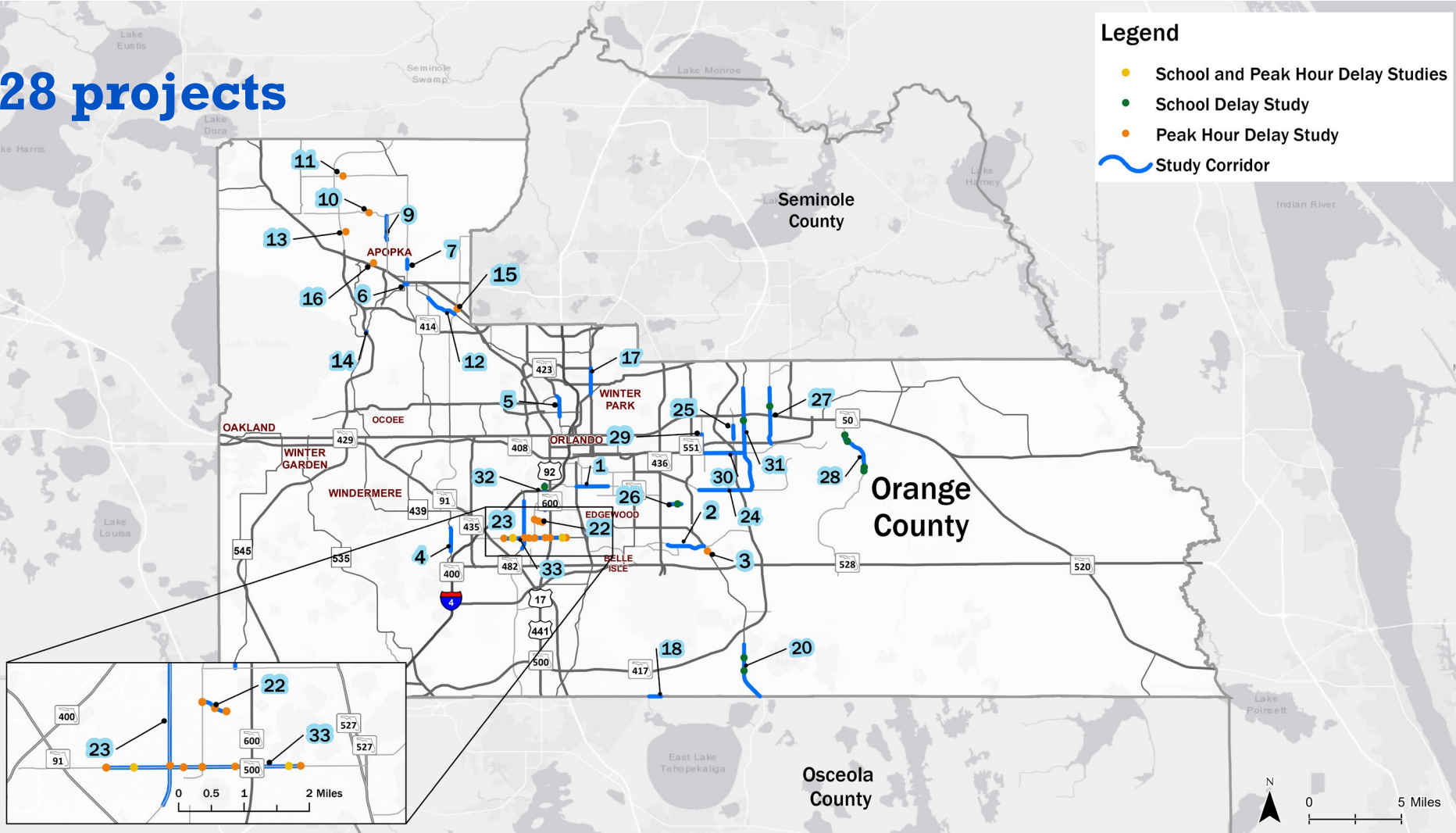
Orange County



28 projects

Legend

- School and Peak Hour Delay Studies
- School Delay Study
- Peak Hour Delay Study
- ~ Study Corridor




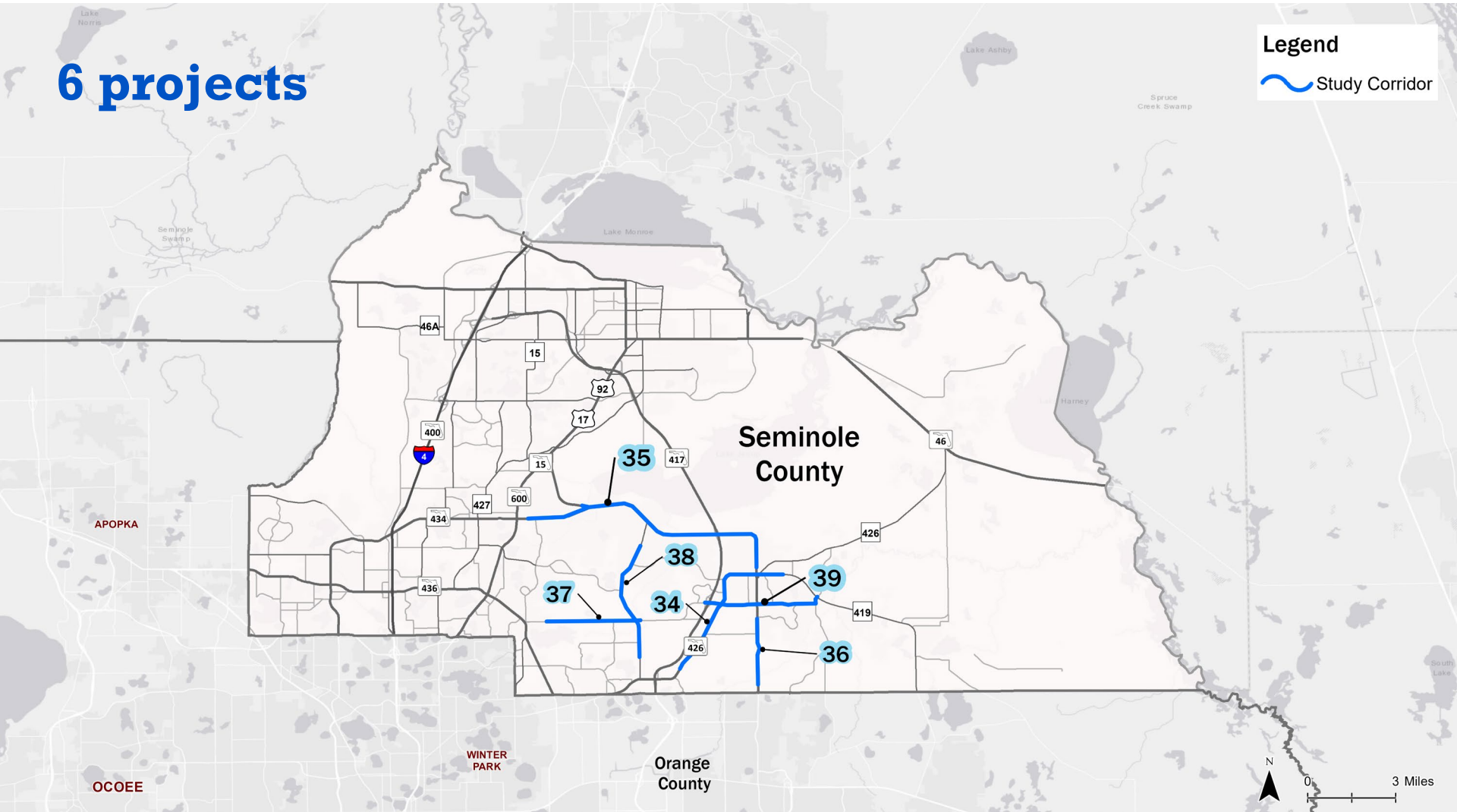
Seminole County



6 projects

Legend

 Study Corridor



Corridor Travel Time Results



Retimed 30 Corridors

93%

of corridors
have *shorter*
Travel Times



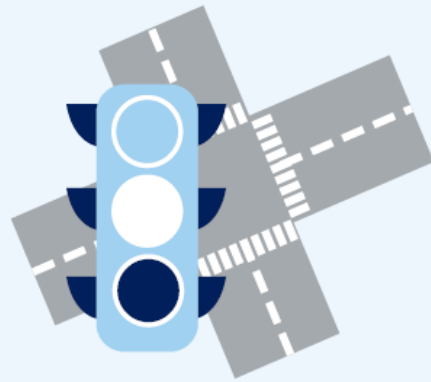
93%

of corridors now have
Reliable Travel Times
compared to the 80% that were
reliable before the retiming

Intersection Delay Results



Retimed 17 Independent Intersections

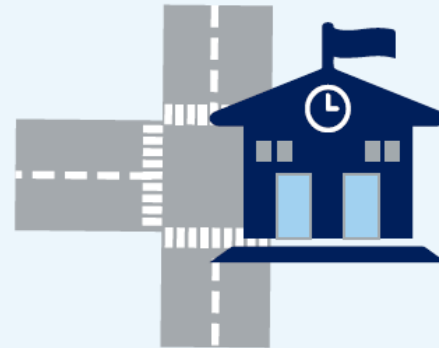


88%

of these intersections had *less* **Intersection Delay** during the peak-period

14 School Intersections

57% of school intersections had *less* **Intersection Delay** during school drop-off/pick-up times



Benefit-Cost Summary

Annual Travel
Time Savings:
541,000 hours

Present Value of
3-Year Benefit:
\$27.2 Million

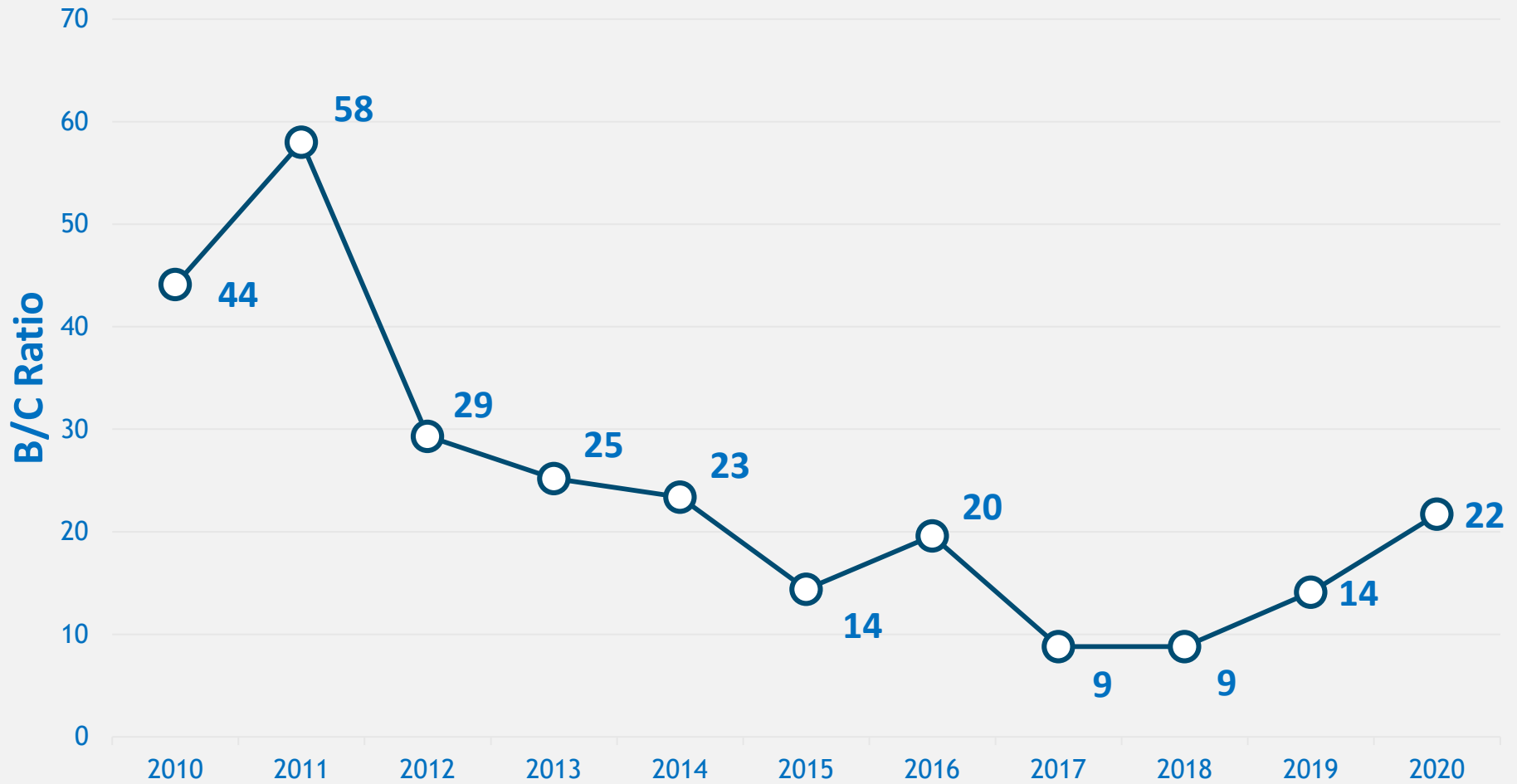
Total Project
Cost:
\$1.3 Million

2019 Program
B/C Ratio:
21.7

Travel Time Cost Savings: \$18.29/hour

(Source: 2019 TTI Urban Mobility Report)

Historic B/C Ratio



2020: B/C Ratios > 1.0 @ 74%



Fuel Savings

471,000
gal/yr



**Reduced
Vehicle Emissions**

4,600
tons CO₂/yr

Signal Timing and Safety



Historically Part of Retiming

- Adjusting clearance time
- Adjusting pedestrian timing
- Increasing platooning
- Minimizing diversion

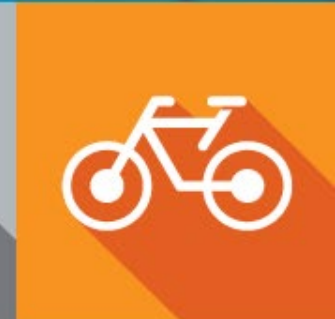
Other Considerations

- Leading Pedestrian Interval
- No Right Turn on Red
- Protected Left Turn
- Reduced Cycle Length

Thank You

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I-4 Beyond the Ultimate

MetroPlan Orlando

July 7, 2021

I4Beyond.com



Agenda

- i. I-4 BtU Overview
- ii. I-4 Ultimate and Sand Lake Rd Update
- iii. Re-imagining the I-4 corridor
- iv. I-4 BtU South Discussion
 - East of SR 528 to US 192
 - US 192 to US 27
- v. I-4 BtU North Introduction
- vi. Next Steps
- vii. Programming Update
- viii. Questions



I-4 Beyond the Ultimate Overview



Goals of I-4 Beyond the Ultimate

- Increase safety
- Increase mobility/ease congestion
- Increase connectivity among Central Florida communities
- Support the region's economy and lifestyle long into the future

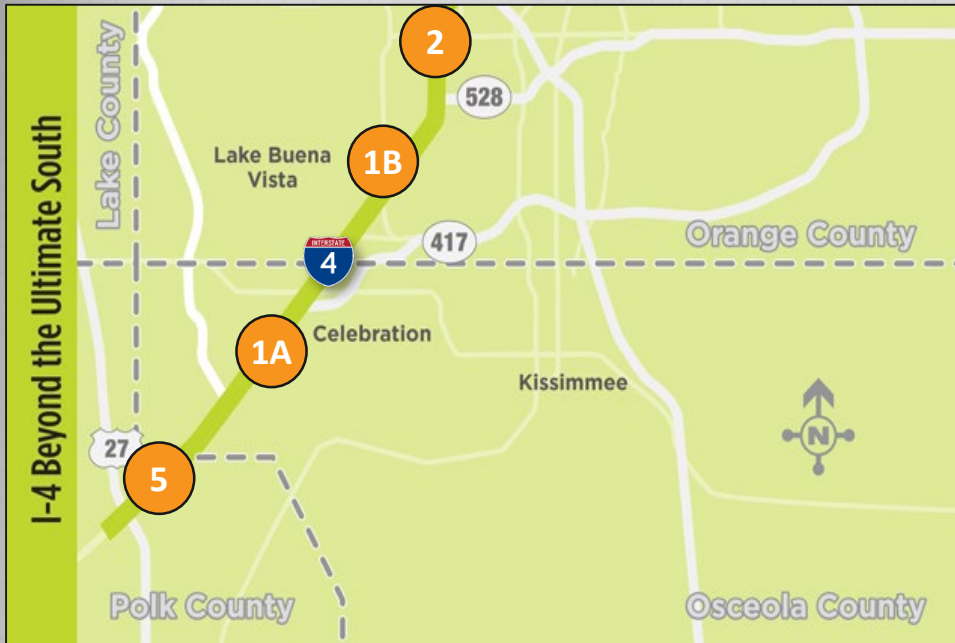


Rendering of Sand Lake Road
(State Road 482)



Approved I-4 BtU South Segments

I-4 BtU *South* Segments Funding Status

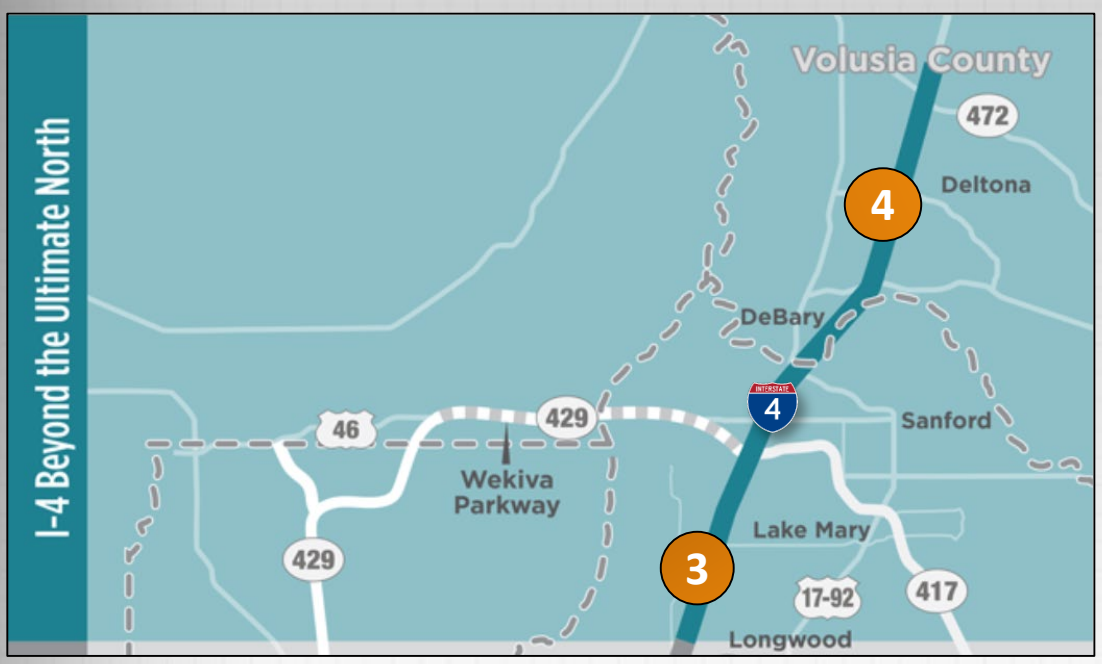


I-4 BtU Segment	Construction Cost	Right of Way
FPN: 242484-7 Segment 2	\$765M (FY 32)	\$54M (FY 18-22)
FPN: 242484-8 Segment 1B	\$1.23B (unfunded)	\$708*M (FY 20-24) (partially funded)
FPN: 431456-1 Segment 1A	\$995M (unfunded)	\$68M (unfunded)
FPN: 201210-3 Segment 5	\$318 M (unfunded)	\$49M (unfunded)
	Approx. Total \$3.3B	

*Includes Crossroads and Daryl Carter



Approved I-4 BtU North Segments



I-4 BtU *North* Segments Funding Status

I-4 BtU Segment	Construction Cost	Right of Way
FPN: 242592-4 Segment 3	\$621M (FY 32)	\$37M (FY 22-26)
FPN: 408464-2 Segment 4	\$572M (unfunded)	\$52M (unfunded)
	Approx. Total \$1.2B	

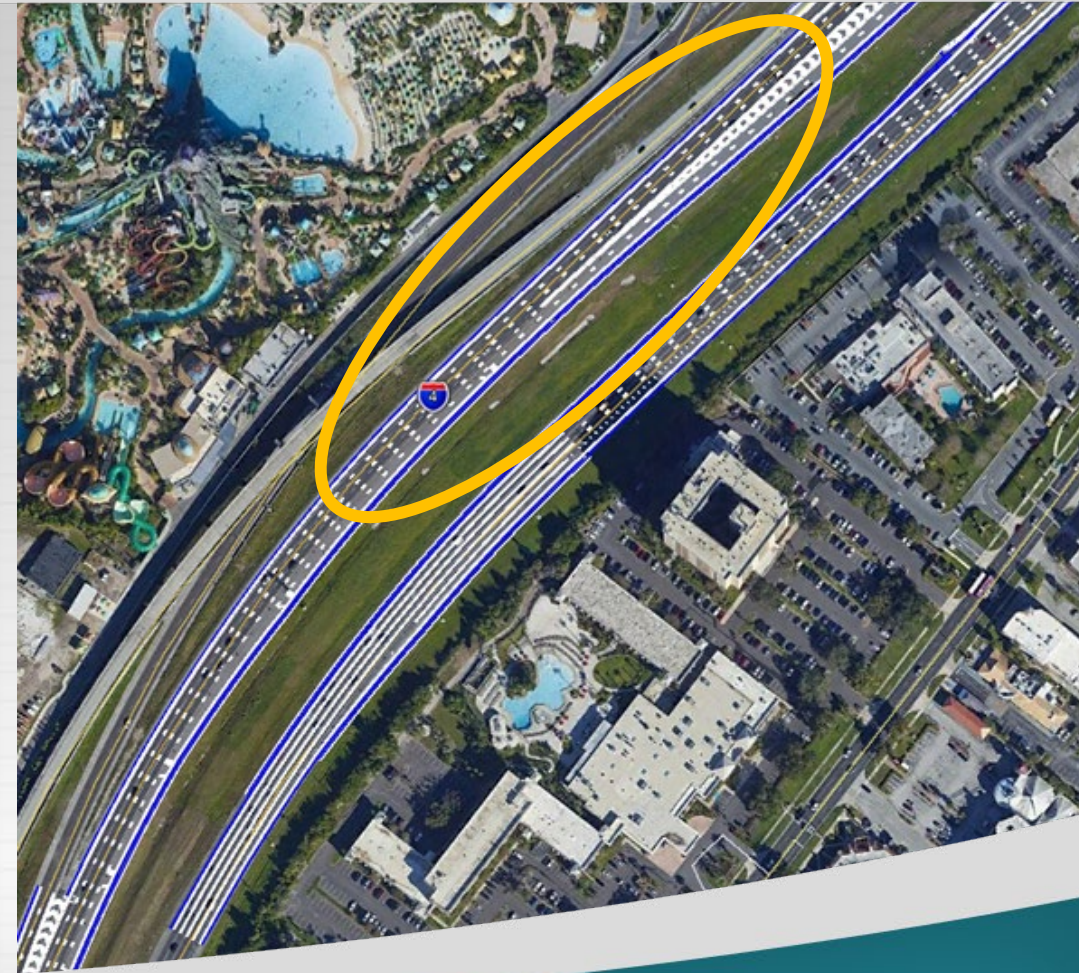


I-4 Ultimate and Sand Lake Rd Update



I-4 WB Express Lane Transition

- I-4 Express Lanes expected to open by end of 2021
- Analysis being done to evaluate westbound managed lanes transition point





Sand Lake Road (SR 482) Interchange

- **FPID: 444315-1**
- **Anticipated letting: Spring 2022**
- **Design-build**
- **Estimated construction cost: \$208 Million**
- **Diverging diamond interchange**
- **Additional capacity to I-4**





Re-imagining the I-4 Corridor



Value Engineering Approach

- Revisit typical section
- Capacity via GULs and/or managed lanes
- Access assumptions
- Size and cost of projects





Opportunities

- **Updated policies/guidance**
 - FDOT Managed Lanes Policy vs. Express Lane Policy
 - Evolved guidance on direct connects and ingress/egress points
- **New parameters**
 - Options with managed lane separation types
- **Industry feedback and lessons learned**
 - Size and cost of projects





Evaluation Approach

- Maintain Purpose and Need from I-4 BtU PD&E
- Stay within ROW defined by I-4 BtU PD&E
- Provide similar traffic operations
- Identify cost saving opportunities
- Recognize need for re-evaluations
- Engage stakeholders





I-4 BtU South: SR 528 to US 192

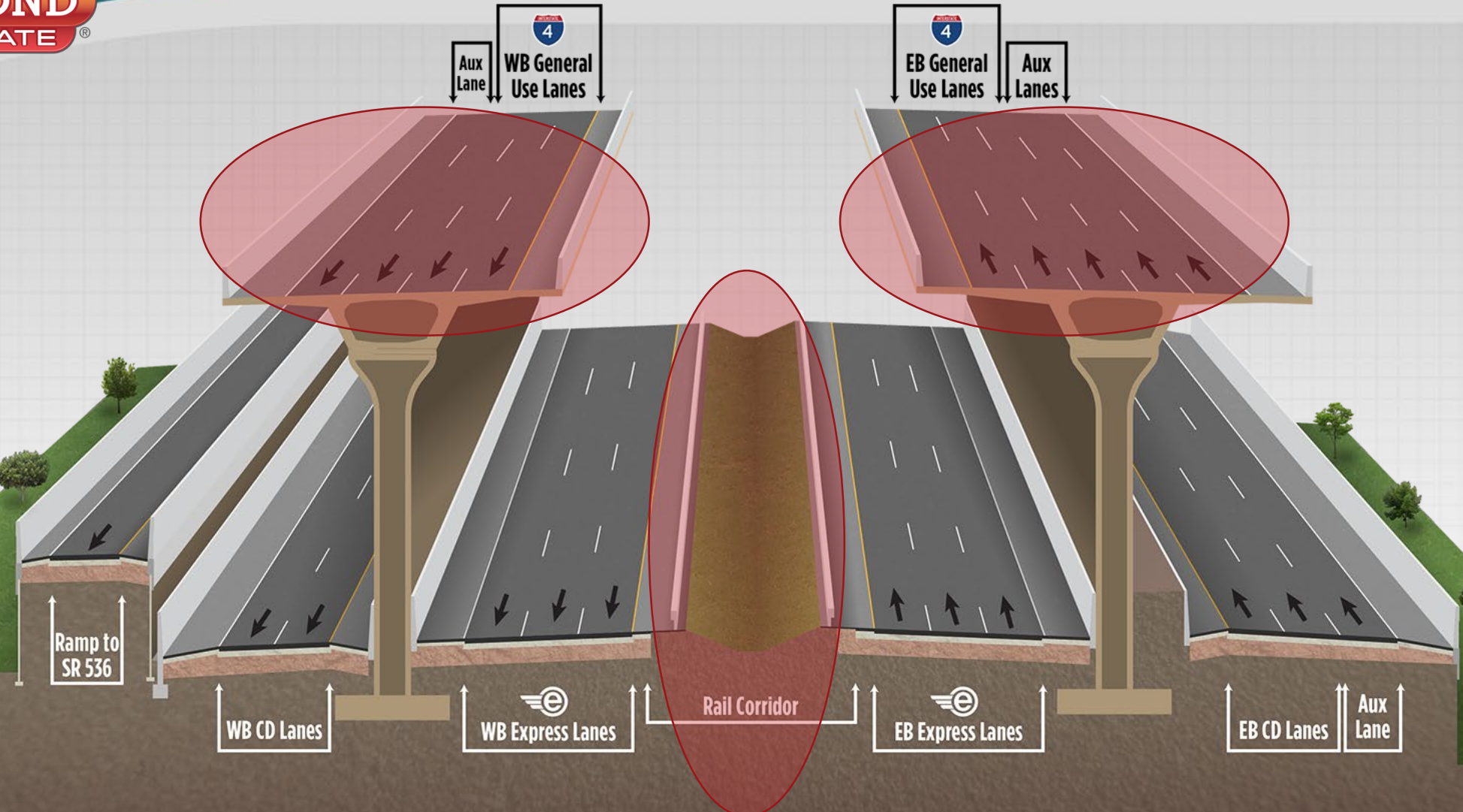
- Key Elements of Value Engineered Concept
 - Mainline at-grade
 - Buffer separation
 - Access points
 - Reconfiguration of interchanges
 - Collector-distributor system



Concept rendering of Daryl Carter Parkway Interchange

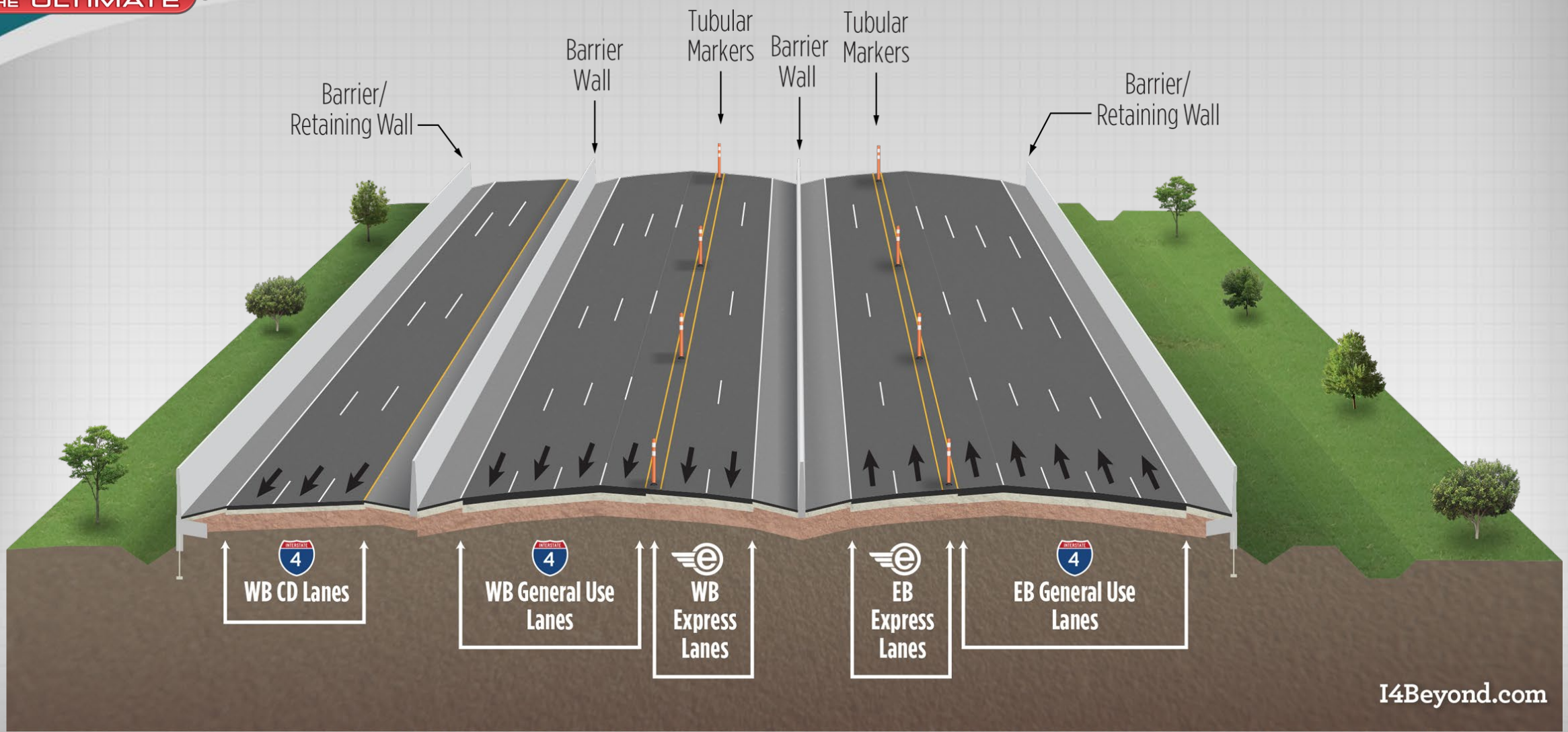


I-4 Beyond the Ultimate Segment 1B Typical Section





I-4 Beyond the Ultimate South Potential Typical Section





I-4 BtU South: US 192 to US 27

- Currently evaluating alternatives
- Close coordination with Brightline
- Consideration of District 1 and Florida's Turnpike Enterprise projects in area





I-4 BtU North: SR 434 to SR 472

Project Evaluation Underway

- Operational needs
- Available funding





Next Steps

- **Continue stakeholder outreach**
- **Refine concepts based on feedback**
- **Schedule future discussions**
- **Adjust approach and implementation plan as funding opportunities arise**



Programming Update



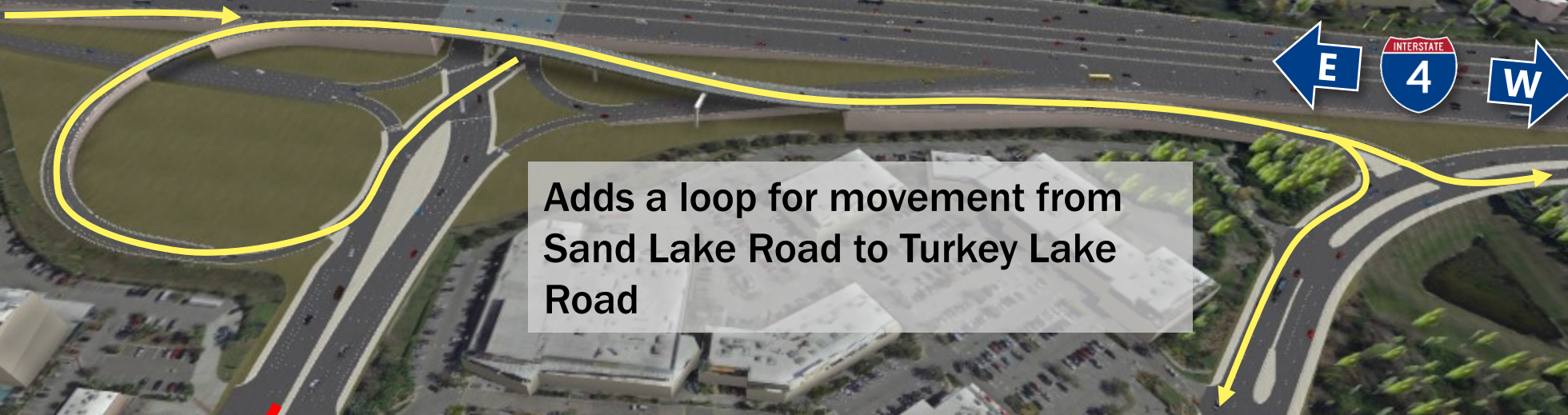
Programming Update

- **FPID: 444187-1 - DDI at CR 532 Interchange with I-4**
 - **Awarded March 2021, estimate completion fall 2022**
- **FPID: 444329-1 - Add Aux Lanes along I-4 (EB & WB) CR 532 to SR 429**
 - **Design underway, letting August 2021**
- **FPID: 443958-1 - M&R I-4 from Polk County line to West of SR 417**
 - **Design underway, letting August 2021**
- **FPID: 441113-1 - Interim Daryl Carter Interchange**
 - **Anticipated letting January 2022**
- **FPID: 444315-1 - Sand Lake Road (SR 482) Interchange**
 - **Anticipated letting May 2022**

QUESTIONS?

Atlas





Adds a loop for movement from Sand Lake Road to Turkey Lake Road



Removes the left turn from westbound Sand Lake Road to southbound Turkey Lake Road

Thanks for joining us!

