

SAND LAKE ROAD RCA STUDY

Board of County Commissioners Public Hearing

June 6, 2017

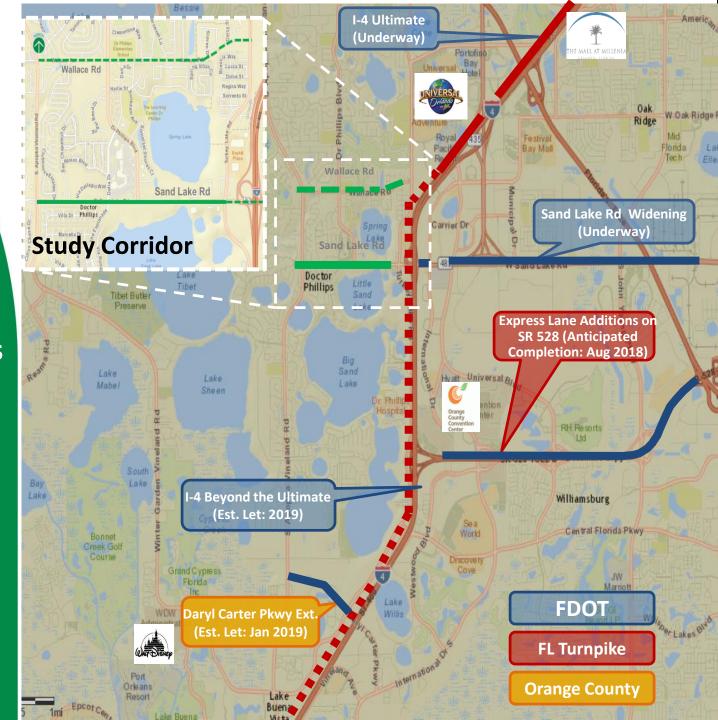
- Study Overview
- Existing Conditions
- Development of Alternatives
- Public Involvement
- Preferred Alternative
- Wallace Road
- Requested Action



Study Context

Regional Projects

- I-4 Ultimate
- I-4 Beyond the Ultimate
- Daryl CarterPkwy Extension
- SR 528 Express Lanes
- Sand Lake Rd. Widening

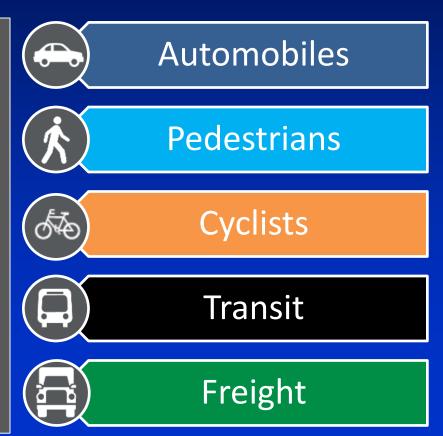




Identify Context Sensitive & Cost Feasible Improvements

- Document Project Need
- Balance needs of all users

- Safety
- Mobility
- Comfort





PUBLIC OUTREACH



Study Newsletter



Study Website



Study Advisory Group Meetings



Public Community Meetings

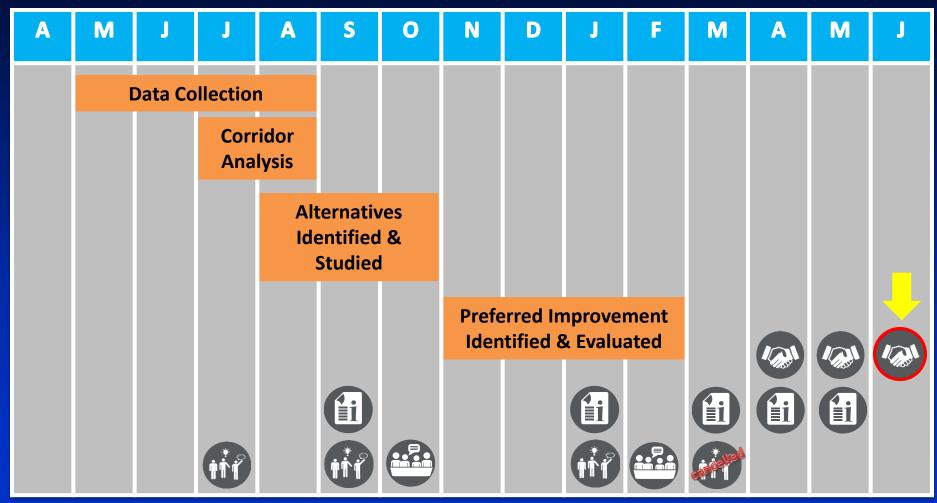


LPA/BCC Public Hearings

www.SandLakeRoadStudy.com



STUDY SCHEDULE

















EXISTING CONDITIONS



Roadway Features

- 5' Sidewalks (both sides)
- No Dedicated Bicycle Facilities
- No Transit
- 4-Lane Divided, frequent R-turn lanes
- Mixed curb/ flush edges and medians
- Mixed open/closed drainage









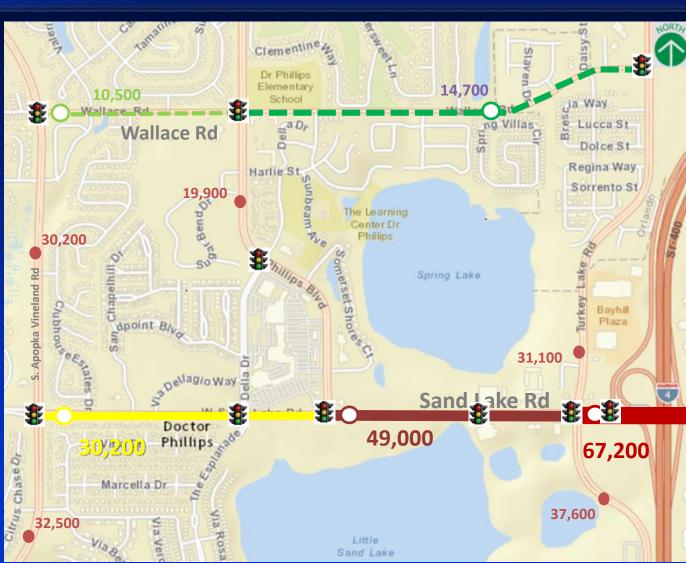


EXISTING CONDITIONS



Daily Traffic

- Distinct Segments
 - Apopka Vineland Rd. to Dr. Phillips Blvd.
 - Dr. Phillips Blvd. to
 Turkey Lake Rd.







EXISTING CONDITIONS



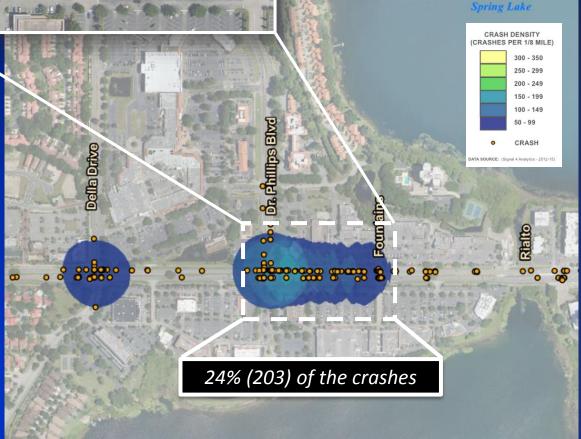
Crash History & Access

- Analyzed 2012-2015(4-Yr Period)
- Total Crashes in Study Corridor: 859
- Highest crash

 location west of
 Turkey Lake Rd.
 intersection is
 between Dr. Phillips
 Blvd. and Fountains



- ►55% Rear End
- >29% Left Turn/Angle
- **≥24%** with Injuries
- ><1% Pedestrian/Bike







THREE-PRONGED APPROACH

TYPICAL SECTIONS

- Existing
- Operational
- Full Reconstruction

CORRIDOR SEGMENTS

- Turkey Lake Rd. to Rialto
- Rialto to Dr. Phillips Blvd.
- Dr. Phillips Blvd. to Apopka Vineland Rd.

TRAFFIC OPERATIONS SCENARIOS

- VISSIM Software
- 3 Scenarios
 - No Build
 - Operational
 - Six-Laning

ALTERNATIVES



ALTERNATIVES





ALTERNATIVE EVALUATION MATRIX

Evaluation Criteria	1 - No Build	2 - Operational Improvements	3 - Full Reconstruction
Lane Changes from Turkey Lake Rd. to	None	Dr. Phillips Blvd.	Apopka Vineland Rd.
PM Pk WB Corridor Travel Time - 2020 (min)	5.1	4.1	4.2
PM Pk WB Corridor Travel Time - 2040 (min)	9.9	6.6	6.1
Complete Streets Accommodation Opportunities	Low	Moderate	High
Roadway Design & Landscape Opportunities	Low	Moderate	High
Stormwater Permitting Difficulty / Approach	None	Low Inline Treatment	High New/Expanded Ponds
Additional Right-of-Way Needed	No	No	Yes
Planning Cost (excludes ROW, Wetland Mitigation, Utility Relocation, and Lighting)	N/A	\$8mil-\$10mil	\$24mil-\$30mil



Study Advisory Group (SAG)

Meeting #1:

Improvements should preserve area character while accommodating all users

Meeting #2:

Selected option should be strategically designed to include aesthetics where applicable

Meeting #3:

Excitement about the project and considerable interest in stormwater treatment, wayfinding and landscaping that will help define the look and feel of the Dr. Phillips Community



PUBLIC INVOLVEMENT

Public Meeting #1

 Key take away: Alternative #2-Lane Improvements from Dr.
 Phillips Blvd to Rialto with aesthetics and landscaping where possible



Public Meeting # 2

 Key take away: No major opposition; landscaping and hardscaping remain a challenge; design will need to address signage & stormwater





www.SandLakeRoadStudy.com





Eastside of Corridor (Dr. Phillips to Rialto)







Eastside of Corridor (Dr. Phillips to Rialto)

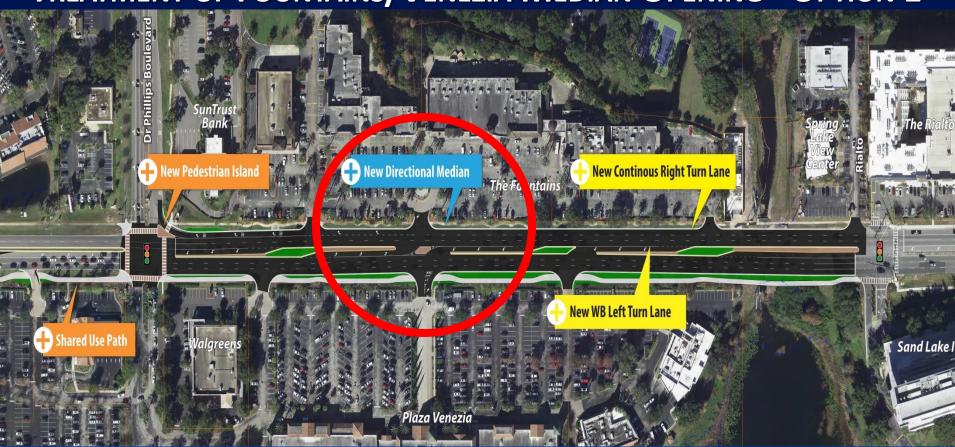


Reduces stop and go traffic congestion improving the safety of automobile and pedestrian movement



Eastside of Corridor (Dr. Phillips to Rialto)

TREATMENT OF FOUNTAINS/VENEZIA MEDIAN OPENING - OPTION 1

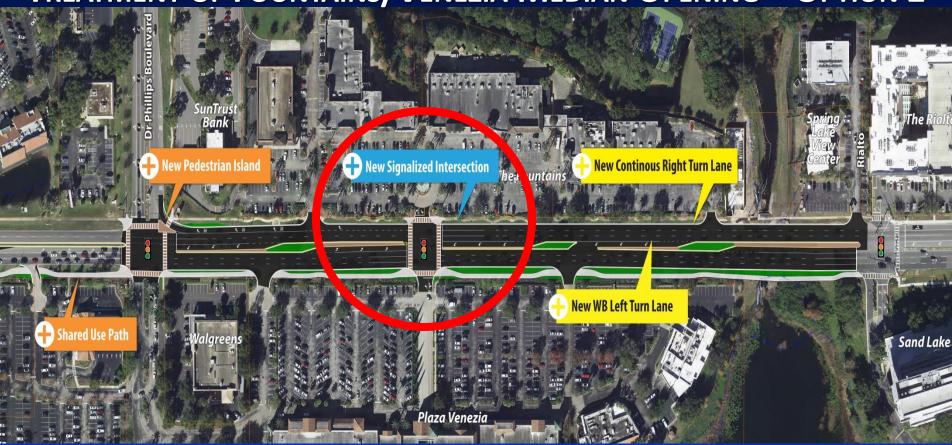


Directional Median shown for Fountains / Plaza Venezia Primary Access



Eastside of Corridor (Dr. Phillips to Rialto)

TREATMENT OF FOUNTAINS/VENEZIA MEDIAN OPENING - OPTION 2



New Traffic Signal shown for Fountains / Plaza Venezia Primary Access (Note: Signalize Only If Warranted)



Eastside of Corridor (Dr. Phillips to Rialto)

Existing
Fountains/
Venezia
Median
Opening





Eastside of Corridor (Dr. Phillips to Rialto)

Rendering of Option 1:

Directional Median Opening





Eastside of Corridor (Dr. Phillips to Rialto)

Rendering of Option 2:

Signalized Intersection with Crosswalks (If warranted)





Eastside of Corridor (Dr. Phillips to Rialto)

Existing Layout

Westbound
 Direction
 Approaching
 Easternmost
 Plaza Venezia
 Access Point





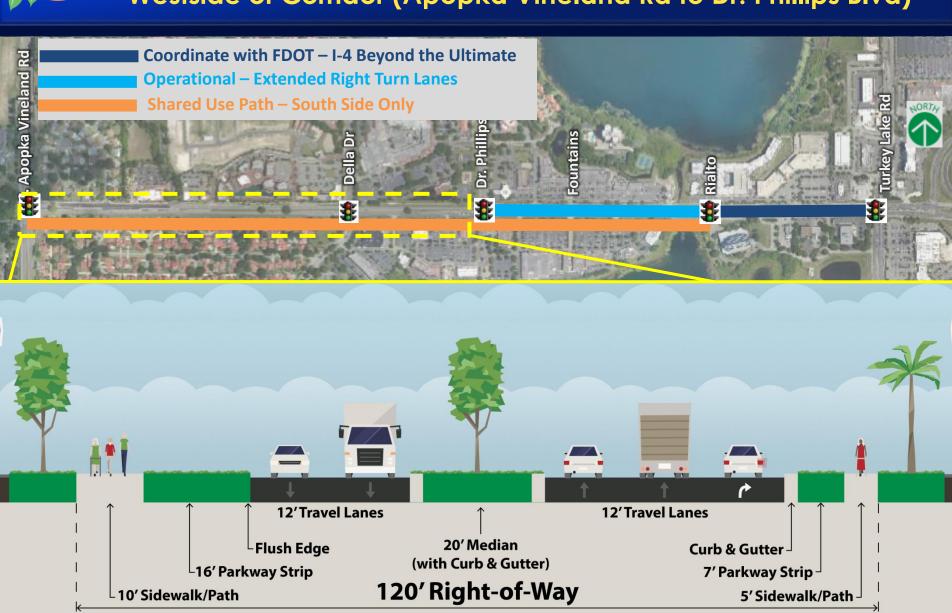
Proposed

- New Left Turn
 Lane and
 Directional
 Opening to
 Easternmost
 Plaza Venezia
 Access Point
- Additional pavement for WB Right Turn Lanes





Westside of Corridor (Apopka Vineland Rd to Dr. Phillips Blvd)





Westside of Corridor (Apopka Vineland Rd to Dr. Phillips Blvd)

Existing Conditions

Standard 5' sidewalk





Westside of Corridor (Apopka Vineland Rd to Dr. Phillips Blvd)

Proposed Improvement

10' Shared Use
 Path (Extended from Apopka
 Vineland Road to
 Rialto – South
 Side of Road
 Only)





Preliminary Estimates

Category	Estimated Cost (1/20/2017)
Roadway/Sidewalk/Drainage	\$2,800,000
Stormwater Treatment	\$3,300,000
Lighting	(awaiting info from Traffic Eng.)
Landscaping (Trees and Turf)	\$125,000
Signalization (if warranted)	\$825,000
Contingency (25% overall)	\$1,800,000
Total	~\$8,850,000+

Note: This construction estimate assumes no ROW acquisition, wetland mitigation, or utility relocation cost.



Consistency with the Comprehensive Plan

Transportation Element Objectives

- Implement Long Range
 Transportation Plan (Obj. T1.1)
- Implement multimodal transportation system (Obj. T1.3)
- Ensure LOS on County roads within unincorporated Orange County (Obj. T2.1)
- Support strategies which promote convenient & efficient mobility system for all modes (Obj. T3.1)







COMPREHENSIVE PLAN
2010 - 2030
GOALS, OBJECTIVES & POLICIES



ADOPTED: MAY 19, 2009

AMENDED: November 29, 2016,

EFFECTIVE: January 19, 2017

THROUGH ORDINANCE 2016-31



PREPARED BY:

ORANGE COUNTY COMMUNITY, ENVIRONMENTAL AND DEVELOPMENT SERVICES DEPARTMENT

ORANGE COUNTY PLANNING DIVISION





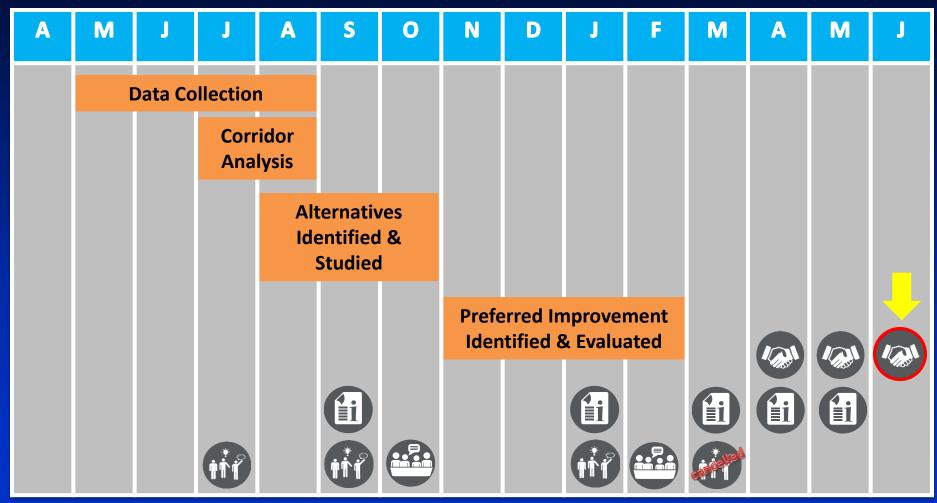
Three Lane Concept (Unfunded)



Three lane cross section tying into the intersection improvements



STUDY SCHEDULE















 Following Board approval, the recommended improvements will proceed into design and engineering.





- Approve the findings and recommendations of the Sand Lake Road Roadway Conceptual Analysis (RCA) Study
- Approve proceeding with final design, right-of-way acquisition and construction
- Make a finding of consistency with the Comprehensive Plan