

METROPLAN PRESENTATION

Transportation Systems Management & Operations Advisory and Technical Advisory Committees
February 28, 2020

Project Development and Environment (PD&E) Study

at Florida's Turnpike (SR 91) and Beachline Expressway (SR 528)

Financial Project ID (FPID) Number: 438547-1 Efficient Transportation Decision Making Number: 14294 Orange County, FL







AGENDA

- Project Overview
 - Location
 - Existing Deficiencies
- Preferred Alternative
 - Orlando South Interchange
 - SR 528 / Voltaire Drive
 - SR 91 / Taft Vineland Road
 - Summary Benefits
- Schedule
- Questions



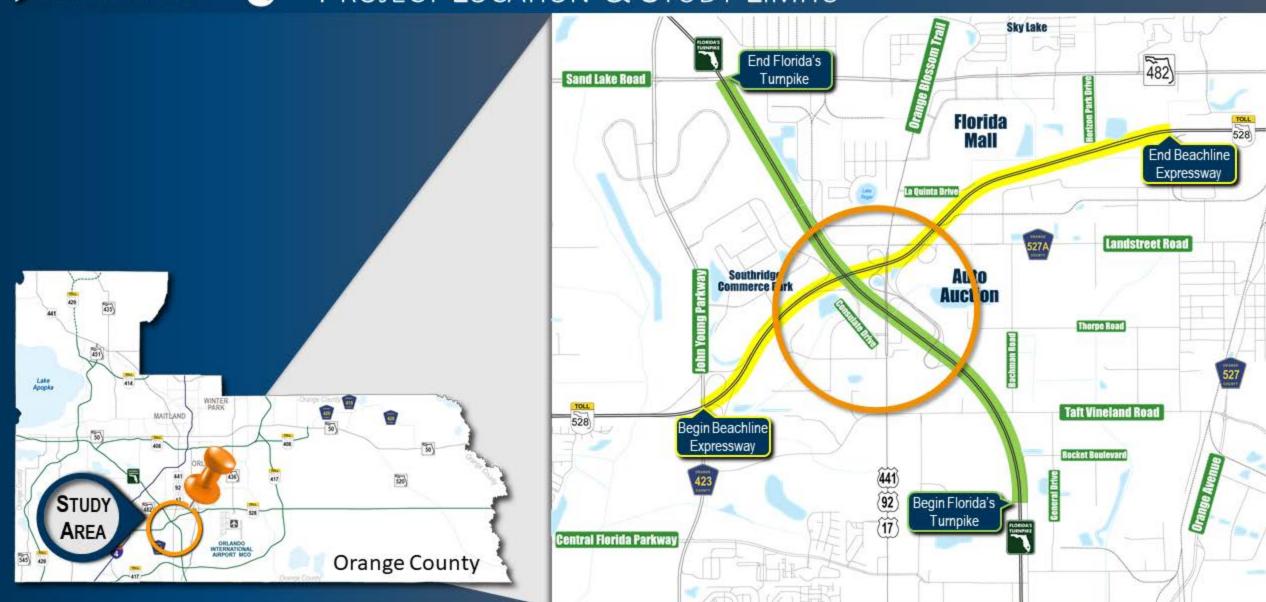








PROJECT LOCATION & STUDY LIMITS









PROJECT DESCRIPTION



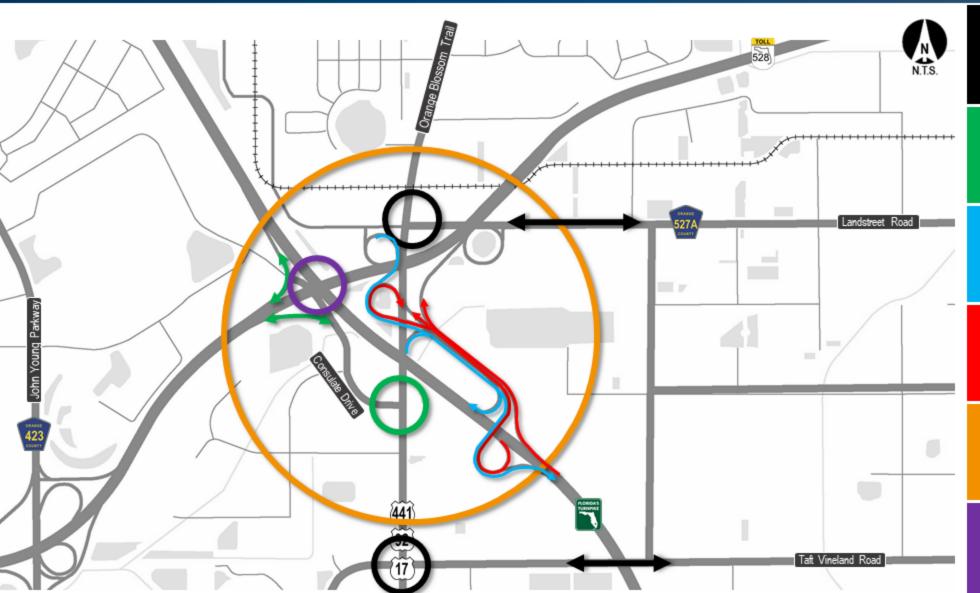


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SUMMARY OF EXISTING DEFICIENCIES



Heavy truck demand leads to congestion at OBT intersections with Landstreet Road and Taft Vineland Road

No direct connections to SR 528 lead to congestion at Consulate Drive / Orange Blossom Trail

Overall – circuitous routings lead to operational inefficiency

Inefficient ramp weaving degrades operations

Low speed ramps decrease operational efficiency

SR 528 bridge is not long enough for 10-lane Florida's Turnpike







No-Build Alternative

Advantages

- No additional social, cultural, physical or natural environment impacts
- No additional right of way
- Disadvantages
 - Increased local road congestion
 - Worse emergency evacuation and response times

















Approaches to developing Preferred Alternative









ENHANCE SAFETY **ADDRESS**TRAFFIC NEEDS

IMPROVE
TRAVEL TIME
RELIABILITY

PROVIDELONG-TERM
MOBILITY

MINIMIZE ENVIRONMENTAL IMPACTS





PROJECT DESCRIPTION

Improvements Include:

Systems Continuity, Capacity, and Operations

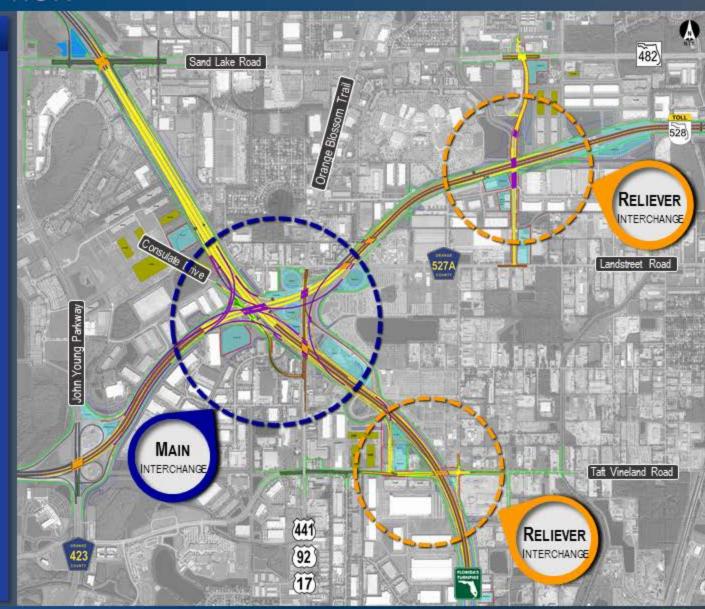
- New directional ramps connecting Florida's Turnpike and Beachline Expressway
- Longer Beachline Expressway bridges for additional Florida's Turnpike lanes
- Auxiliary lanes and braided ramps to improve lane changes

Ramp Safety Operations

- Separation of ramps to reduce weaving
- All Electronic Tolling with gantries

Surface Street Capacity and Operations

- Two reliever interchanges to disperse traffic demand
- Removal of selected ramps to reduce demand on Orange Blossom Trail
- A Diverging Diamond Interchange and triple left turn lanes at Orange Blossom Trail intersection to improve Consulate Drive efficiency

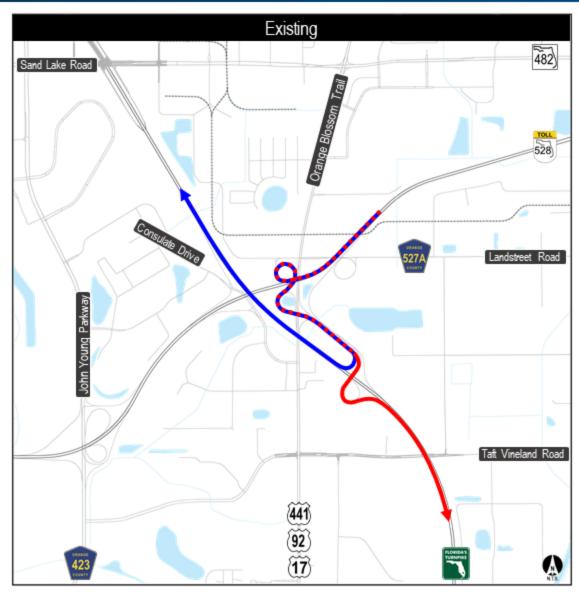


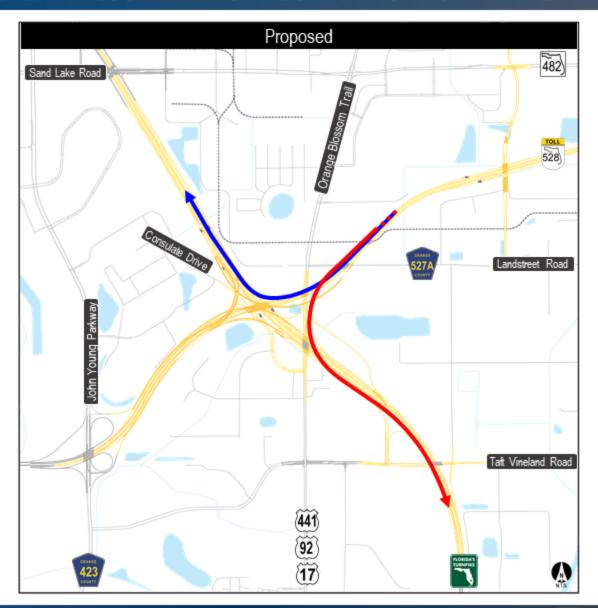






WESTBOUND BEACHLINE EXPRESSWAY TO FLORIDA'S TURNPIKE



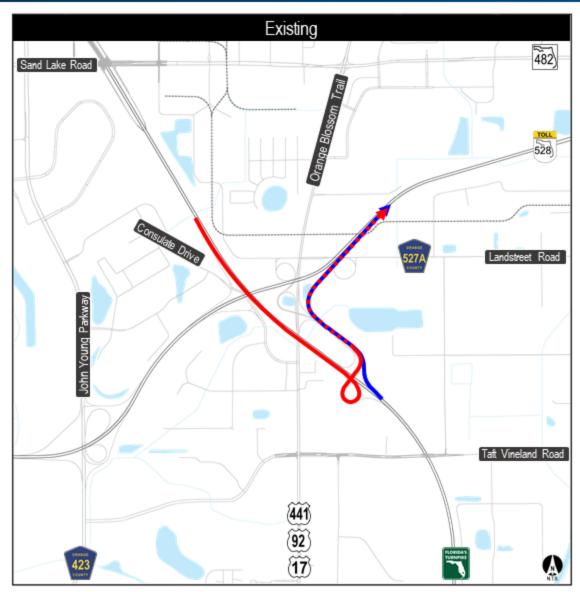








FLORIDA'S TURNPIKE TO EASTBOUND BEACHLINE EXPRESSWAY



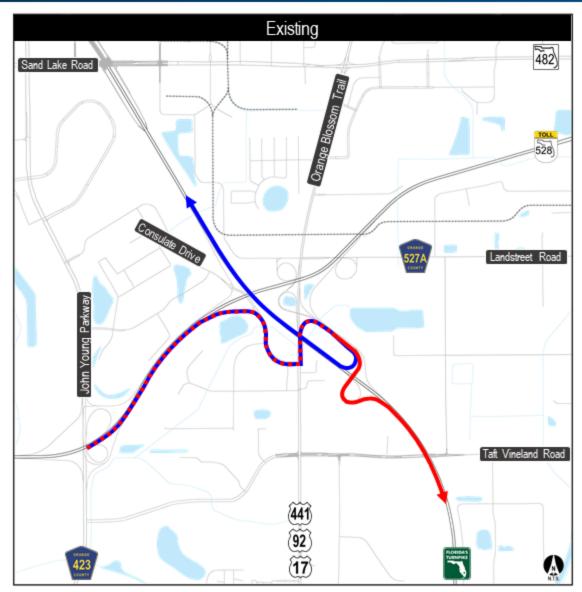








EASTBOUND BEACHLINE EXPRESSWAY TO FLORIDA'S TURNPIKE

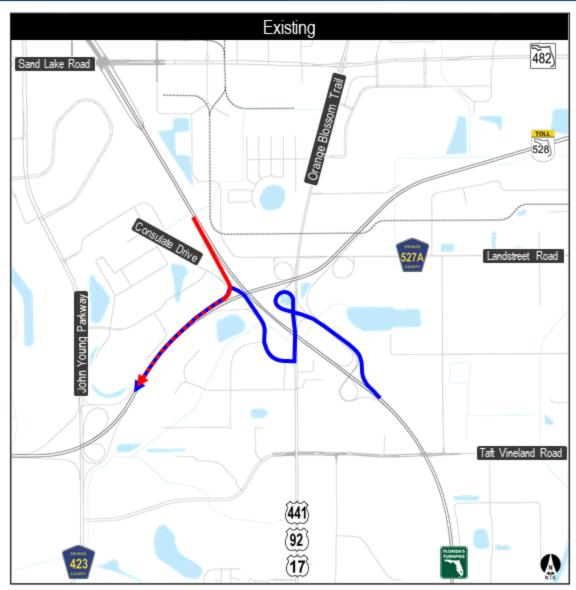








FLORIDA'S TURNPIKE TO WESTBOUND BEACHLINE EXPRESSWAY



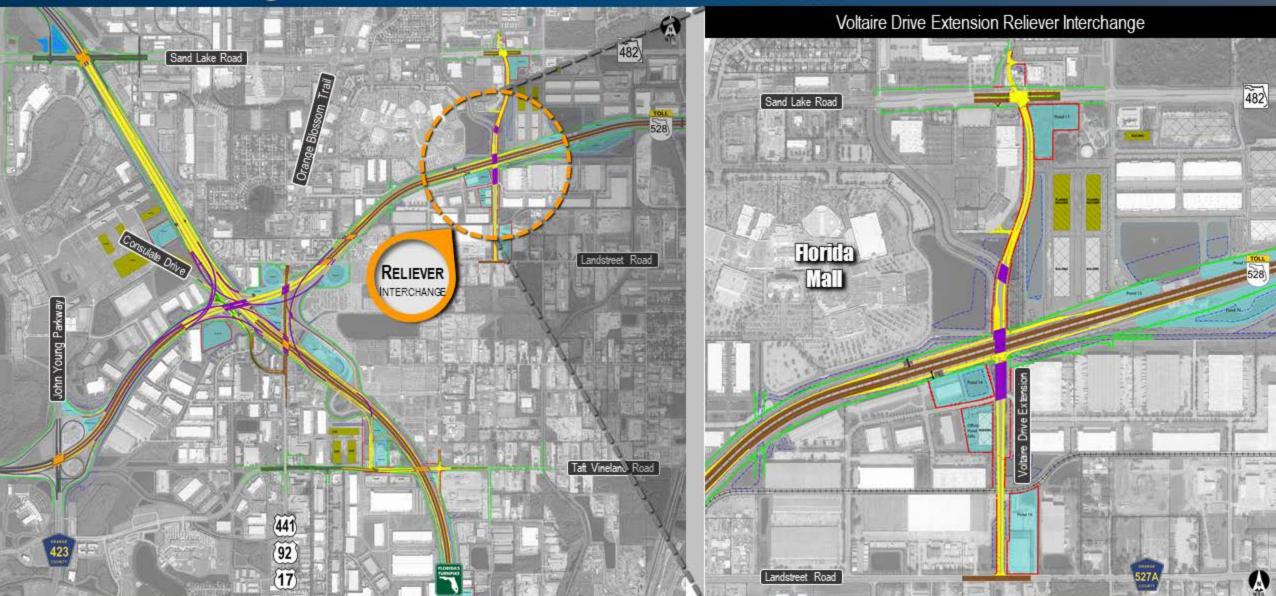








New Local Access Interchanges

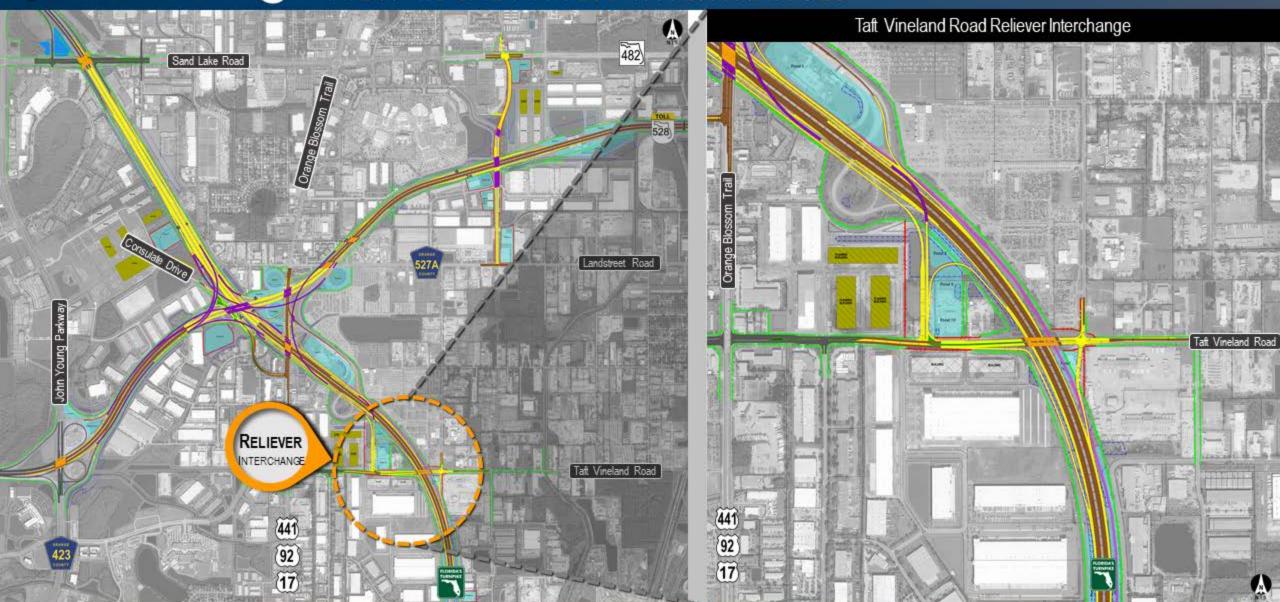








New Local Access Interchanges



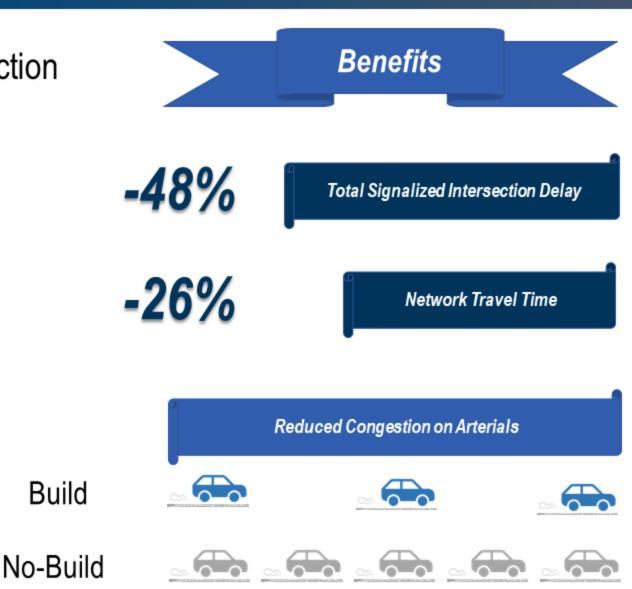




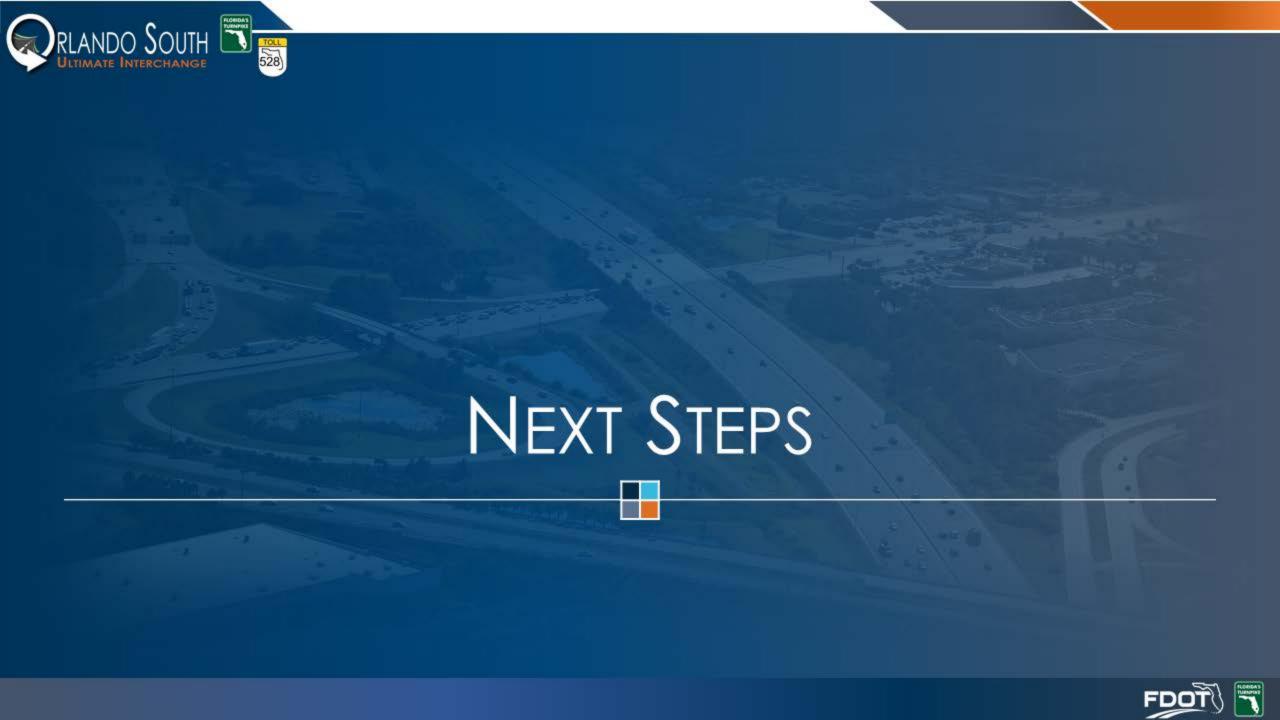


TRAFFIC BENEFITS: BUILD VERSUS NO-BUILD ALTERNATIVE

- 48% reduction in total signalized intersection control delay
- 26% reduction in network travel time
- Reduced congestion on arterials
- Lower potential for crashes
- Lower emissions

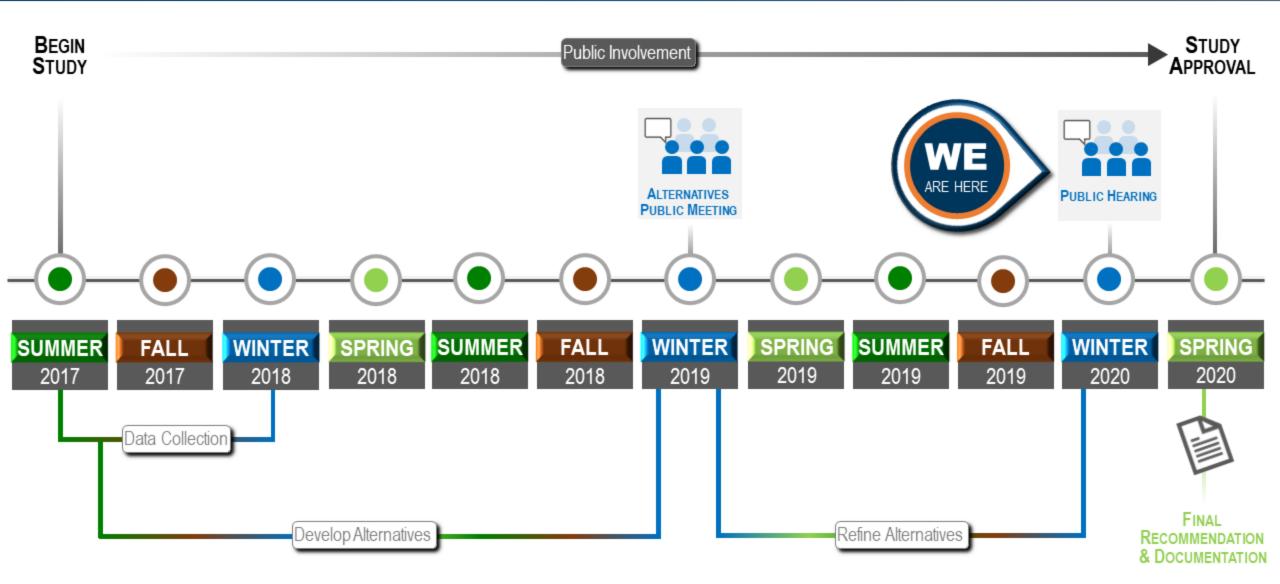








STUDY SCHEDULE





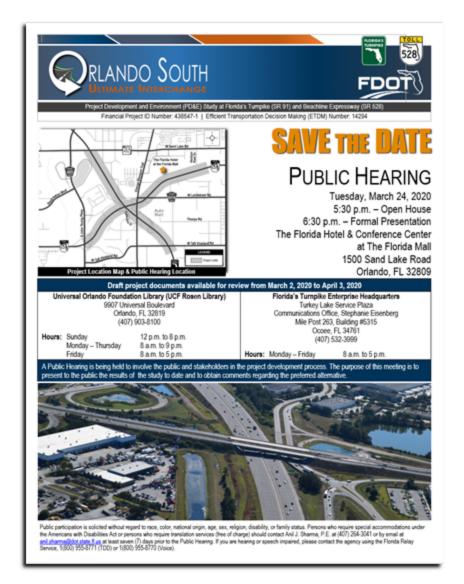




Purpose of Public Hearing

- Review the Preferred Build Alternative
 - Conceptual design
 - Access management changes
 - Potential social, economic, and environmental effects
- Receive verbal and written public comments

Anil J. Sharma, P.E., Project Manager Florida's Turnpike Enterprise (HNTB) P.O. Box 613069 Ocoee, FL 34761-3069 Anil.Sharma@dot.state.fl.us (407) 264-3041





NEXT PHASE



PHASE **Planning Phase Project Development & Environment Study** Design **Right of Way Acquisition** Construction 5

Maintenance

Preliminary Design is funded. Right-of-way and Construction are not yet funded.







QUESTIONS



