SR 9/I-95 PD&E Study
Palm Beach County

FDOT

Palm Beach
Transportation Planning Agency

Project Development and Environment (PD&E) Study for SR 9/I-95 from South of Linton Boulevard/CR 782 to North of SR 704/Okeechobee Boulevard

Southern PD&E Study: Financial Project ID: 444202-1-22-02 I ETDM: 14508
Northern PD&E Study: Financial Project ID: 444202-2-22-02 I ETDM: 14509

TAC Presentation
July 2, 2025

TPA Board Presentation
July 17, 2025

SR 9/I-95 PD&E Study
Palm Beach County

Agenda

- ❑ Project Delivery Process
- ❑ What are Managed Lanes
- ❑ PD&E Studies
- ❑ PD&E Study Process
- ❑ Engineering, Environmental, and Public Involvement
- ❑ Southern PD&E
- ❑ Northern PD&E
- ❑ Schedule
- ❑ Contact Information

SR 9/I-95 PD&E Study
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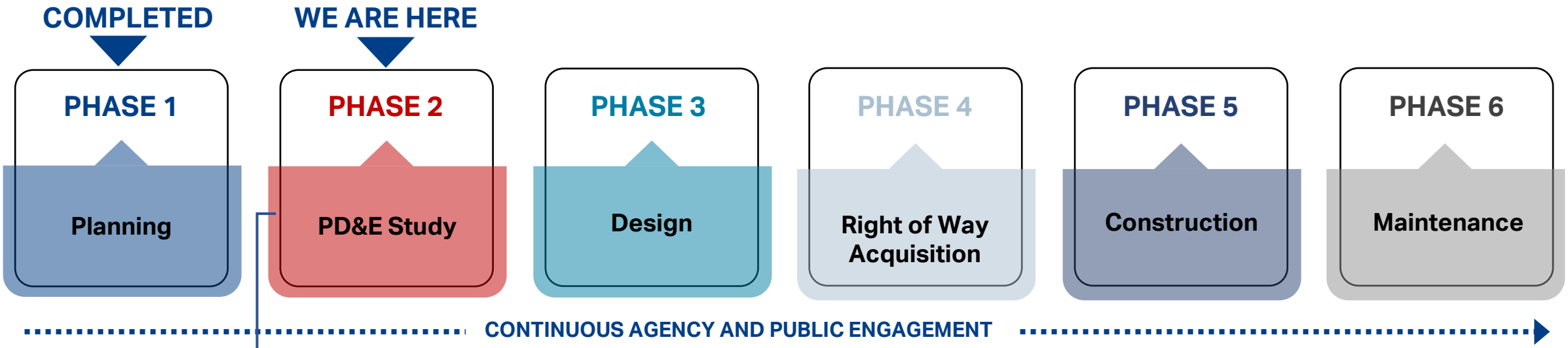
FDOT Transportation Project Delivery Process



Evaluate:

- ❑ Engineering Alternatives
- ❑ Environmental Impacts (Social, Cultural, Natural, and Physical Resources)

Comply with:

- ❑ National Environmental Policy Act (NEPA)
- ❑ Federal and State Environmental Laws
- ❑ Requirements Involving Federal Funding

What are Managed Lanes

- Managed Lanes (ML) are an innovative solution to congestion management
- Limited access to specific vehicle classes by a toll or vehicle volume
- MLs are an alternative to increase capacity
- The Department will prioritize this approach to deploy a transportation system that is:
  - Safe
  - Accessible
  - Efficient
  - Resilient

Provide travel choices

Offer predictable travel times

Manage time congestion

Reduce fuel consumption

Decrease air pollution

Support transit usage

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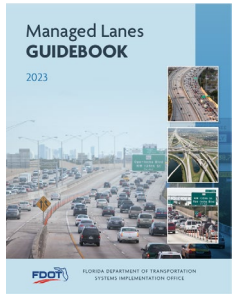
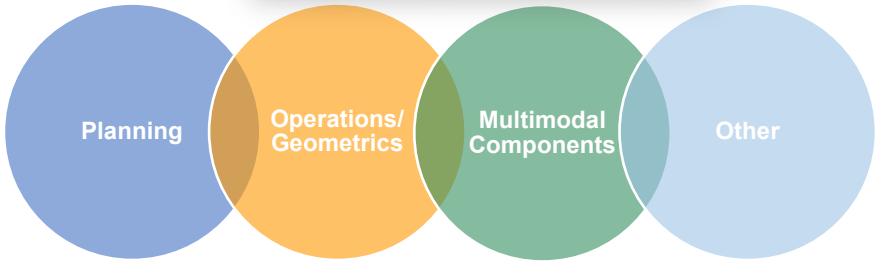
PD&E STUDIES FOR SR 9/I-95 FROM SOUTH OF LINTON BOULEVARD/CR 782 TO NORTH OF SR 704/OKEECHOBEE BOULEVARD I Palm Beach TPA

- Managed Lane's Purpose and Need
  - Improve Safety
  - Provide Congestion Relief
  - Meet Future Travel Demand
  - Minimize Environmental Impacts
  - Increase Mobility and Accessibility
- Must Meet FDOT Managed Lanes Guidebook
- Coordinate with Adjacent PD&E Projects on ML Options



Key Considerations



Managed Lane Type	Screening Guidelines	Benefits / Restriction	Meets Guidelines
Express Lanes	• Additional widening not possible due to ROW or other constraints and connectivity to existing regional Express Lanes (EL) system • Implements Dynamic Tolling, enabling traffic demand management	Provides reliable travel time over time and seamless connection to regional EL system	**YES**
Long-Distance Trip Lanes	• Does not implement Dynamic Tolling • Thru lane Design Hour Volume (DHV) > 50% thru lane capacity	Thru lane DHV less than 40%	NO
Truck-Only Lanes	• Identified as a candidate by FDOT's Freight and Rail Office • Truck AADT > 25% of total AADT	Existing Truck AADT is 7%	NO
Managed Transit Lanes	Based on buses per hour, number of routes served, and mobility objective priority (fare collection) • 10+ buses per hour and 4+ routes served	No existing or planned bus routes on this segment	NO
Part-Time Shoulder Use	Case-by-case basis and must be approved by Chief Engineer	Shoulders less than required width	NO
Connected & AV-Only Lanes	• Connected and AV market penetration of 25%-45% for a dedicated lane	1% penetration rate expected by year 2030	NO
Reversible Lanes	• Ratio of peak direction to reverse direction flow exceeds 2:1 • DHV > 50% of capacity	Ratio of reverse direction flow is 1.08:1 (Less than 2:1); DHV is 52%	NO
Carpool 3+ Lanes	• DDHV > 1,000 pc/h/ln (Design Year)	Less than 30% of the segments within project limits with > 1,000 pc/h/ln	NO

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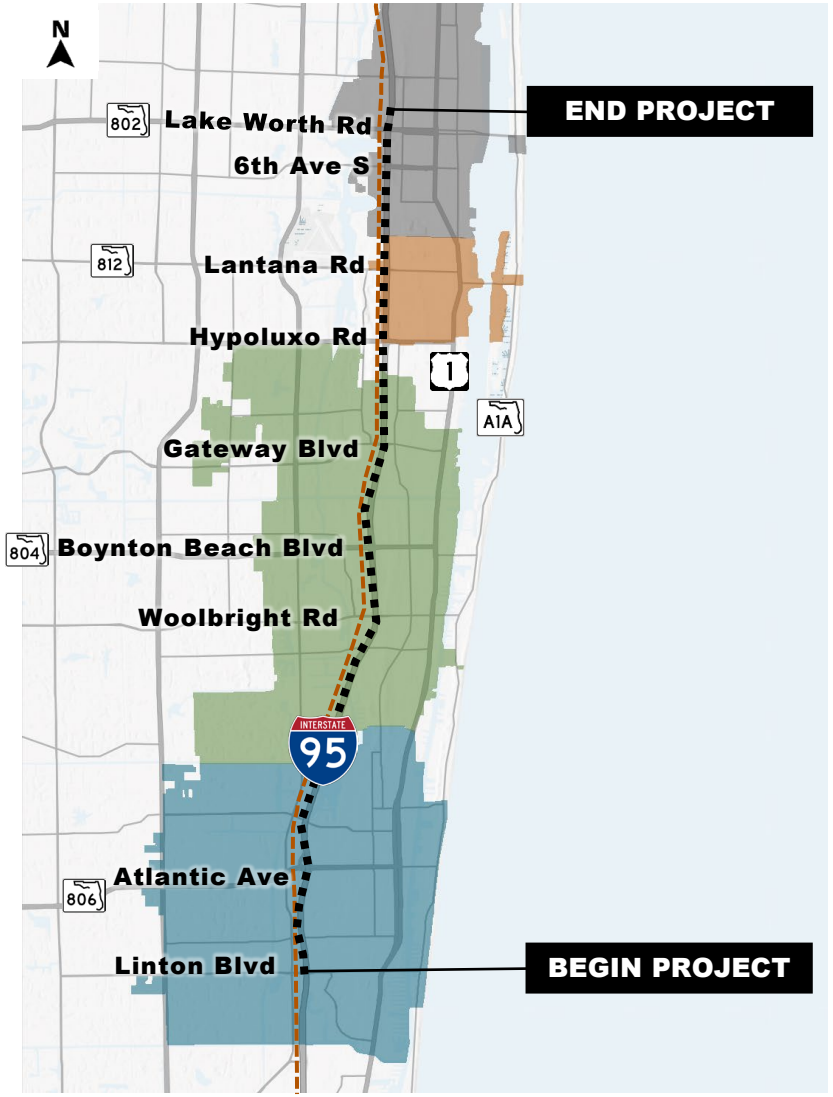
PD&E STUDIES FOR SR 9/I-95 FROM SOUTH OF LINTON BOULEVARD/CR 782 TO NORTH OF SR 704/OKEECHOBEE BOULEVARD I Palm Beach TPA

SOUTHERN PD&E STUDY



PROJECT LOCATION

- Strategic Intermodal System (SIS) and National Highway System (NHS) Facility
- Emergency evacuation route
- Palm Beach County
- Project Corridor
- South Florida Rail Corridor

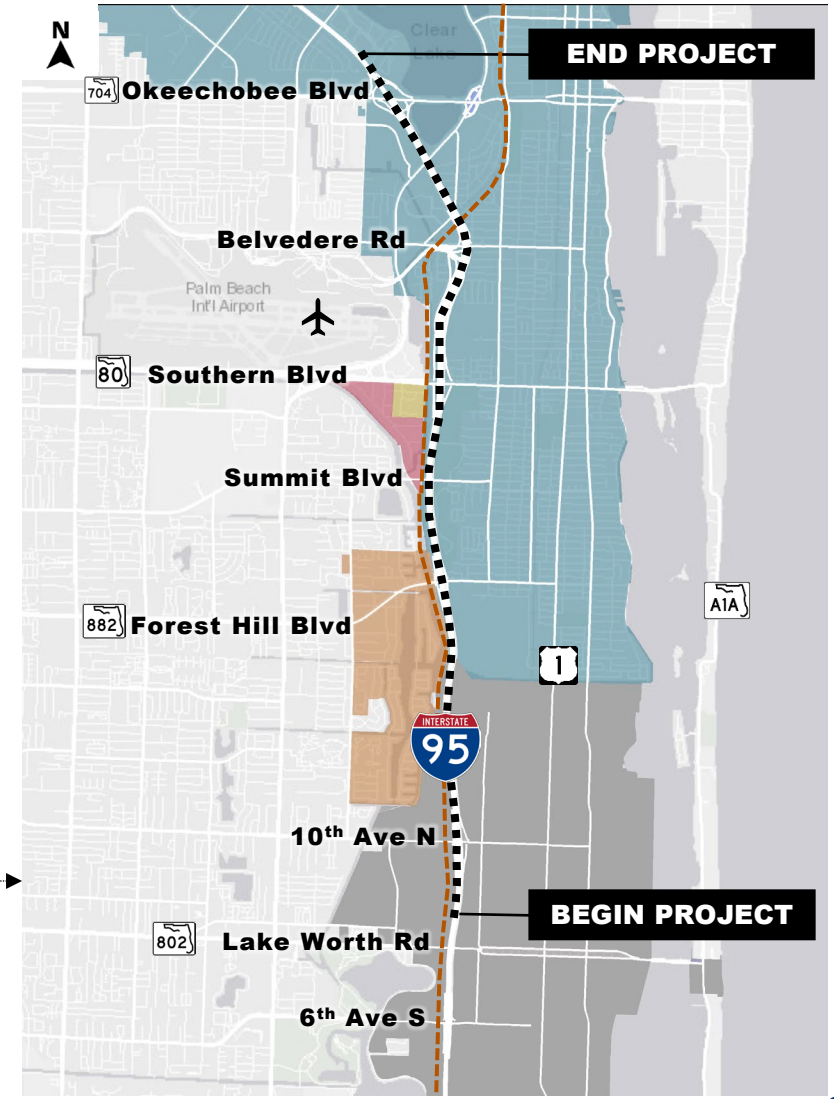
SOUTHERN PD&E STUDY

- Delray Beach
- Boynton Beach
- Lantana
- Lake Worth Beach

NORTHERN PD&E STUDY

- Lake Worth Beach
- Lake Clarke Shores
- Glen Ridge
- Cloud Lake
- West Palm Beach

NORTHERN PD&E STUDY



SR 9/I-95 PD&E Study
Palm Beach County

Purpose and Need

The primary purpose of this study is to find ways to improve the roadway so that traffic flows smoothly both now and in the future. The study will look at ways to make the road safer and improve traffic movements for several modes of transportation such as cars, buses, motorcycles, and trucks.

Project alternatives consist of additional travel lanes and safety enhancements to how vehicles enter and exit the expressway.

Increase Capacity to Meet Travel Demand

Operational and Safety Needs

Modal Interrelationships

SR 9/I-95 PD&E Study
Palm Beach County

PD&E Study Process

TPA Presentation
December 14, 2023

WE ARE HERE
Alternatives Public Workshop

Public Hearing

DATA COLLECTION

- ❑ Engineering Data
- ❑ Environmental Data
- ❑ Other Data

CONCEPT ALTERNATIVES

- ❑ Needs Analysis
- ❑ Concept Alternatives Development and Refinement

ENGINEERING & ENVIRONMENTAL ANALYSIS

- ❑ Engineering Analysis & Studies
- ❑ Environmental Analysis & Studies
- ❑ Concept Alternatives Screening
- ❑ Engineering & Environmental Documentation

ALTERNATIVES REFINEMENT

- ❑ Alternatives Refinement & Screening

FINAL DOCUMENTS

- ❑ Preliminary Engineering Report
- ❑ NEPA Document
- ❑ FDOT Review and Approval of Final Documents

LOCATION AND DESIGN CONCEPT ACCEPTANCE (LDCA)

CONTINUOUS AGENCY AND PUBLIC ENGAGEMENT

SR 9/I-95 PD&E Study
Palm Beach County

Engineering

- ❑ Roadway Geometry
- ❑ Roadway Capacity
- ❑ Safety
- ❑ Traffic Operations
- ❑ Drainage
- ❑ Structures
- ❑ Right-of-Way Requirements
- ❑ Ingress and Egress Access Points
- ❑ Multimodal Considerations
- ❑ Cost

Environmental

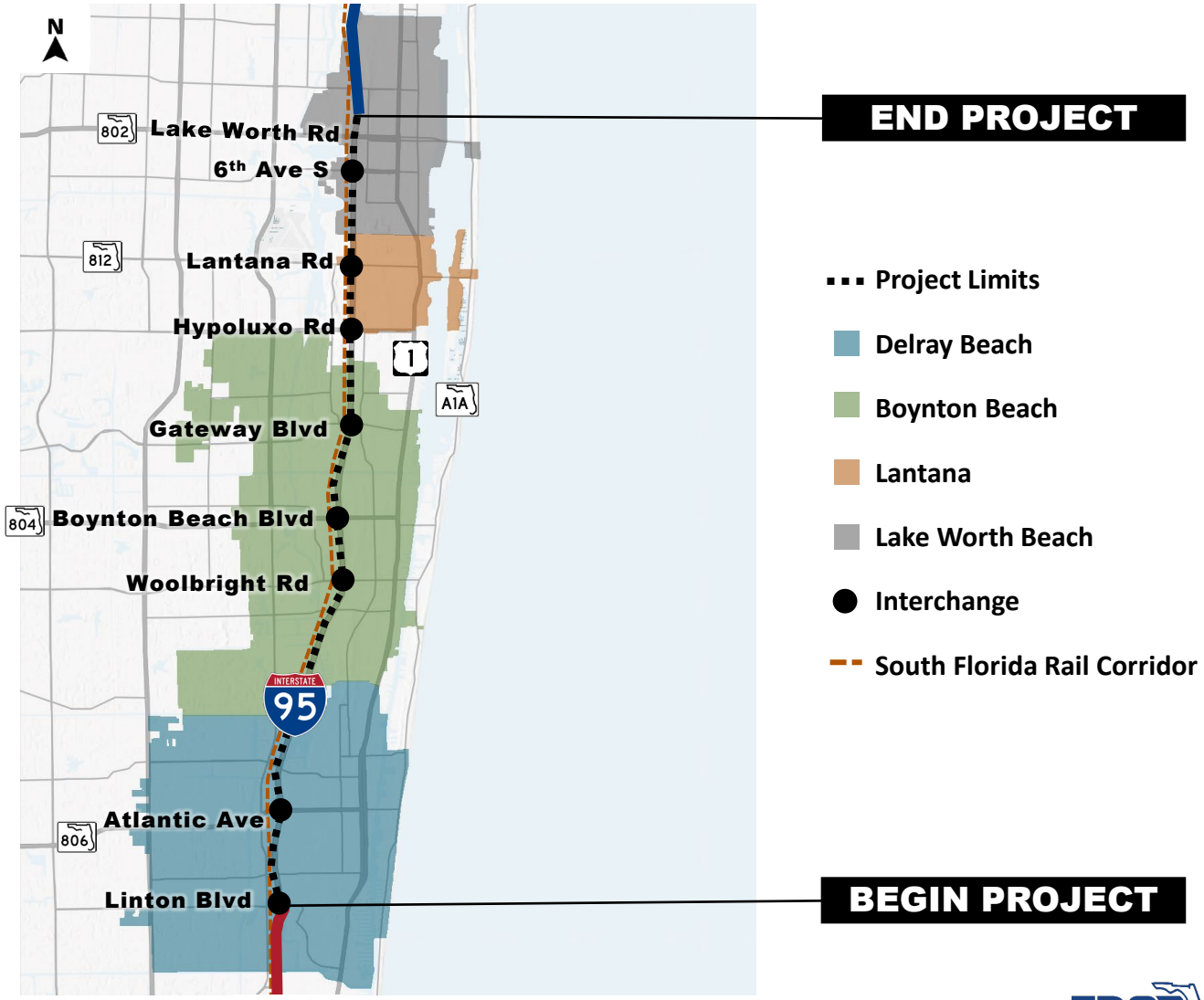
- ❑ Socio-Cultural Evaluation
- ❑ Economic Assessment
- ❑ Land Uses (Existing/Future)
- ❑ Cultural Resources Assessment
- ❑ Recreational Resources
- ❑ Wetlands Evaluation
- ❑ Mobility
- ❑ Water Quality Assessment
- ❑ Wildlife and Habitat Assessment
- ❑ Noise Study
- ❑ Air Quality
- ❑ Contamination Screening Evaluation

Public Involvement

- ❑ Public Involvement Plan (PIP)
- ❑ Project Kick-off Meeting
- ❑ Elected Official Meetings
- ❑ Agency Meetings
- ❑ Public Workshop
- ❑ Community Presentations
- ❑ Public Hearing
- ❑ Project Website

Agencies and Stakeholders Coordination

SR 9/I-95 PD&E Study
Palm Beach County



Southern PD&E Study

FPID 444202-1-22-02
PD&E Study from South of Linton Boulevard/CR 782 to North of 6th Avenue South (approximately 13.5 miles)
Anticipated completion: Spring 2027

Adjacent Projects

FPID 444202-2-22-02
PD&E Study from North of 6th Avenue South to North of SR 704/Okeechobee Boulevard
Anticipated completion: Spring 2027

FPID 433109-5-52-01
Phase 3B from Glades Road to Linton Boulevard/CR 782
Construction completed

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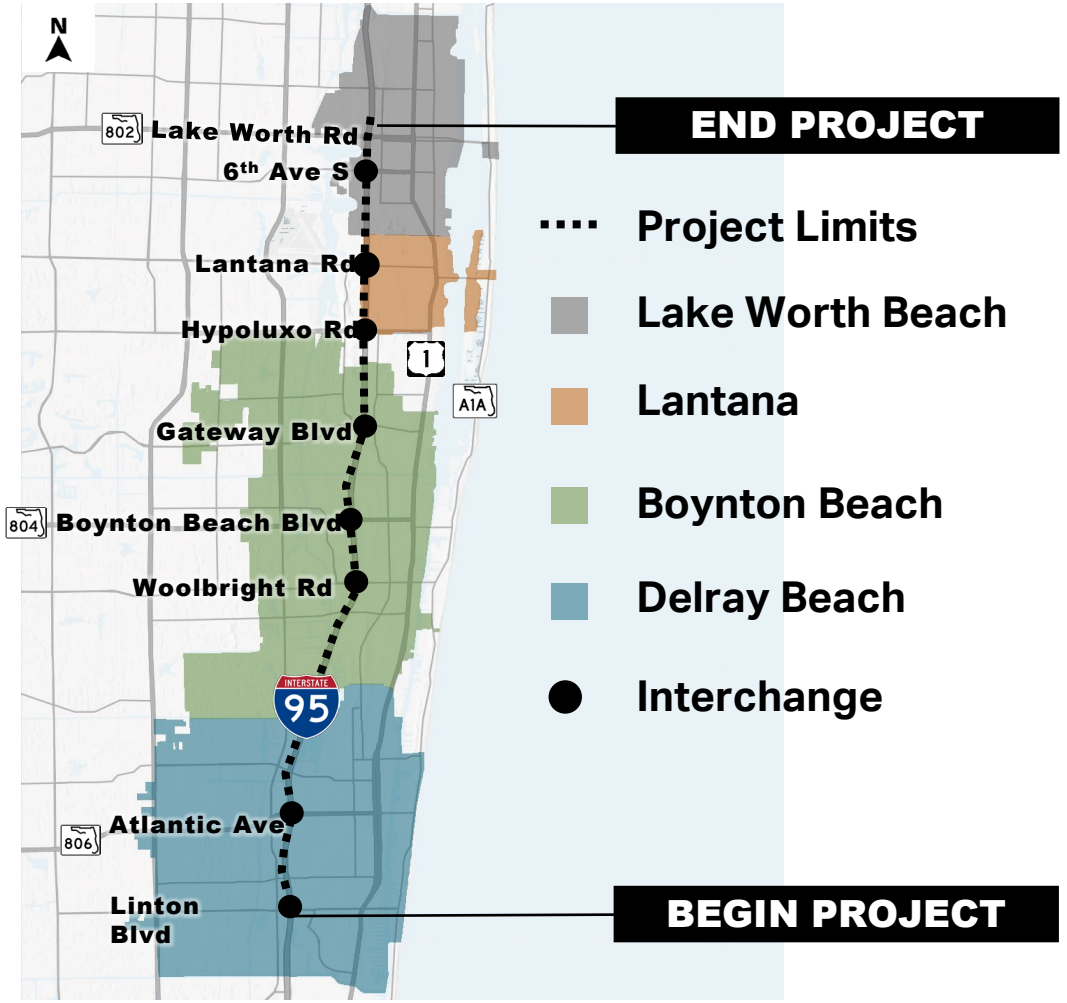
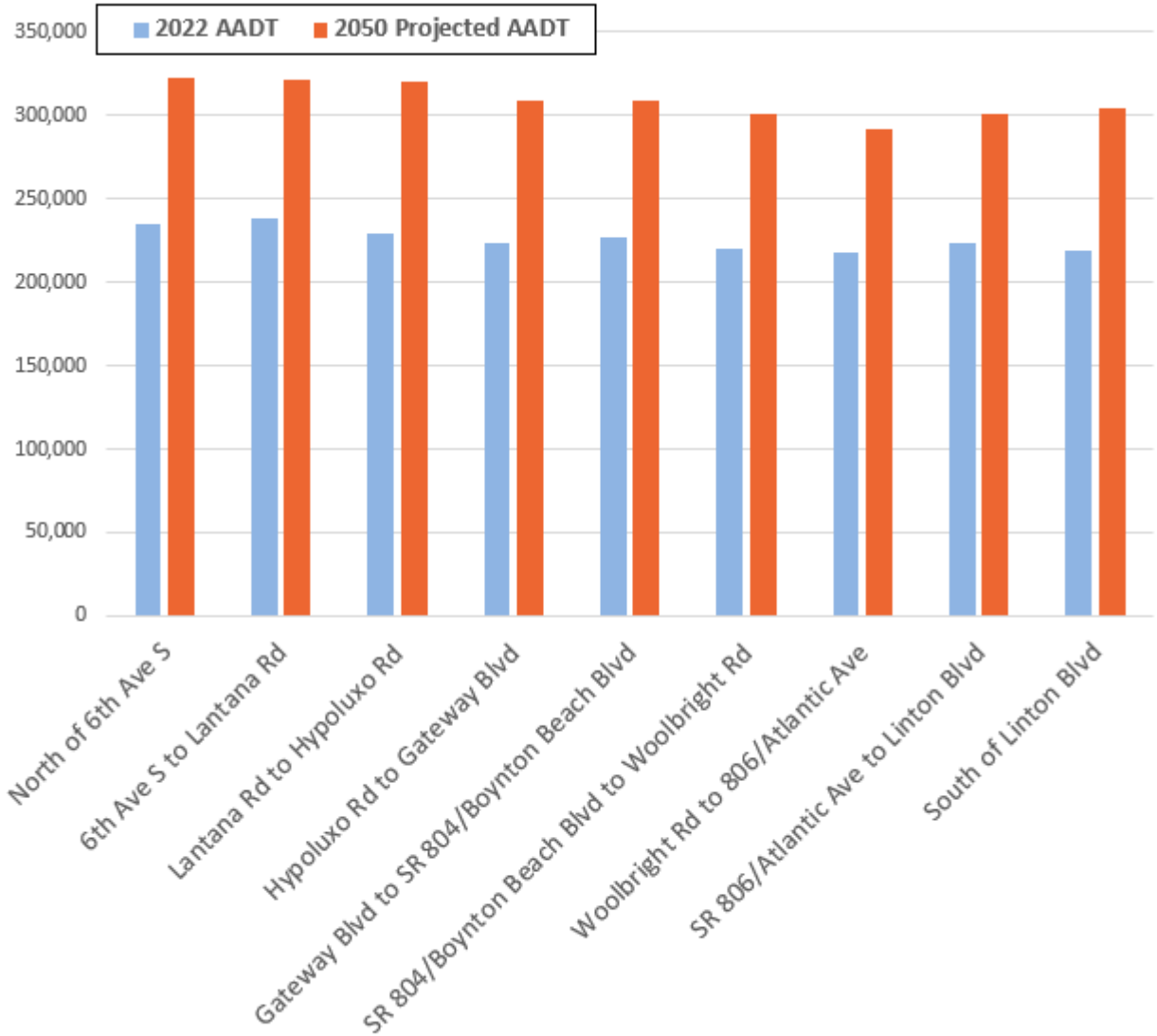
Palm Beach County

Traffic





Annual Average Daily Traffic (AADT) - the average number of vehicles that drive on the road in both directions each day over a full year.

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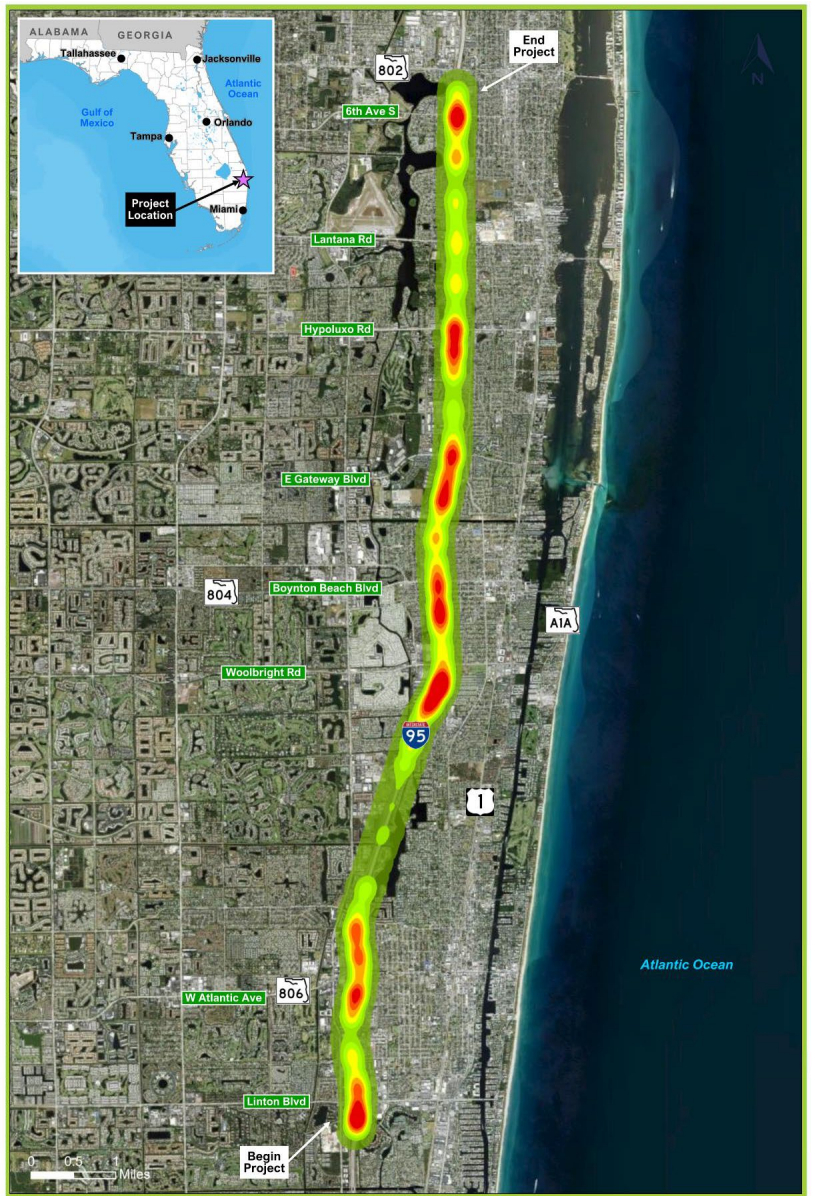
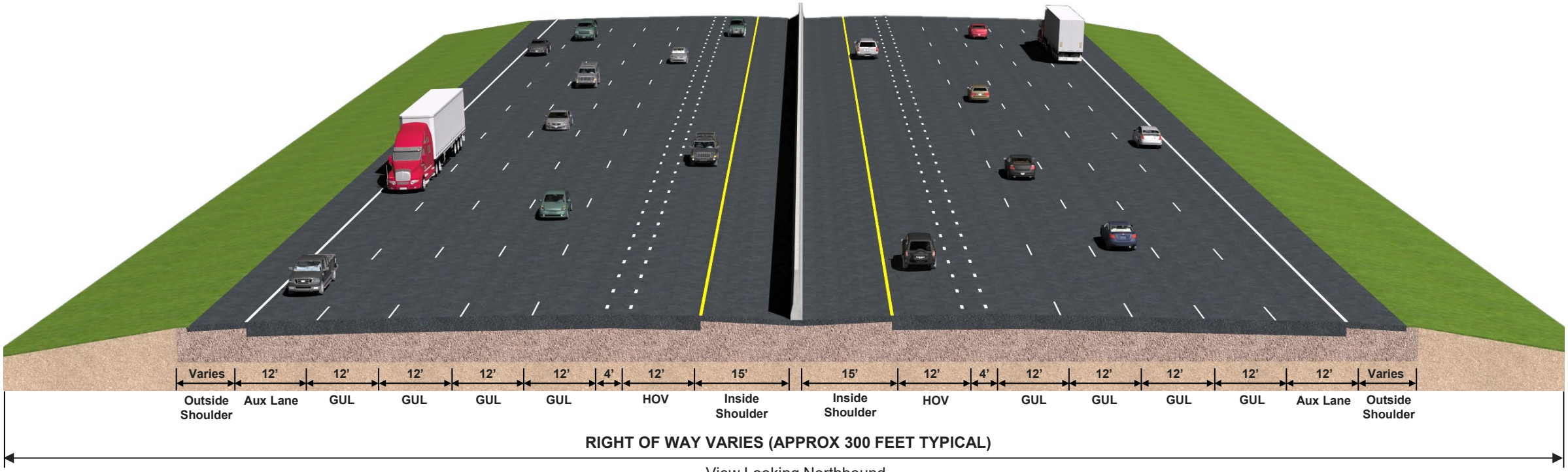
Historical Crash Data (2019-2023)

- 6,362 crashes in a 5-year period
- Fatal crashes accounted for 0.5%
- Rear end crashes are most common at 43.5%
- Sideswipe crashes at 20.6%



I-95: Existing Typical Section



View Looking Northbound

- 15-foot-wide inside shoulder
- 2 High Occupancy Vehicle (HOV) Lanes, 12-foot-wide
- 4-foot-wide separation
- 8 General Use Lanes (GUL), 12-foot-wide
- 2 Auxiliary Lane (Aux Lane), 12-foot-wide
- Varied width outside shoulder
- 65 mph posted speed limit
- SFRC/CSX Railway parallel to I-95 along west side

SR 9/I-95 PD&E Study
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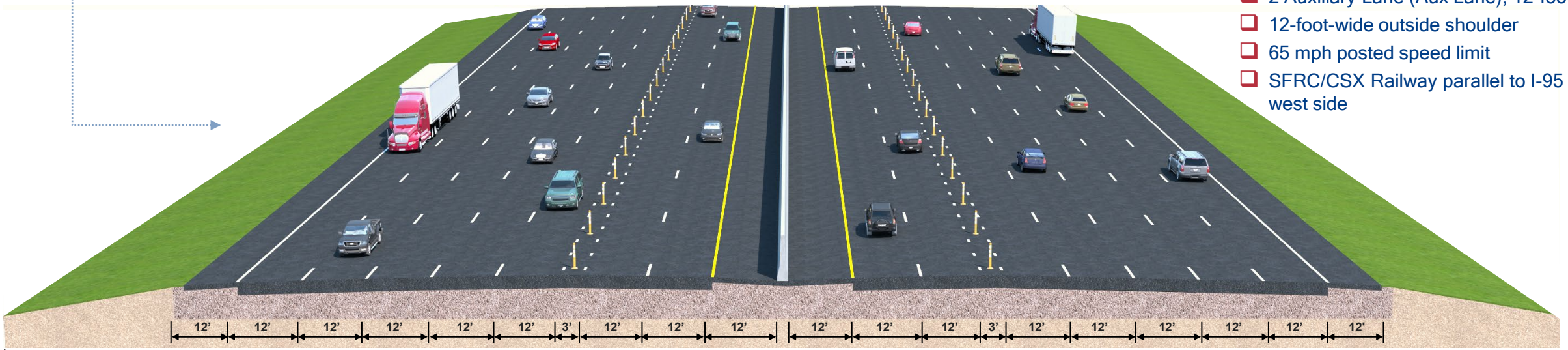
Alternatives Evaluation

- ☑ **No-Action (or No-Build) Alternative**
- ☒ **Transportation System Management and Operations (TSM&O) Alternative**
- ☑ **Master Plan Concept**
  - **Build Alternative** - *widen to provide an additional managed lane along with improvement such as:*
    - *Auxiliary Lane*

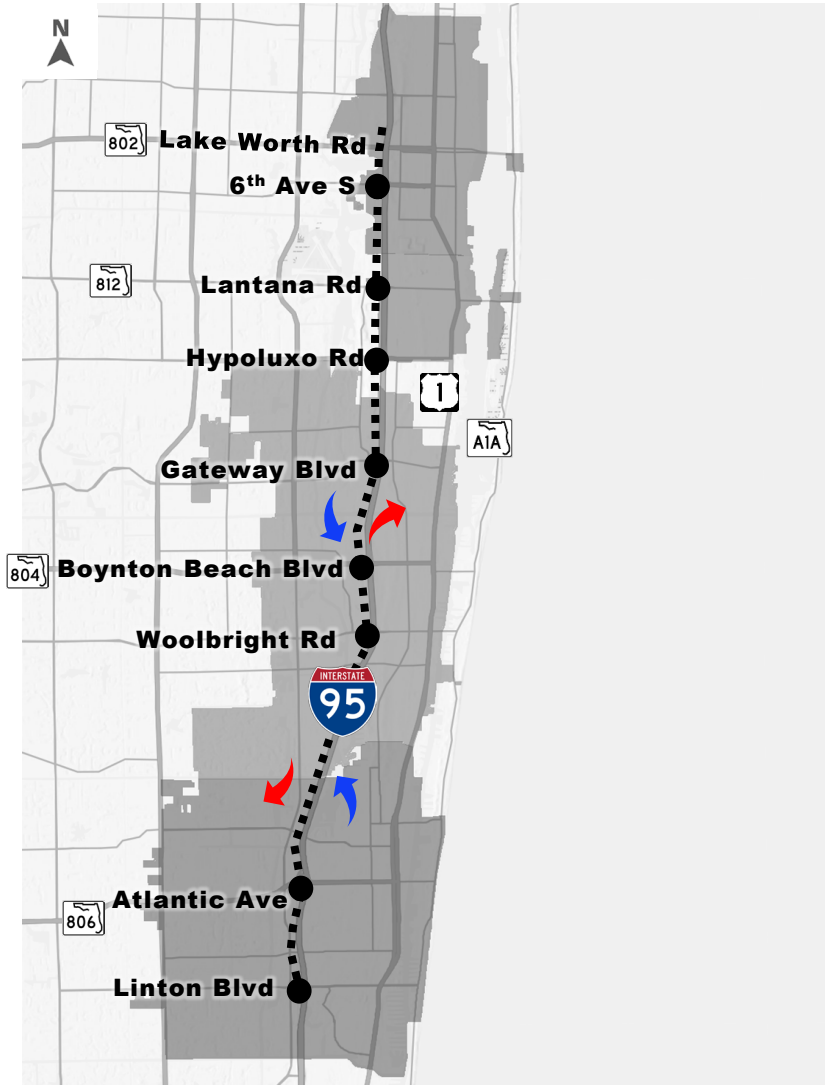
ALTERNATIVE CONSIDERED BUT ELIMINATED

- ❑ 12-foot-wide inside shoulder
- ❑ 4 Managed Lanes (ML), 12-foot-wide
- ❑ 3-foot-wide separation
- ❑ 8 General Use Lanes (GUL), 12-foot-wide
- ❑ 2 Auxiliary Lane (Aux Lane), 12-foot-wide
- ❑ 12-foot-wide outside shoulder
- ❑ 65 mph posted speed limit
- ❑ SFRC/CSX Railway parallel to I-95 along west side



View Looking Northbound

I-95 mainline with Access Points: For all Build Alternatives



Proposed Managed Lanes Access Points

Northbound

- **Entrance** provided from Atlantic Avenue and interchanges to the south (at-grade)
- **Exit** provided to Gateway Boulevard and interchanges to the north (at-grade)

Southbound

- **Entrance** provided from Gateway Boulevard and interchanges to the north (at-grade)
- **Exit** provided to Atlantic Avenue and interchanges to the south (at-grade)

Legend

- Project Limits
- Interchange
- Managed Lanes Entrance (at-grade)
- Managed Lanes Exit (at-grade)

SR 9/I-95 PD&E Study
Palm Beach County

Public Involvement

Public Meetings

- Public Kick off Presentation: December 2023
- Alternative Public Workshops:
  - *Virtual:* Wednesday, July 23, 2025
  - *In-Person:* Tuesday, July 22, 2025
  - Thursday, July 24, 2025
- Public Hearing: (Anticipated) Fall 2026

- Attend Public Meetings
- Provide Your Input
- Visit the Project Webpage

City of Delray Beach
City of Lake Worth Beach Florida
Palm Beach County Florida
City of Boynton Beach
Town of Lantana Florida
Palm Beach Transportation Planning Agency

Elected Officials
Agencies
Local Businesses
Local Neighborhoods

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Northern PD&E Study

FPID 444202-2-22-02
PD&E Study from North of 6th Avenue South to North of SR 704/Okeechobee Boulevard (approximately 7 miles)
Anticipated completion: Spring 2027

Adjacent Projects

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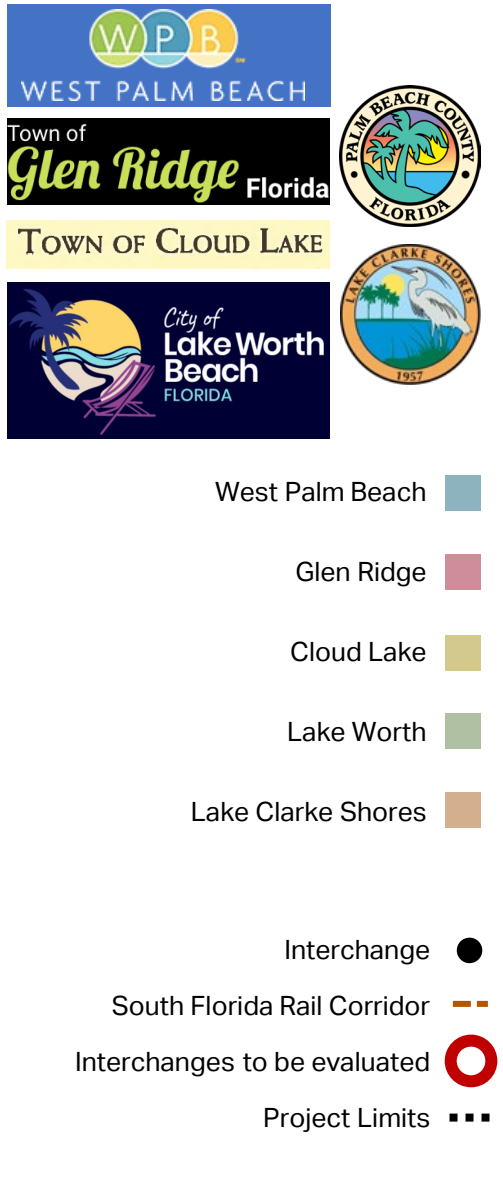
PD&E Study from South of Linton Boulevard/CR 782 to North of 6th Avenue South
Anticipated completion: Spring 2027



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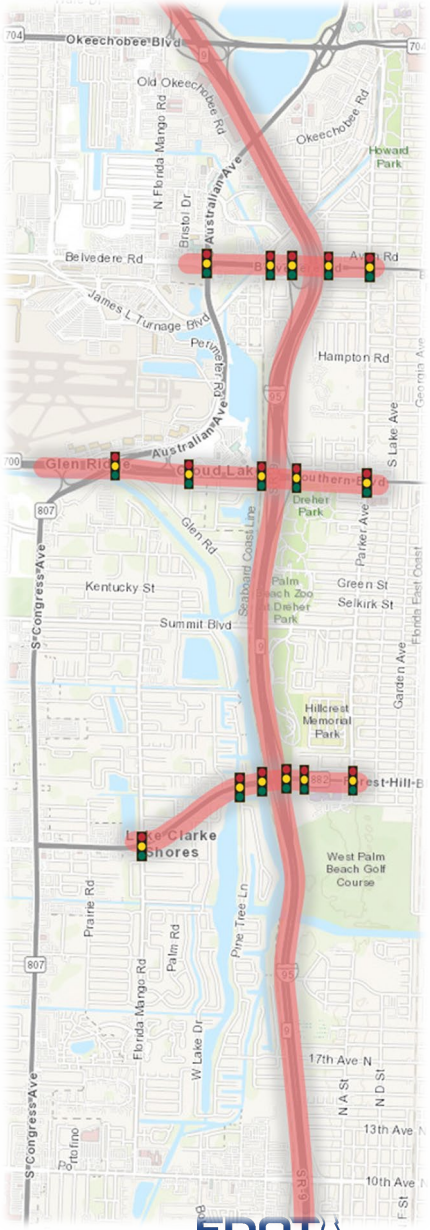
Traffic Analysis

- Annual Average Daily Traffic (AADT) Volumes are projected to increase approximately 29%
- For the no-build condition, the projected AADT for year 2050 is between 292,600 and 332,500 vehicles per day
- Average throughput traffic increases by 3%
- Reduces approximately 16% traffic volume in General Use Lanes
- During morning hours (AM), northbound traffic presents more congestion
- During afternoon hours (PM), southbound traffic is more congested



N
NOT TO SCALE

Area of Influence
Signalized Intersections
Stop Controlled Intersections

SR 704/Okeechobee Blvd

1.202 mi

Belvedere Rd

1.027 mi

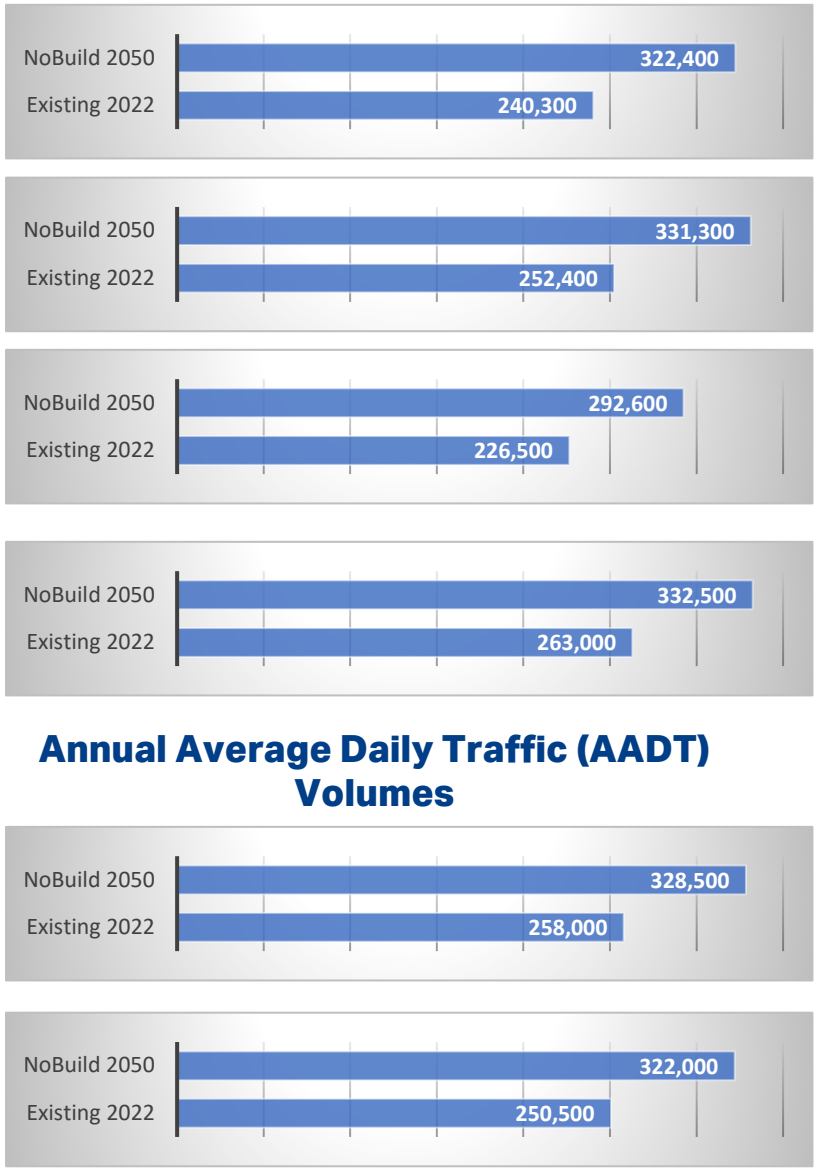
SR 80/US 98/ Southern Blvd

1.445 mi

SR 882/ Forest Hill Blvd

1.912 mi

10th Avenue North



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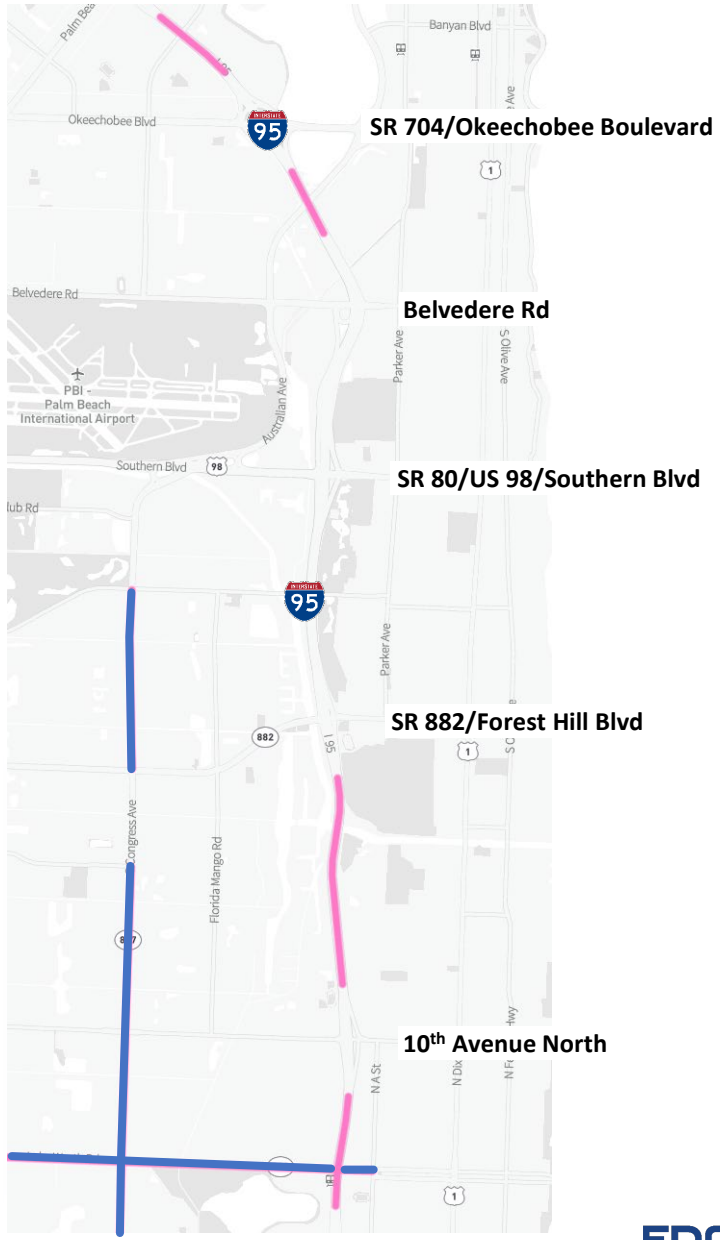
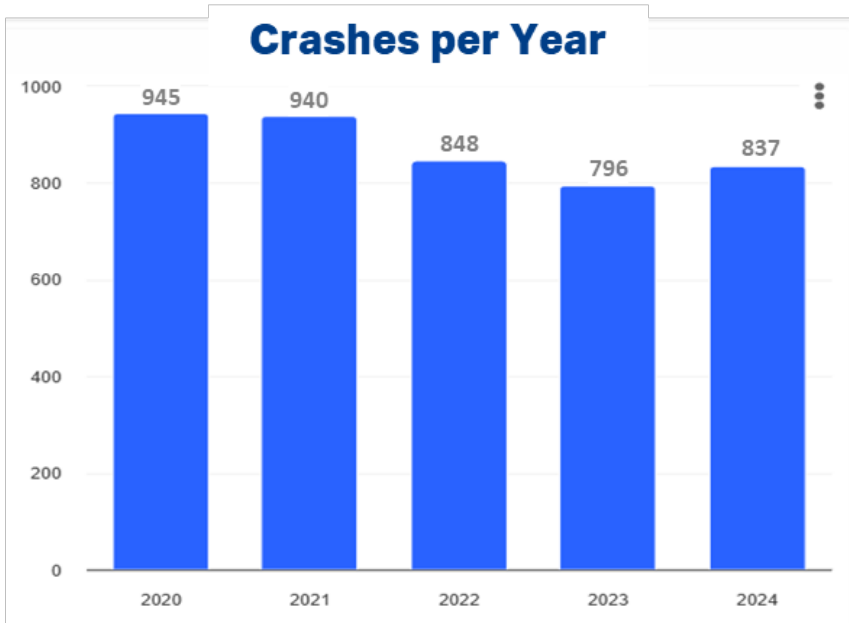
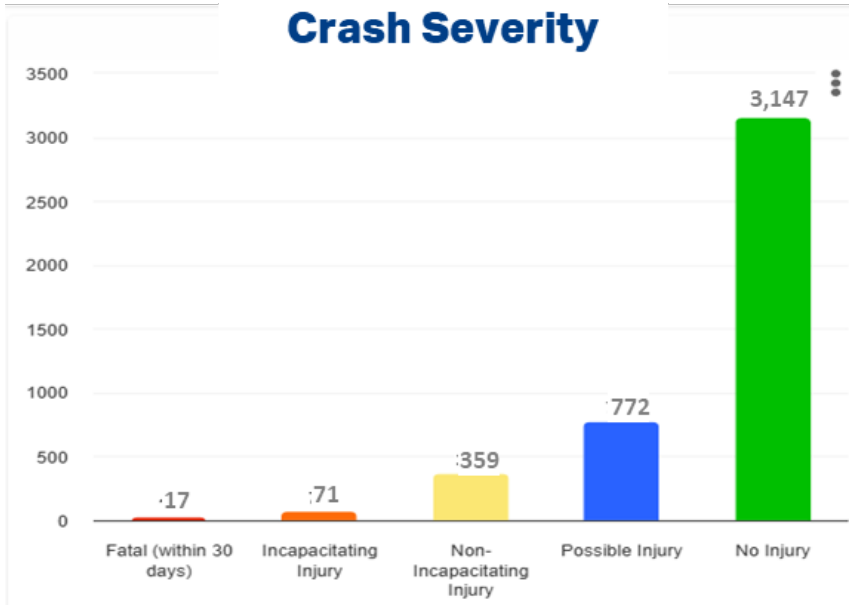
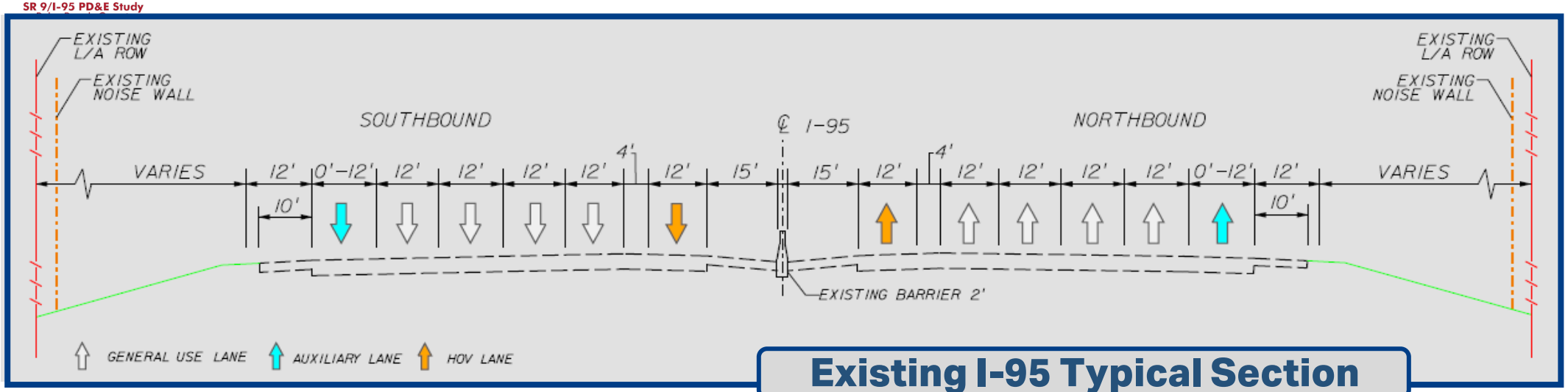
Safety





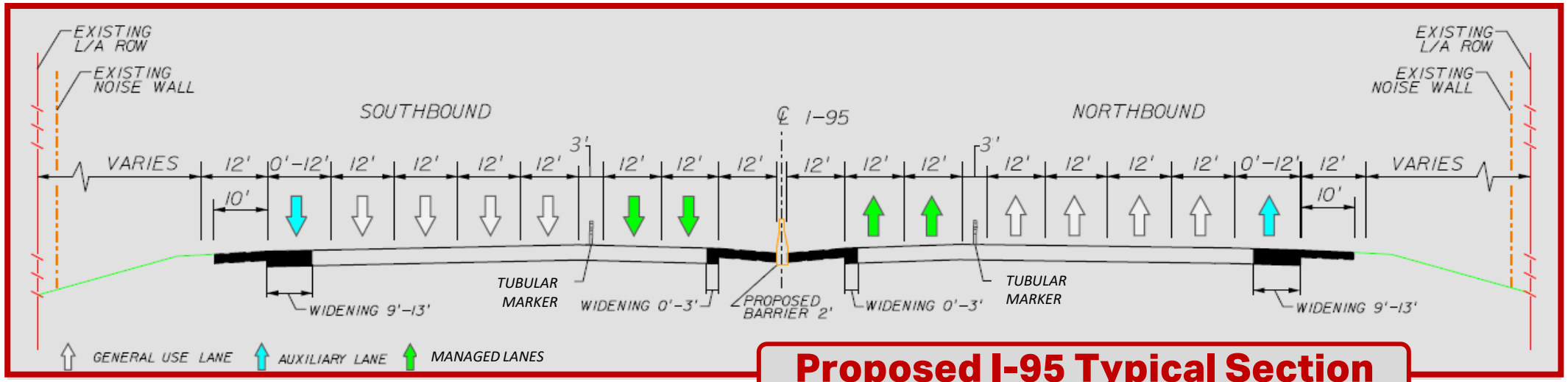


I-95: For all Build Alternatives (1 thru 8)



Existing I-95 Typical Section

- 8 General Use Lanes, 12-foot-wide
- 2 High Occupancy Vehicle (HOV) Lanes, 12-foot-wide
- 4-foot-wide separation
- 65 mph posted speed limit
- SFRC/CSX Railway parallel to I-95 along west side
- 15-foot-wide inside shoulder



Proposed I-95 Typical Section

- 8 General Use Lanes, 12-foot-wide
- 4 Managed Lanes, 12-foot-wide
- 3-foot-wide separation
- 65 mph posted speed limit
- SFRC/CSX Railway parallel to I-95 along west side
- 12-foot-wide inside shoulder

SR 9/I-95 PD&E Study
Palm Beach County

Alternatives Under Consideration

Project Alternatives	I-95 mainline	SR-80 Interchange	Belvedere Ramps	Comments
	1 Option	6 Options	2 Options	
No-Build Alternative	No-Build	No-Build	No-Build	Does not meet Purpose and Need
Alternative 1	Option 1 (4 GUL + 2 ML)	Option 1 (2018 PD&E)	*Interchangeable*	Violation of Ultimate Flight Path (Alt #1 used for comparison only)
Alternative 2	Option 1 (4 GUL + 2 ML)	*Interchangeable*	Option 1* (Ramp to Mercer Ave)	ROW required / Interchangeable with any mainline options
Alternative 3	Option 1 (4 GUL + 2 ML)	*Interchangeable*	Option 2* (Ramps split)	Interchangeable with any mainline options
Alternative 4	Option 1 (4 GUL + 2 ML)	Option 2 (DDI - 2 DC Ramps)	*Interchangeable*	Provides 2 direct connect I-95 to/from SR-80 movements (3)
Alternative 4A	Option 1 (4 GUL + 2 ML)	Option 2 (DDI - 2 DC Ramps) (1)	*Interchangeable*	Provides 2 direct connect I-95 to/from SR-80 movements (3)
Alternative 5	Option 1 (4 GUL + 2 ML)	Option 3 (DDI - 2 DC Ramps at different levels)	*Interchangeable*	Provides 2 direct connect I-95 to/from SR-80 movements (3) / different levels
Alternative 6	Option 1 (4 GUL + 2 ML)	Option 4 (DDI - 4 DC Ramps)	*Interchangeable*	Violation of Ultimate Flight Path / provides 4 direct connect I-95 to/from SR-80 movements
Alternative 7	Option 1 (4 GUL + 2 ML)	Option 5 (DDI - 3 DC Ramps + Braided Ramp at STA 1451)	*Interchangeable*	Feasible alternative if north PBIA runway is not extended to the east (4)
Alternative 7A	Option 1 (4 GUL + 2 ML)	Option 5 (DDI - 3 DC Ramps + Braided Ramp at STA 1455)	*Interchangeable*	Feasible alternative with additional ROW required
Alternative 8	Option 1 (4 GUL + 2 ML)	Option 6 (DDI - 3 DC Ramps + at grade ML egress) (2)	*Interchangeable*	Feasible / provides 3 direct connect ramps I-95 to/from SR-80 + 1 at grade ML exit

(1) Alternative 4A - Proposed alternative design with Shared-Used Path along borders of DDI

(2) Alternative 8 - Proposed ML egress for SB I-95 in the Okeechobee Blvd interchange area

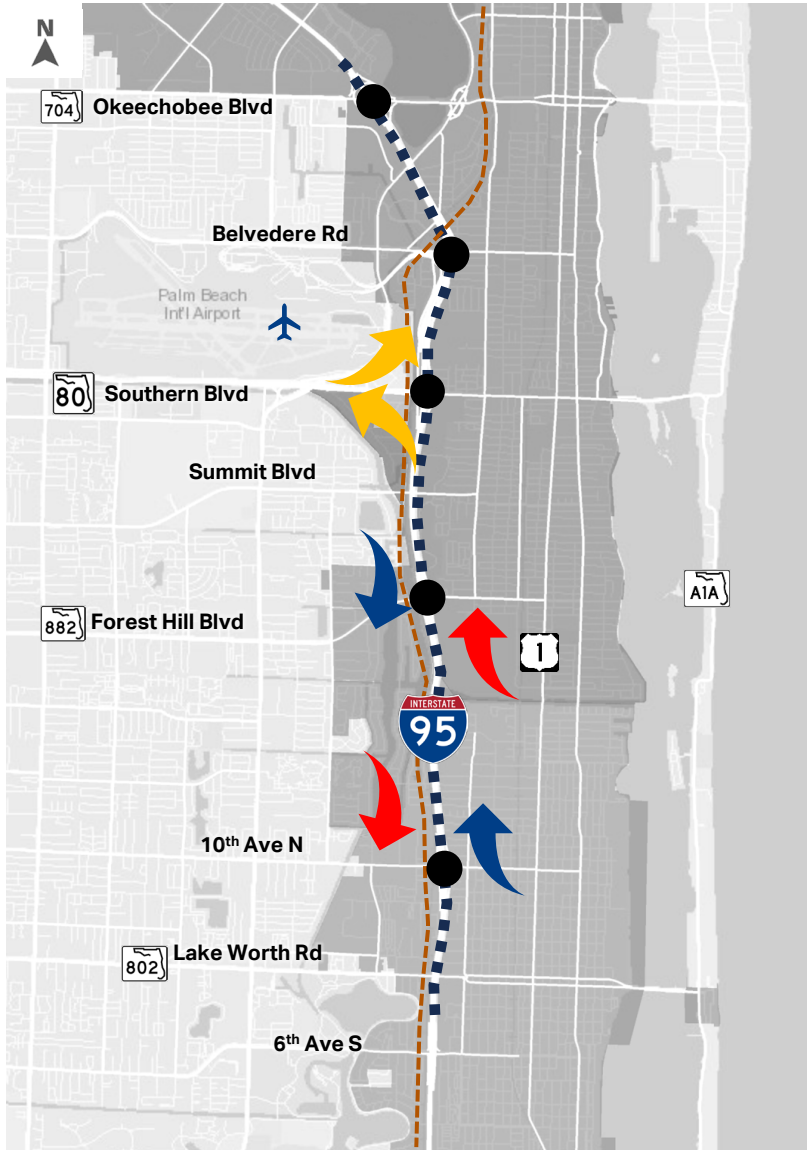
*Options 1 or 2 for the Belvedere can be selected as improvements to Alternatives 4, 4A, 5, 6, 7, 7A, or 8

(3) Alternatives 4 / 4A / 5 provide two direct connect movements: *NB I-95 to WB SR-80*; *EB SR-80 to NB I-95*

(4) Alternative 7 will be acceptable if north PBIA runway is not extended as part of the Airport Master Plan

FDOT

I-95 mainline with Access Points: For all Build Alternatives



Northbound

Entrance provided from I-95 mainline and interchanges south of 10th Ave North (at-grade)

Exit provided to I-95 mainline and interchanges north of Forest Hill Boulevard (at-grade)

Southbound

Entrance provided from I-95 mainline and interchanges north of Forest Hill Boulevard (at-grade)

Exit provided to I-95 mainline and interchanges south of 10th Ave North (at-grade)

Legend

- Project Limits
- Interchanges

Managed Lanes Entrance (at-grade)

Managed Lanes Exit (at-grade)

Direct Connect Ramps to/from I-95 and SR 80/Southern Boulevard (Alternatives 4 thru 8)

SR 9/I-95 PD&E Study
Palm Beach County

Public Involvement

Public Meetings

- Public Kick off Presentation: December 2023
- Alternative Public Workshops:
  - *Virtual:* Wednesday, July 30, 2025
  - *In-Person:* Thursday, July 31, 2025
- Public Hearing: (Anticipated) Fall 2026

- Attend Public Meetings
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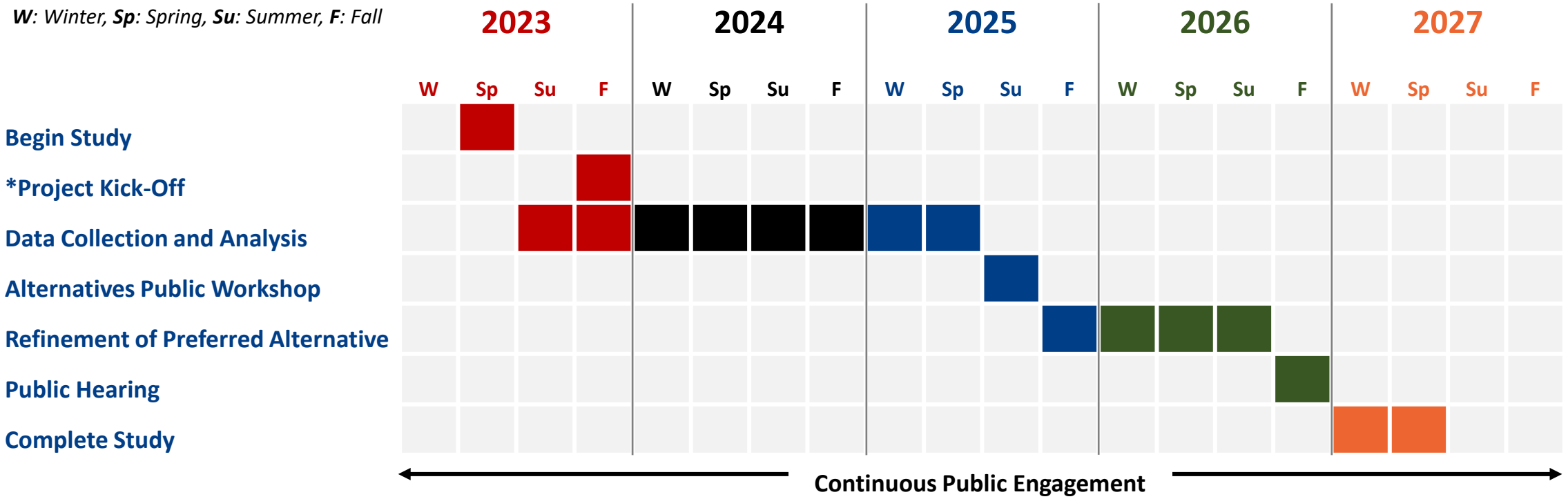
Elected Officials
Agencies
Local Businesses
Local Neighborhoods

SR 9/I-95 PD&E Study
Palm Beach County

PD&E Studies Project Milestones Schedule

***W**: Winter, **Sp**: Spring, **Su**: Summer, **F**: Fall*



*A presentation to kick-off this project was given to the Palm Beach Transportation Planning Agency (TPA) on Thursday, December 14, 2023 at 9:00 am.

I-95 PD&E Study Funding (444202-1 and 444202-2): Design: Unfunded I Right-of-Way: Unfunded I Construction: Unfunded
SR 80/Southern Boulevard (435516-1): Design: Funded (2026) I Right-of-Way: Unfunded I Construction: Unfunded

Southern PD&E Study

SR 9/I-95 from South of Linton Boulevard/CR 782 to North of 6th Avenue South

Lance K. Jones, Jr., P.E.
FDOT Project Manager

Florida Department of Transportation
3400 W Commercial Blvd
Ft. Lauderdale, FL 33309

Lance.Jones1@dot.state.fl.us

954-777-4680

Northern PD&E Study

SR 9/I-95 from North of 6th Avenue South to North of SR 704/Okeechobee Boulevard

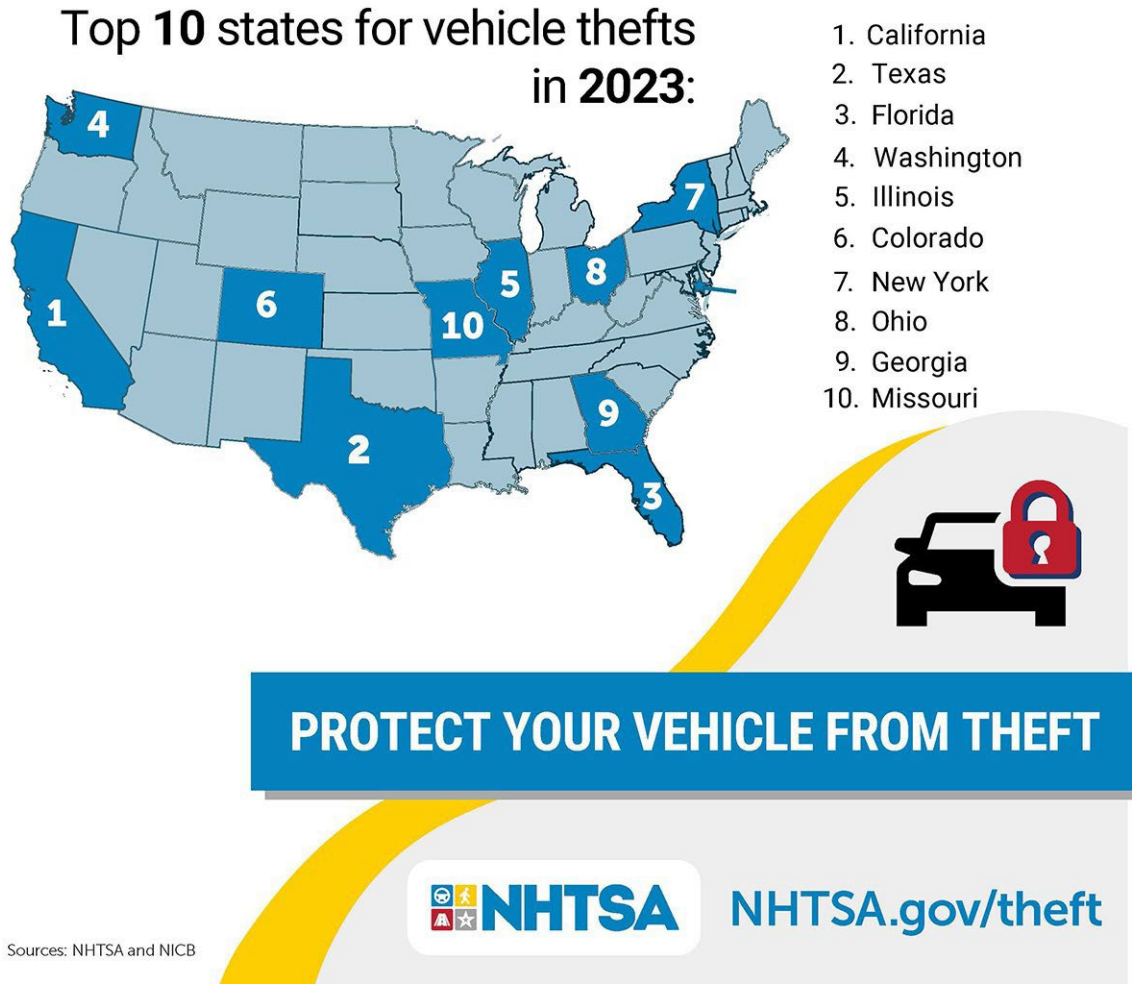
Vanita Saini, P.E.
FDOT Project Manager

Florida Department of Transportation
3400 W Commercial Blvd
Ft. Lauderdale, FL 33309

vanita.saini@dot.state.fl.us

954-777-4468

WHAT YOU SHOULD KNOW



SR 9/I-95 PD&E Study
Palm Beach County

FDOT

Palm Beach
Transportation Planning Agency

Thank You

Project Development and Environment (PD&E) Study for SR 9/I-95 from South of Linton Boulevard/CR 782 to North of SR 704/Okeechobee Boulevard

Southern PD&E Study: Financial Project ID: 444202-1-22-02 I ETDM: 14508
Northern PD&E Study: Financial Project ID: 444202-2-22-02 I ETDM: 14509