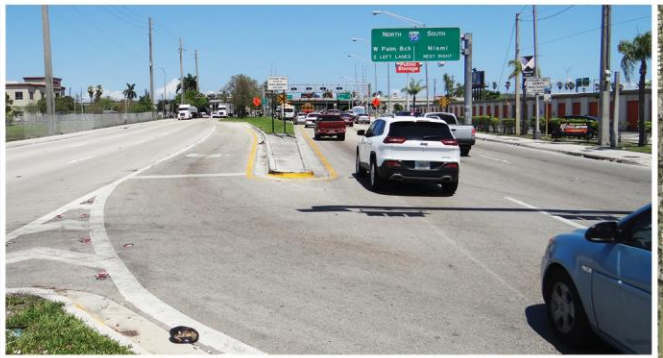
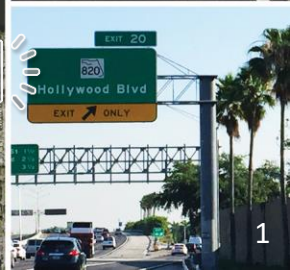
FLORIDA DEPARTMENT OF TRANSPORTATION

Virtual Public Hearing
August 26, 2021

PROJECT DEVELOPMENT & ENVIRONMENT (PD&E) STUDY

Interstate 95 (I-95/SR 9) • From South of Hallandale Beach Boulevard (SR 858) to North of Hollywood Boulevard (SR 820)
Broward County, FL • FPID No.: 436903-1-22-02 • ETDM No.: 14254





Public Hearing – Laws and Regulations

This public hearing is being held in accordance with:

- **Section 120.525, F.S.** – Meetings, hearings, and workshops
- **Section 286.011, F.S.** – Government in the Sunshine Law
- **Section 335.199, F.S.** – Transportation projects modifying access to adjacent property
- **Section 339.155, F.S.** – Transportation planning
  - **Americans with Disabilities Act of 1990 (ADA)**
  - **Title VI of the Civil Rights Act of 1964 and Other Nondiscrimination Laws**
- **49 CFR Part 24**, Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally-Assisted Programs
- **40 CFR Part 1506**, Other Requirements of the **National Environmental Policy Act (NEPA)**

Public Hearing – Title VI Non-Discrimination

The Florida Department of Transportation is required to comply with various non-discrimination laws and regulations, including Title VI of the Civil Rights Act of 1964. Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status.

Persons wishing to express their concerns about Title VI may do so by contacting either:

District Four - Florida Department of Transportation
District Four, Title VI Coordinator
Sharon SinghHagyan
3400 West Commercial Boulevard
Fort Lauderdale, Florida 33309-3421
(954) 777-4190 or
Toll free at (866) 336-8435, ext. 4190
Sharon.SinghHagyan@dot.state.fl.us

or

Tallahassee Office - Florida Department of Transportation, State Title VI Coordinator
Jacqueline Paramore
Equal Opportunity Office
605 Suwannee Street, MS 65
Tallahassee, Florida 32399-0450
(850) 414-4753
Jacqueline.Paramore@dot.state.fl.us

All inquiries or complaints will be handled according to FDOT procedure and in a prompt and courteous manner.

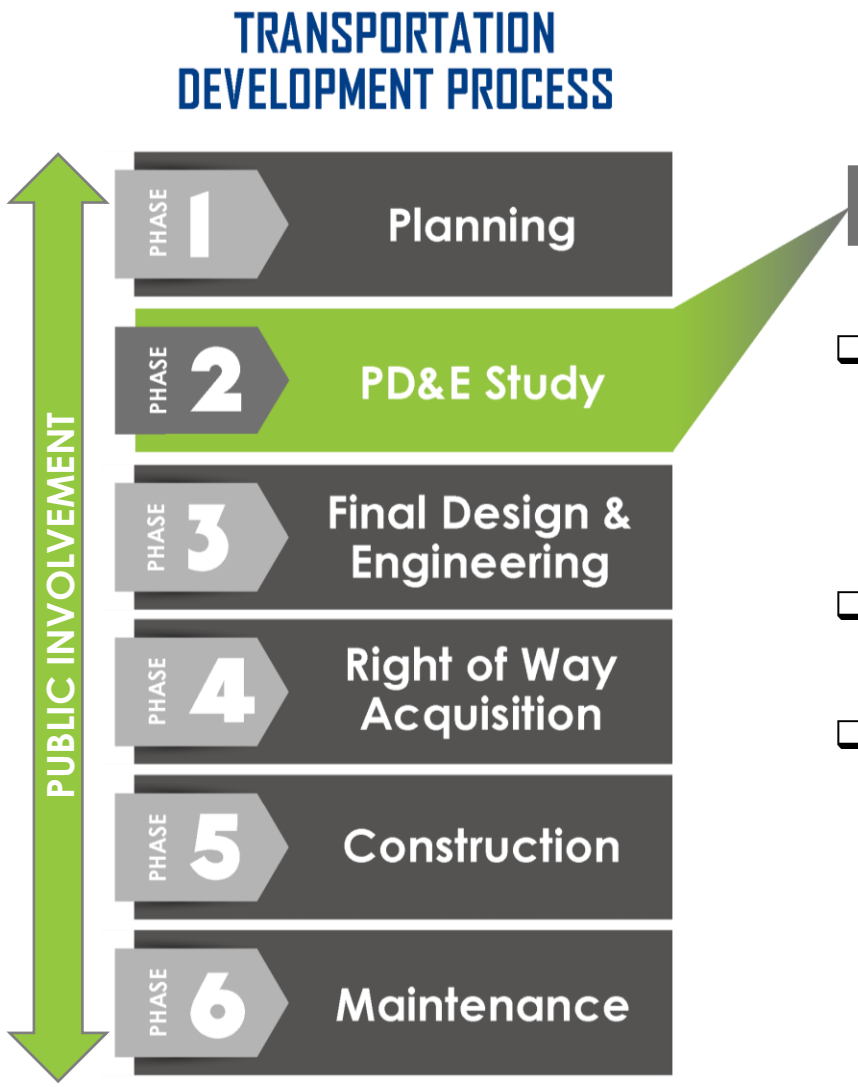
Memorandum of Understanding Disclosure

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried-out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016, and executed by FHWA and FDOT.

Purpose of Tonight's Public Hearing

- Share information with the public
- Serves as an official forum to discuss the maps, drawings, and other information about the project
- Provide an opportunity for public input
- All public comments will become part of the project's public record

What is a PD&E Study?



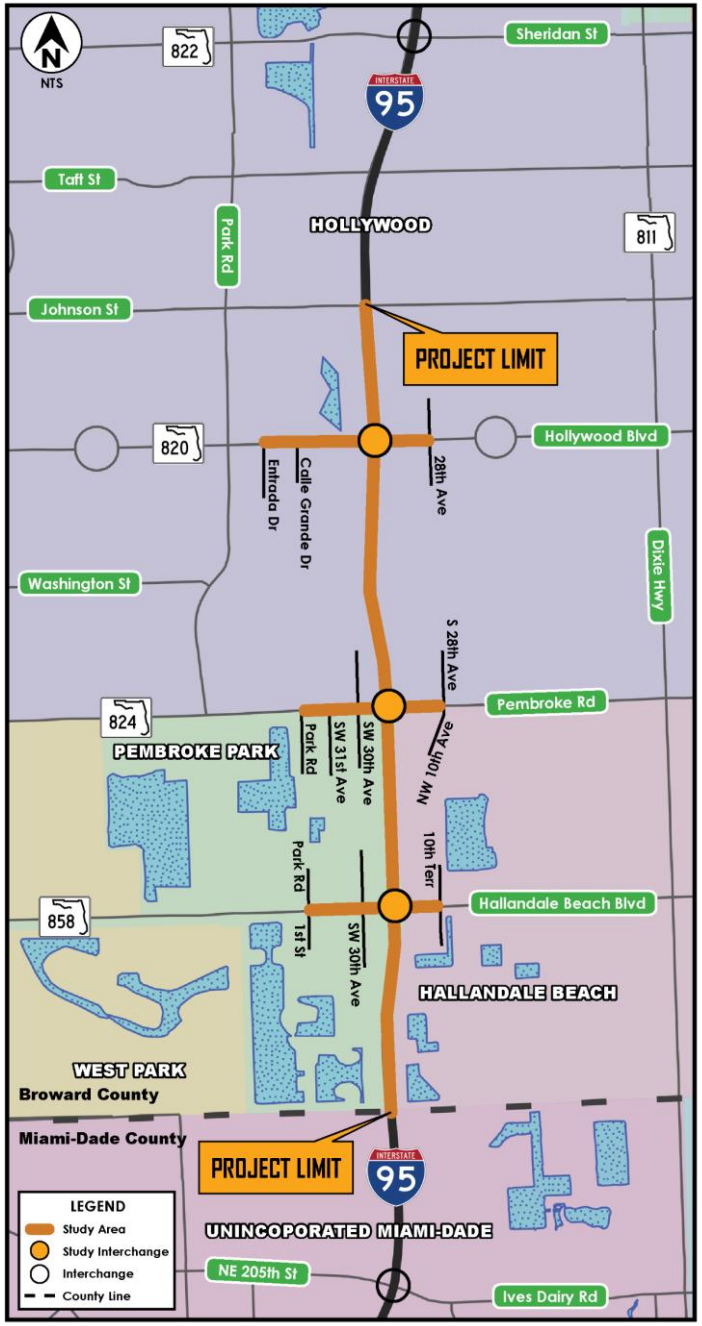
PHASE 2

PHASE 2 PD&E Study

- Formal FDOT process to ensure that consideration is given to environmental impacts, social impacts, public input, engineering design and project costs
- Required to satisfy the National Environmental Policy Act
- Involves engineering analysis and environmental evaluation, all accomplished within the context of a public participation plan

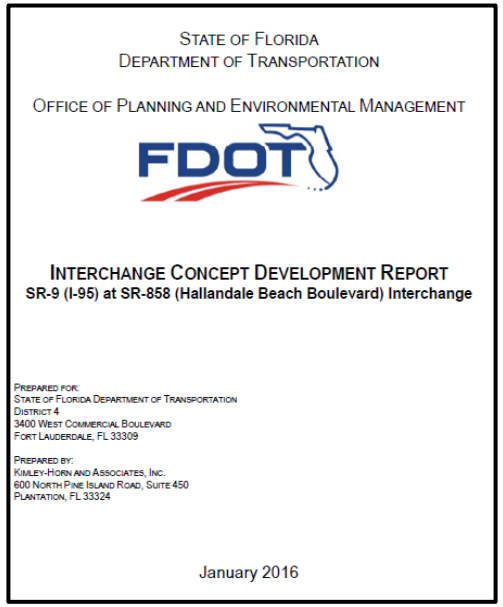
PD&E Study - Project Limits and Study Area

- From: South of Hallandale Beach Boulevard (Miami-Dade/Broward Countyline)
- To: North of Hollywood Boulevard (Johnson Street)
- 3 Miles
- 3 Interchanges
- Broward County, Florida
- Municipalities:
  - Hallandale Beach
  - Pembroke Park
  - Hollywood



Previous Interchange Planning Study

- I-95 Interchange Planning Study (2016)
- Study determined that the proposed interchange improvements were feasible, viable and constructible
- Study recommended a detailed analysis to support the feasibility and viability during the PD&E Study phase



STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

OFFICE OF PLANNING AND ENVIRONMENTAL MANAGEMENT

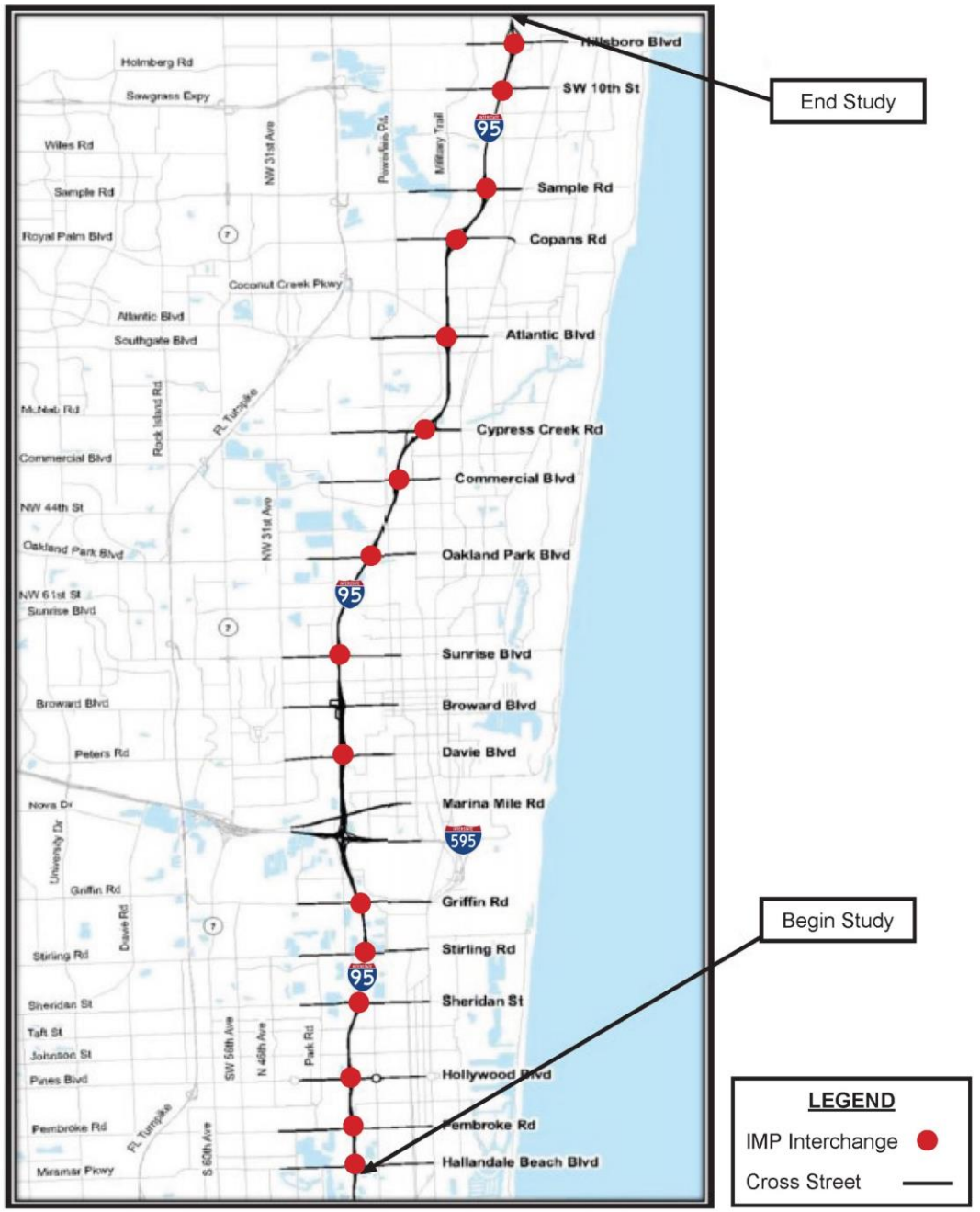
FDOT

INTERCHANGE CONCEPT DEVELOPMENT REPORT
SR-9 (I-95) at SR-858 (Hallandale Beach Boulevard) Interchange

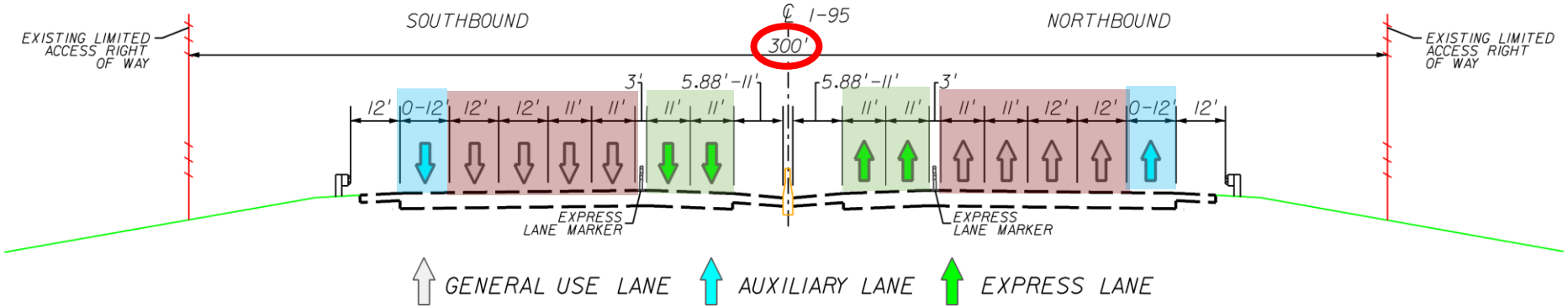
PREPARED FOR:
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT 4
3400 WEST COMMERCIAL BOULEVARD
FORT LAUDERDALE, FL 33309

PREPARED BY:
KIMLEY-HORN AND ASSOCIATES, INC.
600 NORTH PINE ISLAND ROAD, SUITE 450
PLANTATION, FL 33324

January 2016

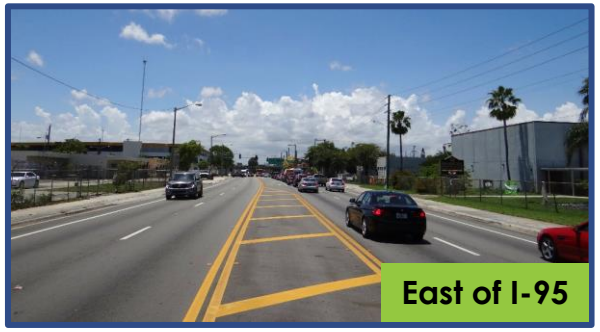


Existing Corridor Characteristics



Hallandale Beach Boulevard

Pembroke Road



Hollywood Boulevard

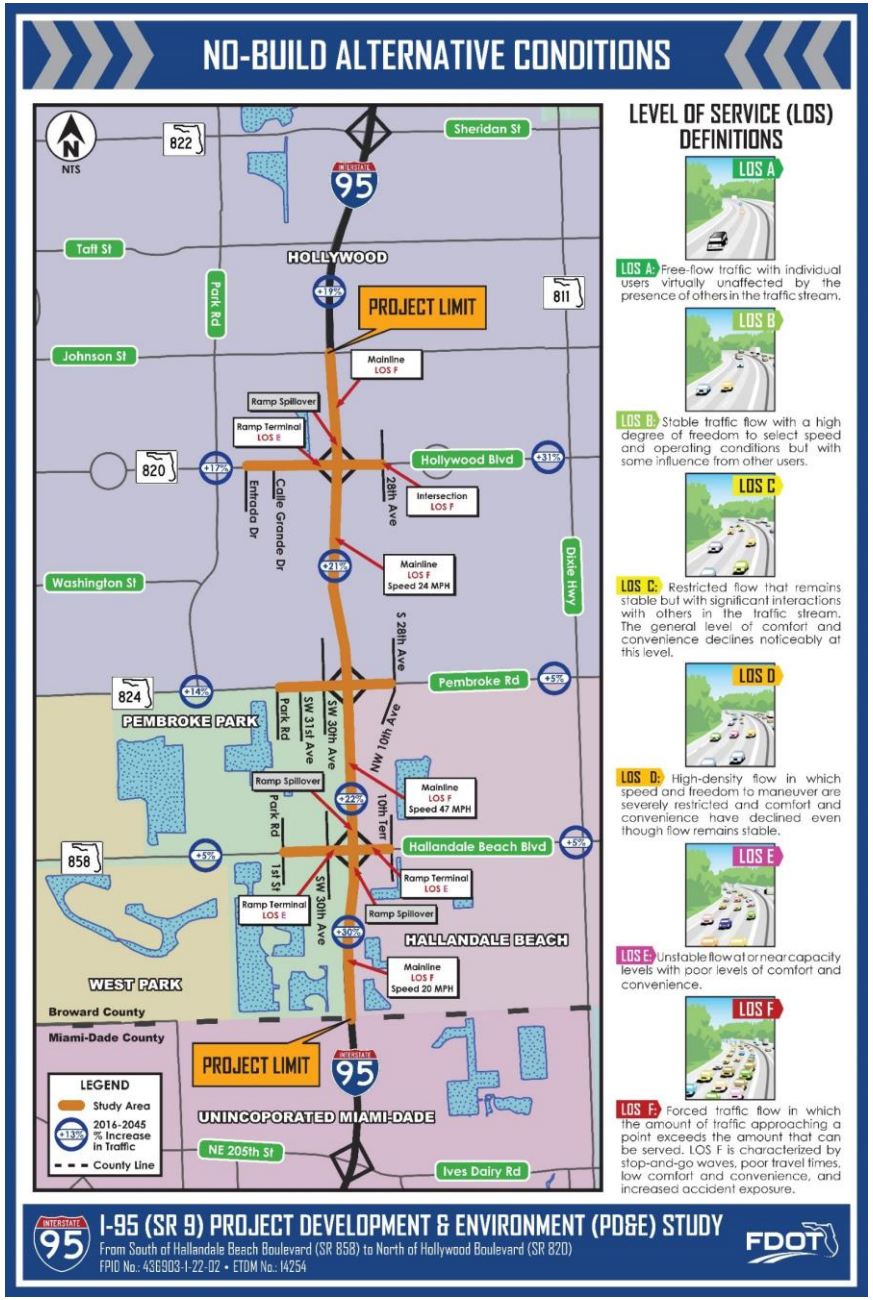
National Highway System

SIS
Strategic Intermodal System

EVACUATION ROUTE

PD&E Study - Scope of Project

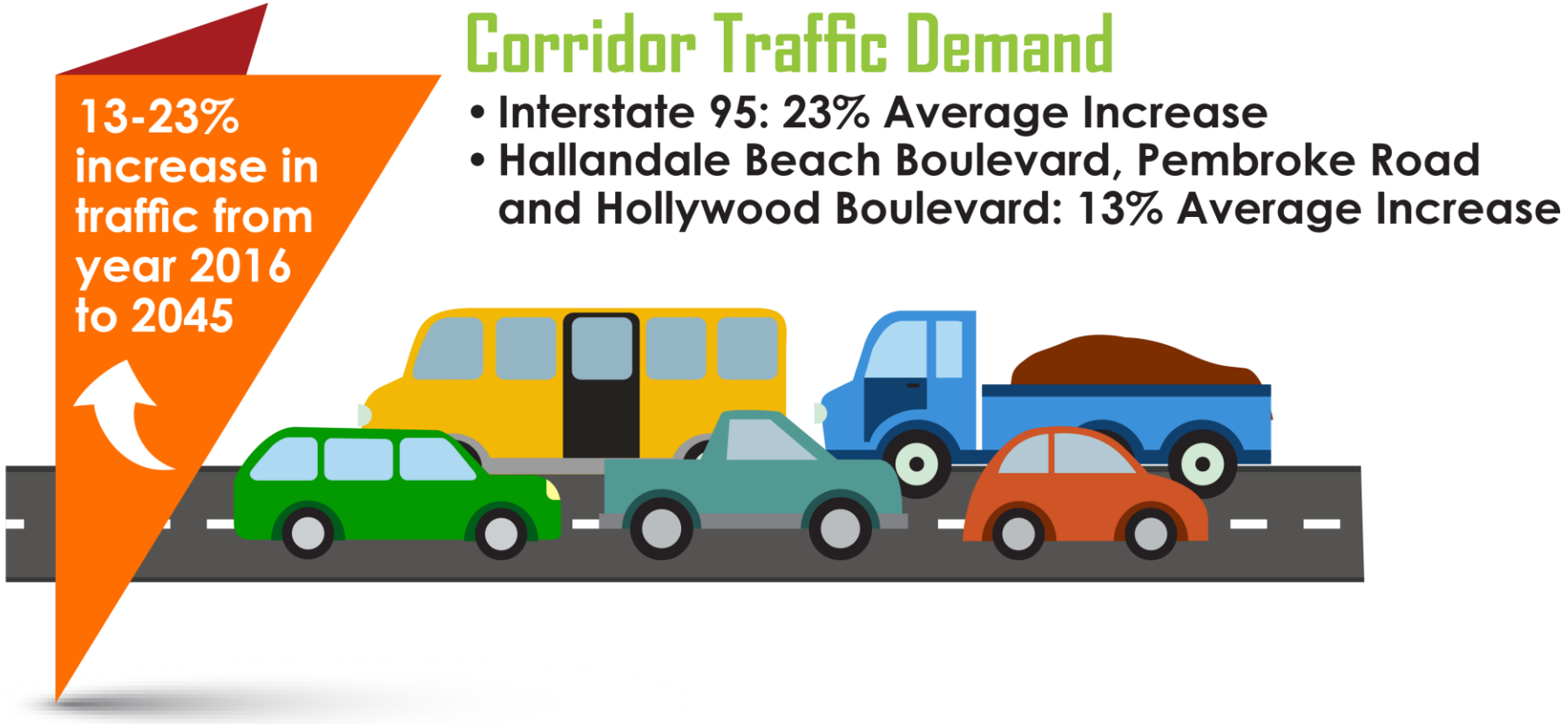
- ❑ Evaluate Interchange Improvements
- ❑ Identify Ramp Terminal Intersection Improvements
- ❑ Evaluate the social, economic, physical and environmental impacts associated with the potential improvements
- ❑ Evaluate Traffic Operations
  - Opening Year 2030
  - Design Year 2045
- ❑ Identify a Preferred Alternative



PD&E Study – Needs of the Project

- **Purpose**
  - The primary purpose of this project is to add interchange capacity to meet future transportation demand, improve travel time reliability and to provide long-term mobility options. The project also includes operational, intersection capacity and safety enhancements.

- **Needs**



Collisions due to heavy congestion and constant stop-and-go

Safety

- Over 2,800 crashes on I-95 between 2008-2015.
- Congestion and additional future traffic will increase accidents within the area.

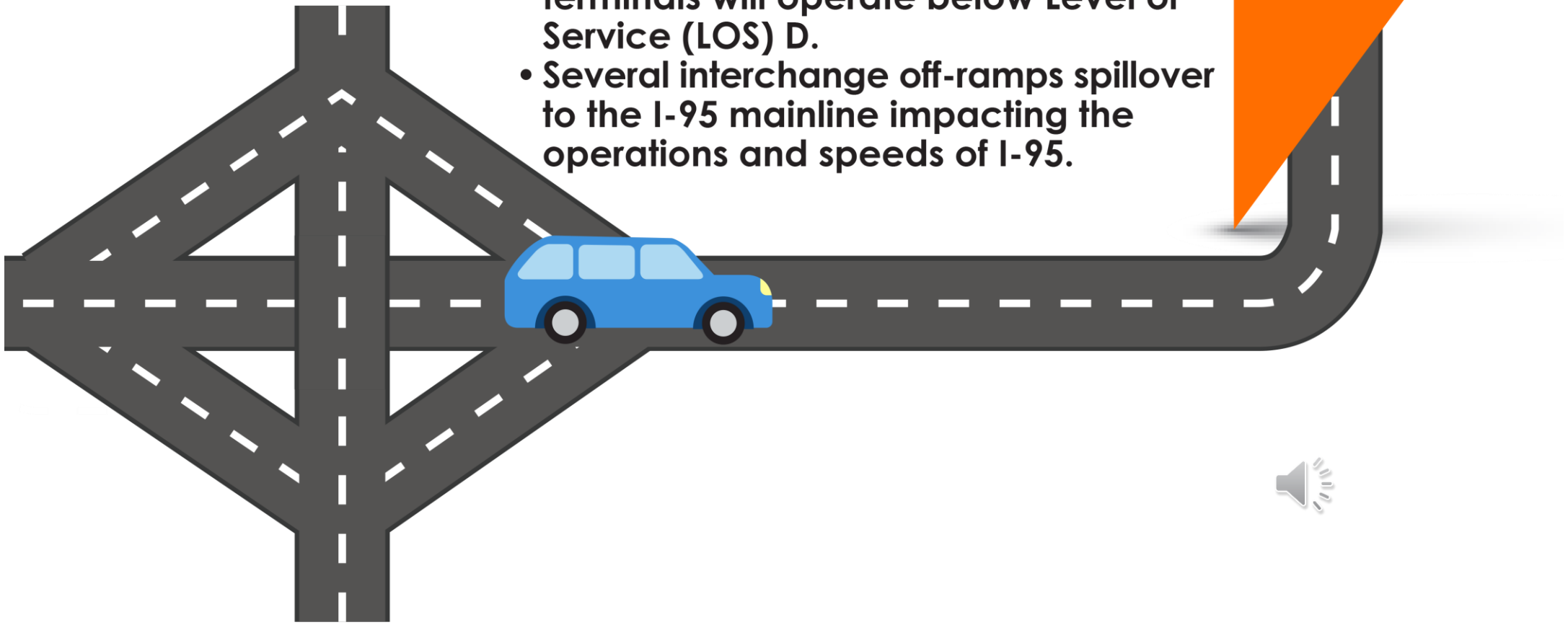
Transit Operations

- Existing congestion impacts transit operations.
- Additional capacity provides opportunities for transit expansions.

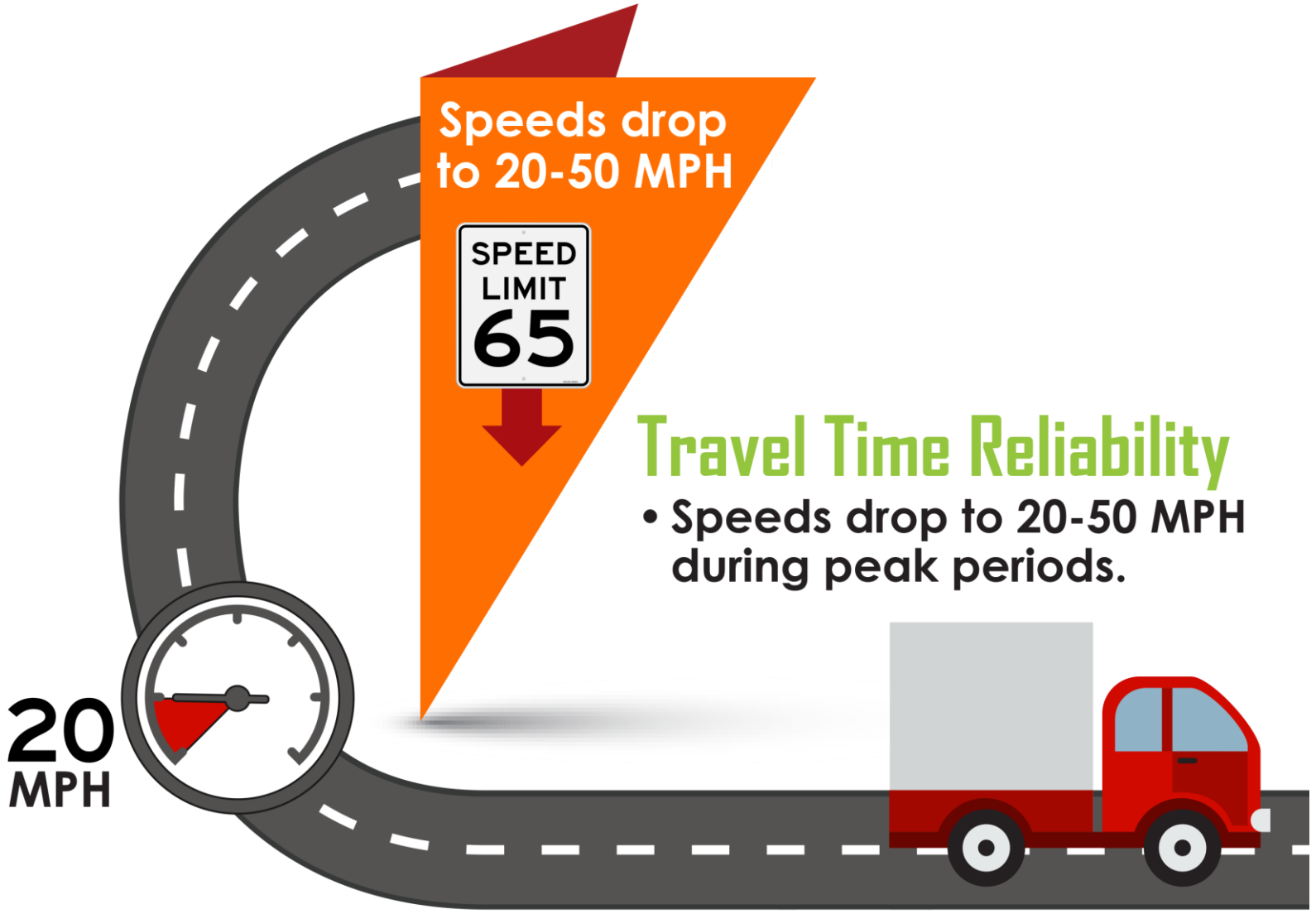
Interchange Capacity Needs

- I-95 freeway segments between interchanges and interchange ramp terminals will operate below Level of Service (LOS) D.
- Several interchange off-ramps spillover to the I-95 mainline impacting the operations and speeds of I-95.

Additional capacity is needed now



PD&E Study – Needs of the Project



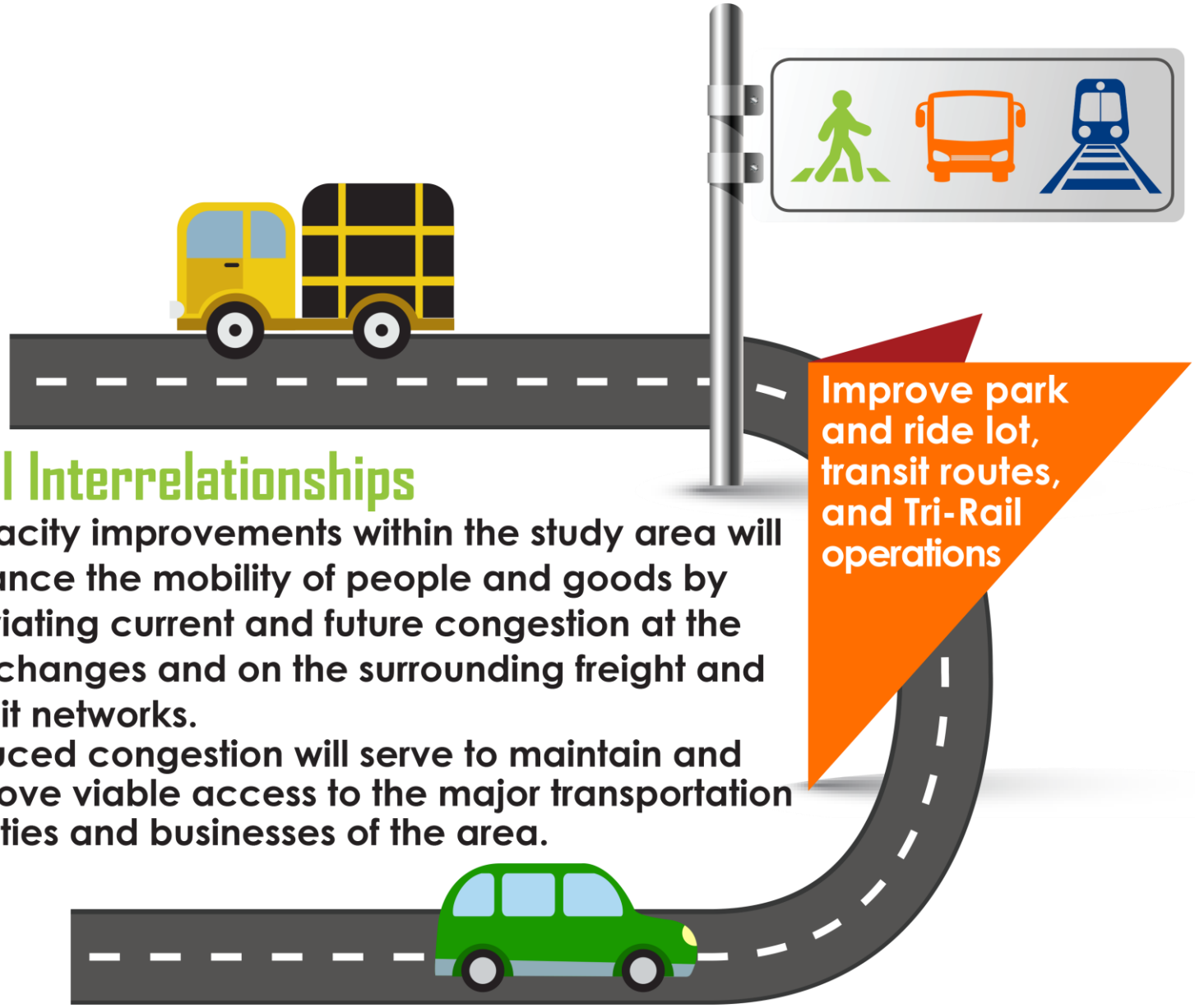
Travel Time Reliability

- Speeds drop to 20-50 MPH during peak periods.

Population Growth

- Broward County population will increase by 16% between 2018 and 2045.
- Broward County employment will grow by 25%.

Increase in population will result in increased traffic

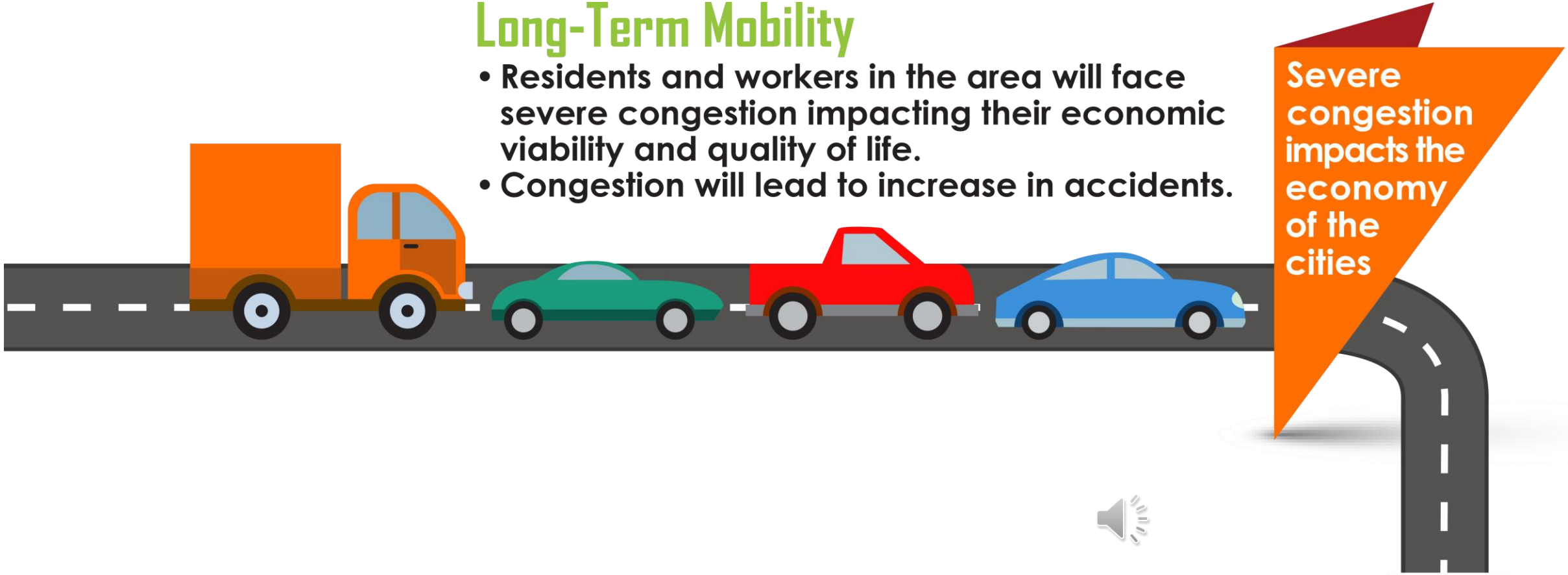


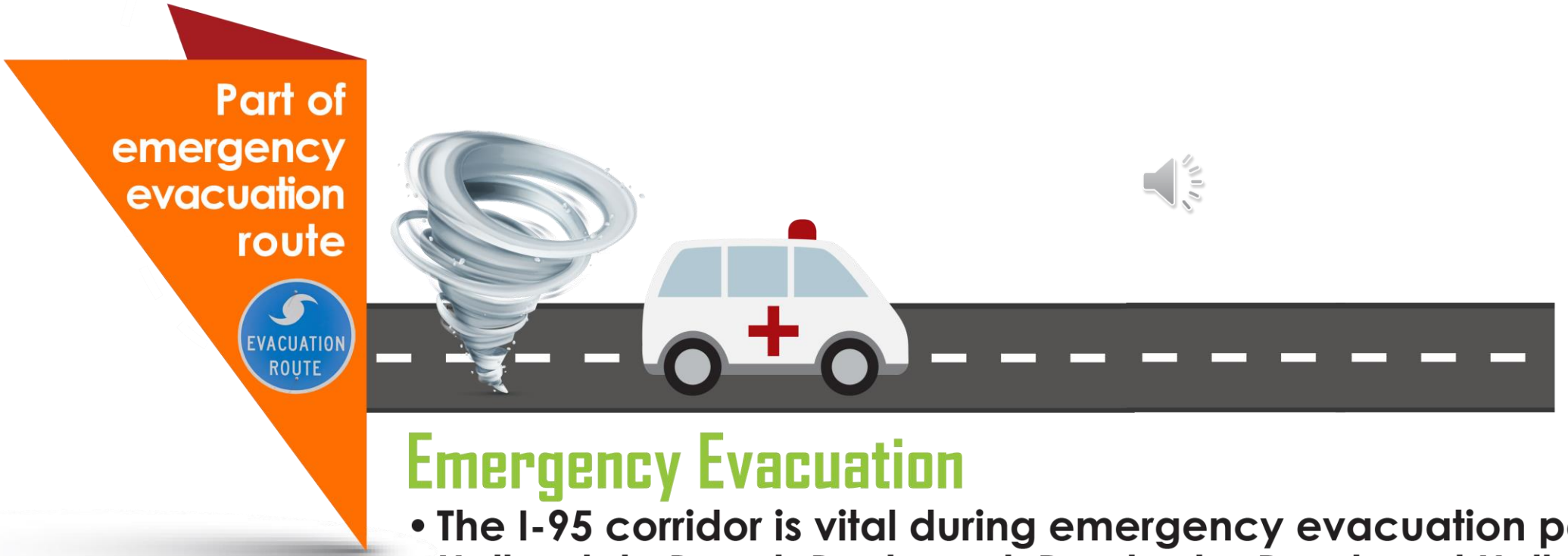
Modal Interrelationships

- Capacity improvements within the study area will enhance the mobility of people and goods by alleviating current and future congestion at the interchanges and on the surrounding freight and transit networks.
- Reduced congestion will serve to maintain and improve viable access to the major transportation facilities and businesses of the area.

Long-Term Mobility

- Residents and workers in the area will face severe congestion impacting their economic viability and quality of life.
- Congestion will lead to increase in accidents.





Emergency Evacuation

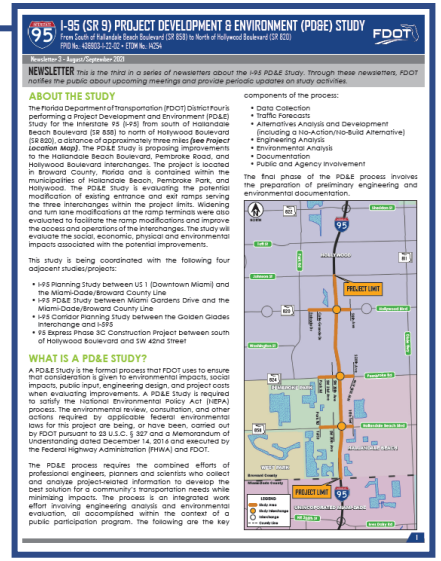
- The I-95 corridor is vital during emergency evacuation periods.
- Hallandale Beach Boulevard, Pembroke Road, and Hollywood Boulevard are also part of the emergency evacuation routes network.

Public Outreach and Coordination

FDOT has been coordinating meetings with the public, agencies and stakeholders throughout the entire study

- **Public Meetings**
  - **Public Kick-off Meeting – May 25, 2017**
  - **Alternatives Public Workshop – June 7, 2018**
  - **Public Hearing – Tonight's Meeting**
- **Other Meetings**
  - **Small Group Meetings**
  - **One-on-One Stakeholder Meetings**
- **Newsletters**
- **Project Website**

www.fdot.gov/projects/sefl/future/95/858-820/



I-95 (SR 9) PROJECT DEVELOPMENT & ENVIRONMENT (PD&E) STUDY

From South of Hallandale Beach Boulevard (SR 858) to North of Hollywood Boulevard (SR 820)

FPID No. 438803-1-22-02 • ETDM No. 14254

Newsletter 2 – August/September 2017

NEWSLETTER *This is the third in a series of newsletters about the I-95 PD&E Study. Through these newsletters, FDOT notifies the public about upcoming meetings and provide periodic updates on study activities.*

ABOUT THE STUDY

The Florida Department of Transportation (FDOT) District Four is performing a Project Development and Environment (PD&E) Study for the Interstate 95 (I-95) from south of Hallandale Beach Boulevard (SR 858) to north of Hollywood Boulevard (SR 820), a distance of approximately three miles *(see Project Location Map)*. The PD&E Study is proposing improvements to the Hallandale Beach Boulevard, Pembroke Road, and Hollywood Boulevard interchanges. The project is located in Broward County, Florida and is contained within the municipalities of Hallandale Beach, Pembroke Park, and Hollywood. The PD&E Study is evaluating the potential modification of existing entrance and exit ramps serving the three interchanges within the project limits. Widening and turn lane modifications at the ramp terminals were also evaluated to facilitate the ramp modifications and improve the access and operations of the interchanges. The study will evaluate the social, economic, physical and environmental impacts associated with the potential improvements.

This study is being coordinated with the following four adjacent studies/projects:

- I-95 Planning Study between US 1 (Downtown Miami) and the Miami-Dade/Broward County Line
- I-95 PD&E Study between Miami Gardens Drive and the Miami-Dade/Broward County Line
- I-95 Corridor Planning Study between the Golden Glades Interchange and I-595
- I-95 Express Phase 3C Construction Project between south of Hollywood Boulevard and SW 42nd Street

WHAT IS A PD&E STUDY?

A PD&E Study is the formal process that FDOT uses to ensure that consideration is given to environmental impacts, social impacts, public input, engineering design, and project costs when evaluating improvements. A PD&E Study is required to satisfy the National Environmental Policy Act (NEPA) process. The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016 and executed by the Federal Highway Administration (FHWA) and FDOT.

The PD&E process requires the combined efforts of professional engineers, planners and scientists who collect and analyze project-related information to develop the best solution for a community's transportation needs while minimizing impacts. The process is an integrated work effort involving engineering analysis and environmental evaluation, all accomplished within the context of a public participation program. The following are the key components of the process:

- Data Collection
- Traffic Forecasts
- Alternatives Analysis and Development (including a No-Action/no-Build Alternative)
- Engineering Analysis
- Environmental Analysis
- Documentation
- Public and Agency Involvement

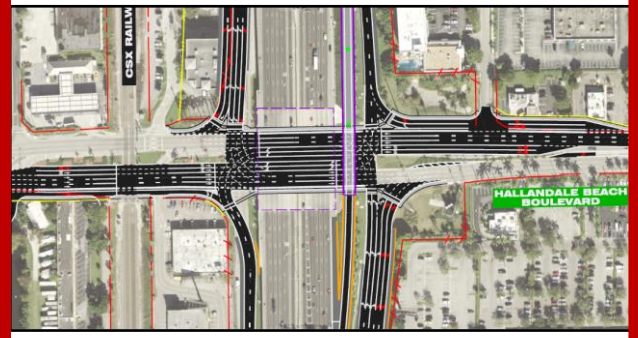
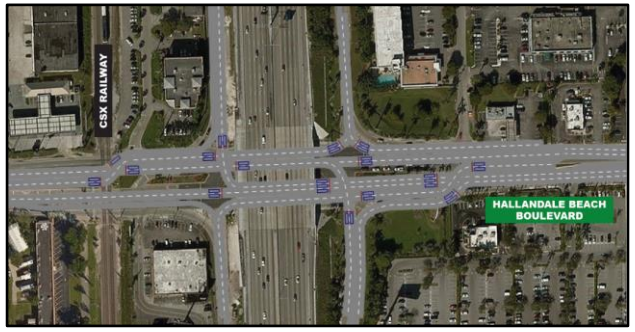
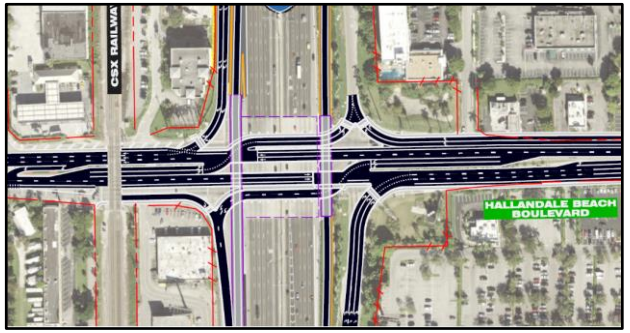
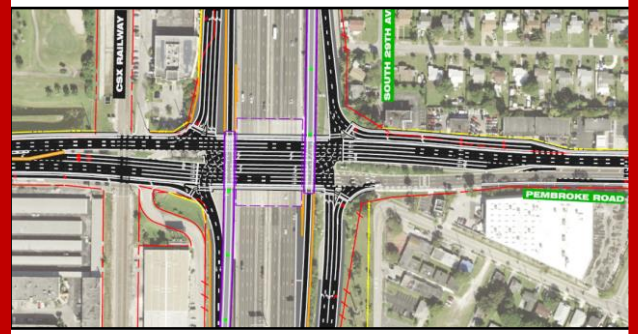
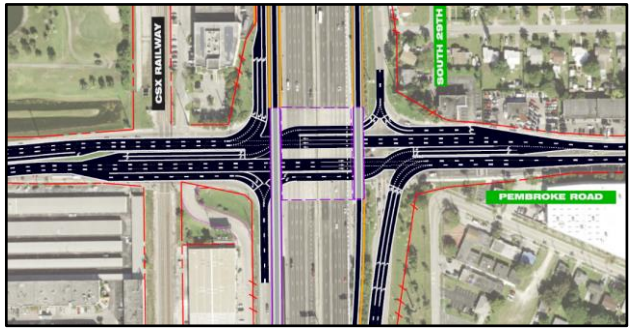
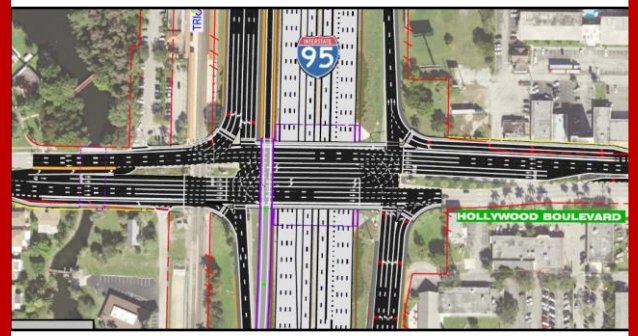
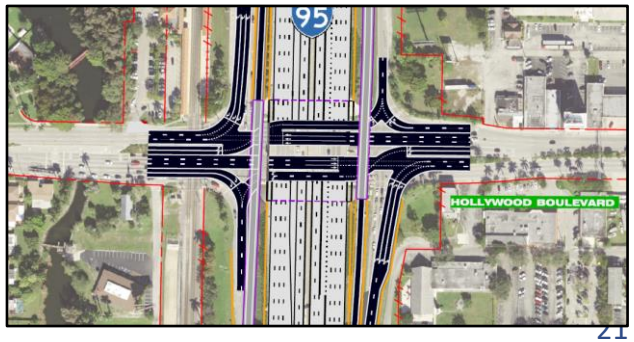
The final phase of the PD&E process involves the preparation of preliminary engineering and environmental documentation.

PROJECT LIMIT

PROJECT LIMIT

Alternatives Analysis - Interchanges

- Evaluate alternatives that will address existing and projected operating deficiencies
- Multiple interchange alternatives were considered, including a No-Build Alternative

DIAMOND	DIVERGING DIAMOND	DISPLACED LEFT TURN	CONTINUOUS FLOW
			
			
			

Alternatives Analysis – I-95 and Interchanges

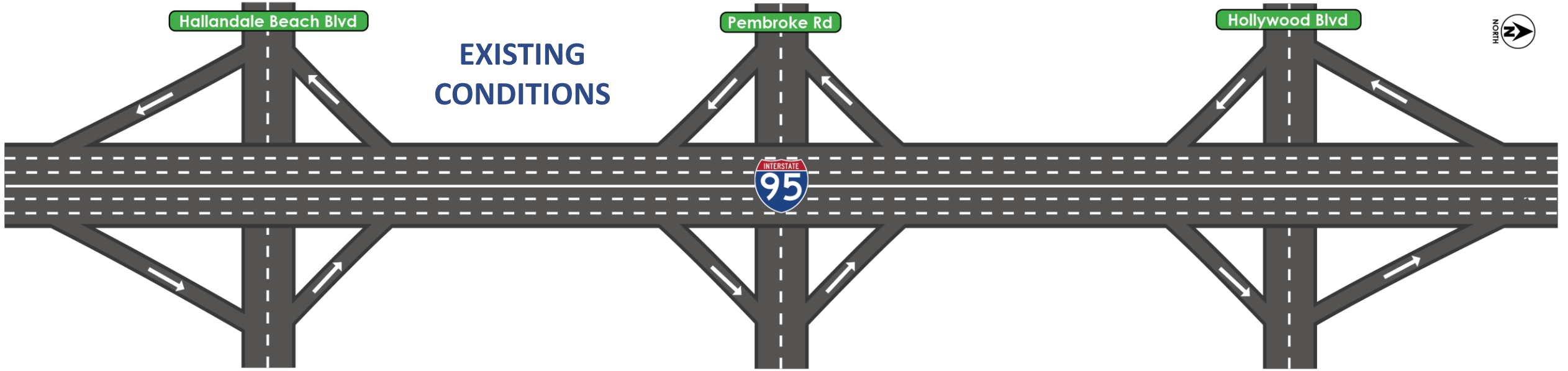
- Two Build Alternatives, Alternatives 1 and 2, were fully evaluated within the study area, which were presented during the 2018 Alternatives Public Workshop.

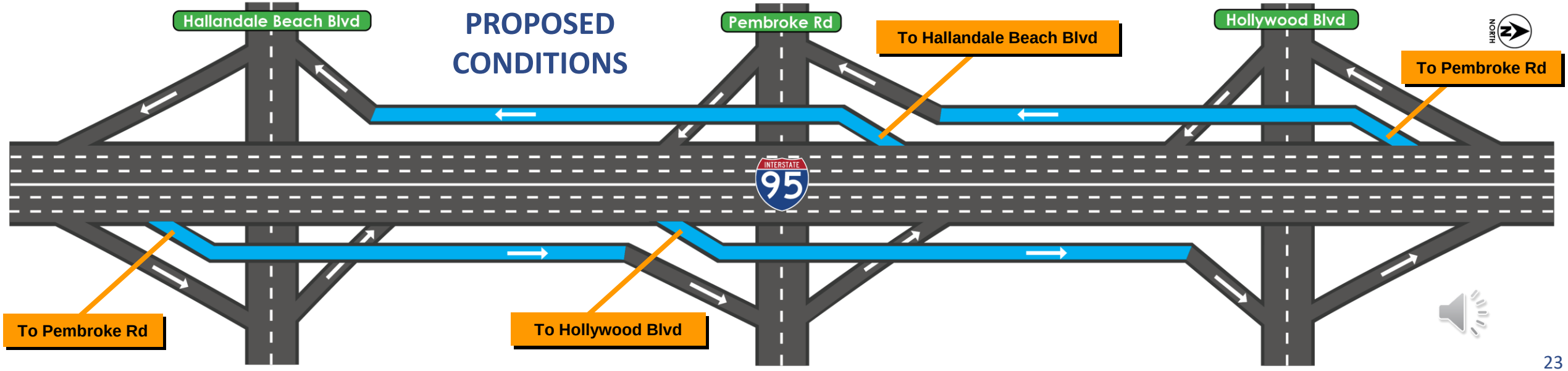
- Both alternatives considered relocating interchange ramps and added exclusive turn lanes at the ramp terminal intersections. Both alternatives maintaining the existing diamond interchange configuration.

Alternative 1

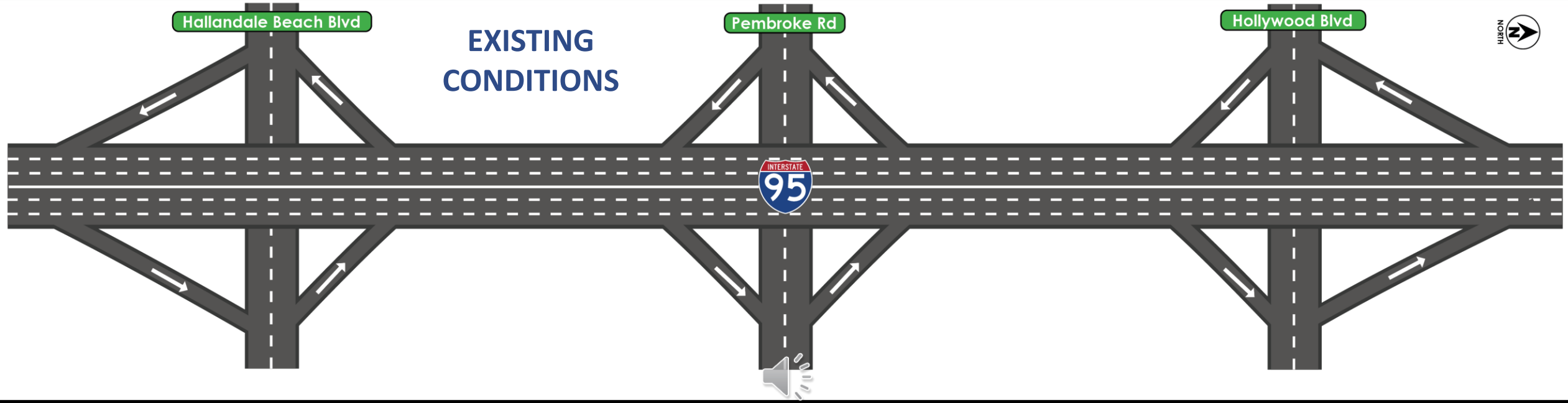
Alternative 2

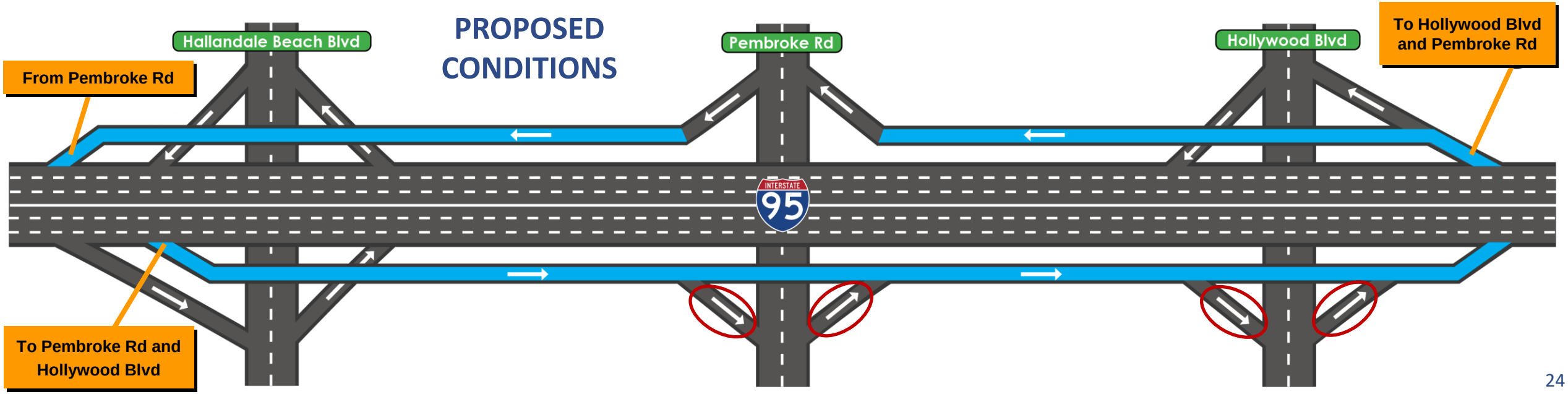
Alternative 1 – Braided Ramps





Alternative 2 – Collector Distributor Roadway System





Alternatives Evaluation Matrix

EVALUATION MATRIX

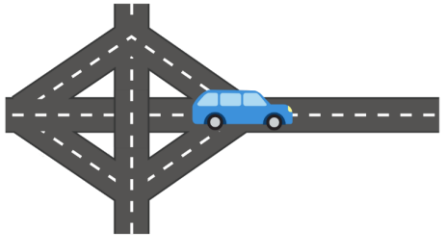
QUALITATIVE COMPARISON					
Variables/Parameters	No-Build Alternative	Build Alternative 1	Build Alternative 2	Best Build Alternative	
				Alt. 1	Alt. 2
Engineering					
Geometric Compliance to Design Criteria	No change	Meets criteria Substandard interchange spacing Relocation of off-ramps impacts uniformity of the corridor	Meets criteria Combines ramps improving interchange spacing Maintains ramp uniformity		☑
Multimodal Facilities	No change	Provides the ability to enhance bus service operations Improves bicycle and pedestrian facilities Impacts public transportation shuttle route between Pembroke Road and Hollywood Boulevard	Provides the ability to enhance bus service operations Improves bicycle and pedestrian facilities Impacts public transportation shuttle route between Pembroke Road and Hollywood Boulevard	☑	☑
Mobility	Increased congestion	Adds capacity Improves the traffic operations of the area	Adds capacity Improves the traffic operations of the area Removing the Pembroke Road interchange from directly interacting with I-95 improves the mobility and access in and out of Pembroke Road		☑
Safety Improvements	Includes planned/programmed ramp terminal safety improvements	Reduces long-term crashes related to heavy congestion, mainline weaving maneuvers, mainline and ramp speed differentials and interstate access	Reduces long-term crashes related to heavy congestion, mainline weaving maneuvers, mainline and ramp speed differentials and interstate access Reduces the number of entrances and exits to/from I-95		☑
Drainage Analysis	No impact	Less impacts than Alternative 2 Alternative 1 requires a smaller roadway footprint	More impacts than Alternative 1 Alternative 2 requires a larger roadway footprint	☑	
Structures Analysis	No change	New bridges = 4, Bridge widenings = 2, Less new bridges than Alternative 2	New bridges = 5, Bridge widenings = 2, More new bridges than Alternative 1	☑	
Utility Impacts	No impact	5 Major impacts, 7 Minor impacts	5 Major impacts, 7 Minor impacts	☑	☑
Maintenance of Traffic	No impact	Moderate impacts during construction, Less impacts than Alternative 2	Moderate impacts during construction, More impacts than Alternative 1	☑	
Purpose and Need	Does not meet	Meets	Meets	☑	☑
			Totals	19	22

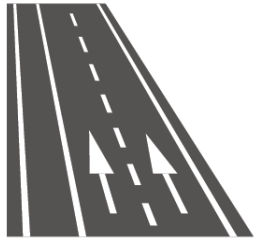
Alternative 2 was selected as the preferred alternative

Alternative 2 - Preferred Alternative Benefits

CAPACITY

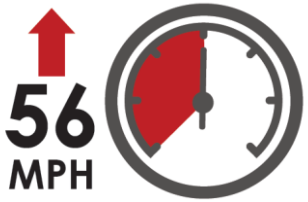
- The collector distributor roadway system removes I-95 mainline traffic, which provides more capacity to several mainline segments of I-95
- Adds additional exclusive turn lanes at the ramp terminals





OPERATIONS

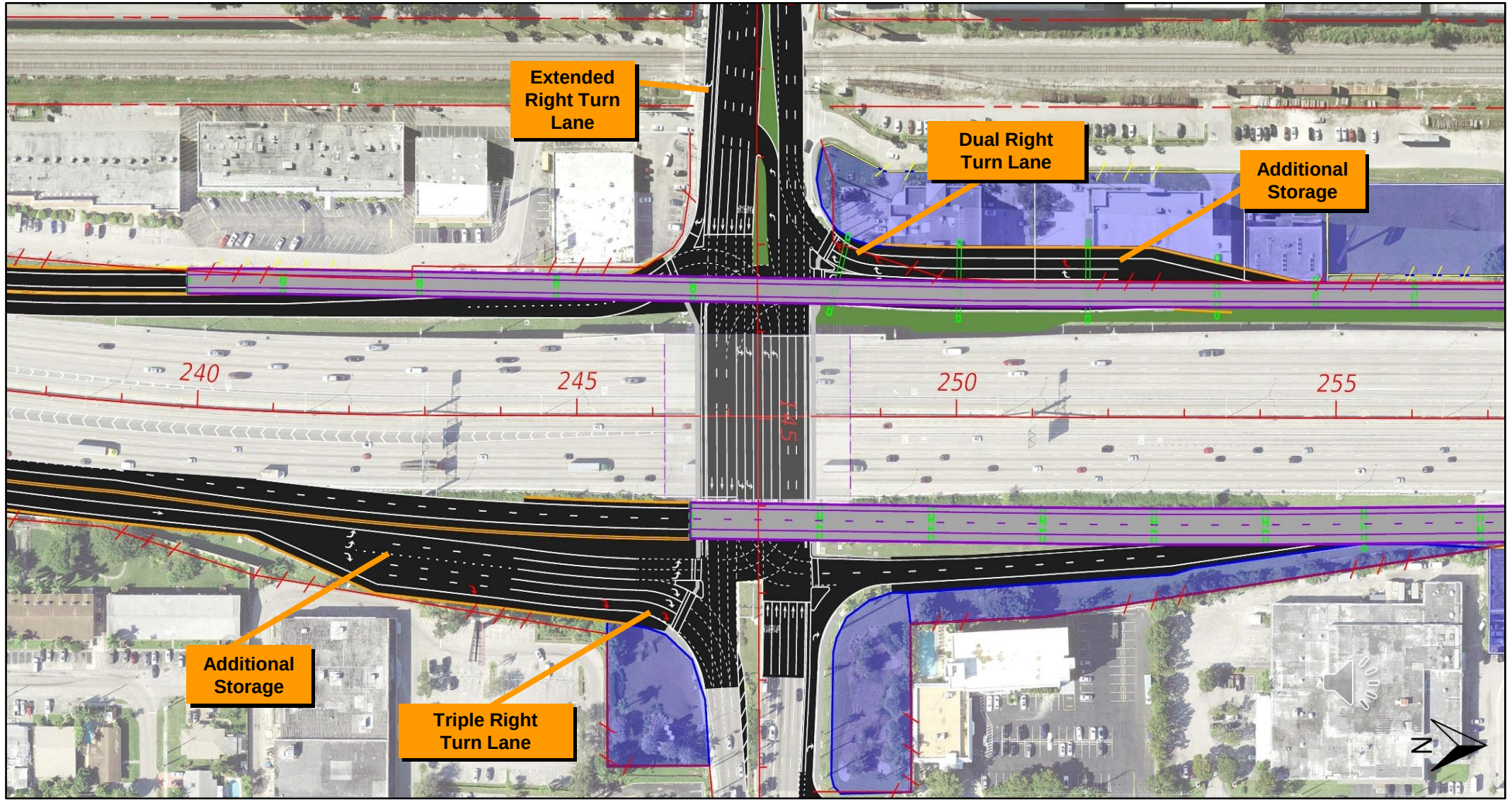
- Combines ramps improving interchange spacing (from 0.7 to 1.8 miles)
- Reduces the number of weaving movements (from 8 to 3)
- No speed differentials between the mainline and ramps
- Increases operating speeds along I-95 by 10-21 MPH
- Provides the most locations with Level of Service (LOS) D or better
- No off-ramp spillovers to the I-95 mainline



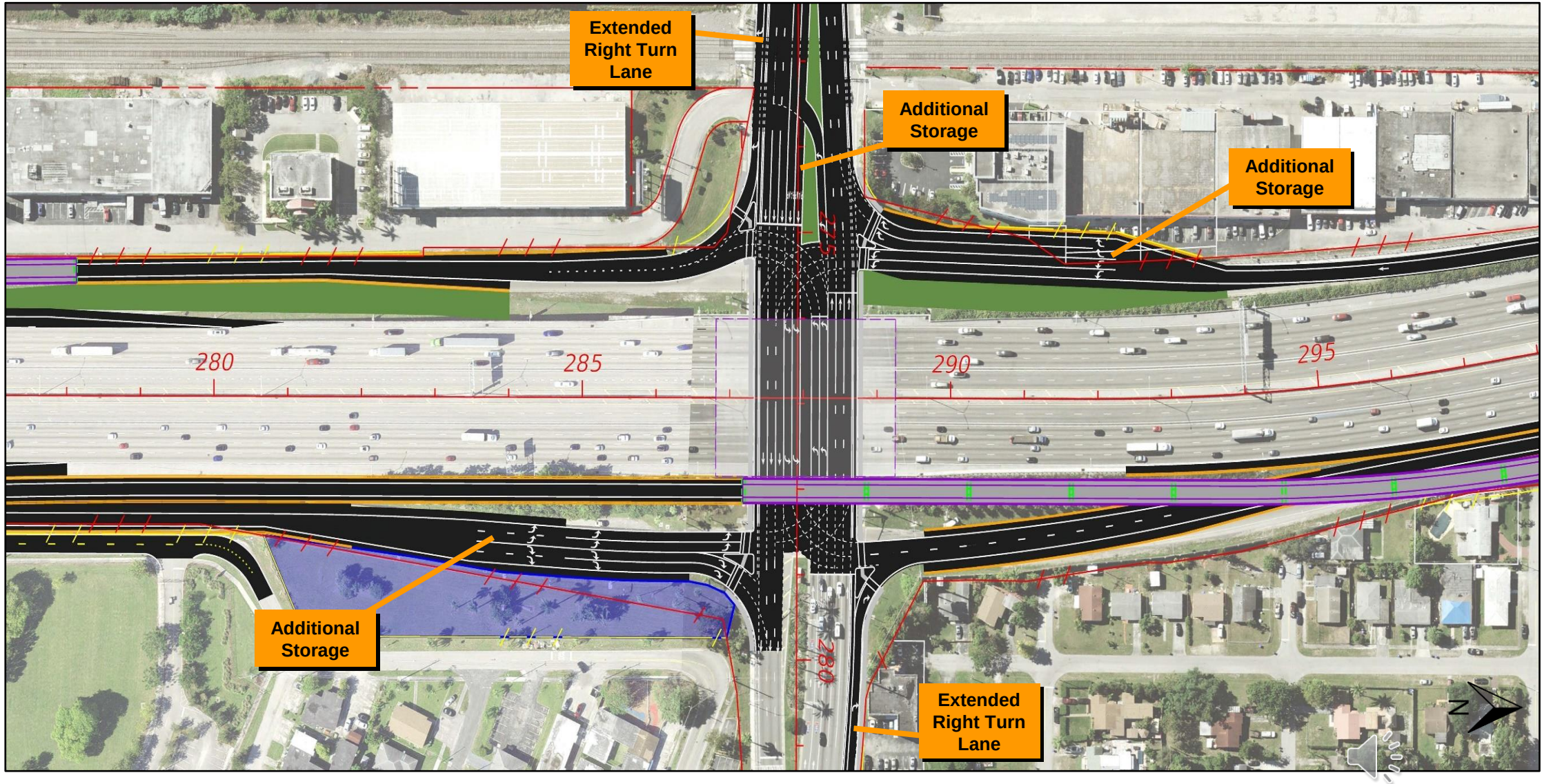
SAFETY

- Reduces the number of entrances and exits to and from I-95 (from 12 to 8)
- Requires less signage on the mainline
- Reduces long-term crashes and total number of crashes
- Provides more off-ramp storage when exiting I-95
- Additional lanes and capacity for emergency response and during evacuation events

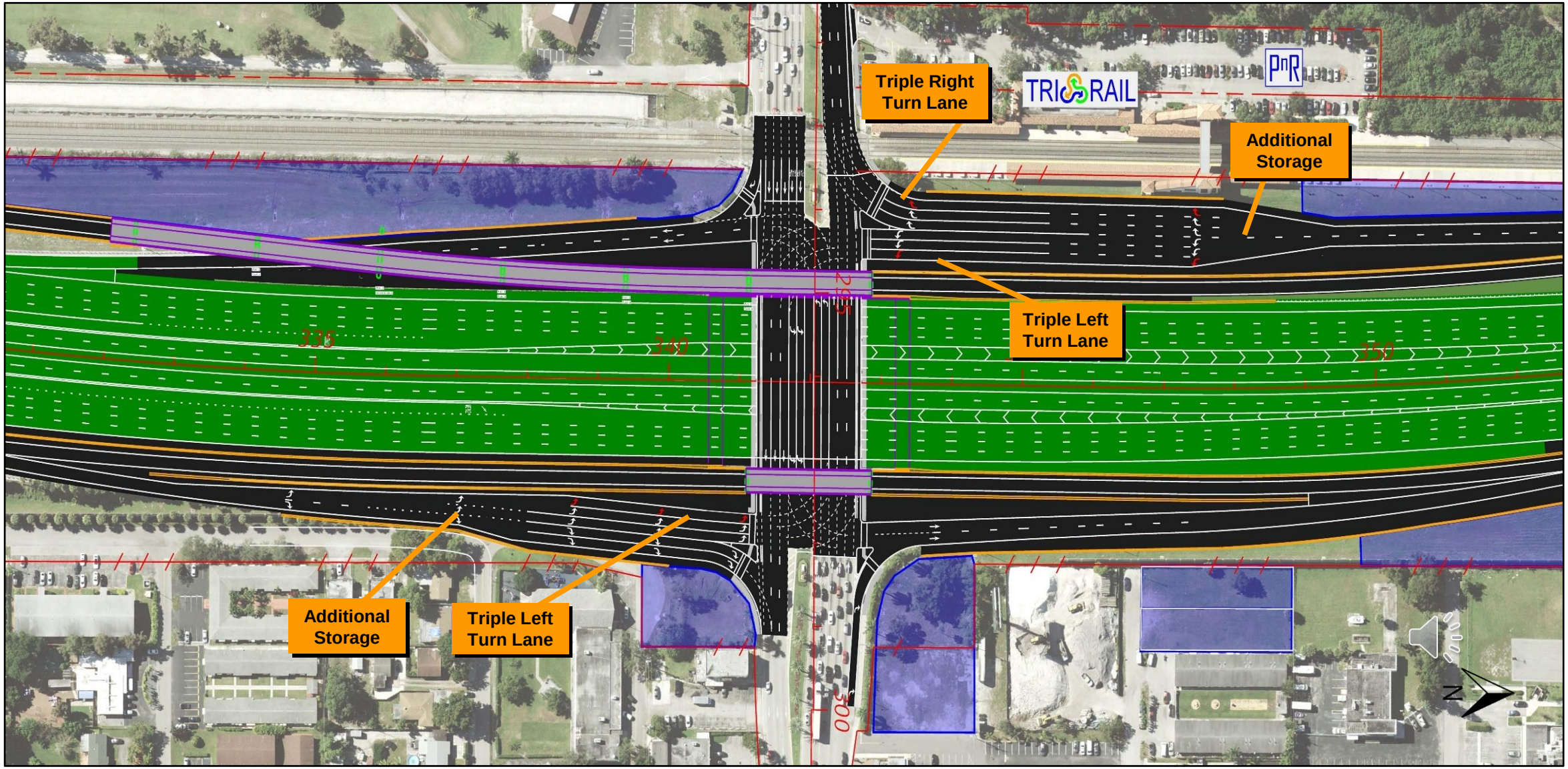
Preferred Alternative – Hallandale Beach Boulevard Interchange



Preferred Alternative – Pembroke Road Interchange



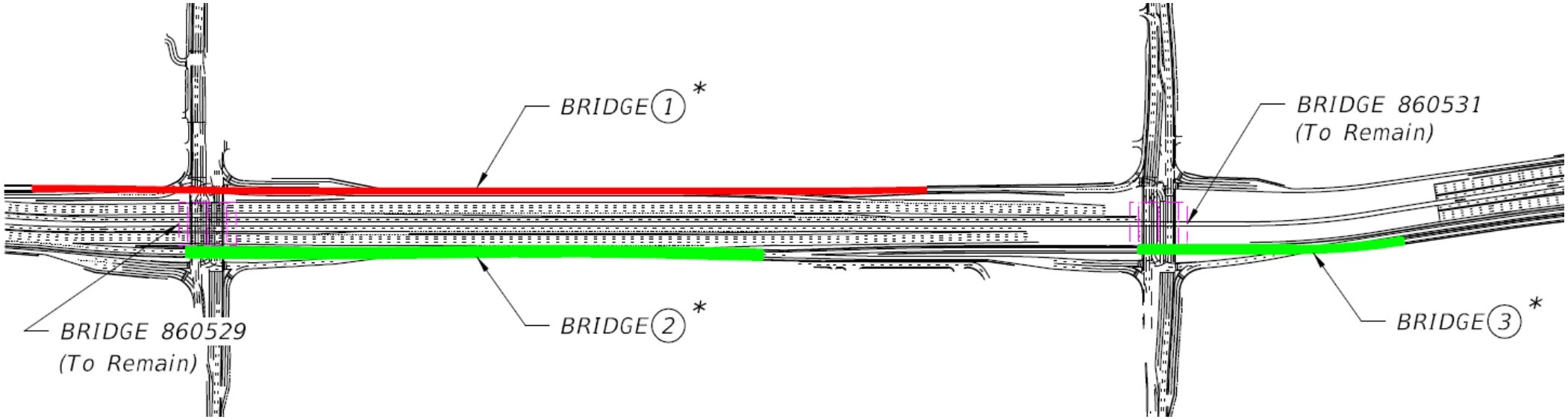
Preferred Alternative – Hollywood Boulevard Interchange



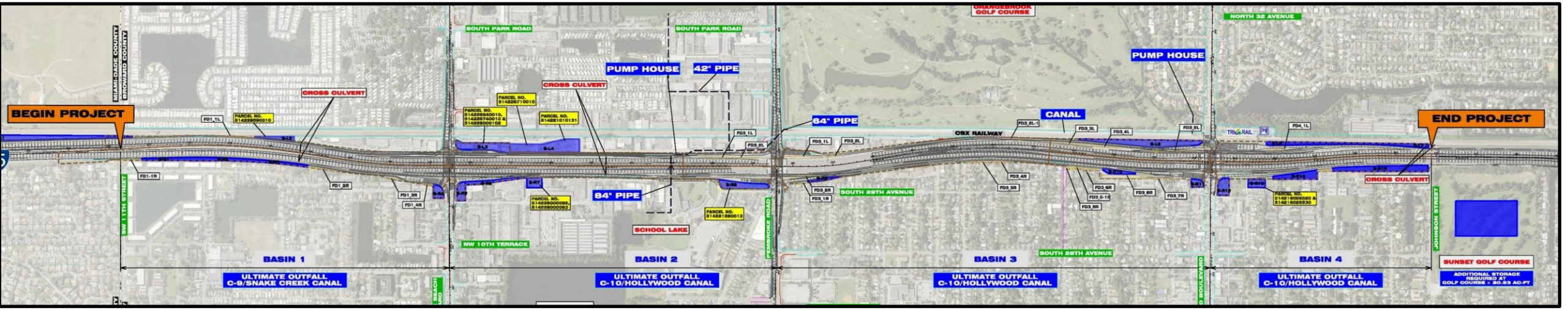
Preferred Alternative – Structures

- 6 New Bridges
- 1 Bridge Widening

SUMMARY OF STRUCTURES	
ITEM	*QUANTITY*
PROPOSED NEW BRIDGES STEEL	1
PROPOSED NEW BRIDGES CONCRETE	5
PROPOSED BRIDGE WIDENINGS	1
EXISTING BRIDE REMAIN	5



Preferred Alternative – Drainage



- Drainage Systems – Four Systems
- Stormwater Attenuation and Floodplain Compensation – Attenuation and floodplain compensation are to be achieved via existing/proposed dry/wet retention ponds and French Drains
- Water Quantity/Quality – Improvements will meet the existing water quality, water quantity and discharge attenuation standards as required by the South Florida Water Management District.

Preferred Alternative – Environmental Considerations

- Social and Economic Effects
- Land Use, Mobility, Aesthetics
- Relocation Potential
- Cultural/Archaeological Resources
- Community Features
- Recreational Resources
- Wetlands/Surface Waters
- Water Quality
- Wildlife and Habitat
- Noise and Air Quality
- Contamination

Environmental – Social, Economic and Community Features

- No displacement or isolation of any neighborhood/population
- Relocation will occur with residential and commercial properties
- No impact to community features anticipated
- Changes to demographics are not anticipated
- Improved access to local businesses and neighborhoods
- Potential to promote economic growth

Environmental – Social, Economic and Community Features

LAND USE

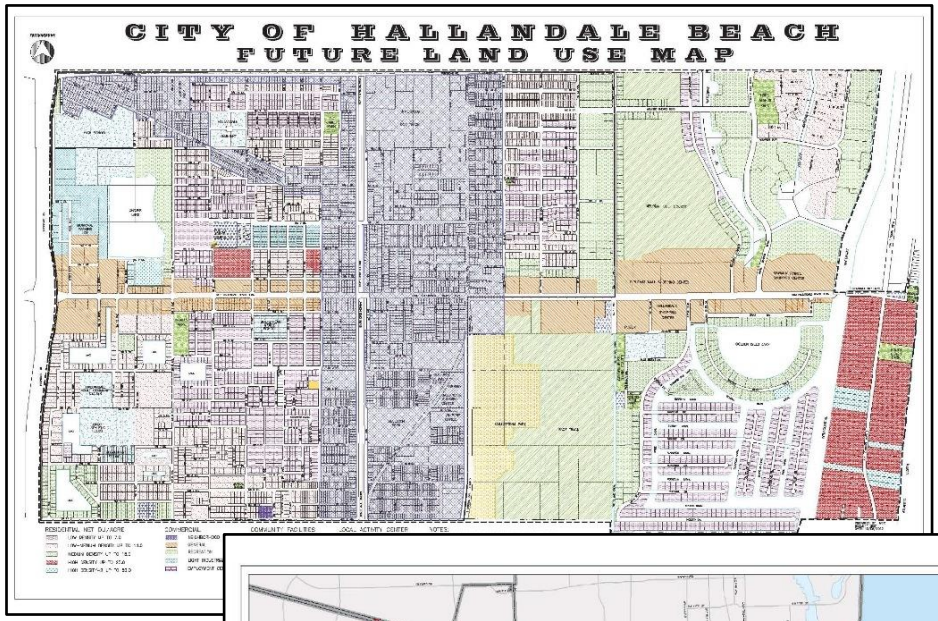
- Project occurs in existing urban environment
- No significant changes in land use

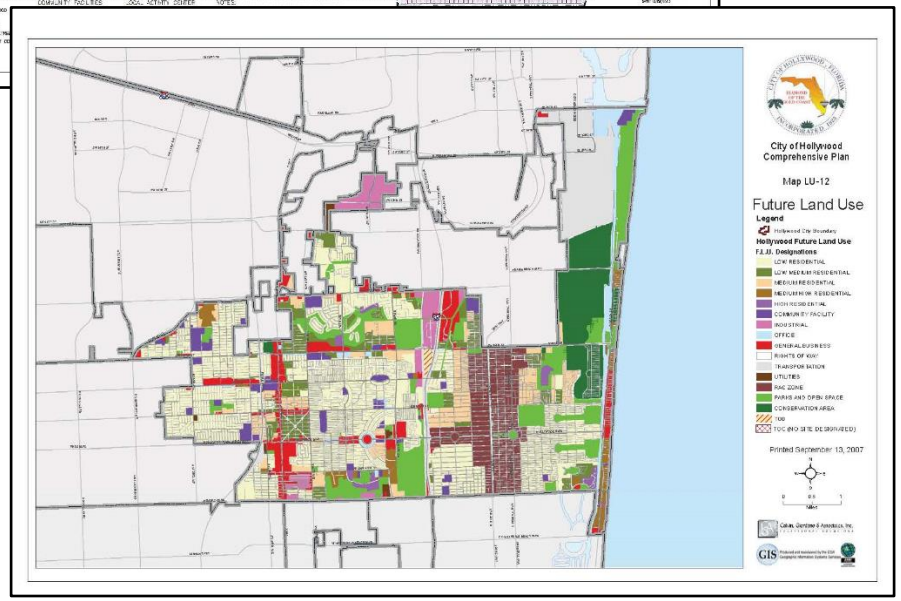
MOBILITY

- Improves safety
- Shuttle route Impact
- Improves emergency evacuation
- Reduces traffic congestion

AESTHETIC EFFECTS

- Potential increased visual awareness of the corridor





Environmental – Cultural Resources

- Cultural Resource Assessment Surveys were conducted in 2018 and 2020
- Over 200 historic resources within the Area of Potential Effect
- 3 historical resources are considered National Register-Eligible: Seaboard Airline Railway Station, Seaboard Air Line (CSX) Railroad, and Stratford's
- The State Historic Preservation Officer concurred with the findings of the CRAS surveys and effects (2019 and 2020)

Environmental – Recreational Section 4(f) Resources

- Six publicly-owned parks are adjacent to the project corridor:
  - Ives Estates Park
  - Oreste Blake Johnson Park
  - McNicol Community Center
  - Orangebrook Golf and Country Club
  - Lions Park
  - Stan Goldman Memorial Park
- All parks were determined to be Section 4(f) resources
- Proposed improvements were designed to avoid impacting these important resources

WILDLIFE AND HABITAT

- Six federally listed animal species
  - Eastern Indigo Snake – May affect
  - Wood Stork – May affect
  - Florida Bonneted Bat – May affect
  - American Crocodile – No effect
  - Everglade Snail Kite – No effect
  - West Indian Manatee – No effect
- One federally listed plant species
  - Johnson's Seagrass – No effect
- No effect to Essential Fish Habitat
- United States Fish and Wildlife Services (USFWS) concurrence is pending

WATER QUALITY

- New stormwater management system anticipated to provide treatment for stormwater runoff - enhancing downstream water quality
- No anticipated impacts to underlying Biscayne Aquifer
- No anticipated impacts to existing wellfields
- Construction erosion/turbidity impacts will be minimized through better management practices
- A Stormwater Pollution Prevention Plan will be incorporated into the project

WETLANDS/SURFACE WATERS

- Wetlands evaluated in accordance with Federal Executive Order 11990 – "Protection of Wetlands".
  - One mangrove wetland north of the C-10 Canal, north of Hollywood Boulevard
  - Four wet swales with hydrophytic vegetation
  - 12 retention ponds in the vicinity of the Corridor
- Impacts anticipated to 1.35 acres of wet swales, no impacts to viable wetlands
- Mitigation through proposed drainage system

NOISE

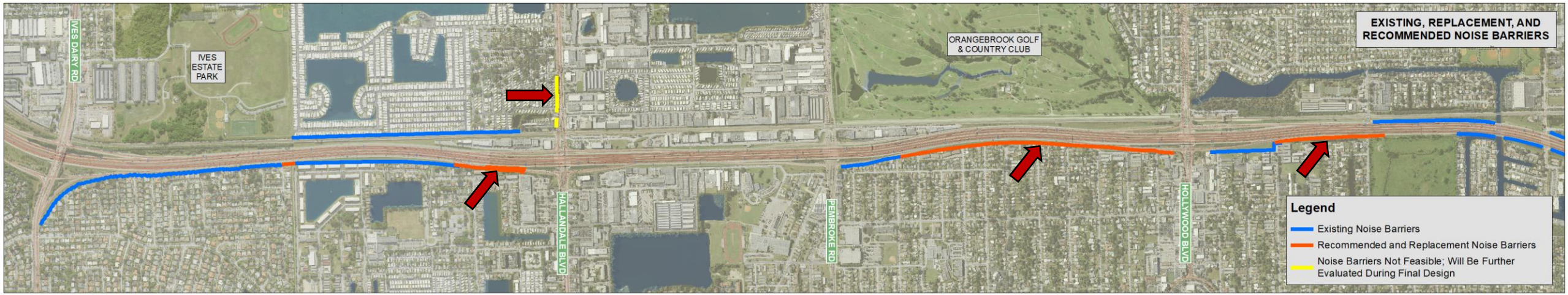
- A Noise Study was conducted for the project in accordance with FDOT and Federal Highway Administration (FHWA) policies and requirements
- Approximately 698 residences were identified as being noise sensitive sites
- 15 non-residential sites were identified as being noise sensitive
  - Schools, parks, places of worship, meeting halls, hotel pools, and restaurants

NOISE

- Traffic noise impacts are predicted to occur at:
  - 182 residences
  - 7 non-residential noise sensitive sites
- Noise walls were evaluated at 12 locations
  - 4 locations were recommended for further consideration in the project's design phase
  - 8 locations were not recommended for the following reasons:
    - ✓ Construction costs for these noise walls were determined to exceed the FDOT's reasonable cost criteria ($42,000 per benefitted site).
    - ✓ It was not possible to reduce the noise levels by at least 7 decibels in accordance with the FDOT's noise level reduction criteria.
    - ✓ Noise barriers would block direct property access.

Environmental – Physical

NOISE



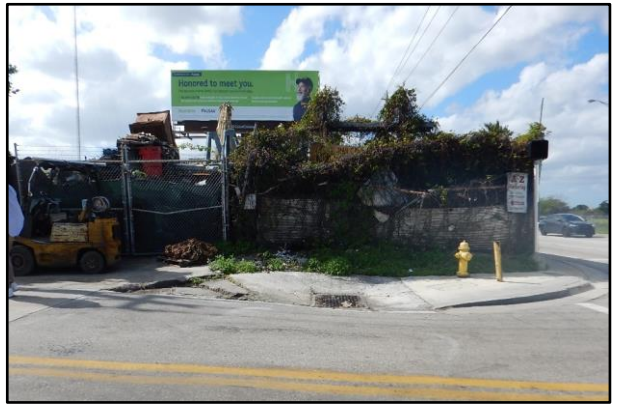
AIR QUALITY

- No significant impacts to air quality
- Project area designated as “attainment”
- The project meets the maximum air quality standards established by the U.S. Environmental Protection Agency

Environmental – Physical

CONTAMINATION

- 52 sites of potential environmental concern were identified within the project area
- 11 sites are rated as “high risk”
- 16 sites are rated as “medium risk”
- 20 sites are rates as “low risk”
- 5 sites are rated as “no risk”
- The most common contaminant at the medium and high sites are petroleum constituents
- Level 2 Contamination Assessment recommended during the project design phase for high and medium risks, prior to right of way acquisition



Environmental – Permits Required

- **Permits anticipated to be required include:**
  - **United States Army Corps of Engineers (USACE) - Section 404 Dredge and Fill Permit and Section 408 Approval**
  - **South Florida Water Management District (SFWMD) Environmental Resources Permit (ERP)**
  - **SFWMD Water Use Permit(s) (Construction Dewatering)**
  - **Florida Department of Environmental Protection (FDEP) National Pollutant Discharge Elimination System (NPDES) permit**

US Army Corps of Engineers®

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

DEPARTMENT OF ENVIRONMENTAL PROTECTION FLORIDA

Preferred Alternative – Right of Way

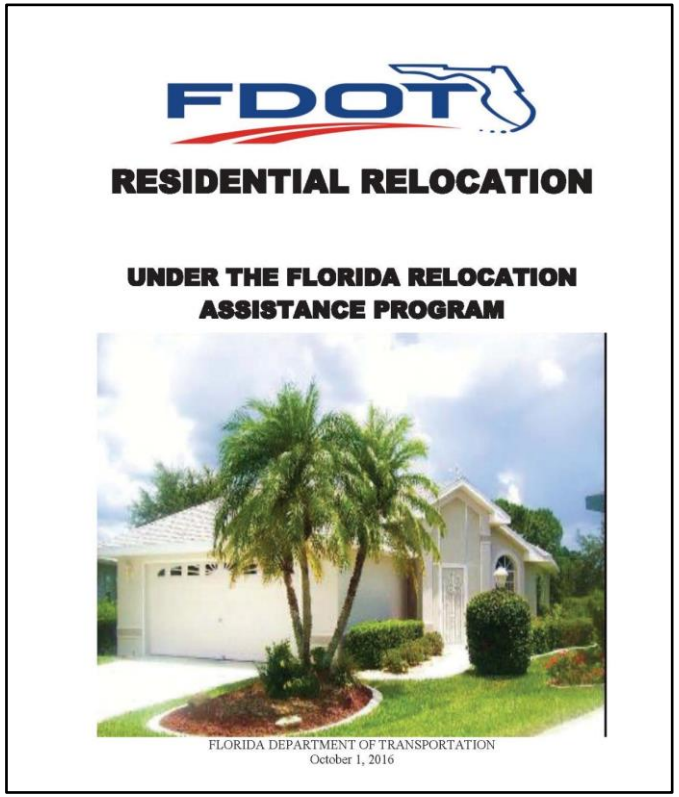
- Right of way acquisition is anticipated for this project
- The estimated right of way cost was generated based on the proposed conceptual design plans
- 38 impacted parcel properties
  - 16 at Hallandale Beach Boulevard Interchange
  - 16 at Pembroke Road Interchange
  - 6 at Hollywood Boulevard Interchange
- The estimated right of way cost is approximately $60.6 M

AFFECTED PROPERTIES	
Type of Parcel	**Impact**
Commercial	15
Residential	9
Industrial	10
Vacant	4
Total Parcel Impacts	38
Total Area Impact (S.F.)	334,092
Total Area Impact (Acre)	7.67
Estimated Relocations and Right of Way Cost	
Residential Parcels	3
Business Parcels	16
Personal Property	2
Estimated Right of Way Cost	$60.6 Million

Preferred Alternative – Right of Way

- Relocation of 3 residential parcels and 16 business parcels
- In compliance with the Uniform Relocation Assistance Act
- You will be contacted by an appraiser who will inspect your property
- You may also be eligible for relocation advisory services and payment benefits
- For more information, please contact:

Dan Marwood
Deputy Right of Way Manager
FDOT District Four Right of Way Office
Phone: (954) 777-4238
Cell: (954) 610-7031
Dan.Marwood@dot.state.fl.us



Florida Statute 339.09
Federal Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (Public Law 91-646 as amended by public law 100-17)

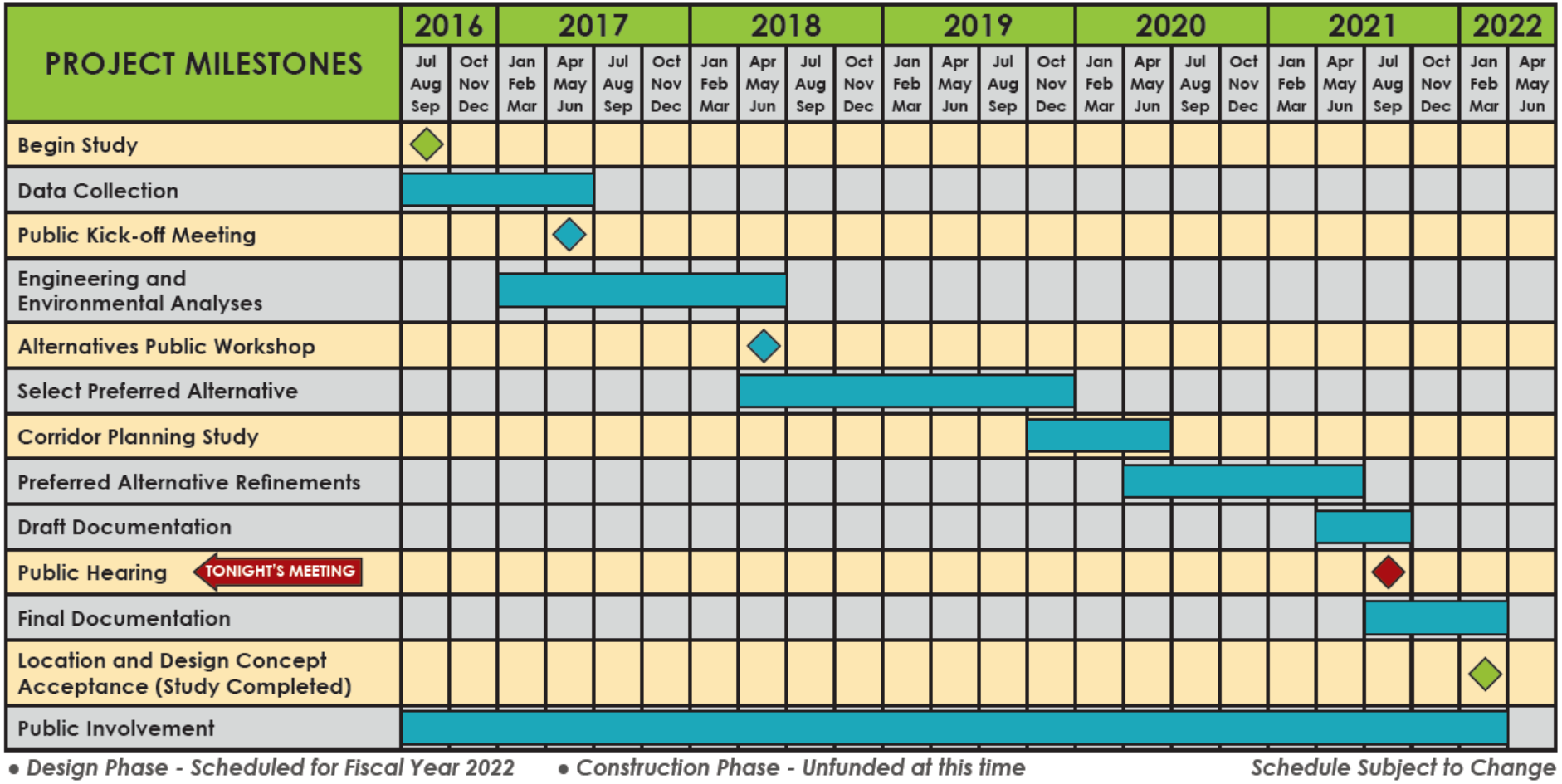
Preferred Alternative – Preliminary Total Cost Estimate

- Developed a project cost estimate
- Generated using the FDOT Long Range Estimate (LRE) cost estimating system
- Includes the major cost components typically associated with highway construction and right of way acquisition
- The estimated project total cost is approximately $285 M

CATEGORY	COST
Construction Cost	$141.2 million
Maintenance of Traffic (10%)	$14.1 million
Mobilization (8%)	$12.5 million
Project Unknown (15%)	$21.2 million
Utilities	$4.3 million
Design (12%)	$17.0 million
Right of Way	$60.6 million
Construction Engineering and Inspection (10%)	$14.1 million
Total Cost Estimate	**$285 million**

Estimated Costs

PD&E Study Milestone Schedule



- PD&E Study to be completed by January 2022
- The Design phase is funded in the FDOT Work Program in Fiscal Year 2022
- Right of way and Construction are currently unfunded

Public Involvement – Comment Options

1. Type comments or questions in the GoToWebinar Questions tool

2. Use the Raise Hand feature of GoToWebinar to make a statement during the comment period

3. Email your comments by visiting the project website or directly to the FDOT Project Manager

4. Mail written comments to the FDOT Project Manager

Comment period ends on September 22, 2021

Contact Information

Send comments no later than September 22, 2021 to:

Mr. Kenzot Jasmin, P.E.
Project Manager
Florida Department of Transportation
District Four
3400 West Commercial Boulevard
Fort Lauderdale, Florida 33309
(954) 777-4462
Kenzot.Jasmin@dot.state.fl.us

PD&E Study Documents/Reports/Display Boards

- **PD&E Study Documents and Reports are available for public review at the FDOT District Office**

  FDOT District Four
  3400 West Commercial Boulevard
  Fort Lauderdale, Florida 33309

- **PD&E Study Documents, Reports and Display Boards are also available on the project website**

www.fdot.gov/projects/sefl/future/95/858-820/

Next Steps

- The Department will incorporate your comments into the decision making
- A final decision will be made on the Preferred Alternative
- The Final PD&E Study documents are sent to FDOT's Office of Environmental Management in Tallahassee for Location and Design Concept Acceptance (LDCA)
- The Design phase is estimated to begin in 2022
- The Right of Way and Construction phases are currently unfunded

Comment Period