

**DRAFT**

# EVALUATION MATRIX

## QUALITATIVE COMPARISON

Variables/Parameters	No-Build Alternative	Build Alternative 1	Build Alternative 2
<b>Engineering</b>			
<b>Geometric Compliance to Design Criteria</b>	No change	Meets criteria	Meets criteria
<b>Multimodal Facilities</b>	No change	Provides the ability to enhance bus service operations; Improves bicycle and pedestrian facilities	Provides the ability to enhance bus service operations; Improves bicycle and pedestrian facilities
<b>Mobility</b>	Increased congestion	Adds capacity; Improves the traffic operations of the area	Adds capacity; Improves the traffic operations of the area
<b>Safety Improvements</b>	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 and from I-95
<b>Drainage Analysis</b>	No impact	Less impacts than Alternative 2	More impacts than Alternative 1
<b>Structures Analysis</b>	No change	New bridges = 4 Bridge widenings = 3	Alternative 2A: New bridges = 6 Bridge widenings = 3 Alternative 2B: New bridges = 5 Bridge widenings = 3 Alternative 2C: New bridges = 5 Bridge widenings = 3
<b>Utility Impacts</b>	No impact	5 Major impacts, 7 Minor impacts	5 Major impacts, 7 Minor impacts
<b>Maintenance of Traffic</b>	No impact	Moderate impacts during construction; Less impacts than Alternative 2	Moderate impacts during construction; More impacts than Alternative 1
<b>Purpose and Need</b>	Does not meet	Meets	Meets
<b>Traffic</b>	Several areas with LOS E and/or LOS F	Achieves LOS D or better	Achieves LOS D or better
<b>Socio-Economic</b>			
<b>Right of Way Impacts</b>	None	Total = 39 Commercial = 30 Residential = 2 Governmental = 2 Industrial = 5 (Extent of parcel impacts are not known at this time)	Alternative 2A Total = 49 Commercial = 33 Residential = 5 Governmental = 4 Industrial = 7 Alternative 2B Total = 44 Commercial = 30 Residential = 5 Governmental = 4 Industrial = 5 Alternative 2C Total = 43 Commercial = 30 Residential = 5 Governmental = 3 Industrial = 5 (Extent of parcel impacts are not known at this time)
<b>Social and Neighborhood Impacts</b>	None/No change	Provides the ability to incorporate regional express bus service which offers an alternative to auto travel and addresses needs of low-income users and disadvantaged groups (Public input/comment is needed to continue this evaluation particularly as it relates to community cohesion, aesthetics, and visual effects)	Provides the ability to incorporate regional express bus service which offers an alternative to auto travel and addresses needs of low-income users and disadvantaged groups (Public input/comment is needed to continue this evaluation particularly as it relates to community cohesion, aesthetics, and visual effects)
<b>Economic and Employment Impacts</b>	No impact	Improves mobility, throughput, travel speeds and travel time for this vital SIS facility and cross streets; Supports economic development and reduces congestion (Public input/comment is needed to continue this evaluation especially since this alternative may involve some business displacement)	Improves mobility, throughput, travel speeds and travel time for this vital SIS facility and cross streets; Supports economic development and reduces congestion (Public input/comment is needed to continue this evaluation especially since this alternative may involve some business displacement)
<b>Community Services/Features</b>	No impact	Government facilities and public parks are located adjacent to the corridor but no disruption in their function and/or the services provided are anticipated	Government facilities and public parks are located adjacent to the corridor but no disruption in their function and/or the services provided are anticipated
<b>Public Comments</b>	(Pending)	(Pending)	(Pending)
<b>Environment</b>			
<b>Noise Impacts</b>	No effect; Does not have the ability to add noise abatement	(Pending Noise Study results)	(Pending Noise Study results)
<b>Air Quality</b>	Potential impacts from increased congestion	The project is located within an attainment area, so significant air quality impacts are not anticipated	The project is located within an attainment area, so significant air quality impacts are not anticipated
<b>Contamination</b>	No impact	Three known contaminated sites and four potentially contaminated sites are directly affected by right of way acquisition (Risk analysis underway)	Three known contaminated sites and four potentially contaminated sites are directly affected by right of way acquisition (Risk analysis underway)
<b>Biological/Wetland Impacts</b>	No impact	Direct wetland impacts = 0 acres Indirect wetland impacts = 0 acres Direct surface water impacts = 0.17 acres Direct impact to stormwater/Drainage Features = 0.16 acres (only Orangebrook drainage feature included)	Direct wetland impacts = 0 acres Indirect wetland impacts = 0 acres Direct surface water impacts = 0.17 acres Direct impact to stormwater/Drainage Features = 0.16 acres (only Orangebrook drainage feature included)
<b>Water Quality</b>	No impact/No improvement	Equivalent water quality treatment will be provided that meets state water quality criteria; Potential for improvement possible based on the proposed drainage system	Equivalent water quality treatment will be provided that meets state water quality criteria; Potential for improvement possible based on the proposed drainage system
<b>Cultural/Historic/Archaeological Impacts</b>	No impact	National Register Eligible Seaboard Air Line Railroad (88D4649) and Seaboard; Coastline Railroad Terminal Building (88D163); 1 Historic Golf Course (Orangebrook)	National Register Eligible Seaboard Air Line Railroad (88D4649) and Seaboard; Coastline Railroad Terminal Building (88D163); 2 Historic Golf Courses (Orangebrook and Sunset)
<b>Cost</b>			
<b>Engineering, CEI and Construction</b>	No construction, No cost involved = \$0	\$127.3 million	\$117.3 million
<b>Right of Way/Business Damages</b>	None = \$0	\$48.3 million	\$60.3 million

## PERFORMANCE EVALUATION CRITERIA

<b>Engineering</b>
<b>Geometric Compliance to Design Criteria:</b> Assesses the compliance of the alternatives with FDOT and AASHTO design standards.
<b>Multimodal Facilities:</b> Measures the availability of multi-modal facilities and their amenities and how each alternative enhances the ability to promote other transportation modes.
<b>Mobility:</b> Measures the ability of an alternative to provide adequate capacity and minimize travel time delay through the corridor.
<b>Safety Improvements:</b> Provides consideration for an alternative's physical, geometric and operational features identifying to what extent they would minimize actual or potential safety hazards.
<b>Drainage Analysis:</b> Evaluates storm water treatment and attenuation within the project limits. Determines and estimates the storm water management facility requirements to serve the drainage needs of the proposed improvements.
<b>Structures Analysis:</b> Evaluates the needed structural improvements of all the bridges within the project limits. This analysis also determines if new bridges are required to accommodate the proposed improvements.
<b>Utility Impacts:</b> Measures the utility impacts of the alternatives. This includes potential conflicts and relocation of the utility lines that are located within the FDOT right of way.
<b>Maintenance of Traffic:</b> Measures the effectiveness of the proposed traffic control schemes during construction to minimize effects on the local residents, business, and traveling public and emergency management services.
<b>Purpose and Need:</b> Measures the ability of an alternative to comply with the purpose and need of the project.
<b>Socio-Economic</b>
<b>Right of Way Impacts:</b> Identifies the level and type of any residential and/or business disruptions associated with an alternative.
<b>Social and Neighborhood Impacts:</b> Identifies whether an alternative has impacts on social and neighborhood issues, including visual and aesthetic concerns.
<b>Economic and Employment Impacts:</b> Identifies whether an alternative impacts economic issues along the corridor.
<b>Community Services/Features:</b> Measures the effect and/or compatibility of an alternative to meet the surrounding visual environment needs from both the roadway user and the supporting community. Also provides a degree of impact to the community's services (Fire, Police, Parks, etc.)
<b>Public Comments:</b> Incorporates the comments and feedback from the public for each alternative. Public and Agency Kick-off Meetings were held on May 25, 2017. Stakeholders voice their opinions and concerns during outreach efforts.
<b>Environmental</b>
<b>Noise Impacts:</b> Measures the ability of an alternative to meet pre-established noise standards.
<b>Air Quality:</b> Measures the ability of an alternative to meet pre-established air quality standards.
<b>Contamination:</b> Measures the potential impact on existing or potential hazardous material sites and/or generators.
<b>Biological/Wetland Impacts:</b> Identifies the degree of potential effect of Threatened and Endangered Species and potential impacts to wetland habitat.
<b>Water Quality:</b> Measures the alternative's potential effect on water quality for any surface or subsurface water resource within the project limits.
<b>Cultural/Historic/Archaeological Impacts:</b> Measures the degree of impact associated with historic structures or archaeological sites that may be caused by the development of a specific corridor or concept.
<b>Project Cost</b>
<b>Engineering, CEI and Construction:</b> Compares each alternative based on design and construction costs.
<b>Right of Way/Business Damages:</b> Addresses variations in right of way costs between alternatives.



# 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)

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