EVALUATION MATRIX

		QUALITATIVE COMPARISON		Best Build	
Variables/Parameters	No-Build Alternative	Build Alternative 1	Build Alternative 2	Alter Alt. 1	nativ
		Engineering			
Geometric Compliance	No change	Meets criteria Substandard interchange spacing	Meets criteria Combines ramps improving interchange spacing		
to Design Criteria		Relocation of off-ramps impacts uniformity of the corridor Provides the ability to enhance bus service operations	Maintains ramp uniformity Provides the ability to enhance bus service operations		
Multimodal Facilities	No change	Improves bicycle and pedestrian facilities Impacts public transportation shuttle route between Pembroke Road and Hollywood Boulevard	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		Ŀ
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	\checkmark	
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		
		Traffic			
95 Mainline Weave Locations	Northbound = 4, Southbound = 4	Northbound = 3, Southbound = 2	Northbound = 1, Southbound = 2 Alternative 2 has less weave locations than Alternative 1		6
-95 Locations with better than LOS D by 2040 AM (PM)	15 (14) = 29	15 (17) = 32	22 (20) = 42, More locations with LOS A, B & C		
I-95 Locations with LOS D by 2040 AM (PM)	5 (6) = 11	9 (7) = 16, More locations with LOS D	4 (6) = 10		
I-95 Locations with LOS E/F by 2040 AM (PM)	4 (4) = 8	0 (0) = 0	0 (0) = 0		
Number of mainline access points	6 locations Northbound 6 locations Southbound	6 locations Northbound 6 locations Southbound	4 locations Northbound 4 locations Southbound Less mainline access points		
Northbound Mainline Access	Hallandale to Pembroke access maintained Pembroke to Hollywood access maintained	Hallandale to Pembroke access not provided Pembroke to Hollywood not provided	Hallandale to Pembroke access not provided Pembroke to Hollywood access maintained via CD Pembroke to Hollywood access is maintained		
Southbound Mainline Access	Hollywood to Pembroke access maintained Pembroke to Hallandale access maintained	Hollywood to Pembroke not provided Pembroke to Hallandale not provided	Hollywood to Pembroke not provided Pembroke to Hallandale not provided		
Northbound Off-Ramp Storage	Hallandale ~ 1,550 ft Pembroke ~ 1,760 ft Hollywood ~ 1,920 ft	Hallandale ~ 1,800 ft Pembroke ~ 4,575 ft Hollywood ~ 5,950 ft	Hallandale ~ 2,100 ft Pembroke ~ 4,575 ft Hollywood > 5,950 ft Provides more storage for off ramps		[
Southbound Off-Ramp Storage	Hollywood ~ 1,875 ft Pembroke ~ 2,050 ft Hallandale ~ 1,950 ft	Hollywood ~ 2,625 ft Pembroke ~ 6,500 ft Hallandale ~ 4,880 ft Overall Alternative 1 has more storage when compared to Alternative 2	Hollywood ~ 2,575 ft Pembroke ~ 7,800 ft Hallandale ~ 1.950 ft		
Mainline Traffic	No change	Some traffic is removed from the mainline with the relocation of the off-ramps	More traffic is removed from the mainline with the addition of the C-D system		
Mainline Signage	No change	Similar to No-Build	Less signage on mainline due to less access points		[
Right of Way Impacts	None	Socio-EconomicTotal Number of Parcels Affected = 32Commercial = 27Residential = 2Vacant = 3Less right of way impacts than Alternative 2	Total Number of Parcels Affected = 35 Commercial = 27 Residential = 5 Vacant = 3		
Social and Neighborhood Impacts	None/No change	Provides the ability to enhance/improve bus service, which offers an alternative to auto travel and addresses needs of low-income users and disadvantaged groups. Aesthetic effects anticipated to the Highland Garden neighborhood, which is adjacent to an elevated on-ramp	Provides the ability to enhance/improve bus service which offers an alternative to auto travel and addresses needs of low-income users and disadvantaged groups. Aesthetic effects not anticipated to the Highland Garden neighborhood		[
Economic, Mobility, and Employment Impacts	No change	Improves mobility, throughput, travel speeds and travel time for this vital SIS facility and cross streets Supports economic development and reduces congestion	Improves mobility, throughput, travel speeds and travel time for this vital SIS facility and cross streets Supports economic development and reduces congestion		[
Community Services/Features	No change	Government facilities and public parks are located adjacent to the corridor but no disruption in their function and/or the services provided are anticipated; Service access to St. John's Lutheran Church will be modified. No other access conflicts anticipated, no impacts to emergency services 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. Service access to St. John's Lutheran Church will be modified. No other access conflicts anticipated; No impacts to emergency services anticipated.		[
	Project is located within an attainment	Environment			
Air Quality	Project is located within an attainment area. Minimal potential impacts may occur from increased congestion.	The project is located within an attainment area, no significant air quality impacts are anticipated. Project is anticipated to decrease congestion.	The project is located within an attainment area, no significant air quality impacts are anticipated. Project is anticipated to decrease congestion.		
Contamination	No change	6-High and 6-Medium known/potentially contaminated sites Less impacts than Alternative 2	8-High and 6 -Medium known/potentially contaminated sites		
sted Species/Wetland Impacts	No impact	Impacts to OSW 4, OSW 5, and Swale 1 Less impacts than Alternative 2	Impacts to OSW 4, OSW 5, Swale 1 and Swale 2		
Water Quality	No impact/No improvement (portions of Hollywood Boulevard, Pembroke Road and Hallandale Beach Boulevard are not	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.		
Cultural/Historic/ Archaeological Impacts	permitted by SFWMD) No impact	3 National Register – eligible historic resources, No adverse effects	3 National Register – eligible historic resources, No adverse effects		
	No construction. No cost involved - *0	Cost \$127 Million	\$105 Million Lower cost when compared to Alternative 1		
Construction Cost	No construction, No cost involved = 0	\$127 Million	\$105 Million, Lower cost when compared to Alternative 1		
ight of Way/Business Damages	None = \$0	\$53 Million	\$57 Million Total	✓S 19	

PERFORMANCE EVALUATION CRITERIA				
Engineering				
Geometric Compliance to Design Criteria: Checks design elements and applicable design standards considered in the study are in compliance with the FDM and AASHTO.				
Multimodal Facilities: Measures the availability of multi-modal facilities and their amenities and how each alternative enhances the ability to promote other transportation modes.				
Mobility: Measures the ability of an alternative to provide adequate capacity and minimize travel time delay through the corridor.				
Safety Improvements: Provides consideration for an alternative's physical, geometric, and operational features identifying to what extent they would minimize actual or potential safety hazards.				
Drainage Analysis: 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.				

Urainage Analysis: 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.

Structures Analysis: 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.

Utility Impacts: 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.

Maintenance of Traffic: Measures the effectiveness of the proposed traffic control schemes during construction to minimize effects on the residents, businesses, traveling public and emergency management services.

Purpose and Need: Measures the ability of an alternative to comply with the purpose and need of the project.

Traffic: Identifies substandard operations, measures the level of service, evaluates mainline and interchange access and signage requirements.

Socio-Economic

Right of Way Impacts: Identifies the level and type of any residential and/or business disruptions associated with an alternative.

Social and Neighborhood Impacts: Identifies whether an alternative has impacts on social and neighborhood issues, including visual and aesthetic concerns.

Economic and Employment Impacts: Identifies whether an alternative impacts economic issues along the corridor.

Community Services/Features: 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.)

Environmental

Air Quality: Measures the ability of an alternative to meet pre-established air quality standards.

Contamination: Measures the potential impact on existing or potential hazardous material sites and/or generators.

Listed Species: Identifies the degree of potential effect of threatened and endangered species.

Wetland Impacts: Identifies the degree of potential impacts to wetland habitat.

Cultural/Historic/Archaeological Impacts: 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.

Project Cost

Construction Cost: Compares each alternative based on construction costs. Cost includes construction cost, mobilization, maintenance of traffic and project unknown.

Right of Way/Business Damages: 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) FPID No.: 436903-1-22-02 • ETDM No.: 14254

