

EVALUATION MATRIX

Variables/ Parameters	No-Build Alternative	Build Alternative 1 Add an additional Travel Lane between US 1 and SR 836	Build Alternative 3 Add one Un-tolled Managed Lane between US 1 and SR 836	Build Alternative 4 Add an additional Travel Lane between US 1 and SR 874 and Add one Express Lane between SR 874 and SR 836	Build Alternative 4A Add an additional Travel Lane between US 1 and SR 836 and Add one Express Lane between SR 874 and SR 836	Best Build Alternative Lowest Score			
						Alt. 1	Alt. 3	Alt. 4	Alt. 4A
ENGINEERING									
Multimodal Facilities	No change	Provides additional capacity. Improves bicycle and pedestrian facilities (at select interchanges). Provides the ability to add Bus Rapid Transit along the inside shoulder of the corridor during peak hours.	Provides additional capacity. Improves bicycle and pedestrian facilities (at select interchanges). Provides the ability to add Bus Rapid Transit continuously on the Managed Lanes along the corridor.	Provides additional capacity. Improves bicycle and pedestrian facilities (at select interchanges). Provides the ability to add Bus Rapid Transit along the inside shoulder of the corridor during peak hours between US 1 and SR 874, and on the Express Lanes between SR 874 and SR 836, with direct access to SR 874 to and from the north.	Provides more capacity when compared to the other alternatives, with an additional Travel Lane between SR 874 and SR 836. Improves bicycle and pedestrian facilities (at select interchanges). Provides the ability to add Bus Rapid Transit along the inside shoulder of the corridor during peak hours between US 1 and SR 874, and on the Express Lanes between SR 874 and SR 836, with direct access to SR 874 to and from the north.	4	2	3	1
Mobility	Increased congestion No local network improvements. No regional network improvements.	Provides additional capacity. Improves traffic operations in the area (local).	Provides additional capacity. Improves traffic operations in the area (local & regional). Managed Lane exclusive lane from US 1 to SR 836. Managed Lane direct connection with the express lanes north of SR 836. New SR 826 northbound median Managed Lane connection to the SR 836 eastbound collector/distributor roadway system. No Managed Lane connection to SR 874. No ability to control traffic entering the Managed Lane.	Provides additional capacity. Improves traffic operations in the area (local & regional). Express Lanes southbound extension from SR 836 to SR 874 with a SR 874 direct connection with the express lanes to and from the north. New SR 826 northbound median Express Lane connection to the SR 836 eastbound collector/distributor roadway system. Express lanes provide travel choices and predictable travel times.	Provides more capacity when compared to the other alternatives, with an additional Travel Lane between SR 874 and SR 836. Improves local mobility with the additional Travel Lane. Improves traffic operations in the area (local & regional). Express Lanes southbound extension from SR 836 to SR 874 with a SR 874 direct connection with the express lanes to and from the north. New SR 826 northbound median Express Lane connection to the SR 836 eastbound collector/distributor roadway system. Express lanes provide travel choices and predictable travel times.	4	3	2	1
Safety Improvements	Includes planned/programmed improvements. No other long-term improvements.	Reduces long-term crashes related to heavy congestion and interchange access.	Reduces long-term crashes related to heavy congestion and interchange access. Managed Lane separates potential transit buses from the other vehicles. Managed Lane separates SR 826 short and long trips.	Reduces long-term crashes related to heavy congestion and interchange access. Removes SR 874 traffic to and from the north from the SR 826 corridor between SR 874 and SR 836, which reduces SR 826 mainline weaving maneuvers, mainline and ramp speed differentials.	Reduces long-term crashes related to heavy congestion and interchange access. Removes SR 874 traffic to and from the north from the SR 826 corridor between SR 874 and SR 836, which reduces SR 826 mainline weaving maneuvers, mainline and ramp speed differentials. The additional Travel Lane between SR 874 and SR 836 will reduce mainline lane-changing maneuvers and sideswipe crashes within the interchange limits. Provides more capacity when compared to the other alternatives, with a corresponding reduction in congestion-related crashes.	4	3	2	1
Maintenance of Traffic	No construction impacts	Moderate impacts during construction. Less impacts when compared to the other alternatives.	High impacts during construction.	Moderate impacts during construction. More impacts than Alternative 1.	Moderate/High impacts during construction.	1	4	2	3
Purpose and Need	Does not meet	Meets all five areas.	Meets and enhances all five areas.	Meets and enhances all five areas.	Meets and exceeds all five areas.	3	2	2	1
2055 Traffic Demand	Over capacity No long-term improvements	Lowest throughput traffic when compared to the other alternatives. Corridor will be at capacity by the year 2040.	Throughput traffic higher than Alternative 4, lower than Alternative 4A. Managed Lanes remove 1,650 vehicles from the SR 826 Travel Lanes. No Managed Lane connection to SR 874. Corridor will be at capacity by the year 2040.	Throughput traffic lower than Alternative 3 and 4A. Express Lanes remove 1,650 vehicles from the SR 826 Travel Lanes. Express lane connection to SR 874 to and from the north, serving the #1 origin and destination traffic pattern within the study limits. Corridor will be at capacity by the year 2040.	Highest throughput traffic when compared to the other alternatives. Express Lanes remove 1,650 vehicles from the SR 826 Travel Lanes. Express lane connection to SR 874 to and from the north, serving the #1 origin and destination traffic pattern within the study limits. Corridor will be at capacity by the year 2051.	4	2	3	1
2055 Traffic Operations	No long-term improvements Travel Lanes Average Speed 27-29 MPH	Travel Lanes Average Speed 35-37 MPH Travel Lane travel times are higher than the other alternatives (between the years 2035 and 2055)	Managed Lanes Average Speed = 55 MPH Weighted Average Speed = 42-44 MPH (Travel Lanes and Managed Lanes) Travel Lane travel times are lower than Alternative 1, same as Alternative 4, and higher than Alternative 4A (between the years 2035 and 2055)	Express Lanes Average Speed = 55 MPH Weighted Average Speed = 45-47 MPH (Travel Lanes and Express Lanes) Travel Lane travel times are lower than Alternative 1, same as Alternative 3, and higher than Alternative 4A (between the years 2035 and 2055)	Express Lanes Average Speed = 55 MPH Weighted Average Speed = 45-48 MPH (Travel Lanes and Express Lanes) Travel Lane travel times are lower than the other alternatives (between the years 2035 and 2055)	4	3	2	1
Future Technology - Autonomous/Connected Vehicles	Requires future reconstruction of the roadway to implement	Requires future reconstruction of the roadway to implement	Infrastructure in-place. Separation between the Managed Lanes and Travel Lanes, in addition to the selected access points, will allow new technology to be separated from older technology.	Infrastructure in-place. Separation between the Express Lanes and Travel Lanes, in addition to the selected access points, will allow new technology to be separated from older technology. Requires future reconstruction of the roadway to implement between US 1 and SR 874.	Infrastructure in-place. Separation between the express lanes and travel lanes, in addition to the selected access points, will allow new technology to be separated from older technology. Requires future reconstruction of the roadway to implement between US 1 and SR 874.	3	1	2	2
Points						27	20	18	11
SOCIO-ECONOMIC									
Social and Neighborhood Impacts	None/No change	No anticipated negative impacts to existing access ways or routes. Additional lane provides enhanced movement between local communities and businesses for the entire project limits.	Additional lane provides enhanced movement between local communities and businesses for the entire project limits. Visual and aesthetic negative impacts with Managed Lane long median bridge structure between south of SR 874 and north of Bird Road. Improvements encroach on the neighborhood south of Miller Road by closing SW 76 th Avenue with a cul-de-sac.	Additional lane provides enhanced movement between local communities and businesses for the entire project limits. Enhances existing access to SR 874 to/from SR 826 north via Express Lanes.	Additional lane provides enhanced movement between local communities and businesses for the entire project limits, and more between SR 874 and SR 836 with the additional travel lane. Enhances existing access to SR 874 to/from SR 826 north via Express Lanes.	3	4	2	1
Economic and Employment Impacts	No change	Slight to moderate improvements in mobility, throughput, travel speeds, and travel time. Supports economic development and reduces congestion.	Moderate improvements in mobility, throughput, travel speeds, and travel time. Supports economic development and reduces congestion. Crash savings are higher than Alternative 1, same as Alternative 4, and lower than Alternative 4A. Road user costs are higher than Alternative 1, same as Alternative 4 and lower than Alternative 4A. (delay/travel time savings)	Moderate improvements in mobility, throughput, travel speeds, and travel time. Supports economic development and reduces congestion. Crash savings are higher than Alternative 1, same as Alternative 3, and lower than Alternative 4A. Road user costs are higher than Alternative 1, same as Alternative 3 and lower than Alternative 4A. (delay/travel time savings)	Moderate to high improvements in mobility, throughput, travel speeds, and travel time. Supports economic development and reduces congestion. Crash savings are higher than other alternatives. Road user costs lower than other alternatives (delay/travel time savings)	3	2	2	1
Emergency Response	No change	Additional capacity will improve emergency and rescue services for the entire project limits. Corridor operating speed is lower than the other alternatives.	Additional capacity will improve emergency and rescue services for the entire project limits. Managed lanes will provide an opportunity for emergency and rescue services to bypass congested areas and improve response times between US 1 and SR 836. Corridor operating speed is higher than Alternative 1, but lower than Alternatives 4 and 4A.	Additional capacity will improve emergency and rescue services for the entire project limits. Express lanes will provide an opportunity for emergency and rescue services to bypass congested areas and improve response times between SR 874 and SR 836. Corridor operating speed is higher than Alternatives 1 and 3, but lower than Alternative 4A. Tolls add the ability to fund and enhance incident management.	Additional capacity will improve emergency and rescue services for the entire project limits, and more between SR 874 and SR 836 with the additional travel lane. Express lanes will provide an opportunity for emergency and rescue services to bypass congested areas and improve response times between SR 874 and SR 836. Corridor operating speed is higher than the other alternatives. Tolls add the ability to fund and enhance incident management.	4	3	2	1
Points						10	9	6	3
ENVIRONMENT									
Noise Impacts	No effect Does not have the ability to add noise abatement.	Traffic noise level increases and potential negative impacts would be slightly lower than the other alternatives. Less widening than the other alternatives. The replacement and recommended noise barriers and associated costs are expected to be similar across all alternatives.	Traffic noise level increases and potential negative impacts would be slightly higher than all the alternatives. Long and high (3 rd Level) median bridge structure between south of SR 874 and north of Bird Road. More widening than the other alternatives. The replacement and recommended noise barriers and associated costs are expected to be similar across all alternatives.	Traffic noise level increases and potential negative impacts would be slightly higher than Alternative 1, but the same as Alternative 4A. Less widening than Alternative 4A. High corridor operating speed, but lower than Alternative 4A. The replacement and recommended noise barriers and associated costs are expected to be similar across all alternatives.	Traffic noise level increases and potential negative impacts would be slightly higher than Alternative 1, but the same as Alternative 4. Corridor operating speed is higher than the other alternatives. The replacement and recommended noise barriers and associated costs are expected to be similar across all alternatives.	1	3	2	2
Contamination	No change	52 sites identified. 9 - High Risk Sites 12 - Medium Risk Sites 30 - Low Risk Sites 1 - No Risk Site	52 sites identified. 9 - High Risk Sites 12 - Medium Risk Sites 30 - Low Risk Sites 1 - No Risk Site	52 sites identified. 9 - High Risk Sites 12 - Medium Risk Sites 30 - Low Risk Sites 1 - No Risk Site	52 sites identified. 9 - High Risk Sites 12 - Medium Risk Sites 30 - Low Risk Sites 1 - No Risk Site	1	1	1	1
Listed Species	No impact	Low-Moderate Effects anticipated to West Indian manatee, Eastern indigo snake, and wood stork. No Effect to Florida bonneted bat, American crocodile, Everglade snail kite, Bartram's hairstreak butterfly, Florida leafwing butterfly, Miami blue butterfly, Miami tiger beetle, state listed species, and protected plants.	Low-Moderate Effects anticipated to West Indian manatee, Eastern indigo snake, and wood stork. No Effect to Florida bonneted bat, American crocodile, Everglade snail kite, Bartram's hairstreak butterfly, Florida leafwing butterfly, Miami blue butterfly, Miami tiger beetle, state listed species, and protected plants.	Low-Moderate Effects anticipated to West Indian manatee, Eastern indigo snake, and wood stork. No Effect to Florida bonneted bat, American crocodile, Everglade snail kite, Bartram's hairstreak butterfly, Florida leafwing butterfly, Miami blue butterfly, Miami tiger beetle, state listed species, and protected plants.	Low-Moderate Effects anticipated to West Indian manatee, Eastern indigo snake, and wood stork. No Effect to Florida bonneted bat, American crocodile, Everglade snail kite, Bartram's hairstreak butterfly, Florida leafwing butterfly, Miami blue butterfly, Miami tiger beetle, state listed species, and protected plants.	1	1	1	1
Wetland and Surface Water Impacts	No impact	4.3 acres - Surface Water Features No wetland mitigation required. No overall adverse impacts to wetland resources.	5.8 acres - Surface Water Features No wetland mitigation required. No overall adverse impacts to wetland resources.	5.8 acres - Surface Water Features No wetland mitigation required. No overall adverse impacts to wetland resources.	4.4 acres - Surface Water Features No wetland mitigation required. No overall adverse impacts to wetland resources.	1	2	2	3
Cultural/Historic/Archaeological Impacts	No impact	No significant negative impacts are anticipated on the resources identified as NRHP eligible or listed.	No significant negative impacts are anticipated on the resources identified as NRHP eligible or listed.	No significant negative impacts are anticipated on the resources identified as NRHP eligible or listed.	No significant negative impacts are anticipated on the resources identified as NRHP eligible or listed.	1	1	1	1
Points						5	8	7	8
COST									
Construction Cost	No construction No cost involved = \$0	\$900 million	\$1.3 billion	\$1.0 billion	\$1.1 billion	1	4	2	3
Right of Way Impacts/Relocations/Cost	None = \$0	67 properties impacted Potential Relocations - TBD Right of way cost - \$125 M	80 properties impacted Potential Relocations - TBD Right of way cost - \$153 M	71 properties impacted Potential Relocations - TBD Right of way cost - \$142 M	77 properties impacted Potential Relocations - TBD Right of way cost - \$155 M	1	4	2	3
Points						2	8	4	6
Total Points						44	45	35	28

Bold text = Different feature/characteristic when compared to the other alternatives. Alternative 2 was eliminated earlier in the concept development process.



STATE ROAD (S.R.) 826/PALMETTO EXPRESSWAY PD&E STUDY

From United States (U.S.) I/S.R. 5/Dixie Highway to NW 25th Street
 FPID No.: 432639-1-22-02 • ETDM No.: 14308

