William Hilton Parkway Gateway Corridor Independent Review Advisory Committee Meeting

April 22nd, 2024

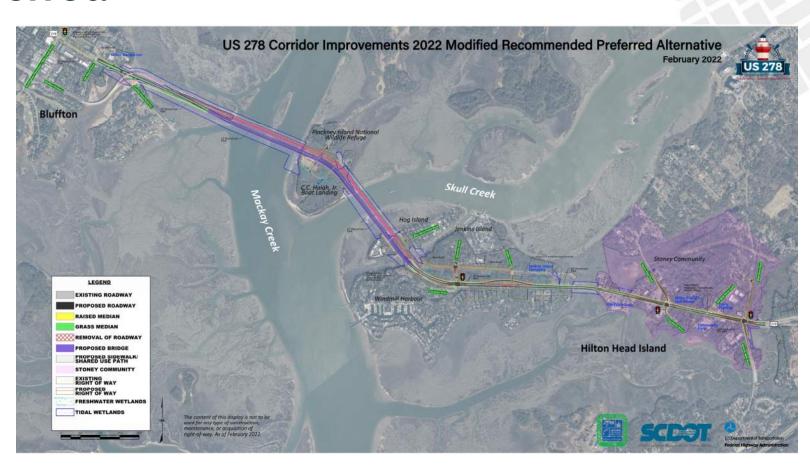




Agenda

- Brief Review of Alternatives and Areas Where ROW is Required
- Updated ROW, Cost, and Construction Duration Information
- Updated Overall Scoring Matrix for All Alternatives

Alternative #1 - SCDOT Modified Recommended Preferred



Alternative #2 - Bowties at Squire Pope and

Spanish Wells



Alternative #3 - Echelon / Center Turn Overpass



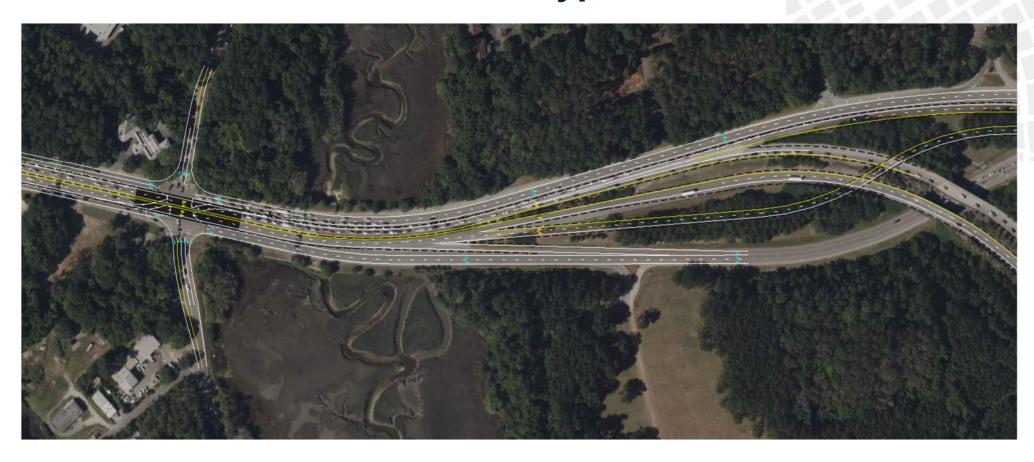


Echelon

Center-Turn Overpass

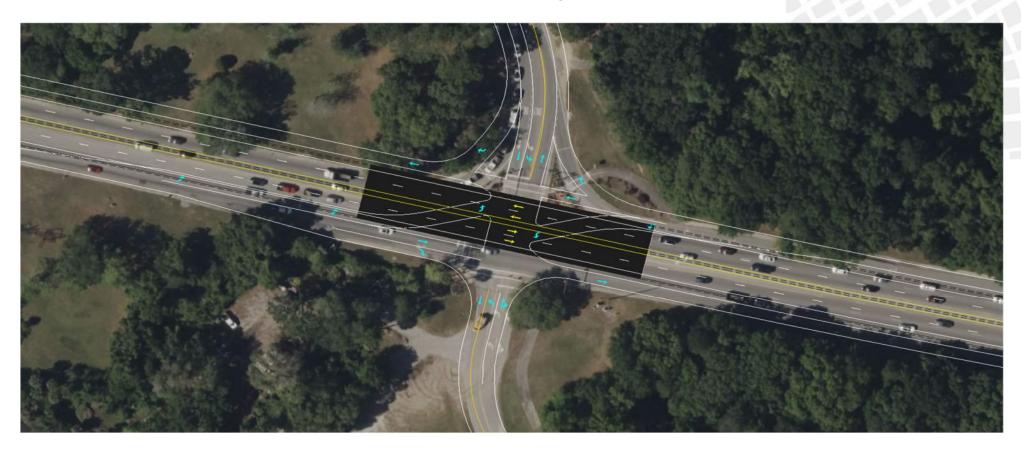




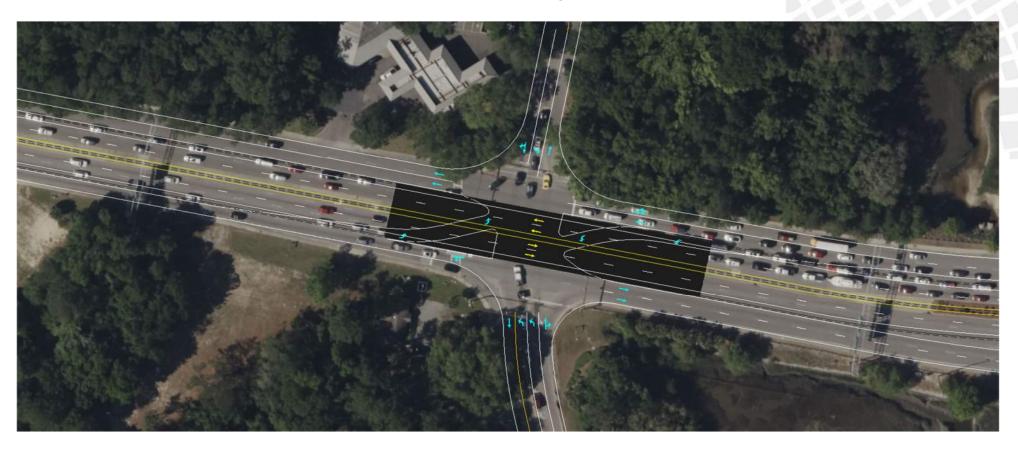




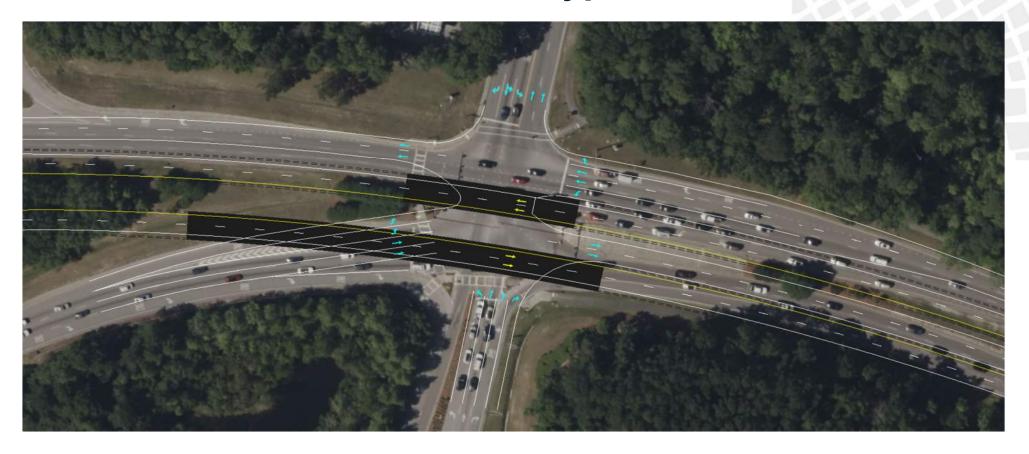
Alternative #4 - Elevated Bypass (Squire Pope)



Alternative #4 - Elevated Bypass (Spanish Wells)



Alternative #4 - Elevated Bypass (Gumtree)



Travel Time Comparison

Scenario		Difference in Travel Time (seconds)* when Compared to 2045 No Build		% Difference	
		AM	PM	AM	PM
		-109		-16.1%	2.7%
	WB	+43		6.3%	-34.2%
		-104		-15.3%	-6.6%
	WB	+9	-290	1.4%	-36.4%
2045 Alternative 3: Echelon at Squire Pope	EB	-67	-51	-9.4%	
2045 Alternative 5. Echelon at Squire Pope	WB	+17	-297	2.5%	-37.7%
2045 Alternative 3: Echelon at Spanish Wells	EB	-103	+16	-15.1%	2.5%
	WB	-15	-331	-2.3%	-44.0%
2045 Alternative 3: Center Turn Overpass at Squire Pope	EB	-122	+23	-18.4%	3.5%
	WB	-21	-319	-3.3%	-41.6%
2045 Alternative 3: Center Turn Overpass at Spanish Wells	EB	-134	-17	-20.6%	-2.9%
	WB	-16	-339	-2.5%	-45.4%
2045 Alternative 4: Elevated Bypass (at grade intersections only**)	EB	-126	+27	-19.1%	4.1%
2043 Alternative 4. Lievated bypass (at grade intersections only					

^{*}Travel times were completed in Synchro for the Hilton Parkway corridor between Moss Creek and Indigo Run

^{* *} Denoted travel times reflect operations of at-grade intersections only. VISSIM software will allow for modeling of bypass itself, and will therefore yield greater reductions in travel times than those shown in the table for the corridor as a whole.

Additional ROW Req'd vs SCDOT Alternative Alternative #1 -SCDOT Modified Preferred



Additional ROW Req'd vs SCDOT Alternative Alternative #2 - Bowties



Additional ROW Req'd vs SCDOT Alternative Alternative #3 - Echelons



Additional ROW Req'd vs SCDOT Alternative Alternative #3 - Center Turn Overpass



Right of Way and Cost Matrix - Data & Scoring

Resource/Category	Alternative 1 (Mod. SCDOT Recommended Preferred)	Alternative 2 Alternative 3 (Bowties at Squire Pope and Spanish Wells) Overpass)		Alternative 4 (Elevated Bypass)	
Est. Add'l Right of Way Acres – Public Est. Add'l Right of Way Acres – Private TOTAL Add' Right of Way Acres	0.2 <u>0.0</u> 0.2	0.94 <u>0.16</u> 1.10	0.86 <u>0.54</u> 1.40	0	
Right of Way Score	2	3	4	1	
Estimated Cost	\$426M*	\$430M**	\$440M to \$450M**	\$545M to \$575M**	
Cost Score	1	2	3	4	
Estimated Construction Duration	36 months	38 months	42 months	48 months	
Construction Duration Score	1	2	3	4	
TOTAL	4	7	10	9	
RANK	1	2	4	3	

^{*}Denoted estimated cost provided by Beaufort County (\$425M) + proposed Gum Tree improvements recommended by Lochmueller (\$1M)

^{* *} Denoted estimated cost generated by Lochmueller Group; based upon assumed percent differential in cost, in comparison to Alternative 1

Overall Scoring Matrix

Resource/Category	Alternative 1 (Mod. SCDOT Recommended Preferred)	Alternative 2 (Bowties at Squire Pope and Spanish Wells)	Alternative 3 (Echelon / Center Turn Overpass)	Alternative 4 (Elevated Bypass)
Traffic Operations (Throughput and Traffic Simulations)	4	3	3	1
ROW Impact	2	3	4	1
Environmental Impact	1	2	4	3
Safety	4	3	3	1
Bike/Pedestrian Impact	4	3	1	2
Community and Social Impact	1	3	4	2
Aesthetic	2	1	3	4
Cost	1	2	3	4
Construction Duration	1	2	3	4
TOTAL	20	22	28	22
RANK	1	3	4	3

1 = Highest Ranking

QUESTIONS?





