Appendix B-1 FDOT Roadway Cost Per Centerline Mile

Roadway Cost Per Centerline Mile Revised June 2014

	Construction Cost From LRE	MOT*	Mobilization *	Subtotal	Scope Contingency (25%)	Total Construction Cost	PE Design (15%)	CEI (15%)	Total Project Cost **
Rural Arterial									
New Construction (2-Lane Roadway) with 5' Paved Shoulders	\$3,351,896	\$335,190	\$368,709	\$4,055,794	\$1,013,949	\$5,069,743	\$760,461	\$760,461	\$6,590,666
New Construction (4-Lane Roadway) with 5' Paved Shoulders	\$5,449,902	\$544,990	\$599,489	\$6,594,381	\$1,648,595	\$8,242,976	\$1,236,446	\$1,236,446	\$10,715,869
New Construction (6-Lane Roadway) with 5' Paved Shoulders	\$6,945,143	\$694,514	\$763,966	\$8,403,624	\$2,100,906	\$10,504,529	\$1,575,679	\$1,575,679	\$13,655,888
Milling and Resurfacing (4-Lane Roadway) with 5' Paved Shoulders	\$1,145,229	\$114,523	\$125,975	\$1,385,727	\$346,432	\$1,732,158	\$259,824	\$259,824	\$2,251,806
Milling and Resurfacing (6-Lane Roadway) with 5' Paved Shoulders	\$1,668,122	\$166,812	\$183,493	\$2,018,428	\$504,607	\$2,523,035	\$378,455	\$378,455	\$3,279,945
Add Lanes (2 to 4 Lanes) with 5' Paved Shoulders (Includes milling and resurfacing of existing pavement)	\$3,895,621	\$389,562	\$428,518	\$4,713,701	\$1,178,425	\$5,892,127	\$883,819	\$883,819	\$7,659,764
Add Lanes (4 to 6 Lanes) with 5' Paved Shoulders (Includes milling and resurfacing of existing pavement)	\$4,364,817	\$436,482	\$480,130	\$5,281,428	\$1,320,357	\$6,601,785	\$990,268	\$990,268	\$8,582,321
Add Lanes (4 to 8 Lanes) with 5' Paved Shoulders (Includes milling and resurfacing of existing pavement)	\$5,855,972	\$585,597	\$644,157	\$7,085,726	\$1,771,432	\$8,857,157	\$1,328,574	\$1,328,574	\$11,514,305
Add Lanes (6 to 8 Lanes) with 5' Paved Shoulders (Includes milling and resurfacing of existing pavement)	\$5,489,564	\$548,956	\$603,852	\$6,642,373	\$1,660,593	\$8,302,966	\$1,245,445	\$1,245,445	\$10,793,856
Add 1 Through Lane on Inside (To Existing) with 5' Paved Shoulders	\$852,034	\$85,203	\$93,724	\$1,030,962	\$257,740	\$1,288,702	\$193,305	\$193,305	\$1,675,313
Add 1 Through Lane on Outside (To Existing) with 5' Paved Shoulders	\$1,334,043	\$133,404	\$146,745	\$1,614,192	\$403,548	\$2,017,740	\$302,661	\$302,661	\$2,623,062
Add 300' Exclusive Left Turn Lane	\$43,253	\$6,488	\$7,461	\$57,203	\$14,301	\$71,503	\$10,725	\$10,725	\$92,954
Add 300' Exclusive Right Turn Lane	\$102,384	\$15,358	\$17,661	\$135,403	\$33,851	\$169,254	\$25,388	\$25,388	\$220,030
Urban Arterial	524		2011-21		- 11				
New Construction (2-Lane Roadway) with 5' Sidewalk, and Curb & Gutter	\$4,840,624	\$484,062	\$532,469	\$5,857,155	\$1,464,289	\$7,321,444	\$1,098,217	\$1,098,217	\$9,517,877
New Construction (4-Lane Roadway) with 5' Sidewalk, and Curb & Gutter	\$6,832,753	\$683,275	\$751,603	\$8,267,631	\$2,066,908	\$10,334,539	\$1,550,181	\$1,550,181	\$13,434,900
New Construction (6-Lane Roadway) with 5' Sidewalk, and Curb & Gutter	\$8,353,372	\$835,337	\$918,871	\$10,107,580	\$2,526,895	\$12,634,475	\$1,895,171	\$1,895,171	\$16,424,818
Milling and Resurfacing (4-Lane Roadway) with 5' Sidewalk, and Curb & Gutter	\$1,227,295	\$122,729	\$135,002	\$1,485,027	\$371,257	\$1,856,283	\$278,442	\$278,442	\$2,413,168
Milling and Resurfacing (6-Lane Roadway) with 5' Sidewalk, and Curb & Gutter	\$1,740,670	\$174,067	\$191,474	\$2,106,211	\$526,553	\$2,632,764	\$394,915	\$394,915	\$3,422,593
Add Lanes (2 to 4 Lanes) with 5' Sidewalk, and Curb & Gutter (Includes milling and resurfacing existing pavement)	\$4,477,530	\$447,753	\$492,528	\$5,417,812	\$1,354,453	\$6,772,265	\$1,015,840	\$1,015,840	\$8,803,944
Add Lanes (4 to 6 Lanes) with 5' Sidewalk, and Curb & Gutter (Includes milling and resurfacing existing pavement)	\$5,002,273	\$500,227	\$550,250	\$6,052,750	\$1,513,188	\$7,565,938	\$1,134,891	\$1,134,891	\$9,835,719
Add Lanes (4 to 8 Lanes) with 5' Sidewalk, and Curb & Gutter (Includes milling and resurfacing existing pavement)	\$6,581,386	\$658,139	\$723,952	\$7,963,477	\$1,990,869	\$9,954,346	\$1,493,152	\$1,493,152	\$12,940,650
Add Lanes (6 to 8 Lanes) with 5' Sidewalk, and Curb & Gutter (Includes milling and resurfacing existing pavement)	\$5,969,158	\$596,916	\$656,607	\$7,222,681	\$1,805,670	\$9,028,351	\$1,354,253	\$1,354,253	\$11,736,856
Add 1 Through Lane on Inside (To Existing) with 5' Sidewalk, and Curb & Gutter	\$894,894	\$89,489	\$98,438	\$1,082,822	\$270,705	\$1,353,527	\$203,029	\$203,029	\$1,759,585
Add 1 Through Lane on Outside (To Existing) with 5' Sidewalk, and Curb & Gutter	\$2,420,914	\$242,091	\$266,300	\$2,929,305	\$732,326	\$3,661,632	\$549,245	\$549,245	\$4,760,121
Add 300' Exclusive Left Turn Lane	\$63,013	\$9,452	\$10,870	\$83,334	\$20,834	\$104,168	\$15,625	\$15,625	\$135,418
Add 300' Exclusive Right Turn Lane	\$132,149	\$19,822	\$22,796	\$174,767	\$43,692	\$218,459	\$32,769	\$32,769	\$283,996

^{*} A 15% MOT and Mobilization factor was used for exclusive left and right turn lanes. A 10% factor was used for all other figures.

Note:

- 1. Estimates were derived from FDOT LRE system
- 2. These figures exclude costs for intersections/interchanges, improvements to cross streets, bridges over 20', right-of-way, landscaping, ITS, and traffic signals.
- 3. The figures are based on market costs for Hillsborough County.
- 4. Costs shown are present day costs.
- 5. The costs developed for this report are not project-specific and should be used for preliminary estimating purposes only.

[&]quot; Total cost shown is derived from a standard typical section. Costs will need to be adjusted to account for signals, bridges, or any additional item not deemed typical.

Roadway Cost Per Centerline Mile Revised June 2014

	Construction Cost From LRE	MOT (18%)	Mobilization (10%)	Subtotal	Scope Contingency (25%)	Total Construction Cost	PE Design (15%)	CEI (15%)	Total Project Cost
Rural Arterial									
Add Lanes (4 to 6 Lanes) with 5' Paved Shoulders, 2 Traffic Signals, Highway Lighting, Fiber Based Communication Backbone, Widening 150' Low Level Bridge, and Milling & Resurfacing Existing 4 Lanes	\$5,974,792	\$597,479	\$657,227	\$7,229,498	\$1,807,375	\$9,036,873	\$1,355,531	\$1,355,531	\$11,747,935
Urban Arterial									
Add Lanes (4 to 6 Lanes) with 5' Sidewalk, Bike Lanes, 2 Traffic Signals, Highway Lighting, Fiber Based Communication Backbone, Widening 150' Low Level Bridge, and Milling & Resurfacing Existing 4 Lanes	\$6,282,391	\$628,239	\$691,063	\$7,601,693	\$1,900,423	\$9,502,116	\$1,425,317	\$1,425,317	\$12,352,751

Note

- 1. Estimates were derived from FDOT LRE system
- 2. These figures exclude costs for intersections/interchanges, cross street improvements, right-of-way, ITS, and landscaping.
- 3. The figures are based on market costs for Hillsborough County.
- 4. Costs shown are present day costs.
- 5. The costs developed for this report are not site-specific and should be used for preliminary estimating purposes only.

Other Roadway Related Costs Revised June 2014

	Construction Cost From LRE	MOT*	Mobilization (15%)	Subtotal	Scope Contingency (25%)	Total Construction Cost	PE Design (15%)	CEI (15%)	Total Project Cost
intersection Traffic Signalization (Mast A	m Assembly)**								
2-Lane Roadway Intersecting 2-Lane Roadway	\$152,791	\$22,919	\$26,357	\$202,067	\$50,517	\$252,583	\$37,887	\$37,887	\$328,358
4-Lane Roadway Intersecting 4-Lane Roadway	\$192,772	\$28,916	\$33,253	\$254,941	\$63,735	\$318,676	\$47,801	\$47,801	\$414,279
6-Lane Roadway Intersecting 6-Lane Roadway	\$214,028	\$32,104	\$36,920	\$283,052	\$70,763	\$353,815	\$53,072	\$53,072	\$459,959
Bicycle and Pedestrian Facilities									
Sidewalks Per Mile (5' Width - 1 Side)	\$88,939	\$4,447	\$14,008	\$107,393	\$26,848	\$134,242	\$20,136	\$20,136	\$174,514
Sidewalks Per Mile (6' Width - 1 Side)	\$106,726	\$5,336	\$16,809	\$128,872	\$32,218	\$161,090	\$24,164	\$24,164	\$209,417
Multi-Use Trail Per Mile (12' Width - 1 Side)	\$170,032	\$8,502	\$26,780	\$205,314	\$51,329	\$256,643	\$38,496	\$38,496	\$333,635
Stormwater Retention Facilities									
1 Acre Pond Site (6' Depth)	\$217,722	\$10,886	\$34,291	\$262,899	\$65,725	\$328,624	\$49,294	\$49,294	\$427,211
Median Retrofit									
Convert 14' Center Turn Lane to 14' Raised Median (Per Mile)	\$189,476	\$28,421	\$32,685	\$250,582	\$62,646	\$313,228	\$46,984	\$46,984	\$407,197
Cross Street Improvements			194-276-2						
Widen 1-Leg of Existing Rural 2-Lane Cross Street to Accommodate 2 Receiving Lanes, Dual Left Turn lanes, and Exclusive Right Turn Lane (Approximate Length of 0.25 Miles)	\$1,156,434	\$173,465		\$1,529,384	\$382,346	\$1,911,730	\$286,760	\$286,760	\$2,485,249

^{*}A 15% MOT factor was used for Traffic Signals, Median Retrofit, and Cross Street Improvements. A 5% factor was used for all other figures.

Notes: 1. Estimates were derived from FDOT LRE system

- 2. The figures are based on market costs for Hillsborough County.
- 3. Costs shown are present day costs.
- 4. The costs developed for this report are not site-specific and should be used for preliminary estimating purposes only.

Interchange Cost Revised June 2014

	Construction Cost From LRE	MOT (10%)	Mobilization (10%)	Subtotal	Scope Contingency (25%)	Total Construction Cost	PE Design (15%)	CEI (15%)	Subtotal Project Cost
Single Point Urban Interchange (SPUI)	\$ 19,832,201.63	\$1,983,220	\$2,181,542	\$23,996,964	\$5,999,241	\$29,996,205	\$4,499,431	\$4,499,431	\$38,995,066

Note

- 1. Cost was derived from an LRE estimate to modify the existing diamond interchange at I-75/SR 54 to a single point urban interchange.
- 2. Cost shown is for construction only. Does not include Design, CEI, and right-of-way.

[&]quot;The cost of traffic signalization assumes the installation of mast arms on all four legs of an Intersection. To obtain the cost of signalizing a four-lane roadway intersecting a two-lane roadway, divide the signal cost of a four-lane roadway by two and add this figure to the signal cost of the two-lane roadway divided by two.

Bridge Cost Per Square Foot

Revised June 2014

	Cost Per Square Foot
New Construction	2014
Low Level	\$120
Mid Level	\$145
High Level	\$170
Overpass (Over Roadway)	\$155
Bascule	\$1,900
Pedestrian Overpass	\$335
Widening	2014
Low Level	\$150
Mid Level	\$170
High Level	\$205
Overpass (Over Roadway)	\$185
Bridge Removal	2014
Concrete Bridge	\$50

Note:

- 1. Figures are for construction costs per square foot of deck area.
- 2. All figures exclude costs for right-of-way, bridge approaches, and approach slabs.
- 3. Figures account for recent increases in concrete and steel, and the effects of labor and material shortages in the construction industry.
- 4. The costs developed for this report are not site-specific and should be used for preliminary estimating purposes only.