

Roadway Cost Per Centerline Mile
Revised October 2006

	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	\$8,259,926	\$825,993	\$908,592	\$9,994,511	\$2,498,628	\$12,493,138	\$1,873,971	\$1,873,971	\$16,241,080
New Construction (4-Lane Roadway) with 5' Paved Shoulders	\$13,123,098	\$1,312,310	\$1,443,541	\$15,878,948	\$3,969,737	\$19,848,685	\$2,977,303	\$2,977,303	\$25,803,291
New Construction (6-Lane Roadway) with 5' Paved Shoulders	\$15,833,112	\$1,583,311	\$1,741,642	\$19,158,065	\$4,789,516	\$23,947,582	\$3,592,137	\$3,592,137	\$31,131,856
Milling and Resurfacing (4-Lane Roadway) with 5' Paved Shoulders	\$1,386,562	\$138,656	\$152,522	\$1,677,740	\$419,435	\$2,097,175	\$314,576	\$314,576	\$2,726,327
Milling and Resurfacing (6-Lane Roadway) with 5' Paved Shoulders	\$2,047,570	\$204,757	\$225,233	\$2,477,560	\$619,390	\$3,096,950	\$464,542	\$464,542	\$4,026,034
Add Lanes (2 to 4 Lanes) with 5' Paved Shoulders (Includes milling and resurfacing of existing pavement)	\$8,160,468	\$816,047	\$897,652	\$9,874,167	\$2,468,542	\$12,342,708	\$1,851,406	\$1,851,406	\$16,045,521
Add Lanes (4 to 6 Lanes) with 5' Paved Shoulders (Includes milling and resurfacing of existing pavement)	\$8,753,450	\$875,345	\$962,880	\$10,591,674	\$2,647,919	\$13,239,593	\$1,985,939	\$1,985,939	\$17,211,471
Add Lanes (4 to 8 Lanes) with 5' Paved Shoulders (Includes milling and resurfacing of existing pavement)	\$12,151,140	\$1,215,114	\$1,336,625	\$14,702,879	\$3,675,720	\$18,378,599	\$2,756,790	\$2,756,790	\$23,892,178
Add Lanes (6 to 8 Lanes) with 5' Paved Shoulders (Includes milling and resurfacing of existing pavement)	\$11,356,428	\$1,135,643	\$1,249,207	\$13,741,278	\$3,435,319	\$17,176,597	\$2,576,490	\$2,576,490	\$22,329,577
Add 1 Through Lane on Inside (To Existing) with 5' Paved Shoulders	\$1,856,504	\$185,650	\$204,215	\$2,246,370	\$561,593	\$2,807,963	\$421,194	\$421,194	\$3,650,351
Add 1 Through Lane on Outside (To Existing) with 5' Paved Shoulders	\$2,651,520	\$265,152	\$291,667	\$3,208,339	\$802,085	\$4,010,424	\$601,564	\$601,564	\$5,213,552
Add 300' Exclusive Left Turn Lane	\$76,758	\$11,514	\$13,241	\$101,512	\$25,378	\$126,890	\$19,033	\$19,033	\$164,957
Add 300' Exclusive Right Turn Lane	\$155,451	\$23,318	\$26,815	\$205,584	\$51,396	\$256,980	\$38,547	\$38,547	\$334,075
Urban Arterial									
New Construction (2-Lane Roadway) with 5' Sidewalk, and Curb & Gutter	\$10,526,226	\$1,052,623	\$1,157,885	\$12,736,733	\$3,184,183	\$15,920,916	\$2,388,137	\$2,388,137	\$20,697,191
New Construction (4-Lane Roadway) with 5' Sidewalk, and Curb & Gutter	\$15,212,150	\$1,521,215	\$1,673,337	\$18,406,702	\$4,601,675	\$23,008,377	\$3,451,257	\$3,451,257	\$29,910,891
New Construction (6-Lane Roadway) with 5' Sidewalk, and Curb & Gutter	\$18,358,300	\$1,835,830	\$2,019,413	\$22,213,543	\$5,553,386	\$27,766,929	\$4,165,039	\$4,165,039	\$36,097,007
Milling and Resurfacing (4-Lane Roadway) with 5' Sidewalk, and Curb & Gutter	\$1,548,816	\$154,882	\$170,370	\$1,874,067	\$468,517	\$2,342,584	\$351,388	\$351,388	\$3,045,359
Milling and Resurfacing (6-Lane Roadway) with 5' Sidewalk, and Curb & Gutter	\$2,119,829	\$211,983	\$233,181	\$2,564,993	\$641,248	\$3,206,242	\$480,936	\$480,936	\$4,168,114
Add Lanes (2 to 4 Lanes) with 5' Sidewalk, and Curb & Gutter (Includes milling and resurfacing existing pavement)	\$8,462,374	\$846,237	\$930,861	\$10,239,473	\$2,559,868	\$12,799,341	\$1,919,901	\$1,919,901	\$16,639,143
Add Lanes (4 to 6 Lanes) with 5' Sidewalk, and Curb & Gutter (Includes milling and resurfacing existing pavement)	\$9,031,516	\$903,152	\$993,467	\$10,928,134	\$2,732,033	\$13,660,167	\$2,049,025	\$2,049,025	\$17,758,217
Add Lanes (4 to 8 Lanes) with 5' Sidewalk, and Curb & Gutter (Includes milling and resurfacing existing pavement)	\$12,285,021	\$1,228,502	\$1,351,352	\$14,864,876	\$3,716,219	\$18,581,095	\$2,787,164	\$2,787,164	\$24,155,423
Add Lanes (6 to 8 Lanes) with 5' Sidewalk, and Curb & Gutter (Includes milling and resurfacing existing pavement)	\$10,963,903	\$1,096,390	\$1,206,029	\$13,266,323	\$3,316,581	\$16,582,904	\$2,487,436	\$2,487,436	\$21,557,775
Add 1 Through Lane on Inside (To Existing) with 5' Sidewalk, and Curb & Gutter	\$2,103,430	\$210,343	\$231,377	\$2,545,151	\$636,288	\$3,181,438	\$477,216	\$477,216	\$4,135,870
Add 1 Through Lane on Outside (To Existing) with 5' Sidewalk, and Curb & Gutter	\$3,958,946	\$395,895	\$435,484	\$4,790,324	\$1,197,581	\$5,987,905	\$898,186	\$898,186	\$7,784,277
Add 300' Exclusive Left Turn Lane	\$119,877	\$17,981	\$20,679	\$158,537	\$39,634	\$198,171	\$29,726	\$29,726	\$257,622
Add 300' Exclusive Right Turn Lane	\$216,157	\$32,423	\$37,287	\$285,867	\$71,467	\$357,334	\$53,600	\$53,600	\$464,534

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

** 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.

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.

The attached cost data reflects FDOT D7 long range estimates and utilizes recent costs for actual projects. This data will be updated and disseminated quarterly.

Roadway Cost Per Centerline Mile

Revised October 2006

Sample Cost Estimates Inclusive of Traffic Signals, Lighting, Bridges, and Fiber Communication Backbone

	Construction Cost From LRE	MOT (10%)	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	\$11,723,847	\$1,172,385	\$1,289,623	\$14,185,855	\$3,546,464	\$17,732,319	\$2,659,848	\$2,659,848	\$23,052,015
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	\$10,887,413	\$1,088,741	\$1,197,615	\$13,173,769	\$3,293,442	\$16,467,212	\$2,470,082	\$2,470,082	\$21,407,375

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.

Bridge Cost Per Square Foot

Revised October 2006

	Cost Per Foot	Square
New Construction		
Low Level	\$110	
Mid Level	\$130	
High Level	\$155	
Overpass (Over Roadway)	\$140	
Bascule	\$1,725	
Pedestrian Overpass	\$400	
Widening		
Low Level	\$160	
Mid Level	\$195	
High Level	\$220	
Overpass (Over Roadway)	\$170	
Bridge Removal		
Concrete Bridge	\$50	

Note:

1. Figures are for 2006 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.

The attached cost data reflects FDOT D7 long range estimates and utilizes recent costs for actual projects. This data will be updated and disseminated quarterly.

10/2/2006

Other Roadway Related Costs
Revised October 2006

	Construction Cost From LRE	MOT *	Mobilization (15%)	Subtotal	Scope Contingency (25%)	Total Construction Cost	PE Design (15%)	CEI (15%)	Subtotal Project Cost	Total Project Cost
Traffic Signals										
2-Lane Mast Arm (Each)	\$132,970	\$19,945	\$22,937	\$175,853	\$43,963	\$219,816	\$32,972	\$32,972	\$285,761	\$285,761
4-Lane Mast Arm (Each)	\$171,989	\$25,798	\$29,668	\$227,456	\$56,864	\$284,320	\$42,648	\$42,648	\$369,616	\$369,616
6-Lane Mast Arm (Each)	\$213,126	\$31,969	\$36,764	\$281,859	\$70,465	\$352,324	\$52,849	\$52,849	\$458,022	\$458,022
Bicycle and Pedestrian Facilities										
Sidewalks Per Mile (5' Width - 1 Side)	\$194,802	\$9,740	\$30,681	\$235,224	\$58,806	\$294,030	\$44,104	\$44,104	\$382,239	\$382,239
Sidewalks Per Mile (6' Width - 1 Side)	\$231,651	\$11,583	\$36,485	\$279,719	\$69,930	\$349,649	\$52,447	\$52,447	\$454,543	\$454,543
Multi-Use Trail Per Mile (12' Width - 1 Side)	\$352,819	\$17,641	\$55,569	\$426,029	\$106,507	\$532,536	\$79,880	\$79,880	\$692,297	\$692,297
Stormwater Retention Facilities										
1 Acre Pond Site (Each)	\$631,431	\$31,572	\$99,450	\$762,454	\$190,613	\$953,067	\$142,960	\$142,960	\$1,238,987	\$1,238,987
Median Retrofit										
Convert 14' Center Turn Lane to 14' Raised Median (Per Mile)	\$486,886	\$73,033	\$83,988	\$643,907	\$160,977	\$804,883	\$120,733	\$120,733	\$1,046,348	\$1,046,348
Cross Street Improvements										
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)	\$2,220,586	\$333,088	\$383,051	\$2,936,726	\$734,181	\$3,670,907	\$550,636	\$550,636	\$4,772,179	\$4,772,179

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

Note:

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 October 2006

	Total Construction Cost
Single Point Urban Interchange (SPUI)	\$51,571,458

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.

Construction Cost Assumptions

RURAL		
New Construction	Widening	Milling and Resurfacing
12' Travel Lanes 40' Depressed Median 10' Outside Shoulders with 5' Paved 8' Inside Shoulders (grassed) 5' Sidewalks (Both Sides) Additional Pavement for Turnouts, Crossovers, Turn Lanes Earthwork (Clearing and Grubbing, Embankment) Signing & Pavement Markings 1 Acre Pond/Lane/Mile (4 Lanes = 4 Acres) Drainage Features (Pipes, Endwalls, MES) Lighting	12' Travel Lanes 40' Depressed Median 10' Outside Shoulders with 5' Paved 8' Inside Shoulders (grassed) 5' Sidewalks (Both Sides) Milling and Resurfacing of Existing Pavement Additional Pavement for Turnouts, Crossovers, Turn Lanes Earthwork (Clearing and Grubbing, Borrow) Signing & Pavement Markings 2 Acre Pond/Additional Lane (2 New Lanes = 4 Acres) Drainage Features (Pipes, Endwalls, MES) Lighting	12' Travel Lanes 40' Depressed Median 10' Outside Shoulders with 5' Paved 8' Inside Shoulders (grassed) Milling and Resurfacing of Existing Pavement Additional Pavement for Turnouts, Crossovers, Turn Lanes Signing & Pavement Markings Drainage Features (Pipe Desilting)
URBAN		
New Construction	Widening	Milling and Resurfacing
12' Travel Lanes 30' Raised Median 4' Bike Lanes (Both Sides) Curb and Gutter 5' Sidewalks (Both Sides) Additional Pavement for Turnouts, Crossovers, Turn Lanes Earthwork (Clearing and Grubbing, Embankment) Signing & Pavement Markings 1 Acre Pond/Lane/Mile (4 Lanes = 4 Acres) Drainage Features (Pipes, Inlets, Manholes) Conventional Lighting	12' Travel Lanes 30' Raised Median 4' Bike Lanes (Both Sides) Curb and Gutter 5' Sidewalks (Both Sides) Milling and Resurfacing of Existing Pavement Additional Pavement for Turnouts, Crossovers, Turn Lanes Earthwork (Clearing and Grubbing, Borrow) Signing & Pavement Markings 2 Acre Pond/Additional Lane (2 New Lanes = 4 Acres) Drainage Features (Pipes, Inlets, Manholes) Conventional Lighting	12' Travel Lanes 30' Raised Median 4' Bike Lanes (Both Sides) Curb and Gutter Milling and Resurfacing of Existing Pavement Additional Pavement for Turnouts, Crossovers, Turn Lanes Signing & Pavement Markings Drainage Features (Pipe Desilting, Manhole Adjustments)