



# 2021 Intelligent Transportation Systems Master Plan Update

## Appendices

**SPACE COAST**  
Transportation Planning Organization

September 2021



# 2021 Intelligent Transportation Systems Master Plan Update

Appendix A - Evaluation Criteria

Appendix B - Project Costs

Appendix C - Project Maintenance Complexity by Hours

Appendix D - Project Map and List

Appendix E - Opportunity Cost Formulas

Appendix F - Project Opportunity Costs

**SPACE COAST**

Transportation Planning Organization



# 2021 Intelligent Transportation Systems Master Plan Update

Appendix A – Project Evaluation



# Space Coast TPO ITS Master Plan Proposed Project List - Evaluation Criteria

HIN 2+ Networks=Green (3)  
HIN 1 Network=Yellow (2)  
HIN 0 Networks=Red (1)







V/C > .85 = Green (3)  
V/C > .75 = Yellow (2)  
V/C < .75 = Red (1)

Direct Connect = Green (3)  
Indirect = Yellow (2)  
No connection = Red (1)

Improved Time = Green (3)  
Improved Consistency = Yellow (2)  
Neither = Red (1)

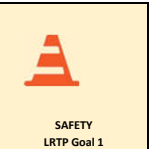

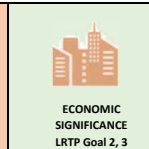
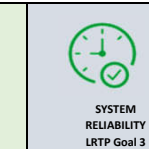






















































































+Monitoring = Green (3)  
Some monitoring = Yellow (2)  
None = Red (1)





















































































Redundancy = Green (3)  
On Evac Route = Yellow (2)  
Neither = Red (1)

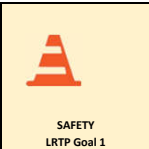

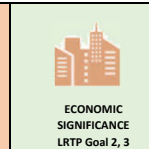
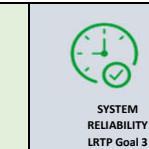
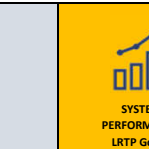

































































 SAFETY L RTP Goal 1	 CONGESTION MANAGEMENT L RTP Goal 1, 4	 ECONOMIC SIGNIFICANCE L RTP Goal 2, 3	 SYSTEM RELIABILITY L RTP Goal 3	 SYSTEM PERFORMANCE L RTP Goal 3	 RESILIENCY L RTP Goal 4
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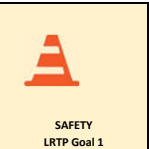

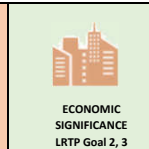
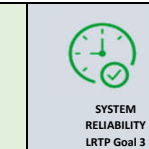










































































Project Number	Project Type	Jurisdiction	Maintaining Agency	Corridor	Start	End	Level project may impact corridor identified in VZ HIN	Targets high congested corridors	Provides improved access to high tourism/high employment zones	Improves travel time reliability	Improves ability to monitor performance of system	Promotes redundancy/sustainability of infrastructure to withstand shocks/stressors
101	ATMS	Cape Canaveral Cocoa Beach FDOT	Brevard County, Cocoa Beach, FDOT	SR A1A	Minutemen Causeway	SR 401						
102	ATMS	Cocoa Beach County FDOT	Brevard County, Cocoa Beach, FDOT	SR 520	Milford Point	SR A1A						
103	ATMS	Cocoa/County	Brevard County, Cocoa Beach, FDOT	SR 501 (Clearlake Rd)	SR 520 (King St)	Industry Rd						
104	ATMS	Titusville	Titusville, FDOT	SR 50	South Street	US 1 (Washington Ave)						
105	ATMS	Titusville / County	Titusville, Brevard County, FDOT	US 1	Camp Rd	SR 406 (Garden St)						
106	ATMS	Melbourne / County	Melbourne, Brevard County, FDOT	Pineda, Eau Gallie, and 192	US1	A1A						
107	ATMS	Satellite Beach, Indian Harbour Beach, County, Indialantic	Melbourne, Brevard County, FDOT	SR A1A	US 192	SR 404 (Pineda Cswy)						
108	ATMS	Melbourne / Palm Bay / Malabar	Palm Bay, FDOT	SR 507 (Babcock) Minton Rd SR 514 (Malabar)	Malabar Rd Malabar Rd Minton Rd	Palm Bay Rd Emerson Rd US 1						
109	ATMS	Cocoa, Rockledge, County, Palm Shores, Melbourne	Cocoa Beach, Rockledge, Brevard County, Palm Shores, Melbourne, FDOT	US 1	Post Rd	Eyster Blvd						
110	ATMS	Rockledge, County	Rockledge, Brevard County	Rockledge Loop	Judge Fran Jameson Way Wickham Rd Wickham Rd	Barton Blvd Judge Fran Jamieson Way Barnes Blvd						
112	ATMS	County, Palm Shores, Melbourne, Melbourne Village, West Melbourne	Brevard County, Melbourne	Wickham Rd	Minton Road	Suntree Blvd						
113	ATMS	County, Titusville	Brevard County, Titusville, FDOT	US 1	SR 406 (Garden St)	SR 46 (Main St)						





















Project Number	Project Type	Jurisdiction	Maintaining Agency	Corridor	Start	End						
							SAFETY LRTP Goal 1	CONGESTION MANAGEMENT LRTP Goal 1, 4	ECONOMIC SIGNIFICANCE LRTP Goal 2, 3	SYSTEM RELIABILITY LRTP Goal 3	SYSTEM PERFORMANCE LRTP Goal 3	RESILIENCY LRTP Goal 4
							Level project may impact corridor identified in VZ HIN	Targets high congested corridors	Provides improved access to high tourism/high employment zones	Improves travel time reliability	Improves ability to monitor performance of system	Promotes redundancy/sustainability of infrastructure to withstand shocks/stressors
114	ATMS	Melbourne, Palm Bay	Melbourne, Palm Bay, FDOT	US 1	SR 514 (Malabar Rd)	E University Blvd						
115	ATMS	Cocoa Beach, County	Cocoa Beach, Brevard County, FDOT	SR A1A	SR 404 (Pineda Causeway)	Minutemen Causeway						
116	ATMS	Melbourne	Melbourne	Post Rd	Wickham Rd	US1						
117	ATMS	Melbourne	Melbourne	Parkway Drive	Wickham Rd	US1						
118	ATMS	Melbourne	Melbourne	Lake Washington Rd	Wickham Rd	US1						
119	ATMS	West Melbourne	Brevard County	Hollywood Blvd	Palm Bay Rd	US 192						
120	ATMS	West Melbourne / Melbourne	Brevard County	Diary Rd	Palm Bay Rd	US 192						
121	ATMS	Brevard County	Brevard County	Grissom Parkway	Industry Rd	Kings Highway						
122	ATMS	Brevard County	Brevard County	Fay Blvd	Homestead Ave	US1						
123	ATMS	Palm Bay	Palm Bay	Malabar Rd	St John's Heritage Parkway	Minton Rd						
124	ATMS	Palm Bay	Palm Bay	Emerson Drive	Degroodt Rd	Malabar Rd						
125	ATMS	Palm Bay	Palm Bay	St John's Heritage Parkway	Interchange	Maraloma On South Babcock St						
126	ATMS	Palm Bay	Palm Bay	San Filippo Drive	Cogan Dr	Malabar Rd						
191	ATMS - evacuation	Brevard County	Brevard County, FDOT	SR 46	Brevard-Seminole County Line	Carpenter Rd						

Project Number	Project Type	Jurisdiction	Maintaining Agency	Corridor	Start	End						
							SAFETY LRTP Goal 1	CONGESTION MANAGEMENT LRTP Goal 1, 4	ECONOMIC SIGNIFICANCE LRTP Goal 2, 3	SYSTEM RELIABILITY LRTP Goal 3	SYSTEM PERFORMANCE LRTP Goal 3	RESILIENCY LRTP Goal 4
							Level project may impact corridor identified in VZ HIN	Targets high congested corridors	Provides improved access to high tourism/high employment zones	Improves travel time reliability	Improves ability to monitor performance of system	Promotes redundancy/sustainability of infrastructure to withstand shocks/stressors
192	ATMS - evacuation	Brevard County	Brevard County, FDOT	SR 3 (Courtenay Pkwy)	SR 528	SR 405 (NASA Pkwy)						
193	ATMS - evacuation	Brevard County	Brevard County, FDOT	SR 528 (Beachline Expy)	Brevard-Orange County Line	I-95						
194	ATMS - evacuation	Brevard County	Brevard County, FDOT	SR 520	Brevard-Orange County Line	I-95						
195	ATMS - evacuation	Indian River, Melbourne Beach, County	Brevard County, Melbourne, FDOT	SR A1A	Brevard-Indian River County Line	US 192						
196	ATMS - evacuation	Melbourne, Palm Bay, Malabar, Grant-Valkaria, County	Brevard County, Melbourne, Palm Bay	US 1	Brevard-Indian River County Line	Malabar Rd						
197	ATMS - evacuation	Palm Bay, County	Palm Bay, Brevard County	Babcock St	Brevard-Indian River County Line	SR 514 (Malabar Rd)						
198	ATMS - evacuation	County, Palm Bay	Palm Bay, Brevard County	Micco Rd	Babcock St	US 1						
							<b>Location / Start</b>					
301	VEHICLE, UNSIGNALIZED	Brevard County / Melbourne	Brevard County	Aurora Road	@ Turtle Mound Road					n/a	n/a	
302	VEHICLE, UNSIGNALIZED	Brevard County	Brevard County	Pinehurst Avenue	@ Spyglass Hill Road					n/a	n/a	
303	VEHICLE, UNSIGNALIZED	Melbourne	Melbourne, FDOT	SR 518 (Eau Gallie Blvd)	@ Turtle Mound Road					n/a	n/a	
304	VEHICLE, SIGNALIZED	Rockledge	Rockledge	Barnes Blvd.	@ Murrell Road					n/a	n/a	
305	VEHICLE, SIGNALIZED	Rockledge	Rockledge, FDOT	SR 519 (Fiske Blvd)	@ Barnes Boulevard					n/a	n/a	
306	VEHICLE, SIGNALIZED	Cocoa	Cocoa Beach, FDOT	501 (Clearlake Road)	Roseline/Tate Street					n/a	n/a	
307	VEHICLE, SIGNALIZED	Cocoa	Cocoa, FDOT	US 1	@ Range Road					n/a	n/a	
308	VEHICLE, SIGNALIZED	Brevard County	Brevard County, FDOT	SR 520 (King Street)	@ Friday Road					n/a	n/a	
309	VEHICLE, SIGNALIZED	Brevard County	Brevard County, FDOT	SR 520	@ SR 3(Courtenay Parkway)					n/a	n/a	

Project Number	Project Type	Jurisdiction	Maintaining Agency	Corridor	Start	End						
							SAFETY LRTP Goal 1	CONGESTION MANAGEMENT LRTP Goal 1, 4	ECONOMIC SIGNIFICANCE LRTP Goal 2, 3	SYSTEM RELIABILITY LRTP Goal 3	SYSTEM PERFORMANCE LRTP Goal 3	RESILIENCY LRTP Goal 4
							Level project may impact corridor identified in VZ HIN	Targets high congested corridors	Provides improved access to high tourism/high employment zones	Improves travel time reliability	Improves ability to monitor performance of system	Promotes redundancy/sustainability of infrastructure to withstand shocks/stressors
310	VEHICLE, SIGNALIZED	Brevard County	Brevard County, FDOT	SR 520	@ Plumosa Street					n/a	n/a	
311	VEHICLE, SIGNALIZED	Brevard County	Brevard County	Merritt Ave	@ Plumosa Street					n/a	n/a	
312	VEHICLE, SIGNALIZED	Brevard County	Brevard County, FDOT	SR 3 (Courtenay Pkwy)	@ Diana Boulevard					n/a	n/a	
313	VEHICLE, SIGNALIZED	Brevard County	Brevard County, FDOT	US 1	@ Canaveral Groves Boulevard					n/a	n/a	
314	VEHICLE, SIGNALIZED	Titusville	Titusville, FDOT	SR 50	@ Sisson Road/Alpine Lane					n/a	n/a	
315	VEHICLE, SIGNALIZED	Titusville	Titusville, FDOT	SR 50	@ SR 405					n/a	n/a	
316	VEHICLE, SIGNALIZED	Brevard County	Brevard County	Grissom Parkway	@ Canaveral Groves Boulevard					n/a	n/a	
317	VEHICLE, SIGNALIZED	Titusville	Titusville, FDOT	SR 405 (South St)	@ Fox Lake Road/Harrison Street					n/a	n/a	
318	VEHICLE, SIGNALIZED	Titusville	Titusville, FDOT	SR 405 (South St)	@ Sisson Road					n/a	n/a	
319	VEHICLE, SIGNALIZED	West Melbourne / Melbourne	West Melbourne / Melbourne	Dairy Road	@ Edgewood Drive					n/a	n/a	
320	VEHICLE, SIGNALIZED	Melbourne	Melbourne, FDOT	SR 518 ( Eau Gallie Blvd)	@ Wickham Road					n/a	n/a	
321	VEHICLE, SIGNALIZED	Melbourne	Melbourne, FDOT	US 192	@ US 1					n/a	n/a	
322	VEHICLE, SIGNALIZED	Palm Bay	Palm Bay	Malabar Rd	@ Emerson Drive					n/a	n/a	
323	BICYCLE	Palm Shores	Brevard County, FDOT	US 1	@ SR 404 (Pineda)					n/a	n/a	
324	BICYCLE	Brevard County	Brevard County, FDOT	SR 520	@ Newfound Harbor Drive					n/a	n/a	
325	BICYCLE	West Melbourne / Palm Bay	West Melbourne / Palm Bay	Palm Bay Rd	@ Hollywood Boulevard					n/a	n/a	

Project Number	Project Type	Jurisdiction	Maintaining Agency	Corridor	Start	End						
							SAFETY LRTP Goal 1	CONGESTION MANAGEMENT LRTP Goal 1, 4	ECONOMIC SIGNIFICANCE LRTP Goal 2, 3	SYSTEM RELIABILITY LRTP Goal 3	SYSTEM PERFORMANCE LRTP Goal 3	RESILIENCY LRTP Goal 4
							Level project may impact corridor identified in VZ HIN	Targets high congested corridors	Provides improved access to high tourism/high employment zones	Improves travel time reliability	Improves ability to monitor performance of system	Promotes redundancy/sustainability of infrastructure to withstand shocks/stressors
326	BICYCLE	Palm Bay	Palm Bay	Minton Road	@ Emerson Drive					n/a	n/a	
327	PEDESTRIAN	Cocoa	Cocoa Beach, FDOT	US 1	@ SR 520					n/a	n/a	
328	PEDESTRIAN	Cocoa	Cocoa Beach, FDOT	SR 501 (Clearlake Rd)	@ Lake Drive/School St					n/a	n/a	
329	PEDESTRIAN	Cocoa	Cocoa Beach, FDOT	SR 501 (Clearlake Rd)	@ Dixon Boulevard					n/a	n/a	
330	PEDESTRIAN	Cocoa	Cocoa Beach, FDOT	SR 501 (Clearlake Rd)	@ Roseline/Tate Street					n/a	n/a	
331	PEDESTRIAN	County	Brevard County, FDOT	SR 520	@ Newfound Harbor Drive					n/a	n/a	
332	PEDESTRIAN	Cape Canaveral	Brevard County, FDOT	SR A1A	@ Central Blvd.					n/a	n/a	
333	PEDESTRIAN	Melbourne	Melbourne, FDOT	SR 518 ( Eau Gallie Blvd)	@ Wickham Road					n/a	n/a	
334	PEDESTRIAN	Melbourne	Melbourne, FDOT	US 1	@ Aurora Road					n/a	n/a	
401	EVENT MANAGEMENT - Pkg	Titusville	Titusville, FDOT	SR 406 (Garden St)	I-95	US 1						
402	EVENT MANAGEMENT - PKG/Detour	Titusville/County	Titusville, FDOT	SR 50	W of I-95	US 1						
403	EVENT MANAGEMENT - PKG	Cape Canaveral, County, Cocoa	FDOT	SR 528	W of I-95	SR A1A						
404	EVENT MANAGEMENT - PKG	Cocoa, County, Cocoa Beach	Brevard County, FDOT	SR 520	W of I-95	SR A1A						
405	EVENT MANAGEMENT - PKG	County, Palm Shores	FDOT	SR 404 (Pineda Cswy)	US 1	SR A1A						
406	EVENT MANAGEMENT - PKG	Melbourne, Indianalantic, West Melbourne	Brevard County, Melbourne, FDOT	US 192	I-95	SR A1A						



							 SAFETY LRTP Goal 1	 CONGESTION MANAGEMENT LRTP Goal 1, 4	 ECONOMIC SIGNIFICANCE LRTP Goal 2, 3	 SYSTEM RELIABILITY LRTP Goal 3	 SYSTEM PERFORMANCE LRTP Goal 3	 RESILIENCY LRTP Goal 4
Project Number	Project Type	Jurisdiction	Maintaining Agency	Corridor	Start	End	Level project may impact corridor identified in VZ HIN	Targets high congested corridors	Provides improved access to high tourism/high employment zones	Improves travel time reliability	Improves ability to monitor performance of system	Promotes redundancy/sustainability of infrastructure to withstand shocks/stressors
415	EVENT MANAGEMENT - EVACUATION	Brevard County/ West Melbourne/Melbourne	Brevard County	Ellis Rd	I-95	Wickham Rd						
416	EVENT MANAGEMENT - EVACUATION	Brevard County/Melbourne	Brevard County	St John's Heritage Parkway	US 192	Ellis Rd						



# 2021 Intelligent Transportation Systems Master Plan Update

Appendix B – Project Costs

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).

If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 101: SR A1A, Minuteman Causeway to SR 401**

"ATMS" Project Calculator	
Design / Engineering Cost	\$ 675,132.08
Construction Engineering & Inspection Cost	\$ 421,957.55
Construction Cost (Material + Labor)	\$ 3,375,660.39
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 5,987,577.62
	<b>INPUT</b>
Fiber Optic (in miles)	7
No. of Traffic Signals	26
No. of ADMS	2
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	45%
Percentage of Mid-Block Coverage	100%
	<b>TOTAL</b>
No. of CCTV Cameras	12
No. of Roadside Units/Bluetooth	26
No. of Midblock Detectors	7
No. of Controllers	26
No. of Controller Cabinet Assemblies	6
No. of Video Detection Systems	13
No. of Network Connections	54

"INTERSTATE" Project Calculator	
Design / Engineering Cost	\$ -
Construction Engineering & Inspection Cost	\$ -
Construction Cost (Material + Labor)	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
	<b>TOTAL</b>
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

"INTERSECTION SAFETY" Project Calculator	
Design / Engineering Cost	\$ -
Construction Engineering & Inspection Cost	\$ -
Construction Cost (Material + Labor)	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

"EVENT MANAGEMENT" Project Calculator	
Design / Engineering Cost	\$ -
Construction Engineering & Inspection Cost	\$ -
Construction Cost (Material + Labor)	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Key Decision Points / Intersections	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
671-2-113	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
641-2-13	Prestressed Concrete Pole, F&I, Type P-II	EA	\$ 13,263.74

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://dotwww.blob.core.windows.net/sitefinity/docs/default/source/programmanagement/estimates/historicalcostinformation/files/historicaltemaverages\\_12month.pdf?sfvrsn=4e4c771\\_2](https://dotwww.blob.core.windows.net/sitefinity/docs/default/source/programmanagement/estimates/historicalcostinformation/files/historicaltemaverages_12month.pdf?sfvrsn=4e4c771_2)

COSTING ASSUMPTIONS:	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Erosion and Sediment Control	12.5%

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,263.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 102: SR 520, Milford Point to SR A1A**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 395,913.33
Construction Engineering & Inspection Cost:	\$ 247,445.83
Construction Cost (Material + Labor):	\$ 1,979,566.63
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 3,511,256.31
<b>INPUT</b>	
Fiber Optic (in miles)	3.3
No. of Traffic Signals	4
No. of ADMS	2
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	50%
Percentage of Mid-Block Coverage	75%
<b>TOTAL</b>	
No. of CCTV Cameras	2
No. of Roadside Units/Bluetooth	4
No. of Midblock Detectors	2
No. of Controllers	4
No. of Controller Cabinet Assemblies	1
No. of Video Detection Systems	2
No. of Network Connections	9

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-111	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-111	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/information/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/information/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%



INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 103: SR 501 (Clearlake Rd), SR 520 (King St) to Industry Rd**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 228,238.43
Construction Engineering & Inspection Cost:	\$ 142,649.02
Construction Cost (Material + Labor):	\$ 1,141,192.16
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 2,024,189.59
<b>INPUT</b>	
Fiber Optic (in miles)	3.4
No. of Traffic Signals	8
No. of ADMS	2
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	50%
Percentage of Mid-Block Coverage	50%
<b>TOTAL</b>	
No. of CCTV Cameras	4
No. of Roadside Units/Bluetooth	8
No. of Midblock Detectors	2
No. of Controllers	8
No. of Controller Cabinet Assemblies	2
No. of Video Detection Systems	4
No. of Network Connections	14

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicle Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?svrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?svrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 104: SR 50, South Street to US 1 (Washington Ave)**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 205,665.03
Construction Engineering & Inspection Cost:	\$ 128,540.64
Construction Cost (Material + Labor):	\$ 1,028,325.13
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 1,823,991.70
	<b>INPUT</b>
Fiber Optic (in miles)	3
No. of Traffic Signals	7
No. of ADMS	2
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	40%
Percentage of Mid-Block Coverage	50%
	<b>TOTAL</b>
No. of CCTV Cameras	3
No. of Roadside Units/Bluetooth	7
No. of Midblock Detectors	2
No. of Controllers	7
No. of Controller Cabinet Assemblies	1
No. of Video Detection Systems	3
No. of Network Connections	12

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
	<b>TOTAL</b>
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicle Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c721\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c721_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 105: US 1, Camp Road to SR 406 (Garden St)**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 523,570.05
Construction Engineering & Inspection Cost:	\$ 327,231.28
Construction Cost (Material + Labor):	\$ 2,617,850.27
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 4,643,411.91
<b>INPUT</b>	
Fiber Optic (in miles)	12.1
No. of Traffic Signals	18
No. of ADMS	2
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	50%
Percentage of Mid-Block Coverage	50%
<b>TOTAL</b>	
No. of CCTV Cameras	9
No. of Roadside Units/Bluetooth	18
No. of Midblock Detectors	6
No. of Controllers	18
No. of Controller Cabinet Assemblies	4
No. of Video Detection Systems	9
No. of Network Connections	29

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicle Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?svrsn=4e4c771-2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?svrsn=4e4c771-2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 106: Pineda, Eau Gallie, and 192, US 1 to SR A1A**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 757,045.19
Construction Engineering & Inspection Cost:	\$ 473,153.24
Construction Cost (Material + Labor):	\$ 3,785,225.94
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 6,714,044.52
<b>INPUT</b>	
Fiber Optic (in miles)	11.5
No. of Traffic Signals	24
No. of ADMS	6
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	50%
Percentage of Mid-Block Coverage	70%
<b>TOTAL</b>	
No. of CCTV Cameras	12
No. of Roadside Units/Bluetooth	24
No. of Midblock Detectors	8
No. of Controllers	24
No. of Controller Cabinet Assemblies	6
No. of Video Detection Systems	12
No. of Network Connections	46

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	EA	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
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635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicle Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c721\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c721_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%



INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 107: SR A1A, US 192 to SR 404 (Pineda Causeway)**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 939,295.66
Construction Engineering & Inspection Cost:	\$ 587,059.78
Construction Cost (Material + Labor):	\$ 4,696,478.28
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 8,330,378.34
<b>INPUT</b>	
Fiber Optic (in miles)	9
No. of Traffic Signals	35
No. of ADMS	6
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	45%
Percentage of Mid-Block Coverage	85%
<b>TOTAL</b>	
No. of CCTV Cameras	16
No. of Roadside Units/Bluetooth	35
No. of Midblock Detectors	8
No. of Controllers	35
No. of Controller Cabinet Assemblies	8
No. of Video Detection Systems	17
No. of Network Connections	70

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	EA	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicle Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?svrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?svrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 108: SR 507, Malabar Rd to Palm Bay Rd; Minton Rd, Malabar Rd to Emerson Rd; SR 514 (Malabar Rd), Minton Rd to US 1**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 539,591.64
Construction Engineering & Inspection Cost:	\$ 337,244.78
Construction Cost (Material + Labor):	\$ 2,697,958.22
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 4,785,503.40
<b>INPUT</b>	
Fiber Optic (in miles)	11
No. of Traffic Signals	16
No. of ADMS	4
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	50%
Percentage of Mid-Block Coverage	55%
<b>TOTAL</b>	
No. of CCTV Cameras	8
No. of Roadside Units/Bluetooth	16
No. of Midblock Detectors	6
No. of Controllers	16
No. of Controller Cabinet Assemblies	4
No. of Video Detection Systems	8
No. of Network Connections	28

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicaltemaverages\\_12month\\_pdf.pdf?svrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicaltemaverages_12month_pdf.pdf?svrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 109: US 1, Post Road to Eyster Blvd**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 333,705.87
Construction Engineering & Inspection Cost:	\$ 208,566.17
Construction Cost (Material + Labor):	\$ 1,668,529.35
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 2,959,553.94
<b>INPUT</b>	
Fiber Optic (in miles)	11.4
No. of Traffic Signals	6
No. of ADMS	2
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	60%
Percentage of Mid-Block Coverage	33%
<b>TOTAL</b>	
No. of CCTV Cameras	4
No. of Roadside Units/Bluetooth	6
No. of Midblock Detectors	4
No. of Controllers	6
No. of Controller Cabinet Assemblies	1
No. of Video Detection Systems	3
No. of Network Connections	9

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
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635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
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641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
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670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

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[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicalitemaverages\\_12month\\_pdf.pdf?svrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicalitemaverages_12month_pdf.pdf?svrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 110: Rockledge Loop, Judge Fran Jamieson Way, Wickham Rd to Barton Blvd, Judge Fran Jamieson Way, Barnes Blvd**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 491,930.59
Construction Engineering & Inspection Cost:	\$ 307,456.62
Construction Cost (Material + Labor):	\$ 2,459,652.95
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 4,362,809.42
<b>INPUT</b>	
Fiber Optic (in miles)	15
No. of Traffic Signals	13
No. of ADMS	2
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	50%
Percentage of Mid-Block Coverage	40%
<b>TOTAL</b>	
No. of CCTV Cameras	7
No. of Roadside Units/Bluetooth	13
No. of Midblock Detectors	6
No. of Controllers	13
No. of Controller Cabinet Assemblies	3
No. of Video Detection Systems	6
No. of Network Connections	20

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-11	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-2-101	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c7712](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c7712)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%



INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 112: Wickham Road, Minton Road to Suntree Blvd**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 934,165.53
Construction Engineering & Inspection Cost:	\$ 583,853.46
Construction Cost (Material + Labor):	\$ 4,670,827.67
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 8,284,880.58
<b>INPUT</b>	
Fiber Optic (in miles)	5.5
No. of Traffic Signals	35
No. of ADMS	6
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	50%
Percentage of Mid-Block Coverage	100%
<b>TOTAL</b>	
No. of CCTV Cameras	18
No. of Roadside Units/Bluetooth	35
No. of Midblock Detectors	6
No. of Controllers	35
No. of Controller Cabinet Assemblies	8
No. of Video Detection Systems	17
No. of Network Connections	76

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicle Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 113: US 1, SR 405 (Garden St) to SR 46 (Main St)**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 176,298.26
Construction Engineering & Inspection Cost:	\$ 110,186.41
Construction Cost (Material + Labor):	\$ 881,491.30
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 1,563,545.20
<b>INPUT</b>	
Fiber Optic (in miles)	4.4
No. of Traffic Signals	5
No. of ADMS	1
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	50%
Percentage of Mid-Block Coverage	50%
<b>TOTAL</b>	
No. of CCTV Cameras	3
No. of Roadside Units/Bluetooth	5
No. of Midblock Detectors	2
No. of Controllers	5
No. of Controller Cabinet Assemblies	1
No. of Video Detection Systems	2
No. of Network Connections	8

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
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635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
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649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
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670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicalcitemaverages\\_12month\\_pdf.pdf?svrsn=4&e711\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicalcitemaverages_12month_pdf.pdf?svrsn=4&e711_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 114: US 1, SR 514 (Malabar Rd) to E University Blvd**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 252,931.25
Construction Engineering & Inspection Cost:	\$ 158,082.03
Construction Cost (Material + Labor):	\$ 1,264,656.26
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 2,243,184.03
<b>INPUT</b>	
Fiber Optic (in miles)	4.75
No. of Traffic Signals	6
No. of ADMS	2
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	33%
Percentage of Mid-Block Coverage	100%
<b>TOTAL</b>	
No. of CCTV Cameras	2
No. of Roadside Units/Bluetooth	6
No. of Midblock Detectors	5
No. of Controllers	6
No. of Controller Cabinet Assemblies	1
No. of Video Detection Systems	3
No. of Network Connections	14

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicle Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 115: SR A1A, SR 404 (Pineda Causeway) to Minutemen Causeway**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 397,441.75
Construction Engineering & Inspection Cost:	\$ 248,401.09
Construction Cost (Material + Labor):	\$ 1,987,208.73
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 3,524,811.49
<b>INPUT</b>	
Fiber Optic (in miles)	7.7
No. of Traffic Signals	17
No. of ADMS	1
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	33%
Percentage of Mid-Block Coverage	50%
<b>TOTAL</b>	
No. of CCTV Cameras	6
No. of Roadside Units/Bluetooth	17
No. of Midblock Detectors	4
No. of Controllers	17
No. of Controller Cabinet Assemblies	4
No. of Video Detection Systems	8
No. of Network Connections	26

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicaltemaverages\\_12month\\_pdf.pdf?svsn=4&\\_c711\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicaltemaverages_12month_pdf.pdf?svsn=4&_c711_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 116: Post Rd, Wickham Road to US 1**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 96,877.79
Construction Engineering & Inspection Cost:	\$ 60,548.62
Construction Cost (Material + Labor):	\$ 484,388.95
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 859,184.91
	<b>INPUT</b>
Fiber Optic (in miles)	1.6
No. of Traffic Signals	5
No. of ADMS	0
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	33%
Percentage of Mid-Block Coverage	50%
	<b>TOTAL</b>
No. of CCTV Cameras	2
No. of Roadside Units/Bluetooth	5
No. of Midblock Detectors	1
No. of Controllers	5
No. of Controller Cabinet Assemblies	1
No. of Video Detection Systems	2
No. of Network Connections	7

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
	<b>TOTAL</b>
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
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635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
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639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
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650-1-13	Vehicle Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
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670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
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671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?svrsn=4e4c71\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?svrsn=4e4c71_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 117: Parkway Drive, Wickham Rd to US 1**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 89,946.59
Construction Engineering & Inspection Cost:	\$ 56,216.62
Construction Cost (Material + Labor):	\$ 449,732.93
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 797,713.78
<b>INPUT</b>	
Fiber Optic (in miles)	1.9
No. of Traffic Signals	4
No. of ADMS	0
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	50%
Percentage of Mid-Block Coverage	50%
<b>TOTAL</b>	
No. of CCTV Cameras	2
No. of Roadside Units/Bluetooth	4
No. of Midblock Detectors	1
No. of Controllers	4
No. of Controller Cabinet Assemblies	1
No. of Video Detection Systems	2
No. of Network Connections	6

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,600.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicalitemaverages\\_12month\\_pdf.pdf?svsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicalitemaverages_12month_pdf.pdf?svsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%



INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 118: Lake Washington Drive, Wickham Rd to US 1**

"ATMS" Project Calculator	
Design / Engineering Cost:	\$ 93,514.44
Construction Engineering & Inspection Cost:	\$ 58,446.53
Construction Cost (Material + Labor):	\$ 467,572.21
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 829,356.21
<b>INPUT</b>	
Fiber Optic (in miles)	2.1
No. of Traffic Signals	4
No. of ADMS	0
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	50%
Percentage of Mid-Block Coverage	50%
<b>TOTAL</b>	
No. of CCTV Cameras	2
No. of Roadside Units/Bluetooth	4
No. of Midblock Detectors	1
No. of Controllers	4
No. of Controller Cabinet Assemblies	1
No. of Video Detection Systems	2
No. of Network Connections	6

"INTERSTATE" Project Calculator	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

"INTERSECTION SAFETY" Project Calculator	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

"EVENT MANAGEMENT" Project Calculator	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

"PARKING MANAGEMENT" Project Calculator	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-3-15	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicaltemaverages\\_12month\\_pdf.pdf?svrsn=4&4c711\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicaltemaverages_12month_pdf.pdf?svrsn=4&4c711_2)

COSTING ASSUMPTIONS:	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 119: Hollywood Blvd, Palm Bay Rd to US 192**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 169,189.60
Construction Engineering & Inspection Cost:	\$ 105,743.50
Construction Cost (Material + Labor):	\$ 845,948.02
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 1,500,500.30
<b>INPUT</b>	
Fiber Optic (in miles)	3.2
No. of Traffic Signals	8
No. of ADMS	0
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	50%
Percentage of Mid-Block Coverage	50%
<b>TOTAL</b>	
No. of CCTV Cameras	4
No. of Roadside Units/Bluetooth	8
No. of Midblock Detectors	2
No. of Controllers	8
No. of Controller Cabinet Assemblies	2
No. of Video Detection Systems	4
No. of Network Connections	12

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
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635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
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670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicalitemaverages\\_12month\\_pdf.pdf?svrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicalitemaverages_12month_pdf.pdf?svrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 120: Diary Road, Palm Bay Rd to US 192**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 113,151.12
Construction Engineering & Inspection Cost:	\$ 70,719.45
Construction Cost (Material + Labor):	\$ 565,755.58
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 1,003,508.95
<b>INPUT</b>	
Fiber Optic (in miles)	3
No. of Traffic Signals	5
No. of ADMS	0
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	33%
Percentage of Mid-Block Coverage	33%
<b>TOTAL</b>	
No. of CCTV Cameras	2
No. of Roadside Units/Bluetooth	5
No. of Midblock Detectors	1
No. of Controllers	5
No. of Controller Cabinet Assemblies	1
No. of Video Detection Systems	2
No. of Network Connections	6

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicalitemaverages\\_12month\\_pdf.pdf?svsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicalitemaverages_12month_pdf.pdf?svsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 121: Grissom Parkway, Industry Rd to Fay Blvd**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 155,604.12
Construction Engineering & Inspection Cost:	\$ 97,252.57
Construction Cost (Material + Labor):	\$ 778,020.58
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 1,380,014.01
<b>INPUT</b>	
Fiber Optic (in miles)	6.2
No. of Traffic Signals	4
No. of ADMS	0
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	40%
Percentage of Mid-Block Coverage	25%
<b>TOTAL</b>	
No. of CCTV Cameras	2
No. of Roadside Units/Bluetooth	4
No. of Midblock Detectors	2
No. of Controllers	4
No. of Controller Cabinet Assemblies	1
No. of Video Detection Systems	2
No. of Network Connections	5

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	EA	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	AS	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,600.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicalitemaverages\\_12month\\_pdf.pdf?svrsn=4e4c712](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicalitemaverages_12month_pdf.pdf?svrsn=4e4c712)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 122: Fay Blvd, Homestead Ave to US 1**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 121,543.71
Construction Engineering & Inspection Cost:	\$ 75,964.82
Construction Cost (Material + Labor):	\$ 607,718.54
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 1,077,940.77
<b>INPUT</b>	
Fiber Optic (in miles)	3.7
No. of Traffic Signals	5
No. of ADMS	0
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	33%
Percentage of Mid-Block Coverage	25%
<b>TOTAL</b>	
No. of CCTV Cameras	2
No. of Roadside Units/Bluetooth	5
No. of Midblock Detectors	1
No. of Controllers	5
No. of Controller Cabinet Assemblies	1
No. of Video Detection Systems	2
No. of Network Connections	6

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
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639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
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641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	EA	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	AS	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
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670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicalitemaverages\\_12month\\_pdf.pdf?svsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicalitemaverages_12month_pdf.pdf?svsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 123: Malabar Rd, St John's Heritage Parkway to Minton Road**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 139,692.06
Construction Engineering & Inspection Cost:	\$ 87,307.54
Construction Cost (Material + Labor):	\$ 698,460.31
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 1,238,893.98
	<b>INPUT</b>
Fiber Optic (in miles)	4
No. of Traffic Signals	5
No. of ADMS	0
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	33%
Percentage of Mid-Block Coverage	50%
	<b>TOTAL</b>
No. of CCTV Cameras	2
No. of Roadside Units/Bluetooth	5
No. of Midblock Detectors	2
No. of Controllers	5
No. of Controller Cabinet Assemblies	1
No. of Video Detection Systems	2
No. of Network Connections	7

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
	<b>TOTAL</b>
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	EA	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicle Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?svrsn=4e4c711\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?svrsn=4e4c711_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%



INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 124: Emerson Drive, Degroot Road to Malabar Road**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 173,680.28
Construction Engineering & Inspection Cost:	\$ 108,550.17
Construction Cost (Material + Labor):	\$ 868,401.40
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 1,540,326.97
<b>INPUT</b>	
Fiber Optic (in miles)	5
No. of Traffic Signals	7
No. of ADMS	0
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	40%
Percentage of Mid-Block Coverage	33%
<b>TOTAL</b>	
No. of CCTV Cameras	3
No. of Roadside Units/Bluetooth	7
No. of Midblock Detectors	2
No. of Controllers	7
No. of Controller Cabinet Assemblies	1
No. of Video Detection Systems	3
No. of Network Connections	9

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	EA	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	AS	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicalitemaverages\\_12month\\_pdf.pdf?svrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicalitemaverages_12month_pdf.pdf?svrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 125: St John's Heritage Parkway, Interchange to Maraloma on South Babcock Street**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 94,315.11
Construction Engineering & Inspection Cost:	\$ 58,946.94
Construction Cost (Material + Labor):	\$ 471,575.54
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 836,457.11
<b>INPUT</b>	
Fiber Optic (in miles)	2.5
No. of Traffic Signals	3
No. of ADMS	0
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	50%
Percentage of Mid-Block Coverage	75%
<b>TOTAL</b>	
No. of CCTV Cameras	2
No. of Roadside Units/Bluetooth	2
No. of Midblock Detectors	3
No. of Controllers	3
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	1
No. of Network Connections	5

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
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635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
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670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicalitemaverages\\_12month\\_pdf.pdf?svrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicalitemaverages_12month_pdf.pdf?svrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 126: San Filippo Drive, Cogan Drive to Malabar Road**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 187,059.74
Construction Engineering & Inspection Cost:	\$ 116,912.34
Construction Cost (Material + Labor):	\$ 935,298.70
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 1,658,986.06
	<b>INPUT</b>
Fiber Optic (in miles)	5.75
No. of Traffic Signals	7
No. of ADMS	0
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	40%
Percentage of Mid-Block Coverage	33%
	<b>TOTAL</b>
No. of CCTV Cameras	3
No. of Roadside Units/Bluetooth	7
No. of Midblock Detectors	2
No. of Controllers	7
No. of Controller Cabinet Assemblies	1
No. of Video Detection Systems	3
No. of Network Connections	9

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
	<b>TOTAL</b>
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicle Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?svrsn=4e4c721\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?svrsn=4e4c721_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 191: SR 46, Brevard - Seminole County Line to Carpenter Road**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 157,164.87
Construction Engineering & Inspection Cost:	\$ 98,228.04
Construction Cost (Material + Labor):	\$ 785,824.34
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 1,393,855.92
<b>INPUT</b>	
Fiber Optic (in miles)	5.7
No. of Traffic Signals	0
No. of ADMS	2
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	50%
Percentage of Mid-Block Coverage	33%
<b>TOTAL</b>	
No. of CCTV Cameras	3
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	2
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	2

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I/GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 192: Sr 3 (Courtenay Parkway), SR 528 to SR 405 (NASA Parkway)**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 393,217.46
Construction Engineering & Inspection Cost:	\$ 245,760.91
Construction Cost (Material + Labor):	\$ 1,966,087.31
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 3,487,347.36
<b>INPUT</b>	
Fiber Optic (in miles)	11.3
No. of Traffic Signals	9
No. of ADMS	2
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	50%
Percentage of CCTV Camera Coverage	100%
Percentage of Mid-Block Coverage	25%
<b>TOTAL</b>	
No. of CCTV Cameras	9
No. of Roadside Units/Bluetooth	9
No. of Midblock Detectors	3
No. of Controllers	9
No. of Controller Cabinet Assemblies	2
No. of Video Detection Systems	4
No. of Network Connections	13

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 42,941.14
Construction Engineering & Inspection Cost:	\$ 26,838.21
Construction Cost (Material + Labor):	\$ 214,705.69
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 337,893.08
<b>INPUT</b>	
No. of Key Decision Points / Intersections	5

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
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660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
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663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
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670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
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SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.  
[https://fdotwww.blob.core.windows.net/sitefinity/dcps/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/dcps/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 193: SR 528 (Beachline Expressway), Brevard - Orange County Line to I-95**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 64,896.84
Construction Engineering & Inspection Cost:	\$ 40,560.53
Construction Cost (Material + Labor):	\$ 324,484.21
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 575,553.87
	<b>INPUT</b>
Fiber Optic (in miles)	0
No. of Traffic Signals	2
No. of ADMS	1
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	100%
Percentage of Mid-Block Coverage	100%
	<b>TOTAL</b>
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	2
No. of Midblock Detectors	0
No. of Controllers	2
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	5

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
	<b>TOTAL</b>
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicle Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?svrsn=4e4c721\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?svrsn=4e4c721_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%



INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 194: SR 520, Brevard-Orange County Line to I-95**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 161,109.40
Construction Engineering & Inspection Cost:	\$ 100,693.37
Construction Cost (Material + Labor):	\$ 805,546.99
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 1,428,838.98
<b>INPUT</b>	
Fiber Optic (in miles)	4.8
No. of Traffic Signals	1
No. of ADMS	2
Percentage of Cabinet Replacements	100%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	100%
Percentage of CCTV Camera Coverage	66%
Percentage of Mid-Block Coverage	20%
<b>TOTAL</b>	
No. of CCTV Cameras	3
No. of Roadside Units/Bluetooth	1
No. of Midblock Detectors	1
No. of Controllers	1
No. of Controller Cabinet Assemblies	1
No. of Video Detection Systems	1
No. of Network Connections	3

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	EA	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	AS	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,600.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicaltemaverages\\_12month\\_pdf.pdf?svrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcosts/informationfiles/historicaltemaverages_12month_pdf.pdf?svrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 195: SR A1A, Brevard-Indian River County Line to US 192**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 390,997.25
Construction Engineering & Inspection Cost:	\$ 244,373.28
Construction Cost (Material + Labor):	\$ 1,954,986.24
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 3,467,656.83
<b>INPUT</b>	
Fiber Optic (in miles)	17.7
No. of Traffic Signals	1
No. of ADMS	2
Percentage of Cabinet Replacements	100%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	100%
Percentage of CCTV Camera Coverage	50%
Percentage of Mid-Block Coverage	25%
<b>TOTAL</b>	
No. of CCTV Cameras	9
No. of Roadside Units/Bluetooth	1
No. of Midblock Detectors	4
No. of Controllers	1
No. of Controller Cabinet Assemblies	1
No. of Video Detection Systems	1
No. of Network Connections	3

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
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635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
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650-1-13	Vehicle Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
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671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
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681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicaltemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicaltemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 196: US 1, Brevard- Indian River County Line to Malabar Road**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 294,802.95
Construction Engineering & Inspection Cost:	\$ 184,251.84
Construction Cost (Material + Labor):	\$ 1,474,014.73
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 2,614,533.63
<b>INPUT</b>	
Fiber Optic (in miles)	11.2
No. of Traffic Signals	2
No. of ADMS	2
Percentage of Cabinet Replacements	100%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	100%
Percentage of CCTV Camera Coverage	50%
Percentage of Mid-Block Coverage	25%
<b>TOTAL</b>	
No. of CCTV Cameras	6
No. of Roadside Units/Bluetooth	2
No. of Midblock Detectors	3
No. of Controllers	2
No. of Controller Cabinet Assemblies	2
No. of Video Detection Systems	2
No. of Network Connections	4

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-13	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicle Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 197: Babcock Street, Brevard- Indian River County Line to SR 514 (Malabar Road)**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 314,280.19
Construction Engineering & Inspection Cost:	\$ 196,425.12
Construction Cost (Material + Labor):	\$ 1,571,400.93
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 2,787,272.41
<b>INPUT</b>	
Fiber Optic (in miles)	12.2
No. of Traffic Signals	2
No. of ADMS	2
Percentage of Cabinet Replacements	100%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	100%
Percentage of CCTV Camera Coverage	50%
Percentage of Mid-Block Coverage	33%
<b>TOTAL</b>	
No. of CCTV Cameras	6
No. of Roadside Units/Bluetooth	2
No. of Midblock Detectors	4
No. of Controllers	2
No. of Controller Cabinet Assemblies	2
No. of Video Detection Systems	2
No. of Network Connections	4

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

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<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 198: Micco Road, Babcock Street to US 1**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 211,793.00
Construction Engineering & Inspection Cost:	\$ 132,370.62
Construction Cost (Material + Labor):	\$ 1,058,964.98
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 1,878,339.14
<b>INPUT</b>	
Fiber Optic (in miles)	7.7
No. of Traffic Signals	1
No. of ADMS	2
Percentage of Cabinet Replacements	100%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	100%
Percentage of CCTV Camera Coverage	75%
Percentage of Mid-Block Coverage	25%
<b>TOTAL</b>	
No. of CCTV Cameras	6
No. of Roadside Units/Bluetooth	1
No. of Midblock Detectors	2
No. of Controllers	1
No. of Controller Cabinet Assemblies	1
No. of Video Detection Systems	1
No. of Network Connections	3

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
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641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
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660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
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663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 201: I-95 @ Wickham Rd**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 4,459.82
Construction Engineering & Inspection Cost:	\$ 2,787.39
Construction Cost (Material + Labor):	\$ 22,299.10
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 39,553.03
<b>INPUT</b>	
Fiber Optic (in miles)	0.25
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ 131,967.67
Construction Engineering & Inspection Cost:	\$ 82,479.80
Construction Cost (Material + Labor):	\$ 659,838.36
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 1,038,420.62
<b>INPUT</b>	
Number of Off-Ramps	2
Number of On-Ramps	2
Mainline Congestion from On-Ramp?	YES
Mainline Congestion from Off-Ramp?	YES
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	2
No. of Ramp Signal Systems	2
No. of Queue Warning Systems	2
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%



INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 201: I-95 @ SR 46 (Main St)**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 4,459.82
Construction Engineering & Inspection Cost:	\$ 2,787.39
Construction Cost (Material + Labor):	\$ 22,299.10
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 39,553.03
<b>INPUT</b>	
Fiber Optic (in miles)	0.25
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ 36,811.86
Construction Engineering & Inspection Cost:	\$ 23,007.41
Construction Cost (Material + Labor):	\$ 184,059.28
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 289,663.29
<b>INPUT</b>	
Number of Off-Ramps	2
Number of On-Ramps	2
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	2
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

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[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 203: I-95 @ SR 406 (Garden St)**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 4,459.82
Construction Engineering & Inspection Cost:	\$ 2,787.39
Construction Cost (Material + Labor):	\$ 22,299.10
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 39,553.03
<b>INPUT</b>	
Fiber Optic (in miles)	0.25
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ 36,811.86
Construction Engineering & Inspection Cost:	\$ 23,007.41
Construction Cost (Material + Labor):	\$ 184,059.28
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 289,663.29
<b>INPUT</b>	
Number of Off-Ramps	2
Number of On-Ramps	2
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	2
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
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649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
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660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
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670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 204: I-95 @ SR 50 (Cheney Highway)**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 4,459.82
Construction Engineering & Inspection Cost:	\$ 2,787.39
Construction Cost (Material + Labor):	\$ 22,299.10
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 39,553.03
<b>INPUT</b>	
Fiber Optic (in miles)	0.25
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ 36,811.86
Construction Engineering & Inspection Cost:	\$ 23,007.41
Construction Cost (Material + Labor):	\$ 184,059.28
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 289,663.29
<b>INPUT</b>	
Number of Off-Ramps	2
Number of On-Ramps	2
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	2
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-13	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-111	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 205: I-95 @ SR 407 (Challenger Memorial Highway)**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 4,459.82
Construction Engineering & Inspection Cost:	\$ 2,787.39
Construction Cost (Material + Labor):	\$ 22,299.10
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 39,553.03
<b>INPUT</b>	
Fiber Optic (in miles)	0.25
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ 69,993.46
Construction Engineering & Inspection Cost:	\$ 43,745.91
Construction Cost (Material + Labor):	\$ 349,967.28
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 550,761.01
<b>INPUT</b>	
Number of Off-Ramps	2
Number of On-Ramps	2
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	YES
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	2
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	2

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-13	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 206: I-95 @Port John Expressway**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 4,459.82
Construction Engineering & Inspection Cost:	\$ 2,787.39
Construction Cost (Material + Labor):	\$ 22,299.10
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 39,553.03
<b>INPUT</b>	
Fiber Optic (in miles)	0.25
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ 36,811.86
Construction Engineering & Inspection Cost:	\$ 23,007.41
Construction Cost (Material + Labor):	\$ 184,059.28
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 289,663.29
<b>INPUT</b>	
Number of Off-Ramps	2
Number of On-Ramps	2
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	2
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
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630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
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633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
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635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
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641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	EA	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	AS	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
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660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
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663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
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670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 207: I-95 @ SR 524**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 4,459.82
Construction Engineering & Inspection Cost:	\$ 2,787.39
Construction Cost (Material + Labor):	\$ 22,299.10
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 39,553.03
<b>INPUT</b>	
Fiber Optic (in miles)	0.25
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ 36,811.86
Construction Engineering & Inspection Cost:	\$ 23,007.41
Construction Cost (Material + Labor):	\$ 184,059.28
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 289,663.29
<b>INPUT</b>	
Number of Off-Ramps	2
Number of On-Ramps	2
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	2
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%



INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 208: I-95 @ SR 520**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 4,459.82
Construction Engineering & Inspection Cost:	\$ 2,787.39
Construction Cost (Material + Labor):	\$ 22,299.10
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 39,553.03
<b>INPUT</b>	
Fiber Optic (in miles)	0.25
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ 36,811.86
Construction Engineering & Inspection Cost:	\$ 23,007.41
Construction Cost (Material + Labor):	\$ 184,059.28
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 289,663.29
<b>INPUT</b>	
Number of Off-Ramps	2
Number of On-Ramps	2
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	2
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 209: I-95 @ SR 519 (Fiske Blvd)**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 4,459.82
Construction Engineering & Inspection Cost:	\$ 2,787.39
Construction Cost (Material + Labor):	\$ 22,299.10
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 39,553.03
<b>INPUT</b>	
Fiber Optic (in miles)	0.25
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ 69,993.46
Construction Engineering & Inspection Cost:	\$ 43,745.91
Construction Cost (Material + Labor):	\$ 349,967.28
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 550,761.01
<b>INPUT</b>	
Number of Off-Ramps	2
Number of On-Ramps	2
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	YES
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	2
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	2

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
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633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.50
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
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641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-111	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 210: I-95 @ SR 404 (Pineda Causeway)**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 4,459.82
Construction Engineering & Inspection Cost:	\$ 2,787.39
Construction Cost (Material + Labor):	\$ 22,299.10
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 39,553.03
<b>INPUT</b>	
Fiber Optic (in miles)	0.25
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ 36,811.86
Construction Engineering & Inspection Cost:	\$ 23,007.41
Construction Cost (Material + Labor):	\$ 184,059.28
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 289,663.29
<b>INPUT</b>	
Number of Off-Ramps	2
Number of On-Ramps	2
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	2
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicle Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 211: I-95 @ SR 518 (Eau Gallie Blvd)**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 4,459.82
Construction Engineering & Inspection Cost:	\$ 2,787.39
Construction Cost (Material + Labor):	\$ 22,299.10
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 39,553.03
<b>INPUT</b>	
Fiber Optic (in miles)	0.25
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ 36,811.86
Construction Engineering & Inspection Cost:	\$ 23,007.41
Construction Cost (Material + Labor):	\$ 184,059.28
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 289,663.29
<b>INPUT</b>	
Number of Off-Ramps	2
Number of On-Ramps	2
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	2
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
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660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
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670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
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685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 212: I-95 @ US 192 (New Haven Ave)**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 4,459.82
Construction Engineering & Inspection Cost:	\$ 2,787.39
Construction Cost (Material + Labor):	\$ 22,299.10
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 39,553.03
<b>INPUT</b>	
Fiber Optic (in miles)	0.25
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ 36,811.86
Construction Engineering & Inspection Cost:	\$ 23,007.41
Construction Cost (Material + Labor):	\$ 184,059.28
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 289,663.29
<b>INPUT</b>	
Number of Off-Ramps	2
Number of On-Ramps	2
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	2
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
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633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
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635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
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641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-111	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 213: I-95 @ Palm Bay Rd**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 4,459.82
Construction Engineering & Inspection Cost:	\$ 2,787.39
Construction Cost (Material + Labor):	\$ 22,299.10
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency):	\$ 39,553.03
<b>INPUT</b>	
Fiber Optic (in miles)	0.25
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ 36,811.86
Construction Engineering & Inspection Cost:	\$ 23,007.41
Construction Cost (Material + Labor):	\$ 184,059.28
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency):	\$ 289,663.29
<b>INPUT</b>	
Number of Off-Ramps	2
Number of On-Ramps	2
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	2
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency):	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency):	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency):	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicle Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-111	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%



INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 214: I-95 @ SR 514 (Malabar Rd)**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 4,459.82
Construction Engineering & Inspection Cost:	\$ 2,787.39
Construction Cost (Material + Labor):	\$ 22,299.10
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 39,553.03
<b>INPUT</b>	
Fiber Optic (in miles)	0.25
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ 36,811.86
Construction Engineering & Inspection Cost:	\$ 23,007.41
Construction Cost (Material + Labor):	\$ 184,059.28
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 289,663.29
<b>INPUT</b>	
Number of Off-Ramps	2
Number of On-Ramps	2
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	2
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
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650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 215: I-95 @ Vierra Blvd**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 4,459.82
Construction Engineering & Inspection Cost:	\$ 2,787.39
Construction Cost (Material + Labor):	\$ 22,299.10
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency):	\$ 39,553.03
<b>INPUT</b>	
Fiber Optic (in miles)	0.25
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ 36,811.86
Construction Engineering & Inspection Cost:	\$ 23,007.41
Construction Cost (Material + Labor):	\$ 184,059.28
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency):	\$ 289,663.29
<b>INPUT</b>	
Number of Off-Ramps	2
Number of On-Ramps	2
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	2
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency):	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency):	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency):	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
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633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
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635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-13	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-111	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 216: I-95 @ St John's Heritage Parkway**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 4,459.82
Construction Engineering & Inspection Cost:	\$ 2,787.39
Construction Cost (Material + Labor):	\$ 22,299.10
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency):	\$ 39,553.03
<b>INPUT</b>	
Fiber Optic (in miles)	0.25
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ 36,811.86
Construction Engineering & Inspection Cost:	\$ 23,007.41
Construction Cost (Material + Labor):	\$ 184,059.28
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency):	\$ 289,663.29
<b>INPUT</b>	
Number of Off-Ramps	2
Number of On-Ramps	2
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	2
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency):	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency):	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency):	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-13	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicle Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-111	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 401: SR 406 (Garden St) from I-95 to US 1**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 13,379.46
Construction Engineering & Inspection Cost:	\$ 8,362.16
Construction Cost (Material + Labor):	\$ 66,897.30
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 118,659.09
<b>INPUT</b>	
Fiber Optic (in miles)	0.75
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 34,352.91
Construction Engineering & Inspection Cost:	\$ 21,470.57
Construction Cost (Material + Labor):	\$ 171,764.55
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 270,314.46
<b>INPUT</b>	
No. of Key Decision Points / Intersections	4

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 403: SR 528, W of I-95 to SR A1A**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 17,839.28
Construction Engineering & Inspection Cost:	\$ 11,149.55
Construction Cost (Material + Labor):	\$ 89,196.40
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 158,212.11
<b>INPUT</b>	
Fiber Optic (in miles)	1
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 17,176.46
Construction Engineering & Inspection Cost:	\$ 10,735.28
Construction Cost (Material + Labor):	\$ 85,882.28
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 135,157.23
<b>INPUT</b>	
No. of Key Decision Points / Intersections	2

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-13	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-111	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 404: SR 520m W of I-95 to SR A1A**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 8,919.64
Construction Engineering & Inspection Cost:	\$ 5,574.78
Construction Cost (Material + Labor):	\$ 44,598.20
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 79,106.06
<b>INPUT</b>	
Fiber Optic (in miles)	0.5
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 51,529.37
Construction Engineering & Inspection Cost:	\$ 32,205.85
Construction Cost (Material + Labor):	\$ 257,646.83
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 405,471.69
<b>INPUT</b>	
No. of Key Decision Points / Intersections	6

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicle Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-111	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%



INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 405: SR 404 (Pineda Cswy), US 1 to SR A1A**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 8,919.64
Construction Engineering & Inspection Cost:	\$ 5,574.78
Construction Cost (Material + Labor):	\$ 44,598.20
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 79,106.06
<b>INPUT</b>	
Fiber Optic (in miles)	0.5
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 34,352.91
Construction Engineering & Inspection Cost:	\$ 21,470.57
Construction Cost (Material + Labor):	\$ 171,764.55
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 270,314.46
<b>INPUT</b>	
No. of Key Decision Points / Intersections	4

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 406: US 192, I-95 to SR A1A, Robert P Murksh Memorial Park**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 44,598.20
Construction Engineering & Inspection Cost:	\$ 27,873.88
Construction Cost (Material + Labor):	\$ 222,991.00
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 395,530.29
<b>INPUT</b>	
Fiber Optic (in miles)	2.5
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 42,941.14
Construction Engineering & Inspection Cost:	\$ 26,838.21
Construction Cost (Material + Labor):	\$ 214,705.69
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 337,893.08
<b>INPUT</b>	
No. of Key Decision Points / Intersections	5

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 415: St John's Heritage Parkway, US 192 to Ellis Rd**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 64,453.42
Construction Engineering & Inspection Cost:	\$ 40,283.39
Construction Cost (Material + Labor):	\$ 322,267.09
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 571,621.25
<b>INPUT</b>	
Fiber Optic (in miles)	2
No. of Traffic Signals	2
No. of ADMS	0
Percentage of Cabinet Replacements	100%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	50%
Percentage of Mid-Block Coverage	50%
<b>TOTAL</b>	
No. of CCTV Cameras	1
No. of Roadside Units/Bluetooth	2
No. of Midblock Detectors	1
No. of Controllers	0
No. of Controller Cabinet Assemblies	2
No. of Video Detection Systems	0
No. of Network Connections	3

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 17,176.46
Construction Engineering & Inspection Cost:	\$ 10,735.28
Construction Cost (Material + Labor):	\$ 85,882.28
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 135,157.23
<b>INPUT</b>	
No. of Key Decision Points / Intersections	2

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-111	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 416: Ellis Rd, I-95 to Wickham Rd**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ 59,993.60
Construction Engineering & Inspection Cost:	\$ 37,496.00
Construction Cost (Material + Labor):	\$ 299,967.99
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 532,068.22
<b>INPUT</b>	
Fiber Optic (in miles)	1.75
No. of Traffic Signals	2
No. of ADMS	0
Percentage of Cabinet Replacements	100%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	50%
Percentage of Mid-Block Coverage	50%
<b>TOTAL</b>	
No. of CCTV Cameras	1
No. of Roadside Units/Bluetooth	2
No. of Midblock Detectors	1
No. of Controllers	0
No. of Controller Cabinet Assemblies	2
No. of Video Detection Systems	0
No. of Network Connections	3

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 17,176.46
Construction Engineering & Inspection Cost:	\$ 10,735.28
Construction Cost (Material + Labor):	\$ 85,882.28
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 135,157.23
<b>INPUT</b>	
No. of Key Decision Points / Intersections	2

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
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684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
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700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 501: Lori Wilson Park**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion on On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 67,955.33
Construction Engineering & Inspection Cost:	\$ 42,472.08
Construction Cost (Material + Labor):	\$ 339,776.65
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 534,723.51
<b>INPUT</b>	
No. of Parking Stalls	150

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 502: Coconut Point Park**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 52,753.08
Construction Engineering & Inspection Cost:	\$ 32,970.68
Construction Cost (Material + Labor):	\$ 263,765.40
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 415,100.80
<b>INPUT</b>	
No. of Parking Stalls	75

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%



INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 503: Seagull Park**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 42,618.25
Construction Engineering & Inspection Cost:	\$ 26,636.40
Construction Cost (Material + Labor):	\$ 213,091.24
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 335,352.33
<b>INPUT</b>	
No. of Parking Stalls	25

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
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685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 504: Spessard Holland Beach Park (South)**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 57,820.50
Construction Engineering & Inspection Cost:	\$ 36,137.81
Construction Cost (Material + Labor):	\$ 289,102.49
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 454,975.04
<b>INPUT</b>	
No. of Parking Stalls	100

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-111	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 505: Spessard Holland Beach Park (North)**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 73,022.75
Construction Engineering & Inspection Cost:	\$ 45,639.22
Construction Cost (Material + Labor):	\$ 365,113.74
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 574,597.74
<b>INPUT</b>	
No. of Parking Stalls	175

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 506: Juan Ponce de Leon Landing**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 47,685.66
Construction Engineering & Inspection Cost:	\$ 29,803.54
Construction Cost (Material + Labor):	\$ 238,428.32
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 375,226.57
<b>INPUT</b>	
No. of Parking Stalls	50

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
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635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-13	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-111	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

Project 507: Robert P Murkshe Memorial Park

"ATMS" Project Calculator	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

"INTERSTATE" Project Calculator	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

"INTERSECTION SAFETY" Project Calculator	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

"EVENT MANAGEMENT" Project Calculator	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

"PARKING MANAGEMENT" Project Calculator	
Design / Engineering Cost:	\$ 47,685.66
Construction Engineering & Inspection Cost:	\$ 29,803.54
Construction Cost (Material + Labor):	\$ 238,428.32
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 375,226.57
<b>INPUT</b>	
No. of Parking Stalls	50

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

COSTING ASSUMPTIONS:	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 508: South Patrick Residents Association Park**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 47,685.66
Construction Engineering & Inspection Cost:	\$ 29,803.54
Construction Cost (Material + Labor):	\$ 238,428.32
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 375,226.57
<b>INPUT</b>	
No. of Parking Stalls	50

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%



INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 509: City of Cocoa Public Garage**

"ATMS" Project Calculator	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
	<b>TOTAL</b>
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

"INTERSTATE" Project Calculator	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
	<b>TOTAL</b>
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

"INTERSECTION SAFETY" Project Calculator	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

"EVENT MANAGEMENT" Project Calculator	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Key Decision Points / Intersections	0

"PARKING MANAGEMENT" Project Calculator	
Design / Engineering Cost:	\$ 88,225.00
Construction Engineering & Inspection Cost:	\$ 55,140.62
Construction Cost (Material + Labor):	\$ 441,124.99
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 694,220.45
	<b>INPUT</b>
No. of Parking Stalls	250

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
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635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
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639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
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641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
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649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicle Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
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671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

COSTING ASSUMPTIONS:	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 510: Port Canaveral**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 280,786.83
Construction Engineering & Inspection Cost:	\$ 175,491.77
Construction Cost (Material + Labor):	\$ 1,403,934.16
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 2,209,441.39
<b>INPUT</b>	
No. of Parking Stalls	1200

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 511: Marina Park**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion on On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 62,887.91
Construction Engineering & Inspection Cost:	\$ 39,304.95
Construction Cost (Material + Labor):	\$ 314,439.57
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 494,849.27
<b>INPUT</b>	
No. of Parking Stalls	125

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 512: Space View Park**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion on On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 47,685.66
Construction Engineering & Inspection Cost:	\$ 29,803.54
Construction Cost (Material + Labor):	\$ 238,428.32
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 375,226.57
<b>INPUT</b>	
No. of Parking Stalls	50

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
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635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 513: Sand Point Park**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 73,022.75
Construction Engineering & Inspection Cost:	\$ 45,639.22
Construction Cost (Material + Labor):	\$ 365,113.74
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 574,597.74
<b>INPUT</b>	
No. of Parking Stalls	175

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 514: William J. Manzo Memorial Park**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 42,618.25
Construction Engineering & Inspection Cost:	\$ 26,636.40
Construction Cost (Material + Labor):	\$ 213,091.24
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 335,352.33
<b>INPUT</b>	
No. of Parking Stalls	25

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-13	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%



INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 515: Kennedy Point Park**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 47,685.66
Construction Engineering & Inspection Cost:	\$ 29,803.54
Construction Cost (Material + Labor):	\$ 238,428.32
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 375,226.57
<b>INPUT</b>	
No. of Parking Stalls	50

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
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635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
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639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
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639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
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649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
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660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-111	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
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670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 516: Rotary Riverfront Park**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion on On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 47,685.66
Construction Engineering & Inspection Cost:	\$ 29,803.54
Construction Cost (Material + Labor):	\$ 238,428.32
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 375,226.57
<b>INPUT</b>	
No. of Parking Stalls	50

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 517: Kennedy Space Center Visitor Complex**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 676,045.33
Construction Engineering & Inspection Cost:	\$ 422,528.33
Construction Cost (Material + Labor):	\$ 3,380,226.67
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 5,319,631.73
<b>INPUT</b>	
No. of Parking Stalls	3150

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 518: Jetty Park**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
	<b>TOTAL</b>
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
	<b>TOTAL</b>
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
	<b>INPUT</b>
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 57,820.50
Construction Engineering & Inspection Cost:	\$ 36,137.81
Construction Cost (Material + Labor):	\$ 289,102.49
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 454,975.04
	<b>INPUT</b>
No. of Parking Stalls	100

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
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635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicallemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicallemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 519: Banana River Park**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 47,685.66
Construction Engineering & Inspection Cost:	\$ 29,803.54
Construction Cost (Material + Labor):	\$ 238,428.32
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 375,226.57
<b>INPUT</b>	
No. of Parking Stalls	50

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-13	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 520: Westgate Cocoa Beach Pier**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 83,157.58
Construction Engineering & Inspection Cost:	\$ 51,973.49
Construction Cost (Material + Labor):	\$ 415,787.90
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 654,346.21
<b>INPUT</b>	
No. of Parking Stalls	225

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%



INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 521: Shepard Park**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 98,359.83
Construction Engineering & Inspection Cost:	\$ 61,474.89
Construction Cost (Material + Labor):	\$ 491,799.15
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 773,968.92
<b>INPUT</b>	
No. of Parking Stalls	300

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
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635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 522: Sidney Fischer Park**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 78,090.16
Construction Engineering & Inspection Cost:	\$ 48,806.35
Construction Cost (Material + Labor):	\$ 390,450.82
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 614,471.98
<b>INPUT</b>	
No. of Parking Stalls	200

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 528: City of Melbourne City Hall**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 73,022.75
Construction Engineering & Inspection Cost:	\$ 45,639.22
Construction Cost (Material + Labor):	\$ 365,113.74
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 574,597.74
<b>INPUT</b>	
No. of Parking Stalls	175

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

**SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.**  
[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.  
 The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications).  
 If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Project 529: Cocoa Beach,Downtown/City Hall**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ 88,225.00
Construction Engineering & Inspection Cost:	\$ 55,140.62
Construction Cost (Material + Labor):	\$ 441,124.99
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 694,220.45
<b>INPUT</b>	
No. of Parking Stalls	241

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
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639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
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671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
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682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
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684-2-1	Device Server, F&I	EA	\$ 778.37
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700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
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700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

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[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Intersection Safety - Kit A**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ 11,285.24
Construction Engineering & Inspection Cost:	\$ 7,053.27
Construction Cost (Material + Labor):	\$ 56,426.18
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 88,800.70
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	1
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Intersection - Kit B**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ 16,639.99
Construction Engineering & Inspection Cost:	\$ 10,399.99
Construction Cost (Material + Labor):	\$ 83,199.95
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 130,935.92
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	1
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicle Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%



INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Intersection Safety - Kit C**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ 16,095.10
Construction Engineering & Inspection Cost:	\$ 10,059.44
Construction Cost (Material + Labor):	\$ 80,475.48
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 126,648.29
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	1
No. of Kit "D" - Vehicle-to-Pedestrian	0

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
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663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
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671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
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682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
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685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
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700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.

[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%

INSTRUCTIONS: Only input proposed quantities in cells highlighted in **YELLOW**.

The assumption is "ATMS" projects will be built first to provide the necessary infrastructure (e.g., communications). If this is not the case add in the cost of the associated "ATMS" projects for the specified corridor(s).

**Intersection Safety - Kit D**

<b>"ATMS" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Fiber Optic (in miles)	0
No. of Traffic Signals	0
No. of ADMS	0
Percentage of Cabinet Replacements	0%
Percentage of Controller Replacements	0%
Percentage of Video Detection Systems	0%
Percentage of CCTV Camera Coverage	0%
Percentage of Mid-Block Coverage	0%
<b>TOTAL</b>	
No. of CCTV Cameras	0
No. of Roadside Units/Bluetooth	0
No. of Midblock Detectors	0
No. of Controllers	0
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	0
No. of Network Connections	0

<b>"INTERSTATE" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
Number of Off-Ramps	0
Number of On-Ramps	0
Mainline Congestion on On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
<b>TOTAL</b>	
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	-

<b>"INTERSECTION SAFETY" Project Calculator</b>	
Design / Engineering Cost:	\$ 19,219.59
Construction Engineering & Inspection Cost:	\$ 12,012.25
Construction Cost (Material + Labor):	\$ 96,097.97
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ 151,234.18
<b>INPUT</b>	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	1

<b>"EVENT MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Key Decision Points / Intersections	0

<b>"PARKING MANAGEMENT" Project Calculator</b>	
Design / Engineering Cost:	\$ -
Construction Engineering & Inspection Cost:	\$ -
Construction Cost (Material + Labor):	\$ -
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contingency)	\$ -
<b>INPUT</b>	
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1	Device Server, F&I	EA	\$ 778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"	AS	\$ 6,254.85
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48"	AS	\$ 7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-7-232	Embedded Dynamic Message Sign, F&I, w/ UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

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[https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages\\_12month\\_pdf.pdf?sfvrsn=4e4c771\\_2](https://fdotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages_12month_pdf.pdf?sfvrsn=4e4c771_2)

<b>COSTING ASSUMPTIONS:</b>	
Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5%



# 2021 Intelligent Transportation Systems Master Plan Update

Appendix C – Projects Maintenance Complexity by Hours

Field Device, Subsystem, System	Added Preventative Maintenance	Unit
Fiber Optic Communications	0.5	hr/mile
Traffic Signal Controller	1	hr/ea
CCTV Camera	1	hr/ea
Vehicle Detection System (midblock)	1	hr/ea
Blank Out Signs	1	hr/ea
Vehicle Detection System (intersection)	2	hr/ea
Dynamic Message Sign	2	hr/ea
Connected Vehicle Roadside Unit	2	hr/ea
Queue Warning System	2	hr/ea
Adaptive Signal Control Technology	4	hr/ea
Ramp Signal Systems	4	hr/ea
Automated Truck Warning System	4	hr/ea
Advanced Bicycle / Pedestrian System	8	hr/ea
Parking Availability Systems	8	hr/ea
Wrong Way Driving Systems	4	hr/ea

Low - Additional maintenance activities may be handled by existing staff	0	40
Mid - Additional maintenance activities may necessitate hiring of staff (e.g., 1-2 technicians)	41	160
Mid - Additional maintenance activities may necessitate significant hiring of staff (e.g., 2-3 technicians)	161	

Project Type	Project No.	Fiber Optic Communications	Traffic Signal Controller	CCTV	MVDS	BOS	VVDS	DMS	CVRSU	QWS	ASCT	WWDS	RSS	ATWS	ABPS	PAS	Added Preventative Maintenance	Added Emergency Maintenance	Total Maintenance	Complexity
ATMS	101	7	26	12	7		13	2	26								261	26.1	287.1	HIGH
ATMS	102	3.3	4	2	3		2	2	4								53.3	5.3	58.6	MEDIUM
ATMS	103	3.4	8	4	2		4	2	8								87.4	8.7	96.1	MEDIUM
ATMS	104	3	7	3	2		3	2	7								75	7.5	82.5	MEDIUM
ATMS	105	12.1	18	9	6		9	2	18								194.1	19.4	213.5	HIGH
ATMS	106	11.5	24	12	8		12	6	24								267.5	26.8	294.3	HIGH
ATMS	107	9	35	16	8		17	6	35								359	35.9	394.9	HIGH
ATMS	108	11	16	8	6		8	4	16								183	18.3	201.3	HIGH
ATMS	109	11.4	6	4	4		3	2	6								83.4	8.3	91.7	MEDIUM
ATMS	110	15	13	7	6		6	2	13								151	15.1	166.1	HIGH
ATMS	112	5.5	35	18	6		17	6	35								355.5	35.6	391.1	HIGH
ATMS	113	4.4	5	3	2		2	1	5								56.4	5.6	62.0	MEDIUM
ATMS	114	4.75	6	2	5		3	2	6								74.75	7.5	82.2	MEDIUM
ATMS	115	7.7	17	6	4		8	1	17								165.7	16.6	182.3	HIGH
ATMS	116	1.6	5	2	1		2	0	5								45.6	4.6	50.2	MEDIUM
ATMS	117	1.9	4	2	1		2	0	4								39.9	4.0	43.9	MEDIUM
ATMS	118	2.1	4	2	1		2	0	4								40.1	4.0	44.1	MEDIUM
ATMS	119	3.2	8	4	2		4	0	8								79.2	7.9	87.1	MEDIUM
ATMS	120	3	5	2	1		2	0	5								47	4.7	51.7	MEDIUM
ATMS	121	6.2	4	2	2		3	0	4								50.2	5.0	55.2	MEDIUM
ATMS	122	3.7	5	2	1		2	0	5								47.7	4.8	52.5	MEDIUM
ATMS	123	4	5	2	2		2	0	5								50	5.0	55.0	MEDIUM
ATMS	124	5	7	3	2		3	0	7								69	6.9	75.9	MEDIUM
ATMS	125	2.5	3	2	2		1	0	3								32.5	3.3	35.8	LOW
ATMS	126	5.75	7	3	2		3	0	7								69.75	7.0	76.7	MEDIUM
ATMS (EVAC)	191	5.7		3	2			2									23.7	2.4	26.1	LOW
ATMS (EVAC)	192	11.3	9	11	2	13	4	2	15								165.3	16.5	181.8	HIGH
ATMS (EVAC)	193			3	3			1									16	1.6	17.6	LOW
ATMS (EVAC)	194	4.8	1	3	1		1	2	1								30.8	3.1	33.9	LOW
ATMS (EVAC)	195	17.7	1	9	4		1	2	1								61.7	6.2	67.9	MEDIUM
ATMS (EVAC)	196	11.2	2	6	3		2	2	2								57.2	5.7	62.9	MEDIUM
ATMS (EVAC)	197	12.2	2	6	4		2	2	2								60.2	6.0	66.2	MEDIUM
ATMS (EVAC)	198	7.7	1	6	2		1	2	1								41.7	4.2	45.9	MEDIUM
INTERSTATE	201	0.25								2		2	2				40.25	4.0	44.3	MEDIUM
INTERSTATE	202	0.25										2					16.25	1.6	17.9	LOW
INTERSTATE	203	0.25										2					16.25	1.6	17.9	LOW
INTERSTATE	204	0.25										2					16.25	1.6	17.9	LOW
INTERSTATE	205	0.25										2		2			32.25	3.2	35.5	LOW
INTERSTATE	206	0.25										2					16.25	1.6	17.9	LOW
INTERSTATE	207	0.25										2					16.25	1.6	17.9	LOW
INTERSTATE	208	0.25										2					16.25	1.6	17.9	LOW
INTERSTATE	209	0.25										2		2			32.25	3.2	35.5	LOW
INTERSTATE	210	0.25										2					16.25	1.6	17.9	LOW
INTERSTATE	211	0.25										2					16.25	1.6	17.9	LOW
INTERSTATE	212	0.25										2					16.25	1.6	17.9	LOW
INTERSTATE	213	0.25										2					16.25	1.6	17.9	LOW
INTERSTATE	214	0.25										2					16.25	1.6	17.9	LOW
INTERSTATE	215	0.25										2					16.25	1.6	17.9	LOW
INTERSTATE	216	0.25										2					16.25	1.6	17.9	LOW
INTERSECTION SAFETY	Kit A	1	1	1		1	1		1								15	1.5	16.5	LOW
INTERSECTION SAFETY	Kit B	1	1	1		1	2		1								19	1.9	20.9	LOW

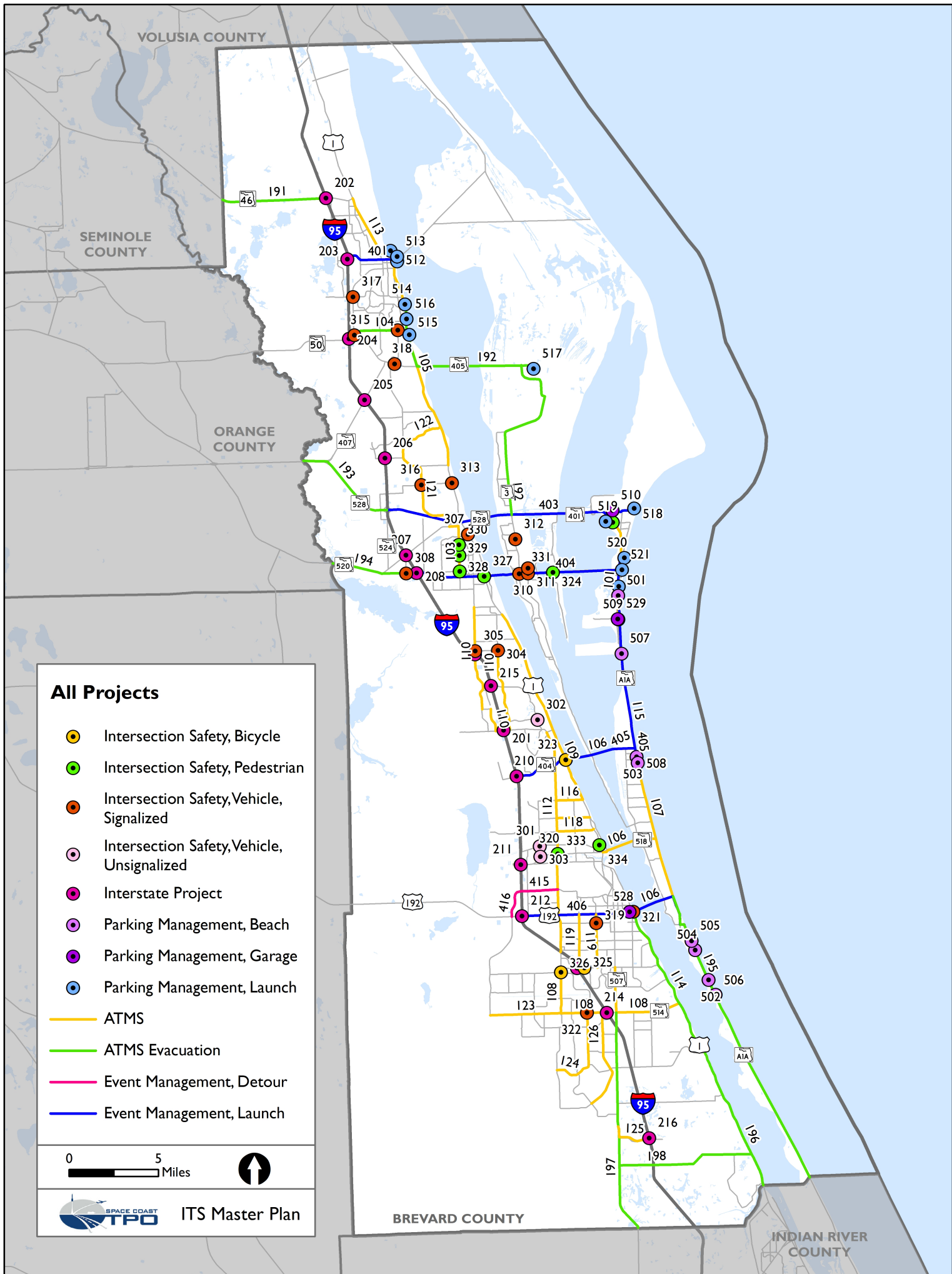
Project Type	Project No.	Fiber Optic Communications	Traffic Signal Controller	CCTV	MVDS	BOS	VVDS	DMS	CVRSU	QWS	ASCT	WWDS	RSS	ATWS	ABPS	PAS	Added Preventative Maintenance	Added Emergency Maintenance	Total Maintenance	Complexity
INTERSECTION SAFETY	Kit C	1	1	1		1	2		1								19	1.9	20.9	LOW
INTERSECTION SAFETY	Kit D	1	1	1		1	2		1								19	1.9	20.9	LOW
EVENT MANAGEMENT	401	0.75		6		11			5								54.75	5.5	60.2	MEDIUM
EVENT MANAGEMENT	403	1		4		6			3								33	3.3	36.3	LOW
EVENT MANAGEMENT	404	0.5		5		17			8								76.5	7.7	84.2	MEDIUM
EVENT MANAGEMENT	405	0.5		5		11			5								52.5	5.3	57.8	MEDIUM
EVENT MANAGEMENT	406	2.5		6		14			7								70.5	7.1	77.6	MEDIUM
EVENT MANAGEMENT	415	2		4	1	5			2								30	3.0	33.0	LOW
EVENT MANAGEMENT	416	1.75		4		5			2								27.75	2.8	30.5	LOW
PARKING MANAGEMENT	501	0.5		1			6	2								1	50.5	5.1	55.55	MEDIUM
PARKING MANAGEMENT	502	0.5		1			3	2								1	38.5	3.9	42.35	MEDIUM
PARKING MANAGEMENT	503	0.5		1			1	2								1	30.5	3.1	33.55	LOW
PARKING MANAGEMENT	504	0.5		1			4	2								1	42.5	4.3	46.75	MEDIUM
PARKING MANAGEMENT	505	0.5		1			7	2								1	54.5	5.5	59.95	MEDIUM
PARKING MANAGEMENT	506	0.5		1			2	2								1	34.5	3.5	37.95	LOW
PARKING MANAGEMENT	507	0.5		1			2	2								1	34.5	3.5	37.95	LOW
PARKING MANAGEMENT	508	0.5		1			2	2								1	34.5	3.5	37.95	LOW
PARKING MANAGEMENT	509	0.5		1			10	2								1	66.5	6.7	73.15	MEDIUM
PARKING MANAGEMENT	510	0.5		1			48	2								1	218.5	21.9	240.35	HIGH
PARKING MANAGEMENT	511	0.5		1			5	2								1	46.5	4.7	51.15	MEDIUM
PARKING MANAGEMENT	512	0.5		1			2	2								1	34.5	3.5	37.95	LOW
PARKING MANAGEMENT	513	0.5		1			7	2								1	54.5	5.5	59.95	MEDIUM
PARKING MANAGEMENT	514	0.5		1			2	2								1	34.5	3.5	37.95	LOW
PARKING MANAGEMENT	515	0.5		1			2	2								1	34.5	3.5	37.95	LOW
PARKING MANAGEMENT	516	0.5		1			126	2								1	530.5	53.1	583.55	HIGH
PARKING MANAGEMENT	517	0.5		1			4	2								1	42.5	4.3	46.75	MEDIUM
PARKING MANAGEMENT	518	0.5		1			2	2								1	34.5	3.5	37.95	LOW
PARKING MANAGEMENT	519	0.5		1			9	2								1	62.5	6.3	68.75	MEDIUM
PARKING MANAGEMENT	520	0.5		1			12	2								1	74.5	7.5	81.95	MEDIUM
PARKING MANAGEMENT	521	0.5		1			8	2								1	58.5	5.9	64.35	MEDIUM
PARKING MANAGEMENT	522	0.5		1				2								1	26.5	2.7	29.15	LOW
PARKING MANAGEMENT	523	0.5		1			6	2								1	50.5	5.1	55.55	MEDIUM
PARKING MANAGEMENT	524	0.5		1			7	2								1	54.5	5.5	59.95	MEDIUM
PARKING MANAGEMENT	525	0.5		1			4	2								1	42.5	4.3	46.75	MEDIUM
PARKING MANAGEMENT	526	0.5		1			4	2								1	42.5	4.3	46.75	MEDIUM
PARKING MANAGEMENT	527	0.5		1				2								1	26.5	2.7	29.15	LOW
PARKING MANAGEMENT	528	0.5		1				2								1	26.5	2.7	29.15	LOW





# 2021 Intelligent Transportation Systems Master Plan Update

Appendix D – Projects Map and List



### All Projects

- Intersection Safety, Bicycle
- Intersection Safety, Pedestrian
- Intersection Safety, Vehicle, Signalized
- Intersection Safety, Vehicle, Unsignalized
- Interstate Project
- Parking Management, Beach
- Parking Management, Garage
- Parking Management, Launch
- ATMS
- ATMS Evacuation
- Event Management, Detour
- Event Management, Launch

0 5 Miles



ITS Master Plan

BREVARD COUNTY

INDIAN RIVER COUNTY



# Space Coast TPO ITS Master Plan Proposed Project List

ATMS Projects								Project Cost	O & M	Timing
Project Number	Project Type	Jurisdiction	Maintaining Agency	Corridor	Start	End	Description		Level of maintenance (High, Med, Low)	0-5, 5-10, 10+ years
	ATMS	Brevard County, SpacePort	Brevard County	NASA Causeway Indian River Bridge	SR 405	SR 3	5 DMS, 19 CCTV, 4 thermal, 7 VDS, 1 RWIS, 4 security (primary project area)	\$6,894,209	Medium	0-5
	TMC	Brevard County	Brevard County	Region			Construction of a new regional TMC	\$8,000,000		0-5
101	ATMS	Cape Canaveral, Cocoa Beach, FDOT	Brevard County, Cocoa Beach, FDOT	SR A1A	Minutemen Causeway	SR 401	7 miles of fiber work, 26 Traffic Controllers (1 controller per signalized intersection) adaptive traffic signal control optional, 12 CCTV Cameras (full coverage of corridor), 2 DMS (1 north and 1 south of SR 520), 26 RSU (1 at each intersection), 7 MVDS (at locations with major traffic changes to provide a complete understanding of travel direction, speed and volume).	\$ 5,987,578	High	0-5
103	ATMS	Cocoa Beach, Brevard County	Brevard County, Cocoa Beach, FDOT	SR 501 (Clearlake Rd)	SR 520 (King St)	Industry Rd	Approx. 3.35 miles of fiber work, 8 traffic controllers (1 controller per signalized intersection), adaptive traffic signal control optional, 4 CCTV cameras (full coverage of corridor), 2 DMS (1 SB and 1 NB on each corridor), 8 RSU (1 at each intersection), 2 MVDS (at locations with major traffic changes to provide a complete understanding of travel direction, speed and volume)	\$ 2,024,190	Medium	0-5
115	ATMS	Cocoa Beach, Brevard County	Cocoa Beach, Brevard County, FDOT	SR A1A	SR 404 (Pineda Causeway)	Minutemen Causeway	Approx. 7.7 miles of fiber work, 17 traffic controllers (1 controller per signalized intersection) adaptive traffic signal control optional, 5 CCTV cameras (full coverage of corridor), 1 DMS (one north SR 404 (Pineda Causeway)), 17 RSU (1 at each intersection), 4 MVDS (at locations with major traffic changes to provide a complete understanding of travel direction, speed and volume)	\$ 3,524,811	High	0-5
102	ATMS	Cocoa Beach, Brevard County, FDOT	Brevard County, Cocoa Beach, FDOT	SR 520	Milford Point	SR A1A	Approx. 3.3 miles of fiber work, 4 Traffic Controllers (1 controller per signalized intersection) adaptive traffic signal control optional, 2 CCTV cameras (full coverage of corridor), 2 DMS (1 EB and 1 WB on SR 520), 4 RSU (1 at each intersection), 2 MVDS (At locations with major traffic changes to provide a complete understanding of travel direction, speed and volume)	\$ 3,511,256	Medium	0-5

ATMS Projects								Project Cost	O & M	Timing
Project Number	Project Type	Jurisdiction	Maintaining Agency	Corridor	Start	End	Description		Level of maintenance (High, Med, Low)	0-5, 5-10, 10+ years
109	ATMS	Cocoa Beach, Rockledge, County, Palm Shores, Melbourne	Cocoa, Rockledge, County, Palm Shores, Melbourne, FDOT	US 1	Post Rd	Eyster Blvd	Approx. 11.4 miles of fiber work, 6 traffic controllers (1 controller per signalized intersection) adaptive traffic signal control optional, 4 CCTV cameras (full coverage of corridor), 2 DMS (on either side of intersections with I-95), 6 RSU (1 at each intersection), 4 MVDS (at locations with major traffic changes to provide a complete understanding of travel direction, speed and volume)	\$ 2,959,534	Medium	0-5
106	ATMS	Melbourne, Brevard County	Melbourne, Brevard County, FDOT	Pineda, Eau Gallie, and 192	US1	A1A	Approx. 11.5 miles of fiber work (Optional wireless communication across bridges), 24 traffic controllers (1 controller per signalized intersection) adaptive traffic signal control optional, 12 CCTV cameras (full coverage of corridor), 6 DMS (1 EB and 1 WB on each corridor), 24 RSU (1 at each intersection), 8 MVDS (at locations with major traffic changes to provide a complete understanding of travel direction, speed and volume)	\$ 6,714,045	High	0-5
114	ATMS	Melbourne, Palm Bay	Melbourne, Palm Bay, FDOT	US 1	SR 514 (Malabar Rd)	E University Blvd	Approx. 4.75 miles of fiber work, 6 traffic controllers (1 controller per signalized intersection) adaptive traffic signal control optional, 4 CCTV cameras (full coverage of corridor), 2 DMS (one north and south of SR 500 (US 192), 6 RSU (1 at each intersection), 4 MVDS (at locations with major traffic changes to provide a complete understanding of travel direction, speed and volume)	\$ 2,243,184	Medium	0-5
107	ATMS	Satellite Beach, Indian Harbor Beach, County, Indialantic	Melbourne, Brevard County, FDOT	SR A1A	US 192	SR 404 (Pineda Cswy)	Approx. 9 miles of fiber work, 35 Traffic Controllers (1 (1 controller per signalized intersection and midblock pedestrian crossings) adaptive traffic signal control optional) 16 CCTV cameras (full coverage of corridors), 6 DMS (1 NB and 1 SB before each intersection with SR 404, SR 508 and SR 500), 35 RSU (1 at each intersection), 8 MVDS (at locations with major traffic changes to provide a complete understanding of travel direction, speed and volume)	\$ 8,330,378	High	0-5
113	ATMS	Titusville, Brevard County	Brevard County, Titusville, FDOT	US 1	SR 406 (Garden St)	SR 46 (Main St)	Approx. 4.4 miles of fiber work, 5 traffic controllers (1 controller per signalized intersection) adaptive traffic signal control optional, 3 CCTV cameras (full coverage of corridor), 1 DMS (on the north of SR 406 (Garden St)), 5 RSU (1 at each intersection), 2 MVDS (at locations with major traffic changes to provide a complete understanding of travel direction, speed and volume)	\$ 1,563,545	Medium	0-5
105	ATMS	Titusville, Brevard County	Titusville, Brevard County, FDOT	US 1	Camp Rd	SR 406 (Garden St)	Approx. 12.1 miles of fiber work, 18 traffic controllers (1 controller per signalized intersection) adaptive traffic signal control optional, 9 CCTV Cameras (full coverage of corridor), 2 DMS (1NB and 1 SB on US 1), 18 RSU (1 at each intersection), 6 MVDS (at locations with major traffic changes to provide a complete understanding of travel direction, speed and volume)	\$ 4,643,412	High	0-5

ATMS Projects								Project Cost	O & M	Timing
Project Number	Project Type	Jurisdiction	Maintaining Agency	Corridor	Start	End	Description		Level of maintenance (High, Med, Low)	0-5, 5-10, 10+ years
121	ATMS	Brevard County	Brevard County	Grissom Parkway	Industry Rd	Fay Blvd	Approx. 6.2 miles of fiber work, 4 traffic controllers (1 controller per signalized intersection) adaptive signal control optional, 2 CCTVS (Full coverage of corridors), 4 RSU (1 at each intersection), 2 MVDS (to provide a complete understanding of travel direction, speed and volume)	\$ 1,916,656	Medium	5-10
122	ATMS	Brevard County	Brevard County	Fay Blvd	Homestead Ave	US1	Approx. 3.7 miles of fiber work, 5 traffic controllers (1 controller per signalized intersection) adaptive signal control optional, 2 CCTVs (Full coverage of corridors), 5 RSU (1 at each intersection), 1 MVDS (to provide a complete understanding of travel direction, speed and volume)	\$ 1,077,941	Medium	5-10
112	ATMS	Brevard County, Palm Shores, Melbourne, Melbourne Village, West Melbourne	Brevard County, Melbourne	Wickham Rd	Minton Road	Suntree Blvd	Approx. 5.5 miles of fiber work, 35 traffic controllers (1 controller per signalized intersection) adaptive traffic signal control optional, 18 CCTV cameras (full coverage of corridor), 6 DMS (one north and south of each major intersection w/ bridge (SR 507, SR 518, SR 404)), 35 RSU (1 at each intersection), 10 MVDS (at locations with major traffic changes to provide a complete understanding of travel direction, speed and volume)	\$ 8,284,881	High	5-10
116	ATMS	Melbourne	Melbourne	Post Rd	Wickham Rd	US1	Approx. 1.6 miles of fiber work, 5 traffic controllers (1 controller per signalized intersection) adaptive signal control optional, 2 CCTV (Full coverage of corridors), 5 RSU (1 at each intersection), 1 MVDS (to provide a complete understanding of travel direction, speed and volume)	\$ 859,185	Medium	5-10
117	ATMS	Melbourne	Melbourne	Parkway Drive	Wickham Rd	US1	Approx. 1.9 miles of fiber work, 4 traffic controllers (1 controller per signalized intersection) adaptive signal control optional, 2 CCTV (Full coverage of corridors), 4 RSU (1 at each intersection), 1 MVDS (to provide a complete understanding of travel direction, speed and volume)	\$ 797,714	Medium	5-10
118	ATMS	Melbourne	Melbourne	Lake Washington Rd	Wickham Rd	US1	Approx. 2.1 miles of fiber work, 4 traffic controller (1 controller per signalized intersection) adaptive signal control optional, 2 CCTVs (Full coverage of corridors), 4 RSU (1 at each intersection), 1 MVDS (to provide a complete understanding of travel direction, speed and volume)	\$ 829,356	Medium	5-10

ATMS Projects								Project Cost	O & M	Timing
Project Number	Project Type	Jurisdiction	Maintaining Agency	Corridor	Start	End	Description		Level of maintenance (High, Med, Low)	0-5, 5-10, 10+ years
108	ATMS	Melbourne, Palm Bay, Malabar	Palm Bay, FDOT	SR 507 (Babcock) Minton Rd SR 514 (Malabar)	Malabar Rd Malabar Rd Minton Rd	Palm Bay Rd Emerson Rd US 1	Approx. 11.0 miles of fiber work, 16 traffic controllers (1 controller per signalized intersection)(adaptive traffic signal control optional), 8 CCTV cameras (full coverage of corridors), 4 DMS (on either side of intersections approaching I-95), 16 RSU (1 at each intersection), 6 MVDS (at locations with major traffic changes to provide a complete understanding of travel direction, speed and volume)	\$ 4,785,503	High	5-10
110	ATMS	Rockledge, Brevard County	Rockledge, County	Rockledge Loop	Judge Fran Jameson Way Wickham Rd Wickham Rd	Barton Blvd Judge Fran Jamieson Way Barnes Blvd	Approx. 15 miles of fiber work, 13 traffic controllers (1 controller per signalized intersection) adaptive traffic signal control optional, 7 CCTV cameras (full coverage of corridor), 2 DMS (on either side of intersections with I-95), 13 RSU (1 at each intersection), 6 MVDS (at locations with major traffic changes to provide a complete understanding of travel direction, speed and volume)	\$ 4,362,809	High	5-10
104	ATMS	Titusville	Titusville, FDOT	SR 50	South Street	US 1 (Washington Ave)	Approx. 3 miles of fiber work, 7 traffic controllers (1 controller per signalized intersection) adaptive traffic signal control optional, 3 CCTV Cameras (full coverage of corridor.), 2 DMS (1 EB and 1 WB on SR 50), 7 RSU (1 at each intersection), 2 MVDS (at locations with major traffic changes to provide a complete understanding of travel direction, speed and volume)	\$ 1,823,992	Medium	5-10
119	ATMS	West Melbourne	Brevard County	Hollywood Blvd	Palm Bay Rd	US 192	Approx. 3.2 miles of fiber work, 8 traffic controllers (1 controller per signalized intersection) adaptive signal control optional, 4 CCTVs (Full coverage of corridors), 8 RSU (1 at each intersection), 2 MVDS (to provide a complete understanding of travel direction, speed and volume)	\$ 1,500,500	Medium	5-10
120	ATMS	West Melbourne, Melbourne	Brevard County	Diary Rd	Palm Bay Rd	US 192	Approx. 3 miles of fiber work, 5 traffic controllers (1 controller per signalized intersection) adaptive signal control optional, 2 CCTV (Full coverage of corridors), 5 RSU (1 at each intersection), 1 MVDS (to provide a complete understanding of travel direction, speed and volume)	\$ 1,003,509	Medium	5-10
123	ATMS	Palm Bay	Palm Bay	Malabar Rd	St John's Heritage Parkway	Minton Rd	Approx. 4.0 miles of fiber work, 5 traffic controllers (1 controller per signalized intersection), 2 CCTVs (Full coverage of corridors), 5 RSU (1 at each intersection), 2 MVDS (to provide a complete understanding of travel direction, speed and volume)	\$ 1,238,894	Medium	10+



ATMS Projects

ATMS Projects								Project Cost	O & M	Timing
Project Number	Project Type	Jurisdiction	Maintaining Agency	Corridor	Start	End	Description		Level of maintenance (High, Med, Low)	0-5, 5-10, 10+ years
124	ATMS	Palm Bay	Palm Bay	Emerson Drive	Degroodt Rd	Malabar Rd	Approx. 5.0 miles of fiber work, 7 traffic controllers (1 controller per signalized intersection), 3 CCTVs (Full coverage of corridors), 7 RSU (1 at each intersection), 2 MVDS (to provide a complete understanding of travel direction, speed and volume)	\$ 1,540,327	Medium	10+
125	ATMS	Palm Bay	Palm Bay	St John's Heritage Parkway	Interchange	Maraloma On South Babcock St	Approx. 2.5 miles of fiber work, 3 traffic controllers (1 controller per signalized intersection), 2 CCTVs (Full coverage of corridors), 3 RSU (1 at each intersection), 2 MVDS (to provide a complete understanding of travel direction, speed and volume)	\$ 836,457	Low	10+
126	ATMS	Palm Bay	Palm Bay	San Filippo Drive	Cogan Dr	Malabar Rd	Approx. 5.75 miles of fiber work, 7 traffic controllers (1 controller per signalized intersection), 3 CCTVs (Full coverage of corridors), 7 RSU (1 at each intersection), 2 MVDS (to provide a complete understanding of travel direction, speed and volume)	\$ 1,658,986	Medium	10+



# Space Coast TPO ITS Master Plan Proposed Project List

ATMS Evacuation Projects								Project Cost	O & M	Timing
Project Number	Project Type	Jurisdiction	Maintaining Agency	Corridor	Start	End	Description		Level of maintenance (High, Med, Low)	0-5, 5-10, 10+ years
192	ATMS - evacuation	Brevard County	Brevard County, FDOT	SR 3 (Courtenay Pkwy)	SR 528	SR 405 (NASA Pkwy)	Approx. 11.3 miles of fiber, 9 traffic controllers (1 controller per signalized intersection), 9 CCTV (for corridor coverage), 2 DMS (for traveler information 1 NB, 1 SB), 3 MVDS (real-time traffic data), and network communications (fiber could be substituted w/ wireless point-to-point, cellular modems) and 13 Blankout signs, 5 ITS cabinet assemblies w/ in-cabinet hardware for Event Management way-finding.	\$ 3,825,240	High	0-5
191	ATMS - evacuation	Brevard County	Brevard County, FDOT	SR 46	Brevard-Seminole County Line	Carpenter Rd	Approx. 5.7 miles of fiber, 3 CCTV (for corridor coverage), 2 DMS (for traveler information 1 WB, 1 EB), 2 MVDS (real-time traffic data), and network communications (fiber could be substituted w/ wireless point-to-point, cellular modems).	\$ 1,393,856	Low	5-10
193	ATMS - evacuation	Brevard County	Brevard County, FDOT	SR 528 (Beachline Expy)	Brevard-Orange County Line	I-95	Utilize ex. FDOT fiber optic communications, CCTV cameras, DMS. Add 2 CCTV cameras (supplement coverage on west end), 2 MVDS (provide real-time traffic data), 1 DMS (provide traveler information WB)	\$ 575,554	Low	5-10
194	ATMS - evacuation	Brevard County	Brevard County, FDOT	SR 520	Brevard-Orange County Line	I-95	Approx. 4.8 miles of fiber, 1 traffic controller (1 controller per signalized intersection), 3 CCTV (for corridor coverage), 2 DMS (for traveler information 1 NB, 1 SB), 1 MVDS (real-time traffic data), and network communications (fiber could be substituted w/ wireless point-to-point, cellular modems).	\$ 1,428,839	Low	5-10
195	ATMS - evacuation	Indialantic, Melbourne Beach, County	Brevard County, Melbourne, FDOT	SR A1A	Brevard-Indian River County Line	US 192	Approx. 17.6 miles of fiber, 1 traffic controller (1 controller per signalized intersection), 10 CCTV (for corridor coverage), 2 DMS (for traveler information 1 NB, 1 SB), 4 MVDS (real-time traffic data), and network communications (fiber could be substituted w/ wireless point-to-point, cellular modems).	\$ 3,467,657	Medium	5-10
196	ATMS - evacuation	Melbourne, Palm Bay, Malabar, Grant-Valkaria, County	Brevard County, Melbourne, Palm Bay, FDOT	US 1	Brevard-Indian River County Line	Malabar Rd	Approx. 11.2 miles of fiber, 2 traffic controller (1 controller per signalized intersection), 6 CCTV (for corridor coverage), 2 DMS (for traveler information 1 NB, 1 SB), 3 MVDS (real-time traffic data), and network communications (fiber could be substituted w/ wireless point-to-point, cellular modems).	\$ 2,614,534	Medium	10+

197	ATMS - evacuation	Palm Bay, Brevard County	Palm Bay, Brevard County	Babcock St	Brevard-Indian River County Line	SR 514 (Malabar Rd)	Approx. 12.2 miles of fiber, 2 traffic controller (1 controller per signalized intersection), 6 CCTV (for corridor coverage), 2 DMS (for traveler information 1 NB, 1 SB), 4 MVDS (real-time traffic data), and network communications (fiber could be substituted w/ wireless point-to-point, cellular modems).	\$ 2,787,272	Medium	10+
198	ATMS - evacuation	Palm Bay, Brevard County	Brevard County, Palm Bay	Micco Rd	Babcock St	US 1	Approx. 7.7 miles of fiber, 1 traffic controller (1 controller per signalized intersection), 3 CCTV (for corridor coverage), 2 DMS (for traveler information 1 EB, 1 WB), 2 MVDS (real-time traffic data), and network communications (fiber could be substituted w/ wireless point-to-point, cellular modems).	\$ 1,878,339	Medium	10+



# Space Coast TPO ITS Master Plan Proposed Project List

Interstate Projects						Project Cost	O & M	Timing
Project Number	Project Type	Jurisdiction	Maintaining Agency	Location	Description		Level of maintenance (High, Med, Low)	0-5, 5-10, 10+ years
201	Interstate	Brevard County	Brevard County, FDOT	@ Wickham Road	2 RSS at NB and SB on-ramps , 1 Queue Warning System for NB off-ramp; inclusive of MVDS, CCTV, cabinet assembly and upstream flashing beacons, 2 WWDS upstream for NB and SB off-ramps, Controller modifications at two signalized intersections, Approx. 0.25 miles of minor fiber optic work for network connection.	\$ 1,077,974	Medium	0-5
202	Interstate	Brevard County	Brevard County, FDOT	@ SR 46 (Main St.), Exit 233	2 WWDS, 0.25 miles of fiber work	\$ 329,216	Low	5-10
203	Interstate	Titusville	Titusville, FDOT	@SR 406 (Garden St) Exit 220	2 WWDS, 0.25 miles of fiber work	\$ 329,216	Low	5-10
204	Interstate	Titusville	Brevard County, FDOT	@ SR 50 (Cheney Highway) Exit 215	2 WWDS, 0.25 miles of fiber work	\$ 329,216	Low	5-10
205	Interstate	Brevard County	Brevard County, FDOT	@ SR 407 (Challenger Memorial Highway) Exit 220	2 WWDS, Wireless communications (X2), Investigate Automated Truck Warning System for loop ramps	\$ 590,314	Low	0-5
206	Interstate	Brevard County	Brevard County	@ Port John Expressway Exit 208	2 WWDS, 0.25 miles of fiber work	\$ 329,216	Low	5-10
207	Interstate	Cocoa	Cocoa, Beach, FDOT	@ SR 524 Exit 202	2 WWDS, 0.25 miles of fiber work	\$ 289,663	Low	5-10
208	Interstate	Cocoa Beach, Brevard County	Brevard County, FDOT	@ SR 520, Exit 201	2 WWDS, 0.25 miles of fiber work	\$ 329,216	Low	5-10
209	Interstate	Rockledge, Brevard County	Brevard County, FDOT	@ SR 519 (Fiske Blvd) Exit 195	2 WWDS, Wireless communications (X2), Investigate Automated Truck Warning System for loop ramps	\$ 590,314	Low	0-5
210	Interstate	Brevard County	Brevard County, FDOT	@ SR 404 (Pineda Causeway) Exit 188	2 WWDS, 0.25 miles of fiber work	\$ 329,216	Low	5-10
211	Interstate	Melbourne	Brevard County, FDOT	@ SR 518 (Eau Gallie Blvd) Exit 183	2 WWDS, 0.25 miles of fiber work	\$ 329,216	Low	5-10
212	Interstate	Melbourne	West Melbourne, FDOT	@ US 192 (New Haven Ave) Exit 180	2 WWDS, 0.25 miles of fiber work	\$ 329,216	Low	0-5
213	Interstate	West Melbourne, Palm Bay	Brevard County, FDOT	@ Palm Bay Rd Exit 176	2 WWDS, 0.25 miles of fiber work	\$ 329,216	Low	5-10
214	Interstate	Palm Bay	Brevard County, FDOT	@ SR 514 (Malabar Rd) Exit 173	2 WWDS, 0.25 miles of fiber work	\$ 329,216	Low	5-10
215	Interstate	Brevard County	Brevard County, FDOT	@ Viera Boulevard (Exit 193)	2 WWDS, 0.25 miles of fiber work	\$ 329,216	Low	10+
216	Interstate	Brevard County	Brevard County, FDOT	@ St Johns Heritage Pkwy	2 WWDS, 0.25 miles of fiber work	\$ 329,216	Low	10+



## Space Coast TPO ITS Master Plan Proposed Project List

Intersection Safety Projects							Project Cost	O & M	Timing
Project Number	Project Type	Jurisdiction	Maintaining Agency	Corridor	Location / Start	Description		Level of maintenance (High, Med, Low)	0-5, 5-10, 10+ years
323	Bicycle	Palm Shores	Brevard County, FDOT	US 1	@ SR 404 (Pineda)	Kit C	\$ 126,648	Low	0-5
324	Bicycle	Brevard County	Brevard County, FDOT	SR 520	@ Newfound Harbor Drive	Kit C	\$ 126,648	Low	0-5
325	Bicycle	West Melbourne / Palm Bay	West Melbourne, Palm Bay	Palm Bay Rd	@ Hollywood Boulevard	Kit C	\$ 126,648	Low	0-5
326	Bicycle	Palm Bay	Palm Bay	Minton Road	@ Emerson Drive	Kit C	\$ 151,234	Low	0-5
327	Pedestrian	Cocoa Beach	Cocoa Beach, FDOT	US 1	@ SR 520	Kit D	\$ 151,234	Low	0-5
328	Pedestrian	Cocoa Beach	Cocoa Beach, FDOT	SR 501 (Clearlake Rd)	@ Lake Drive/School St	Kit D	\$ 151,234	Low	0-5
329	Pedestrian	Cocoa Beach	Cocoa Beach, FDOT	SR 501 (Clearlake Rd)	@ Dixon Boulevard	Kit D	\$ 151,234	Low	0-5
330	Pedestrian	Cocoa Beach	Cocoa Beach, FDOT	SR 501 (Clearlake Rd)	@ Roseline/Tate Street	Kit D	\$ 151,234	Low	0-5
331	Pedestrian	Brevard County	Brevard County, FDOT	SR 520	@ Newfound Harbor Drive	Kit D	\$ 151,234	Low	0-5
332	Pedestrian	Cape Canaveral	Brevard County, FDOT	SR A1A	@ Central Blvd.	Kit D	\$ 151,234	Low	0-5
333	Pedestrian	Melbourne	Melbourne, FDOT	SR 518 ( Eau Gallie Blvd)	@ Wickham Road	Kit D	\$ 151,234	Low	0-5
334	Pedestrian	Melbourne	Melbourne, FDOT	US 1	@ Aurora Road	Kit D	\$ 151,234	Low	0-5
304	Vehicle, Signalized	Rockledge	Rockledge	Barnes Blvd.	@ Murrell Road	Kit B	\$ 130,936	Low	5-10
305	Vehicle, Signalized	Rockledge	Rockledge, FDOT	SR 519 (Fiske Blvd)	@ Barnes Boulevard	Kit B	\$ 130,936	Low	5-10
306	Vehicle, Signalized	Cocoa Beach	Cocoa Beach, FDOT	501 (Clearlake Road)	Roseline/Tate Street	Kit B	\$ 130,936	Low	5-10
307	Vehicle, Signalized	Cocoa Beach	Cocoa Beach, FDOT	US 1	@ Range Road	Kit B	\$ 130,936	Low	5-10
308	Vehicle, Signalized	Brevard County	Brevard County, FDOT	SR 520 (King Street)	@ Friday Road	Kit B	\$ 130,936	Low	5-10

309	Vehicle, Signalized	Brevard County	Brevard County, FDOT	SR 520	@ SR 3(Courtenay Parkway)	Kit B	\$ 130,936	Low	5-10
310	Vehicle, Signalized	Brevard County	Brevard County, FDOT	SR 520	@ Plumosa Street	Kit B	\$ 130,936	Low	5-10
311	Vehicle, Signalized	Brevard County	Brevard County	Merritt Ave	@ Plumosa Street	Kit B	\$ 130,936	Low	5-10
312	Vehicle, Signalized	Brevard County	Brevard County, FDOT	SR 3 (Courtenay Pkwy)	@ Diana Boulevard	Kit B	\$ 130,936	Low	5-10
313	Vehicle, Signalized	Brevard County	Brevard County, FDOT	US 1	@ Canaveral Groves Boulevard	Kit B	\$ 130,936	Low	5-10
314	Vehicle, Signalized	Titusville	Titusville, FDOT	SR 50	@ Sisson Road/Alpine Lane	Kit B	\$ 130,936	Low	5-10
315	Vehicle, Signalized	Titusville	Titusville, FDOT	SR 50	@ SR 405	Kit B	\$ 130,936	Low	5-10
316	Vehicle, Signalized	Brevard County	Brevard County	Grissom Parkway	@ Canaveral Groves Boulevard	Kit B	\$ 130,936	Low	5-10
317	Vehicle, Signalized	Titusville	Titusville, FDOT	SR 405 (South St)	@ Fox Lake Road/Harrison Street	Kit B	\$ 130,936	Low	5-10
318	Vehicle, Signalized	Titusville	Titusville, FDOT	SR 405 (South St)	@ Sisson Road	Kit B	\$ 130,936	Low	5-10
319	Vehicle, Signalized	West Melbourne, Melbourne	West Melbourne, Melbourne	Dairy Road	@ Edgewood Drive	Kit B	\$ 130,936	Low	5-10
320	Vehicle, Signalized	Melbourne	Melbourne, FDOT	SR 518 ( Eau Gallie Blvd)	@ Wickham Road	Kit B	\$ 130,936	Low	5-10
321	Vehicle, Signalized	Melbourne	Melbourne, FDOT	US 192	@ US 1	Kit B	\$ 130,936	Low	5-10
322	Vehicle, Signalized	Palm Bay	Palm Bay	Malabar Rd	@ Emerson Drive	Kit B	\$ 130,936	Low	5-10
301	Vehicle, Unsignalized	Brevard County, Melbourne	Brevard County	Aurora Road	@ Turtle Mound Road	Kit A	\$ 88,801	Low	10+
302	Vehicle, Unsignalized	Brevard County	Brevard County	Pinehurst Avenue	@ Spyglass Hill Road	Kit A	\$ 88,801	Low	10+
303	Vehicle, Unsignalized	Melbourne	Melbourne, FDOT	SR 518 (Eau Gallie Blvd)	@ Turtle Mound Road	Kit A	\$ 88,801	Low	10+





# Space Coast TPO ITS Master Plan Proposed Project List

Event Management - Parking and Evacuation Projects								Project Cost	O & M	Timing
Project Number	Project Type	Jurisdiction	Maintaining Agency	Corridor	Start	End	Description		Level of maintenance (High, Med, Low)	0-5, 5-10, 10+ years
403	Event Management Pkg	Cape Canaveral, County, Cocoa Beach	FDOT	SR 528	W of I-95	SR A1A	6 Blankout signs, 4 ITS cabinet assemblies w/ in-cabinet hardware, Approx. 1 mile of fiber optic communication	\$ 293,369	Medium	5-10
404	Event Management Pkg	Cocoa, County, Cocoa Beach	Brevard County, FDOT	SR 520	W of I-95	SR A1A	17 Blankout signs, 5 ITS cabinet assemblies w/ in-cabinet hardware, Approx. .5 miles of fiber optic communication	\$ 484,578	Medium	5-10
406	Event Management Pkg	Melbourne, Indialantic, West Melbourne	Brevard County, Melbourne, FDOT	US 192	I-95	SR A1A	14 Blankout signs, 6 ITS cabinet assemblies w/ in-cabinet hardware, Approx. 2.5 miles of fiber optic communication	\$ 733,423	Medium	5-10
405	Event Management Pkg	Palm Shores, Brevard County	FDOT	SR 404 (Pineda Cswy)	US 1	SR A1A	11 Blankout signs, 5 ITS cabinet assemblies w/ in-cabinet hardware, Approx. .5 miles of fiber optic communication	\$ 349,421	Medium	5-10
401	Event Management Pkg	Titusville	Titusville, FDOT	SR 406 (Garden St)	I-95	US 1	11 Blankout signs, 6 ITS cabinet assemblies w/ in-cabinet hardware, Approx. 0.75 miles of fiber optic communication	\$ 388,974	Medium	5-10
416	Event Management Evacuation	Melbourne, Brevard County	Brevard County	St John's Heritage Parkway	US 192	Ellis Rd	5 Blankout signs, 2 ITS cabinets w/ in-cabinet hardware, approx. 1.75 miles of fiber optic communications, 1 MVDS (for real-time traffic data), 2 CCTV cameras	\$ 667,225	Low	10+
415	Event Management Evacuation	West Melbourne, Melbourne, Brevard County	Brevard County	Ellis Rd	I-95	Wickham Rd	5 Blankout signs, 2 ITS cabinets w/ in-cabinet hardware, approx. 2.0 miles of fiber optic communications, 1 MVDS (for real-time traffic data), 2 CCTV cameras	\$ 706,778	Low	10+



## Space Coast TPO ITS Master Plan Proposed Project List

Parking Management Projects							Project Cost	O & M	Timing
Project Number	Project Type	Jurisdiction	Maintaining Agency	Location / Start	End	Description		Level of maintenance (High, Med, Low)	0-5, 5-10, 10+ years
517	Parking Management	Brevard County	Delaware North	Kennedy Space Center Visitor Complex	Launch	DMS, Parking spot numbers signage	\$ 5,319,632	Medium	0-5
516	Parking Management	Brevard County	Brevard County	Rotary Riverfront Park	Launch	DMS, Parking spot numbers signage	\$ 375,227	High	5-10
502	Parking Management	Brevard County	Brevard County	Coconut Point Park	Beach	DMS, Parking spot numbers signage	\$ 415,101	Medium	10+
503	Parking Management	Brevard County	Brevard County	Seagull Park	Beach	DMS, Parking spot numbers signage	\$ 335,352	Low	10+
504	Parking Management	Brevard County	Brevard County	Spessard Holland Beach Park (South)	Beach	DMS, Parking spot numbers signage	\$ 454,975	Medium	10+
505	Parking Management	Brevard County	Brevard County	Spessard Holland Beach Park (North)	Beach	DMS, Parking spot numbers signage	\$ 574,598	Medium	10+
506	Parking Management	Brevard County	Brevard County	Juan Ponce de Leon Landing	Beach	DMS, Parking spot numbers signage	\$ 375,227	Low	10+
508	Parking Management	Brevard County	Brevard County	South Patrick Residents Association Park	Beach	DMS, Parking spot numbers signage	\$ 375,227	Low	10+
519	Parking Management	Cape Canaveral	Cape Canaveral	Banana River Park	Launch	DMS, Parking spot numbers signage	\$ 375,227	Medium	5-10
528	Parking Management	City of Melbourne	City of Melbourne	City of Melbourne City Hall	Garage	DMS, Parking spot numbers signage (approx. 175 stalls)	\$ 574,588	Low	10+

501	Parking Management	Cocoa Beach	Brevard County	Lori Wilson Park	Beach	DMS, Parking spot numbers signage	\$ 534,724	Medium	5-10
509	Parking Management	Cocoa Beach	Cocoa Beach	City of Cocoa Public Garage	Garage	DMS, Parking spot numbers signage	\$ 694,220	Medium	5-10
520	Parking Management	Cocoa Beach	Privately Owned	Westgate Cocoa Beach Pier	Launch	DMS, Parking spot numbers signage	\$ 654,346	Medium	5-10
521	Parking Management	Cocoa Beach	Cocoa Beach	Shepard Park	Launch	DMS, Parking spot numbers signage	\$ 773,969	Medium	5-10
522	Parking Management	Cocoa Beach	Cocoa Beach	Sidney Fischer Park	Launch	DMS, Parking spot numbers signage	\$ 614,472	Low	5-10
507	Parking Management	Cocoa Beach	Cocoa Beach	Robert P Murkshe Memorial Park	Beach	DMS, Parking spot numbers signage	\$ 375,227	Low	10+
529	Parking Management	Cocoa Beach	Cocoa beach	Downtown/City Hall	Garage	DMS, Parking spot numbers signage (approx. 241 stalls)	\$ 694,220	Low	10+
518	Parking Management	Port Canaveral	Port Canaveral	Jetty Park	Launch	DMS, Parking spot numbers signage	\$ 454,975	Low	5-10
510	Parking Management	Port Canaveral	Port Canaveral	Port Canaveral	Garage	DMS, Parking spot numbers signage	\$ 2,209,441	High	10+
511	Parking Management	Titusville	Titusville	Marina Park	Launch	DMS, Parking spot numbers signage	\$ 494,849	Medium	5-10
512	Parking Management	Titusville	Titusville	Space View Park	Launch	DMS, Parking spot numbers signage	\$ 375,227	Low	5-10
513	Parking Management	Titusville	Titusville	Sand Point Park	Launch	DMS, Parking spot numbers signage	\$ 574,598	Medium	5-10
514	Parking Management	Titusville	Titusville	William J. Manzo Memorial Park	Launch	DMS, Parking spot numbers signage	\$ 335,352	Low	5-10
515	Parking Management	Titusville	Titusville	Kennedy Point Park	Launch	DMS, Parking spot numbers signage	\$ 375,227	Low	5-10



# 2021 Intelligent Transportation Systems Master Plan Update

Appendix E – Opportunity Cost Formulas

**SOURCE: Statewide Active Arterial Management Needs Plan, 2013**

Note: Formulas were updated as needed.

**Monetary Losses**

The parameters utilized for the monetary costs are the following:

Parameter	Value	Source
Travel Time Delay Cost	\$16.79 per hour of travel per person	2012 Urban Mobility Report by Texas Transportation Institute
Auto Occupancy	1.25 persons per vehicle	2012 Urban Mobility Report by Texas Transportation Institute
Average cost per gallon for regular gasoline	\$3.546	U.S Energy Information Administration

Parameters of Study Simulation

To estimate the cost, the following formulas were utilized per time period:

$$(Eq. 9-1) \quad \text{Cost from fuel consumption} = \text{Fuel consumption increase} \times \text{Average cost per gallon of regular gasoline}$$

$$(Eq. 9-2) \quad \text{Cost from total travel time increase} = \text{Total travel time increase} \times \text{Auto occupancy} \times \text{Cost of travel person}$$

The following equation is being utilized to determine the detector failure opportunity cost:

$$(Eq. 9-3) \quad \text{Detector Failure Opportunity Cost} = \$0.0059344 \times \text{AADT} \times 364 \text{ Days} \times \text{No. of Signals}$$

**Annual Highway Congestion Costs**

The methodology for determining the overall annual cost of congestion per year is shown below. This analysis was completed by the Texas Transportation Institute utilizing the following formulas (For more information go to: <http://mobility.tamu.edu/ums/report/>):

$$(Eq. 9-4) \quad \text{Delay per Auto Commuter} = \frac{\text{(Peak Period Delay/ Auto Commuters)}}{\text{Auto Commuters}} + \frac{\text{(Remaining Delay/ Population)}}{\text{Population}}$$

$$(Eq. 9-5) \quad \text{Annual Fuel Wasted in Congestion} = \text{Annual Fuel Consumed in Congestion} - \text{Annual Fuel That Would be Consumed in Free-Flow Conditions}$$

$$(Eq. 9-6) \quad \text{Annual Psgr-Veh Delay Cost} = \text{Delay per Auto Commuter (Eq. 9-4)} \times \text{Value of Person Time (\$/hour)} \times \text{Vehicle Occupancy (person/vehicle)} \times \text{Annual Conversion Factor}$$

$$(Eq. 9-7) \quad \text{Annual Psgr Fuel Cost} = \text{Annual Fuel Wasted in Congestion (Eq. 9-5)} \times \text{Percent of Passenger Vehicles} \times \text{Gasoline Cost} \times \text{Annual Conversion Factor}$$

$$(Eq. 9-8) \quad \text{Annual Commercial-Veh. Delay Cost} = \text{Delay per Auto Commuter (Eq. 9-4)} \times \text{Value of Comm. Vehicle Time (\$/hr)} \times \text{Annual Conversion Factor}$$

$$(Eq. 9-9) \quad \text{Annual Commercial Veh. Fuel Cost} = \text{Annual Fuel Wasted in Congestion (Eq. 9-5)} \times \text{Percent of Comm. Vehicles} \times \text{Diesel Cost} \times \text{Annual Conversion Factor}$$

$$(Eq. 9-10) \quad \text{Annual Cost Due to Congestion} = \text{Annual Passenger-Vehicle Delay Cost (Eq. 9-6)} + \text{Annual Passenger Fuel Cost (Eq. 9-7)} + \text{Annual Comm. Veh. Delay Cost (Eq. 9-8)} + \text{Annual Comm. Veh. Fuel Cost (Eq. 9-9)}$$

Next determine the number of miles that a vehicle will travel within that hour. For the overall state road system, the statewide average speed in Florida is 41.5 mph.<sup>1</sup> Once the average speed on the Statewide System has been determined, it is necessary to equate the mileage traveled for each arterial segment to the congestion cost in one hour. This is achieved utilizing the following formula:

$$(Eq. 9-11) \quad \text{Annual Congestion Cost Per Mile} = \frac{\text{Congestion Cost Per Vehicle Per Hour}}{41.5 \text{ Miles Per Hour}}$$

Finally, it is necessary to obtain the annual congestion cost the following formulas were used:

$$(Eq. 9-12) \quad \text{Annual Congestion Cost Per Segment (Enhanced Maintenance Loc.)} = \text{Annual Congestion Cost Per Mile (Eq. 9-11)} \times \text{Average AADT Per District} \times \text{Average Miles Per Section Per District}$$

$$(Eq. 9-13) \quad \text{Annual Congestion Cost (Full AAM Loc.)} = \text{Annual Congestion Cost Per Mile (Eq. 9-11)} \times \text{AADT Per Arterial Section} \times \text{Miles Per Arterial Section}$$

<sup>1</sup> "2011 Source Book," FDOT, 2011. <http://www.dot.state.fl.us/planning/statistics/sourcebook/>.



### Signal Retiming Opportunity Costs

The following formulas are used to obtain the signal retiming opportunity cost:

$$\text{(Eq. 9-15) } \begin{array}{l} \text{Annual} \\ \text{Congestion} \\ \text{Opportunity Cost} \\ \text{of Signal Retiming} \\ \text{(Full AAM)} \end{array} = \begin{array}{l} \text{Opportunity Cost} \\ \text{(Congestion Cost)} \end{array} \times 8\% \times \begin{array}{l} \% \text{ of Signals} \\ \text{Coordinated} \end{array}$$

### Arterial Management Opportunity Costs

The following formulas apply:

$$\text{(Eq. 9-16) } \begin{array}{l} \text{Congestion Cost} \\ \text{Per Segment Per} \\ \text{Hour} \end{array} = \begin{array}{l} \text{Annual} \\ \text{Congestion Cost} \\ \text{(Full AAM Loc.)} \\ \text{(Eq. 9-13)} \end{array} / 365 \text{ days} / 24 \text{ hrs}$$

$$\text{(Eq. 9-17) } \begin{array}{l} \text{Opportunity Cost} \\ \text{of Arterial} \\ \text{Management} \end{array} = \begin{array}{l} \text{No. of} \\ \text{Crashes} \end{array} \times 1.67 \text{ hrs} \times 20\% \times \begin{array}{l} \text{Congestion Cost Per} \\ \text{Segment Per Hour} \\ \text{(Eq. 9-16)} \end{array}$$

### Adaptive Technology Opportunity Costs

Therefore, to quantify this benefit, the following formula applies:

$$\text{(Eq. 9-18) } \begin{array}{l} \text{Opportunity Cost of} \\ \text{Adaptive} \\ \text{Technology} \end{array} = \begin{array}{l} \text{Annual Congestion} \\ \text{Opportunity Cost} \\ \text{(Eq. 9-13)} \end{array} \times 3\% \times \begin{array}{l} \% \text{ of Adaptive} \\ \text{Intersections} \\ \text{(69.42\%)} \end{array}$$

### Crash Reduction Opportunity Costs

Per FHWA, studies have indicated that crashes can be reduced up to 15% through improved signal timings.<sup>2</sup> However, since the retiming of traffic signals will only provide a reduction of certain types of crashes (i.e. rear-end), only 50% of the crashes were assumed to apply. In addition, per the 2013 FDOT Plans Preparation Manual, Volume 1, the total average cost per crash on the state road system is \$141,085.

Therefore, to quantify this benefit, the following formula applies:

$$\text{(Eq. 9-19) } \begin{array}{l} \text{Opportunity Cost} \\ \text{of Crash} \\ \text{Reduction} \end{array} = \begin{array}{l} \text{No. of} \\ \text{Crashes}/2 \end{array} \times \$141,085 \times 15\% \times 50\%$$

<sup>2</sup> "Adaptive Signal Control," FHWA, 5/15/2012.

<http://www.fhwa.dot.gov/everydaycounts/technology/adsc/description.cfm>.



# 2021 Intelligent Transportation Systems Master Plan Update

Appendix F – Project Opportunity Costs

**Opportunity Cost Analysis - SCTPO ATMS Master Plan Projects**

Proj. #	Local Road Name	Total Mileage	# Signals	# Crash in 2019	AADT	Detector Maintenance Opportunity Cost	Average Annual Congestion Cost Per Hour	Annual Congestion Cost Per Mile	Annual Congestion Cost Per Segment	Travel Time Delay Reduction % (Signal Retiming)	Annual Congestion Opportunity Cost (Signal Retiming)	Congestion Cost Per Segment Per Hour	Opportunity Cost (Arterial Management)	Travel Time Delay Reduction % (Adaptive)	Annual Congestion Opportunity Cost (Adaptive)	Annual Congestion Opportunity Cost (Crash Reduction)
101	SR A1A	7.00	26	139	29,607	\$1,662,838.77	\$350.00	\$8.43	\$1,747,125.93	8%	\$139,770.07	\$199.44	\$4,629.68	3%	\$52,413.78	\$1,470,811.13
103	SR 520 (Clearlake Rd)	3.35	8	44	17,421	\$301,046.89	\$350.00	\$8.43	\$491,969.68	8%	\$39,357.57	\$56.16	\$412.67	3%	\$14,759.09	\$465,580.50
115	SR A1A	7.70	17	57	16,024	\$588,422.16	\$350.00	\$8.43	\$1,040,112.23	8%	\$83,208.98	\$118.73	\$1,130.23	3%	\$31,203.37	\$603,138.38
102	SR 520	3.30	4	27	23,553	\$203,509.38	\$350.00	\$8.43	\$655,220.91	8%	\$52,417.67	\$74.80	\$674.52	3%	\$19,656.63	\$285,697.13
109	US 1	11.40	6	243	33,260	\$431,076.46	\$350.00	\$8.43	\$3,196,371.74	8%	\$255,709.74	\$364.88	\$29,614.60	3%	\$95,891.15	\$2,571,274.13
106	Pineda, Eau Gallie, and US 192	11.50	24	265	25,229	\$1,307,921.42	\$350.00	\$8.43	\$2,445,781.34	8%	\$195,662.51	\$279.20	\$24,711.88	3%	\$73,373.44	\$2,804,064.38
114	US 1	4.75	6	113	26,771	\$346,974.93	\$350.00	\$8.43	\$1,071,987.78	8%	\$85,759.02	\$122.37	\$4,618.60	3%	\$32,159.63	\$1,195,695.38
107	SR A1A	9.00	35	141	23,482	\$1,775,311.65	\$350.00	\$8.43	\$1,781,551.75	8%	\$142,524.14	\$203.37	\$9,577.67	3%	\$53,446.55	\$1,491,973.88
113	US 1	4.40	5	36	20,010	\$216,114.77	\$350.00	\$8.43	\$742,192.37	8%	\$59,375.39	\$84.73	\$1,018.74	3%	\$22,265.77	\$380,929.50
105	US 1	12.10	18	282	23,295	\$905,778.26	\$350.00	\$8.43	\$2,376,206.25	8%	\$190,096.50	\$271.26	\$25,549.10	3%	\$71,286.19	\$2,983,947.75
121	Grissom Parkway	6.20	4	28	11,366	\$98,209.00	\$350.00	\$8.43	\$594,062.82	8%	\$47,525.03	\$67.82	\$634.21	3%	\$17,821.88	\$296,278.50
122	Fay Blvd	3.70	5	37	11,554	\$124,788.06	\$350.00	\$8.43	\$360,374.58	8%	\$28,829.97	\$41.14	\$508.39	3%	\$10,811.24	\$391,510.88
112	Wickham Rd	5.50	35	400	33,342	\$2,520,824.96	\$350.00	\$8.43	\$1,545,918.91	8%	\$123,673.51	\$176.47	\$23,577.03	3%	\$46,377.57	\$4,232,550.00
116	Post Rd	1.60	5	29	9,520	\$102,821.79	\$350.00	\$8.43	\$128,405.76	8%	\$10,272.46	\$14.66	\$141.98	3%	\$3,852.17	\$306,859.88
117	Parkway Dr	1.90	4	22	5,267	\$45,509.44	\$350.00	\$8.43	\$84,361.54	8%	\$6,748.92	\$9.63	\$70.76	3%	\$2,530.85	\$232,790.25
118	Lake Washington Rd	2.10	4	27	8,965	\$77,461.96	\$350.00	\$8.43	\$77,461.96	8%	\$12,696.59	\$18.12	\$163.38	3%	\$4,761.22	\$285,697.13
108	SR 507, Minton Rd, and SR 514	11.00	16	339	31,182	\$1,077,726.30	\$350.00	\$8.43	\$2,891,549.01	8%	\$231,323.92	\$330.09	\$37,374.26	3%	\$86,746.47	\$3,587,086.13
110	Rockledge Loop	15.00	13	320		\$0.00	\$350.00	\$8.43	\$0.00	8%	\$0.00	\$0.00	\$0.00	3%	\$0.00	\$3,386,040.00
104	SR 50	3.00	7	56	21,216	\$320,803.98	\$350.00	\$8.43	\$536,552.64	8%	\$42,924.21	\$61.25	\$1,145.63	3%	\$16,096.58	\$592,557.00
119	Hollywood Blvd	3.20	8	49	15,211	\$262,852.24	\$350.00	\$8.43	\$410,318.45	8%	\$32,825.48	\$46.84	\$766.58	3%	\$12,309.55	\$518,487.38
120	Dairy Rd	3.00	5	5	24,710	\$266,885.72	\$350.00	\$8.43	\$624,922.22	8%	\$49,993.78	\$71.34	\$119.13	3%	\$18,747.67	\$52,906.88
123	Malabar Rd	4.00	5	53	22,055	\$238,207.41	\$350.00	\$8.43	\$743,694.60	8%	\$59,495.57	\$84.90	\$1,502.84	3%	\$22,310.84	\$560,812.88
124	Emerson Dr	5.00	7	29	16,237	\$245,517.26	\$350.00	\$8.43	\$684,389.55	8%	\$54,751.16	\$78.13	\$756.73	3%	\$20,531.69	\$306,859.88
125	St. John's Heritage Pkwy	2.50	3	6	23,708	\$153,636.49	\$350.00	\$8.43	\$499,646.10	8%	\$39,971.69	\$57.04	\$114.30	3%	\$14,989.38	\$63,488.25
126	San Filippo Dr	5.75	7	26	23,708	\$358,485.14	\$350.00	\$8.43	\$1,149,186.03	8%	\$91,934.88	\$131.19	\$1,139.22	3%	\$34,475.58	\$275,115.75
192	SR 3 (Courtenay Pkwy)	11.3	9	89	17,900	\$347,990.73	\$350.00	\$8.43	\$1,705,112.29	8%	\$136,408.98	\$194.65	\$5,786.09	3%	\$51,153.37	\$941,742.38
191	SR 46	5.7	0	29	9,284	\$0.00	\$350.00	\$8.43	\$446,105.48	8%	\$35,688.44	\$50.93	\$493.26	3%	\$13,383.16	\$306,859.88
193	SR 528 (Beachline Expy)	0.0	0	61	37,805	\$0.00	\$350.00	\$8.43	\$0.00	8%	\$0.00	\$0.00	\$0.00	3%	\$0.00	\$645,463.88
194	SR 520	4.8	1	64	17,159	\$37,064.81	\$350.00	\$8.43	\$694,308.29	8%	\$55,544.66	\$79.26	\$1,694.24	3%	\$20,829.25	\$677,208.00
195	SR A1A	17.6	1	77	11,962	\$25,838.45	\$350.00	\$8.43	\$1,774,714.43	8%	\$141,977.15	\$202.59	\$5,210.29	3%	\$53,241.43	\$814,765.88
196	US 1	12.0	2	36	19,225	\$83,056.68	\$350.00	\$8.43	\$1,944,801.00	8%	\$155,584.08	\$222.01	\$2,669.44	3%	\$58,344.03	\$380,929.50
197	Babcock St	12.2	2	74	11,416	\$49,317.74	\$350.00	\$8.43	\$1,174,038.51	8%	\$93,923.08	\$134.02	\$3,312.50	3%	\$35,221.16	\$783,021.75
198	Micco Rd	7.7	1	12	9,316	\$20,123.69	\$350.00	\$8.43	\$604,710.88	8%	\$48,376.87	\$69.03	\$276.68	3%	\$18,141.33	\$126,976.50
403	SR 528		0	121		\$0.00	\$350.00	\$8.43	\$0.00	8%	\$0.00	\$0.00	\$0.00	3%	\$0.00	\$1,280,346.38
404	SR 520	11.80	0	156	24,913	\$0.00	\$350.00	\$8.43	\$2,478,203.13	8%	\$198,256.25	\$282.90	\$14,740.22	3%	\$74,346.09	\$1,650,694.50
406	US 192	8.60	0	317	28,752	\$0.00	\$350.00	\$8.43	\$2,084,477.76	8%	\$166,758.22	\$237.95	\$25,194.10	3%	\$62,534.33	\$3,354,295.88
405	SR 404	4.00	0	34	30,689	\$0.00	\$350.00	\$8.43	\$1,034,833.08	8%	\$82,786.65	\$118.13	\$1,341.50	3%	\$31,044.99	\$359,766.75
401	SR 406	2.80	0	35	14,429	\$0.00	\$350.00	\$8.43	\$340,582.12	8%	\$27,246.57	\$38.88	\$454.50	3%	\$10,217.46	\$370,348.13
416	St. John's Heritage Pkwy	1.75	2	11		\$0.00	\$350.00	\$8.43	\$0.00	8%	\$0.00	\$0.00	\$0.00	3%	\$0.00	\$116,395.13
415	Ellis Rd	2.00	0	18	14,714	\$0.00	\$350.00	\$8.43	\$248,078.04	8%	\$19,846.24	\$28.32	\$170.26	3%	\$7,442.34	\$190,464.75
<b>Total</b>		<b>250.2</b>	<b>295</b>		<b>Subtotal</b>	<b>\$14,196,116.53</b>			<b>\$40,490,574.58</b>		<b>\$3,239,245.97</b>		<b>\$231,295.23</b>		<b>\$1,214,717.24</b>	<b>\$41,341,432.13</b>
				<b>Average AADT</b>	<b>20115</b>								<b>% Adaptive Intersections =</b>	<b>69.33%</b>		
					<b>TOTALS</b>	<b>\$14,196,117</b>					<b>\$3,239,245.97</b>		<b>\$231,295.23</b>		<b>\$842,203.95</b>	<b>\$41,341,432.13</b>

Notes:

Only signals with full ITS devices were considered in the Opportunity Cost  
 Cost includes 2% inflation per year

<b>TOTAL</b>	<b>\$59,850,293.80</b>
<b>10 YEAR COST **</b>	<b>\$655,344,018.91</b>



**SPACE COAST**  
Transportation Planning Organization  
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