





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

Transportation Planning Organization



Space Coast TPO ITS Master Plan Proposed Project Space Coast IPO IIS IVIAS List - Evaluation Criteria

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 LRTP Goal 1	CONGESTION MANAGEMENT LRTP Goal 1, 4	ECONOMIC SIGNIFICANCE LETP 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
101	ATMS	Cape Canaveral Cocoa Beach FDOT	Brevard County, Cocoa Beach, FDOT	SR A1A	Minutemen Causeway	SR 401	0	0	0	0	0	O
102	ATMS	Cocoa Beach County FDOT	Brevard County, Cocoa Beach, FDOT	SR 520	Milford Point	SR A1A	0	0	0	0	0	0
103	ATMS	Cocoa/County	Brevard County, Cocoa Beach, FDOT	SR 501 (Clearlake Rd)	SR 520 (King St)	Industry Rd	0	0	0	O	0	0
104	ATMS	Titusville	Titusville, FDOT	SR 50	South Street	US 1 (Washington Ave)	0	0	0	¢	0	0
105	ATMS	Titusville / County	Titusville, Brevard County, FDOT	US 1	Camp Rd	SR 406 (Garden St)	0	0	0	O	0	O
106	ATMS	Melbourne / County	Melbourne, Brevard County, FDOT	Pineda, Eau Gallie, and 192	US1	A1A	0	0	0	0	0	0
107	ATMS	Satellite Beach, Indian Harbour Beach, County, Indialantic	Melbourne, Brevard County, FDOT	SR A1A	US 192	SR 404 (Pineda Cswy)	0		0	0	0	0
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	0	0	0	O	0	0
109	ATMS	Cocoa, Rockledge, County, Palm Shores, Melbourne	Cocoa Beach, Rockledge, Brevard County, Palm Shores, Melbourne, FDOT	US 1	Post Rd	Eyster Blvd	0	0	0	0	0	0
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	0	0	0	0	0	0
112	ATMS	County, Palm Shores, Melbourne, Melbourne Village, West Melbourne	Brevard County, Melbourne	Wickham Rd	Minton Road	Suntree Blvd	0	0	0	0	0	O
113	ATMS	County, Titusville	Brevard County, Titusville, FDOT	US 1	SR 406 (Garden St)	SR 46 (Main St)	0	0	0	0	0	0

6/11/2021 Page 1 of 6

							A					
							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
114	ATMS	Melbourne, Palm Bay	Melbourne, Palm Bay, FDOT	US 1	SR 514 (Malabar Rd)	E University Blvd	0	0	0	0	0	0
115	ATMS	Cocoa Beach, County	Cocoa Beach, Brevard County, FDOT	SR A1A	SR 404 (Pineda Causeway)	Minutemen Causeway	0	O	0	0	0	O
116	ATMS	Melbourne	Melbourne	Post Rd	Wickham Rd	US1	0	O	O	0	0	0
117	ATMS	Melbourne	Melbourne	Parkway Drive	Wickham Rd	US1	O	O	O	0	0	0
118	ATMS	Melbourne	Melbourne	Lake Washington Rd	Wickham Rd	US1	O	0	0	O	0	0
119	ATMS	West Melbourne	Brevard County	Hollywood Blvd	Palm Bay Rd	US 192	O	0	0	O	O	0
120	ATMS	West Melbourne / Melbourne	Brevard County	Diary Rd	Palm Bay Rd	US 192	O	0	0	O	0	0
121	ATMS	Brevard County	Brevard County	Grissom Parkway	Industry Rd	Kings Highway	0	0	0	0	0	O
122	ATMS	Brevard County	Brevard County	Fay Blvd	Homestead Ave	US1	O	O	O	O	0	O
123	ATMS	Palm Bay	Palm Bay	Malabar Rd	St John's Heritage Parkway	Minton Rd	O	O	0	Q	0	O
124	ATMS	Palm Bay	Palm Bay	Emerson Drive	Degroodt Rd	Malabar Rd	O	0	0	0	0	0
125	ATMS	Palm Bay	Palm Bay	St John's Heritage Parkway	Interchange	Maraloma On South Babcock St	0	0	0	0	0	0
126	ATMS	Palm Bay	Palm Bay	San Filippo Drive	Cogan Dr	Malabar Rd	O	O	O	O	0	O
191	ATMS - evacuation	Brevard County	Brevard County, FDOT	SR 46	Brevard-Seminole County Line	Carpenter Rd	0	O	O	0	0	0

6/11/2021 Page 2 of 6

							A					
							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
192	ATMS - evacuation	Brevard County	Brevard County, FDOT	SR 3 (Courtenay Pkwy)	SR 528	SR 405 (NASA Pkwy)	0	O	O	O	0	0
193	ATMS - evacuation	Brevard County	Brevard County, FDOT	SR 528 (Beachline Expy)	Brevard-Orange County Line	I-95	0	0	O	O	0	0
194	ATMS - evacuation	Brevard County	Brevard County, FDOT	SR 520	Brevard-Orange County Line	1-95	0	0	0	0	0	0
195	ATMS - evacuation	Indialantic, Melbourne Beach, County	Brevard County, Melbourne, FDOT	SR A1A	Brevard-Indian River County Line	US 192	O	0	0	0	0	0
196	ATMS - evacuation	Melbourne, Palm Bay, Malabar, Grant-Valkaria, County	Brevard County, Melbourne, Palm Bay	US 1	Brevard-Indian River County Line	Malabar Rd	0	0	0	0	0	0
197	ATMS - evacuation	Palm Bay, County	Palm Bay, Brevard County	Babcock St	Brevard-Indian River County Line	SR 514 (Malabar Rd)	0	0	0	0	0	0
198	ATMS - evacuation	County, Palm Bay	Palm Bay, Brevard County	Micco Rd	Babcock St	US 1	0	O	0	0	0	0
					Location / Start							
301	VEHICLE, UNSIGNALIZED	Brevard County / Melbourne	Brevard County	Aurora Road	@ Turtle Mound Road		73	O	O	n/a	n/a	0
							-					1. .
302	VEHICLE, UNSIGNALIZED	Brevard County	Brevard County	Pinehurst Avenue	@ Spyglass Hill Road		Ŏ	Ö	Ö	n/a	n/a	0
302			Brevard County Melbourne, FDOT	Pinehurst Avenue SR 518 (Eau Gallie Blvd)	@ Spyglass Hill Road @ Turtle Mound Road		0	1	0	n/a	n/a	0
	UNSIGNALIZED VEHICLE,	Brevard County					000	ŏ		7		
303	VEHICLE, UNSIGNALIZED VEHICLE, VEHICLE,	Brevard County Melbourne	Melbourne, FDOT	SR 518 (Eau Gallie Blvd)	@ Turtle Mound Road		0 0	Ö O	ŏ	n/a	n/a	Ö
303	VEHICLE, UNSIGNALIZED VEHICLE, SIGNALIZED VEHICLE, SIGNALIZED	Brevard County Melbourne Rockledge	Melbourne, FDOT Rockledge	SR 518 (Eau Gallie Blvd) Barnes Blvd.	@ Turtle Mound Road @ Murrell Road		0000	Ö O	0	n/a	n/a	0
303	UNSIGNALIZED VEHICLE, UNSIGNALIZED VEHICLE, SIGNALIZED VEHICLE, SIGNALIZED	Brevard County Melbourne Rockledge Rockledge	Melbourne, FDOT Rockledge Rockledge, FDOT	SR 518 (Eau Gallie Blvd) Barnes Blvd. SR 519 (Fiske Blvd)	@ Turtle Mound Road @ Murrell Road @ Barnes Boulevard		00000	0 0	000	n/a n/a	n/a n/a	0 0
303 304 305 306	UNSIGNALIZED VEHICLE, UNSIGNALIZED VEHICLE, SIGNALIZED VEHICLE, SIGNALIZED VEHICLE, SIGNALIZED	Brevard County Melbourne Rockledge Rockledge Cocoa	Melbourne, FDOT Rockledge Rockledge, FDOT Cocoa Beach, FDOT	SR 518 (Eau Gallie Blvd) Barnes Blvd. SR 519 (Fiske Blvd) 501 (Clearlake Road)	@ Turtle Mound Road @ Murrell Road @ Barnes Boulevard Roseline/Tate Street		00000	0000	0000	n/a n/a n/a	n/a n/a n/a	0 0

6/11/2021 Page 3 of 6

							A			(1)		
							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
310	VEHICLE, SIGNALIZED	Brevard County	Brevard County, FDOT	SR 520	@ Plumosa Street		0	O	0	n/a	n/a	0
311	VEHICLE, SIGNALIZED	Brevard County	Brevard County	Merritt Ave	@ Plumosa Street		0	O	0	n/a	n/a	0
312	VEHICLE, SIGNALIZED	Brevard County	Brevard County, FDOT	SR 3 (Courtenay Pkwy)	@ Diana Boulevard		0	0	0	n/a	n/a	0
313	VEHICLE, SIGNALIZED	Brevard County	Brevard County, FDOT	US 1	@ Canaveral Groves Boulevard		0	0	0	n/a	n/a	0
314	VEHICLE, SIGNALIZED	Titusville	Titusville, FDOT	SR 50	@ Sisson Road/Alpine Lane		0	0	O	n/a	n/a	0
315	VEHICLE, SIGNALIZED	Titusville	Titusville, FDOT	SR 50	@ SR 405		0	0	O	n/a	n/a	O
316	VEHICLE, SIGNALIZED	Brevard County	Brevard County	Grissom Parkway	@ Canaveral Groves Boulevard		0	O	0	n/a	n/a	0
317	VEHICLE, SIGNALIZED	Titusville	Titusville, FDOT	SR 405 (South St)	@ Fox Lake Road/Harrison Street		0	0	0	n/a	n/a	0
318	VEHICLE, SIGNALIZED	Titusville	Titusville, FDOT	SR 405 (South St)	@ Sisson Road		0	O	0	n/a	n/a	0
319	VEHICLE, SIGNALIZED	West Melbourne / Melbourne	West Melbourne / Melbourne	Dairy Road	@ Edgewood Drive		0	0	0	n/a	n/a	0
320	VEHICLE, SIGNALIZED	Melbourne	Melbourne, FDOT	SR 518 (Eau Gallie Blvd)	@ Wickham Road		0	0	0	n/a	n/a	0
321	VEHICLE, SIGNALIZED	Melbourne	Melbourne, FDOT	US 192	@ US 1		0	0	0	n/a	n/a	0
322	VEHICLE, SIGNALIZED	Palm Bay	Palm Bay	Malabar Rd	@ Emerson Drive		O	0	0	n/a	n/a	0
323	BICYCLE	Palm Shores	Brevard County, FDOT	US 1	@ SR 404 (Pineda)		0	0	0	n/a	n/a	0
324	BICYCLE	Brevard County	Brevard County, FDOT	SR 520	@ Newfound Harbor Drive		0	O	0	n/a	n/a	0
325	BICYCLE	West Melbourne / Palm Bay	West Melbourne / Palm Bay	Palm Bay Rd	@ Hollywood Boulevard		0	0	0	n/a	n/a	0

6/11/2021 Page 4 of 6

							A					
							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
326	BICYCLE	Palm Bay	Palm Bay	Minton Road	@ Emerson Drive		O	0	O	n/a	n/a	0
327	PEDESTRIAN	Cocoa	Cocoa Beach, FDOT	US 1	@ SR 520		O	0	0	n/a	n/a	0
328	PEDESTRIAN	Cocoa	Cocoa Beach, FDOT	SR 501 (Clearlake Rd)	@ Lake Drive/School St		0	0	0	n/a	n/a	O
329	PEDESTRIAN	Cocoa	Cocoa Beach, FDOT	SR 501 (Clearlake Rd)	@ Dixon Boulevard		0	O	0	n/a	n/a	O
330	PEDESTRIAN	Cocoa	Cocoa Beach, FDOT	SR 501 (Clearlake Rd)	@ Roseline/Tate Street		0	Q	0	n/a	n/a	O
331	PEDESTRIAN	County	Brevard County, FDOT	SR 520	@ Newfound Harbor Drive		0	O	O	n/a	n/a	O
332	PEDESTRIAN	Cape Canaveral	Brevard County, FDOT	SR A1A	@ Central Blvd.		0	O	O	n/a	n/a	O
333	PEDESTRIAN	Melbourne	Melbourne, FDOT	SR 518 (Eau Gallie Blvd)	@ Wickham Road		0	O	O	n/a	n/a	O
334	PEDESTRIAN	Melbourne	Melbourne, FDOT	US 1	@ Aurora Road		O	Q	O	n/a	n/a	0
401	EVENT MANAGEMENT - Pkg	Titusville	Titusville, FDOT	SR 406 (Garden St)	1-95	US 1	0	0	0	0	0	0
402	EVENT MANAGEMENT - PKG/Detour	Titusville/County	Titusville, FDOT	SR 50	W of I-95	US 1	O	0	0	0	0	0
403	EVENT MANAGEMENT - PKG	Cape Canaveral, County, Cocoa	FDOT	SR 528	W of I-95	SR A1A	O	O	O	0	O	0
404	EVENT MANAGEMENT - PKG	Cocoa, County, Cocoa Beach	Brevard County, FDOT	SR 520	W of I-95	SR A1A	0	O	0	O	0	0
405	EVENT MANAGEMENT - PKG	County, Palm Shores	FDOT	SR 404 (Pineda Cswy)	US 1	SR A1A	0	0	0	O	0	0
406	EVENT MANAGEMENT - PKG	Melbourne, Indialantic, West Melbourne	Brevard County, Melbourne, FDOT	US 192	1-95	SR A1A	0	0	0	0	0	O

6/11/2021 Page 5 of 6

							A	(=)				()
							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	0	0	0	0	0	0
416	EVENT MANAGEMENT - EVACUATION	Brevard County/Melbourne	Brevard County	St John's Heritage Parkway	US 192	Ellis Rd	O	0	0	0	0	O

6/11/2021 Page 6 of 6





2021 Intelligent Transportation Systems Master Plan Update

Appendix B - Project Costs

SPACE COAST

Transportation Planning Organization

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):	Þ	3,375,660.39
Total Project Cost (w/ Mobilization, Maintenance of Traffic,	s	5,987,577.62
Erosion and Sediment Control, Configency)	Ψ	0,001,011.02
		INPUT
Fiber Optic (in miles)		- 1
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		459
Percentage of Mid-Block Coverage		100%
		TOTAL
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		(
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, Contigency)	\$	-
		INPUT
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
	T	OTAL
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, Contigency)	\$ -
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	(
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "C" - Vehicle-to-Bicycle	0
NO. OF NEL C - VEHICLE-ID-DICYCLE	0

NT 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, Configency)	\$
	IN
of Key Decision Points / Intersections	

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
671-2-11	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	S	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	S	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/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
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 Beacns	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-III	EA	\$	13,283.74

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	FA	s	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	S	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, Cabinet Electronics Signal Priority and Preemption System, F&I, Optical, Detector	FA	S.	1,714,44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	FA	\$	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	S	27.645.38
670-5-400	Traffic Controller Assembly, Modify	FA	\$	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	FA	\$	1.890.00
676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	FA	ŝ	8.946.60
681-000	Connected Vehicle Equipment, Roadside Unit	FA	\$	7.500.00
682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	ŝ	10,176.47
684-1-1	Managed Field Ethernet Switch, F&I	FA	\$	3,792,46
684-2-1	Device Server. F&I	FA	S	778.37
685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	FA	\$	6.832.51
685-3-1	Remote Power Management Unit, F&I	FA	\$	1,545.12
695-8-11	Cellular Modem. F&I	EA	\$	3,500.00
700-10-123			\$.,
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA AS	\$	66,024.43
	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"			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 Beacns	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			S	52,572.76

Pay Item Description
630-2-11 Conduit, F&I, Open Trench

630-2-12 Conduit, F&I, Directional Bore
632-7-1 Signal Cable - New or Reconstructed Intersection, F&I

Unit Unit Cost LF \$ 7.

21.37 5,796.13

LF \$

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

https://fiotwww.blob.core.windows.net/sitefnity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month pdfpdf?s/krsn=4e4c771_2

COSTING ASS	SUMPTIONS:	
Contingency		15%
Maintenance of		10%
Mobilization		10%
Erosion and Se		5%
Design / Engine	•	20%
Construction Er		12.5%

Project 102: SR 520, Milford Point to SR A1A

"ATMS" Project Calculator	•
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, Contigency)	\$ 3,511,256.31
	INPUT
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%
	TOTAL
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

"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, Contigency)	\$ -
	INPUT
Number of Off-Ramps	(
Number of On-Ramps	(
Mainline Congestion from On-Ramp?	NC
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
	TOTAL
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, Contigency)	
	INPUT
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, Contigency)	\$ -
	INPU
No. of Key Decision Points / Intersections	

"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, Contigency)	\$ -
	INPU
No. of Parking Stalls	

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	FA	\$	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 Beacns	AS	\$	3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$	9,352.32
700-2-10	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://flotwww.blob.core.windows.net/sitefinity/idocs/defaultsource/programmanagement/estimates/historicalcos/information/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%

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

"ATMS" Project Calculator	
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, Contigency)	\$ 2,024,189.59
	INPU
Fiber Optic (in miles)	3.
No. of Traffic Signals	
No. of ADMS	
Percentage of Cabinet Replacements	259
Percentage of Controller Replacements	1009
Percentage of Video Detection Systems	509
Percentage of CCTV Camera Coverage	509
Percentage of Mid-Block Coverage	509
	TOTA
No. of CCTV Cameras	
No. of Roadside Units/Bluetooth	
No. of Midblock Detectors	
No. of Controllers	
No. of Controller Cabinet Assemblies	
No. of Video Detection Systems	
No. of Network Connections	1

"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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPU
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	(
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	
No. of Kit "C" - Vehicle-to-Bicycle	

"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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ =
	INPUT
No. of Parking Stalls	0

3302-12 Conduit, F&I, Directional Bore LF \$ 21,37 3322-71 Signal Cable - New or Reconstructed Intersection, F&I PI \$ 5,796.13 3332-123 Fiber Optic Connection, Install, Splice LF \$ 39.07 3332-31 Fiber Optic Connection, Install, Splice EA \$ 39.07 3332-315 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 899.92 3332-315 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 1,801.63 3332-315 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 1,801.63 3332-315 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 1,801.63 3332-317 Pull & Splice Box, F&I, 24° X 36° EA \$ 1,265.36 3332-319 Pull & Splice Box, F&I, 24° X 36° EA \$ 1,265.36 3332-311 Electrical Service Wire, F&I LF \$ 7.17 3332-31 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,278.5 3332-31 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.5 341-2-21 Prestresseed	Pay Item	Description	Unit	Unit Cost	
332-7-1 Signal Cable - New or Reconstructed Intersection, F&I PI \$ 5,796.13 333-1-123 Fiber Optic Cable, F&I, Underground Cable, 48-96 LF \$ 3,34 333-2-31 Fiber Optic Connection, Install, Splice EA \$ 390.73 333-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 1,893.33 333-3-15 Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel EA \$ 1,801.63 333-2-17 Pull & Splice Box, F&I, 13" X-24" EA \$ 7,266 333-2-17 Pull & Splice Box, F&I, 13" X-24" EA \$ 1,265.33 333-2-11 Electrical Sprice Wire, F&I EA \$ 1,265.33 333-2-11 Electrical Sprice Wire, F&I LF \$ 1,265.33 333-11 Electrical Sprice Wire, F&I LF \$ 1,265.00 333-11 Electrical Sprice Wire, F&I LF \$ 7,266.50 333-11 Electrical Sprice Wire, F&I LF \$ 1,375.56 412-211 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,376.56 442-2-11 Prestressed Concrete Pole, F&I, Type P-III EA	630-2-11	Conduit, F&I, Open Trench	LF	\$	7.13
Fiber Optic Cable, F&L Underground Cable, 48-96	630-2-12				21.37
Fiber Optic Connection, Install, Splice	632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$	5,796.13
333-3-11 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 899.92 333-3-15 Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel EA \$ 732.68 333-3-15 Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel EA \$ 732.68 335-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 335-2-13 Pull & Splice Box, F&I, 20" X 60" Rectangular or 36" Round EA \$ 2,348.75 335-2-11 Electrical Service Wire, F&I T.7.17 339-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.66 341-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,385.34 341-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,385.34 342-2-101 Stell Mast Arm Assembly, F&I, 30 Single AS \$ 3,8776.62 360-2-101 Loop Detector Inductive, F&I, Type I EA \$ 790.00 360-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment <td< td=""><td>633-1-123</td><td>Fiber Optic Cable, F&I, Underground Cable, 48-96</td><td>LF</td><td>\$</td><td>3.34</td></td<>	633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$	3.34
333-3-15 Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel EA \$ 1,801.63 335-2-17 Pull & Spilce Box, F&I, 13" X 24" EA \$ 1,265.36 335-2-17 Pull & Spilce Box, F&I, 13" X 24" EA \$ 1,265.36 335-2-17 Pull & Spilce Box, F&I, 24" X 36" EA \$ 1,265.36 335-2-17 Pull & Spilce Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 335-2-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 339-1-11 Electrical Service Wire, F&I Type P-II Pedestal F \$ 7.17 339-3-11 Electrical Service Wire, F&I Type P-II Pedestal EA \$ 1,378.56 339-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 341-2-11 Prestressed Concrete Pole, F&I, Type P-II EA \$ 1,385.34 341-2-13 Prestressed Concrete Pole, F&I, Type P-II EA \$ 1,385.34 341-2-13 Prestressed Concrete Pole, F&I, Type P-II EA \$ 1,385.34 341-2-10 Steel Mast Arm Assembly, F&I, 30' Single AS \$ 3,5775.62 349-21-01 Steel Mast Arm Assembly, F&I, 30' Single AS \$ 3,5775.62 349-21-01 Steel Mast Arm Assembly, F&I, 30' Single AS \$ 3,5775.62 360-1-110 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 360-3-12 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.26 360-3-12 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 9,515.49 360-3-11 Vehicle Detection System-Wideo, F&I, Cabinet Equipment EA \$ 9,515.49 360-3-11 Vehicle Detection System-Wideo, F&I, Cabinet Equipment EA \$ 9,515.49 360-4-12 Vehicle Detection System-Wideo, F&I, Cabinet Equipment EA \$ 9,515.49 360-4-11 Vehicle Detection System-Wideo, F&I, Cabinet Equipment EA \$ 9,515.49 360-4-12 Vehicle Detection System-Wingon Way for Exit Ramp, 1 or 2 Lanes EA \$ 3,791.31 363-1-111 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 9,515.49 360-4-12 Vehicle Detection System-Wingon Way for Exit Ramp, 1 or 2 Lanes EA \$ 3,791.30 370-5-140	633-2-31	Fiber Optic Connection, Install, Splice			39.07
Sa52-11 Pull & Splice Box, F&I, 13* X 24* EA \$ 732.68	633-3-11				899.92
Sa52-12 Pull & Splice Box, F&l, 24" X 36" EA	633-3-15				1,801.63
Saper	635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$	732.68
339-1-111 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 339-2-1 Electrical Service Wire, F&I LF \$ 7,178 339-2-1 Electrical Service Wire, F&I LF \$ 1,378.56 341-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,385.34 341-2-13 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.34 341-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,3283.76 342-2-101 Steel Mast Arm Assembly, F&I, 30° Single AS \$ 35,775.62 349-21-01 Steel Mast Arm Assembly, F&I, 30° Single AS \$ 39,775.62 350-1-13 Vehicular Traffic Signal, F&I, Type 10 EA \$ 389.94 360-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 360-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 360-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ <t< td=""><td>635-2-12</td><td>Pull & Splice Box, F&I, 24" X 36"</td><td>EA</td><td>\$</td><td>1,265.36</td></t<>	635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$	1,265.36
Signarrow Section Service Wire, F&I Electrical Service Disconnect, F&I, Pole Mount EA S. 1,378-56	635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA		2,384.57
Sagna-3-11 Electrical Service Disconnect, F&I, Pole Mount	639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$	2,850.00
Add 1-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA	639-2-1	Electrical Service Wire, F&I	LF		7.17
641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283,74 246-2-151 Aluminum Pole - Index 695-001, F&I, 20° EA \$ 2,166,52 349-21-01 Steel Mast Arm Assembly, F&I, 30° Single AS \$ 35,775,62 550-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 560-1-10 Loop Detector Inductive, F&I, Type B EA \$ 389,94 560-1-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.00 560-2-102 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 4,128,33 560-3-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515,48 560-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515,49 560-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,751,49 560-4-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 7,517,31 560-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,197,13 560-4-12 Vehicle Detection System-Video, F&I, Above	639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$	1,378.56
646-2-115 Aluminum Pole - Index 695-001, F&I, 20' EA \$ 2,166.50 548-2-1-01 Steel Mast Arm Assembly, F&I, 30' Single AS \$ 35,775.65 549-2-1-01 Steel Mast Arm Assembly, F&I, 30' Single AS \$ 35,775.65 550-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 560-1-10 Loop Detector Inductive, F&I, Type ID EA \$ 389.94 560-2-102 Loop Detector Inductive, F&I, Type ID EA \$ 780.00 560-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 560-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515.49 560-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 560-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 560-1-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,1971.31 560-1-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,1971.31 560-1-11 Vehicle Detection System-Video, F&I, Above Ground E	641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$	1,395.34
549-21-01 Steel Mast Arm Assembly, F&I, 30' Single AS \$ 35,775.62 550-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 550-1-13 Vehicular Traffic Signal, F&I, Type 10 EA \$ 388.94 560-2-102 Loop Detector Inductive, F&I, Type B EA \$ 780.26 560-2-110 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 560-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 2,283.33 560-4-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515.49 560-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 560-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 560-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 560-7-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 560-7-13 Vehicle Detection System-Video, F&I, Bove Ground Equipment EA \$ 3,1971.31 560-7-13 Signal Priorit	641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$	13,283.74
September Sept	646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$	2,166.50
560-1-110 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 560-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 560-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 560-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 560-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515.48 560-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 560-4-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 560-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 560-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 560-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 560-7-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 1,971.44 560-1-13 Pedestrian Detector EA \$ 1,714.44 560-1-13 Pedestrian Detector F&I \$ 4,500.00	649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$	35,775.62
EA \$ 780.26	650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$	790.00
560-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 560-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 8,228.73 560-3-12 Vehicle Detection System-Mideo, F&I, Above Ground Equipment EA \$ 9,515.49 560-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 560-4-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 560-1-13 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 5,752.44 565-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 565-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 565-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 567-5-140 Traffic Controller Assembly, F&I, McMa, Two Preemption Plans AS \$ 32,011.37 577-2-410 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 577-2-11 Traffic Controller Modify EA \$ 1,942.50 577-2-	660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$	389.94
560-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 8,228.73 560-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.48 560-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 560-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,1971.31 560-7-11 Vehicle Detection System-Video, F&I, Passive Pedestrian Detector EA \$ 3,1971.31 563-1-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 5,752.44 563-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 565-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 4,500.00 570-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 570-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 570-2-11 Traffic Controller Modify EA \$ 1,942.50 570-2-11 Traffic Controller, Modify EA \$ 1,890.00 5770-2-11 Traffic Controller, Modify	660-2-102	Loop Assembly, F&I, Type B	EA	\$	780.26
560-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 8,228.73 560-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.48 560-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 560-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,797.31 560-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,797.31 563-1-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 5,752.44 663-1-12 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 663-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,752.44 560-1-13 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 3,2011.37 570-5-140 Traffic Controller Assembly, Modify EA \$ 1,942.50 571-2-40 Traffic Controller Modify EA \$ 1,942.50 571-2-40	660-3-11		EA	\$	4,128.33
560-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 560-7-11 Vehicle Detection System- Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 560-7-11 Vehicle Detection System- Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 563-1-111 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 565-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 4,500.00 570-5-112 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.37 570-5-140 Traffic Controller Assembly, Modify EA \$ 1,942.50 570-5-400 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,942.50 571-2-40 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,942.50 571-2-11 Traffic Controller Without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,942.50 571-2-12 Traffic Controller Modify EA \$ 1,890.00 576-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,446.60 581-000	660-3-12		EA	\$	8,228.73
560-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 560-7-11 Vehicle Detection System- Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 560-7-11 Vehicle Detection System- Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 563-1-111 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 565-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 4,500.00 570-5-112 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.37 570-5-140 Traffic Controller Assembly, Modify EA \$ 1,942.50 570-5-400 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,942.50 571-2-40 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,942.50 571-2-11 Traffic Controller Without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,942.50 571-2-12 Traffic Controller Modify EA \$ 1,890.00 576-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,446.60 581-000	660-4-11		EA		
Webicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	660-4-12		FA		
5631-1111 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 5,752.44 5631-1121 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 5631-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 5651-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 4,500.00 570-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 570-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 571-2-11 Traffic Controller Modify EA \$ 1,942.50 571-2-12 Traffic Controller, Modify EA \$ 1,890.00 571-2-12 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,466.60 576-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,466.60 581-100 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 582-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 3,792.46 584-2-1 Device Server, F&I EA \$ 778.37 <td></td> <td></td> <td></td> <td></td> <td></td>					
563-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 565-1-31 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 4,500.00 570-5-112 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.37 570-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 570-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 571-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,890.00 571-2-12 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 1,890.00 586-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,946.60 581-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 582-1-13 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 3,792.46 584-1-1 Managed Field Ethernet Switch, F&I EA \$ 7,7837 585-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,545.12 585-8-11 Cellular Modem, F&I		, , , , , , , , , , , , , , , , , , , ,			
565-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 4,500.00 570-5-112 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.37 570-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 570-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 571-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 4,500.00 571-2-11 Traffic Controller, Modify EA \$ 1,890.00 576-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,946.60 581-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 582-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176.47 584-1-1 Managed Field Ethernet Switch, F&I EA \$ 7,780.70 584-2-1 Device Server, F&I EA \$ 778.37 585-3-1 Remote Power Management Unit, F&I EA \$ 6,832.51 595-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-10-123					
370-5-112 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.37 370-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 370-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 371-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 4,500.00 371-2-01 Traffic Controller, Modify EA \$ 1,890.00 377-2-10 Traffic Controller, Modify EA \$ 1,890.00 377-2-11 Traffic Controller, Modify EA \$ 1,890.00 377-2-12 Traffic Controller, Modify EA \$ 1,890.00 377-2-11 Traffic Controller, Modify EA \$ 1,890.00 377-2-12 Traffic Controller, Modify EA \$ 1,890.00 377-2-11 Traffic Controller, Modify EA \$ 1,890.00 381-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 382-1-13 Traffic Controller, Roadside Unit EA \$ 3,792.46 384-1-1 Managed Field Ethernet Switch, F&I EA \$ 78		0 , 1 , 1 , 1			
570-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 571-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 4,500.00 576-2-112 Traffic Controller, Modify EA \$ 1,890.00 576-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946.60 581-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 582-1-13 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176.47 582-1-13 Managed Field Ethernet Switch, F&I EA \$ 3,792.46 584-2-1 Device Server, F&I EA \$ 778.37 585-1-3 Uninterrupitible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832.51 585-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 595-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 6,624.43 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 7,122.87 700-12-12	670-5-112				32,011.37
571-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 4,500.00 571-2-40 Traffic Controller, Modify EA \$ 1,890.00 577-2-412 ITS Cabinet, F&I, Pole Mount, 336S, 24" x 46" 22" EA \$ 8,946.60 581-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 582-1-13 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176.47 584-1-1 Managed Field Ethernet Switch, F&I EA \$ 3,792.46 584-2-1 Device Server, F&I EA \$ 778.37 385-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832.51 385-3-1-1 Remote Power Management Unit, F&I EA \$ 1,545.12 395-8-11 Cellular Modern, F&I EA \$ 1,545.12 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 6,024.43 700-11-1 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 <tr< td=""><td>670-5-140</td><td>Traffic Controller Assembly, F&I, Model 2070, 1 Preemption</td><td>AS</td><td>\$</td><td>27,645.38</td></tr<>	670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$	27,645.38
371-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 4,500.00 371-2-40 Traffic Controller, Modify EA \$ 1,890.00 377-2-40 Traffic Controller, Modify EA \$ 8,946.60 581-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 582-1-13 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176.47 584-1-1 Managed Field Ethernet Switch, F&I EA \$ 3,792.46 584-2-1 Device Server, F&I EA \$ 778.37 585-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 595-8-11 Cellular Modern, F&I EA \$ 1,545.12 700-10-123 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 \$ 6,254.85 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352.32 700-6-12 Embedded Dynamic Me	670-5-400	Traffic Controller Assembly, Modify	EA	\$	1,942.50
571-2-40 Traffic Controller, Modify EA \$ 1,890.00 576-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946.60 576-2-121 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946.60 582-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 7,500.00 582-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 3,792.46 584-2-1 Device Server, F&I EA \$ 778.37 584-2-1 Device Server, F&I EA \$ 778.37 585-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,835.1 585-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 595-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.48 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 2,254.85 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 7,122.87 70	671-2-11		EA	\$	4,500.00
576-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946.60 581-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 582-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176.47 584-1-1 Managed Field Ethernet Switch, F&I EA \$ 778.37 584-1-1 Device Server, F&I EA \$ 778.37 585-1-3 Uninterrupible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6.832.51 585-1-13 Uninterrupible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6.832.51 595-8-11 Cellular Modern, F&I EA \$ 1,545.12 595-8-11 Cellular Modern, F&I EA \$ 3,500.00 700-10-12 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.48 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 6,254.88 700-11-1 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 Beacns AS \$ 3,948.03 <td>671-2-40</td> <td></td> <td>EA</td> <td>\$</td> <td>1,890.00</td>	671-2-40		EA	\$	1,890.00
881-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 882-1-13 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176.47 882-1-11 Managed Field Ethernet Switch, F&I EA \$ 3,792.46 884-2-1 Device Server, F&I EA \$ 778.37 885-1-31 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832.51 885-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 595-8-11 Cellular Modern, 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, Elankout Sign , 48" X 48" AS \$ 6,254.85 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948.03 700-2-16 Multi-Post 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	676-2-112		EA		8,946.60
582.1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176.47 584.1-11 Managed Field Ethernet Switch, F&I EA \$ 3,792.46 584.2-1 Device Server, F&I EA \$ 778.37 585.1-3 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832.51 585.3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 595.8-11 Cellular Modem, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024-35 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, .48" X 48" AS 6,254-85 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, .48" X 48" AS 5,7122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS 3,948.03 700-6-12 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	681-000		EA		7,500.00
384-1-1 Managed Field Ethernet Switch, F&I EA \$ 3,792.46 384-2-1 Device Server, F&I EA \$ 778.37 385-1-3 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832.51 385-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 395-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-10-23 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.36 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,24.85 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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	682-1-113		EA	\$	10.176.47
884-2-1 Device Server, F&I EA \$ 778.37 385-1-3 Uninterrupible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832.51 385-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 395-8-11 Cellular Modern, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.33 700-11-1 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 Beacns 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	684-1-1		EA	\$	3,792.46
385-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832.51 385-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 395-8-11 Cellular Modern, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 60,024.43 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 6,254.85 700-12-12 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 Beacns 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	684-2-1				778.37
585-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 595-8-11 Cellular Modern, 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, 46" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948.03 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF AS \$ 9,352.32 700-6-12 Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF EA \$ 17,000.00			FA		
595-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.85 700-11-1 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 Beacns 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	685-3-1				1,545.12
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 Beacns 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	695-8-11		FA		
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 Beacns 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		· · · · · · · · · · · · · · · · · · ·			66,024.43
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 Beacns AS \$ 3,948.03 700-2-61 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		The state of the s			
700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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					-,
700-2-16 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		1 7 0 1 1 0 1			
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					
700-7-232 Embedded Dynamic Message Sign, F&I, wlo UPS, Full Color, 12-20 SF EA \$ 17,000.00					
	700-6-12				17,000.00
100-0-155 FIGHT Access Dynamic Message Sign, F&I W/ UPS, Full Color, 51-100 SF EA \$ 52,5/2./6					
	100-8-135	FIGHT Access Dynamic Message Sign, F&I W/ UPS, Full Color, 51-100 SF	EA	Þ	52,512.76

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.
https://fdotwww.blob.core.windows.net/sitefinity/docs/defaultsource/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month pdf.pdf?sfvrsn=4e4c771_2

Contingency	159
Maintenance of Traffic	101
Mobilization	101
Erosion and Sediment Control	51
Design / Engineering	201
Construction Engineering and Inspection	12.5

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

"ATMS" Project Calculator	
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, Contigency)	\$ 1,823,991.70
	INPUT
Fiber Optic (in miles)	INPUI
	7
No. of Traffic Signals	
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%
	TOTAL
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

"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, Contigency)	\$ -
	INPUT
Number of Off-Ramps	(
Number of On-Ramps	(
Mainline Congestion from On-Ramp?	NC
Mainline Congestion from Off-Ramp?	NC
Geometric Concerns for Truck Speed on Off-Ramp?	NC
	TOTAL
No. of Wrong Way Driving Systems	(
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
-	INPUT
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, Contigency)	\$ -
	INPUT
No. of Parking Stalls	(

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 Beacns	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/defaultsource/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month_pdf.pdf?sfvrsn=4e
4c771_2

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

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

"ATMS" Project Calculator	
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, Contigency)	\$ 4,643,411.91
	INPUT
Fiber Optic (in miles)	12.1
No. of Traffic Signals	18
No. of ADMS	10
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%
	TOTAL
No. of CCTV Cameras	9
No. of Roadside Units/Bluetooth	18
No. of Midblock Detectors	(
No. of Controllers	18
No. of Controller Cabinet Assemblies	4
No. of Video Detection Systems	9
No. of Network Connections	29

"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, Contigency)	\$ -
	INPUT
Number of Off-Ramps	C
Number of On-Ramps	
Mainline Congestion from On-Ramp?	NC
Mainline Congestion from Off-Ramp?	NC
Geometric Concerns for Truck Speed on Off-Ramp?	NC
	TOTAL
No. of Wrong Way Driving Systems	(
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPU
No. of Parking Stalls	(

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	FA	\$	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	FA	\$	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
	7 7 1			
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$	5,752.44
663-1-112 665-1-13	Signal Priority and Preemption System, F&I, Optical, Detector	EA EA	\$	1,714.44
000-1-13	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 Beacns	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://flotwww.blob.core.windows.net/sitefinity/docs/defaultsource/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month pdf.pdf?sfvrsn=4e4c771
_2

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

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

"ATMS" Project Calculator	
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, Contigency)	\$ 6,714,044.52
	INPUT
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%
	TOTAL
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

"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, Contigency)	\$ -
	INPUT
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
	TOTAL
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	

IIINTEROFOTION CAFETVII Decises Contented	
"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, Contigency)	\$,
	INPUT
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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 Beacns	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
100-0-100	1 Tone 7 Boods Dynamic Wessage Sign, Facility Of S, Fall Cold, ST-100 SF	ĽΛ	¥ JZ,J1Z.10

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.
https://fdotwww.blob.core.windows.net/silefinity/docs/defaultsource/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month_pdf.pdf?sfvrsn=4e
4c771_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%

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

"ATMS" Project Calculator	
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, Contigency)	\$ 8,330,378.34
	INPUT
Filter Oakle (in added)	INPUT
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%
	TOTAL
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

"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, Contigency)	\$ -
	INPUT
Number of Off-Ramps	(
Number of On-Ramps	(
Mainline Congestion from On-Ramp?	NC
Mainline Congestion from Off-Ramp?	NC
Geometric Concerns for Truck Speed on Off-Ramp?	NC
	TOTAL
No. of Wrong Way Driving Systems	(
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPU
No. of Parking Stalls	(

6302-11 Condult, F&I, Directional Bore LF \$ 7.13 6302-212 Condult, F&I, Directional Bore LF \$ 21.37 632-7-1 Signal Cable - New or Reconstructed Intersection, F&I PI \$ 5.796.13 633-3-13 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 \$ 1,801.53 633-3-17 Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel EA \$ 1,801.53 635-2-11 Pull & Splice Box, F&I, 13° X-24° S \$ 1,265.36 635-2-12 Pull & Splice Box, F&I, 30° X-60° Rectangular or 36° Round EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 30° X-60° Rectangular or 36° Round EA \$ 2,384.57 639-1-11 Electrical Service Wire, F&I Cree February F	Pay Item	Description	Unit	Un	it Cost
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 \$ 3,34 633-3-31 Fiber Optic Connection, Install, Splice EA \$ 39.07 633-3-11 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 999.92 633-3-15 Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel EA \$ 1,801.53 635-2-12 Pull & Splice Box, F&I, 13" X-24" EA \$ 732.68 635-2-12 Pull & Splice Box, F&I, 30" X-24" EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 30" X-60" Rectangular or 36" Round EA \$ 2,384.57 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-11 Electrical Service Wire, F&I FAI, Del Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,235.75 642-2-10 Steel Mast Arm Assembly, F&I, 30 Single AS \$	630-2-11	Conduit, F&I, Open Trench	LF	\$	7.13
633-1-123 Fiber Optic Cable, F&I, Underground Cable, 48-96 LF \$.3.94 633-2-31 Fiber Optic Connection, Install, Splice EA \$.390.7 633-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$.899.92 633-3-15 Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel EA \$.1,801.63 635-2-12 Pull & Splice Box, F&I, 372 X2* EA \$.722.68 635-2-12 Pull & Splice Box, F&I, 372 X2* EA \$.722.68 635-2-12 Pull & Splice Box, F&I, 372 X2* EA \$.2,865.06 635-2-12 Pull & Splice Box, F&I, 207 X 60" Rectangular or 36" Round EA \$.2,364.57 635-2-13 Pull & Splice Box, F&I, 207 X 60" Rectangular or 36" Round EA \$.2,364.57 639-2-11 Electrical Service Wire, F&I Belectrical Service Wire, F&I Belectrical Service Wire, F&I FA \$.1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-IIP Pedestal EA \$.1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-IIP Pedestal EA \$.1,378.56 641-2-11 Auril Markary <	630-2-12	Conduit, F&I, Directional Bore	LF	\$	21.37
Sa3-2-31 Fiber Optic Connection, Install, Splice EA \$ 39.07	632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$	5,796.13
6333-311 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, 372 X-24* EA \$ 72,866 635-2-12 Pull & Splice Box, F&I, 372 X-24* EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 372 X-24* SC \$ 2,364.57 635-2-13 Pull & Splice Box, F&I, 372 X-24* SC \$ 2,364.57 639-1-11 Electrical Service Disconnect, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,328.37 646-2-15 Aluminum Pole - Index G95-001, F&I, 20° EA \$ 2,166.50 649-21-01 Steel Mast Arm Assembly, F&I, 30° Single AS \$ 35,775.62 660-1-13 Vehicle Detection Inductive, F&I, 17ye B EA \$ 780.26		Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$	3.34
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, 31" X 24" 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 Service Wire, F&I LF \$ 7.17 639-1-12 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-IIP Pedestal EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,385.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,385.34 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,385.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,385.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 3,5775.62 650-1-13 Vehicla Detection Oxide Pedes Pole, F&I, Type B EA \$ 3,606.64 660-3-11	633-2-31	Fiber Optic Connection, Install, Splice	EA	\$	39.07
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 \$ 1,265.36 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 639-2-12 Pull & Splice Box, F&I, 20" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-2-11 Electrical Service Wire, F&I LF \$ 7,17 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,3283.74 642-21-15 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 Vehicute Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-10 Loop Assembly, F&I, Type B EA \$ 780.26 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-2-11 Vehicle Detection System-Microwave, F&I, Above Ground Eq	633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$	899.92
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 \$ 2,384.57 639-2-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,3283.74 642-2-15 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 \$ 790.00 660-2-101 Loop Detector Inductive, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.26 660-3-11 Vehicle Detection System-Wideo, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA		Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel		\$	1,801.63
6352-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Wire, F&I F 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-III EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.374 646-2-115 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, Type 10 EA \$ 790.00 660-3-11 Vehicular Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 660-3-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 4,751.79 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA <td< td=""><td></td><td></td><td></td><td></td><td></td></td<>					
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 \$ 7,17 639-2-11 Electrical Service Wire, F&I LF \$ 7,17 641-2-11 Prestressed Concrete Pole, F&I, Type P-IIPedestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,3283.74 646-2-15 Aluminum Pole - Index 695-001, F&I, 20° EA \$ 2,166.50 649-21-01 Steel Mast Arm Assembly, F&I, 30° Single AS \$ 3,5775.62 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type B 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-Winder, F&I, Above Ground Equipment EA \$ 4,751.79		a see a		_	
639-2-1 Electrical Service Wire, F&I LF \$ 7.17 639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.66 641-2-11 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 \$ 1,328.37 646-2-115 Aluminum Pole - Index 695-001, F&I, 20° EA \$ 2,166.50 649-21-01 Steel Mast Arm Assembly, F&I, 30° Single AS \$ 35,776.60 660-1-13 Vehicular Traffic Signal, F&I, Huminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-10 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, Above Ground Equipment EA \$ 2,228.73 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 1,751.79 660-4-11 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 1,971.79				_	,
639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 646-2-15 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 \$ 790.00 660-3-10 Loop Detector Inductive, F&I, Type 10 EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.31 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment					
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 \$ 13,283.74 640-2-15 Aluminum Pole - Index 695-001, F&I, 20° EA \$ 2,166.50 649-21-01 Steel Mast Arm Assembly, F&I, 30° Single AS \$ 3,5775.62 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type B EA \$ 780.06 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 8,228.73 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,151.40 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,151.40 660-4-12 Vehicle Detection System-F&I, Optical, Cabinet Equipment EA		•			
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 \$ 790,00 660-1-10 Loop Detector Inductive, F&I, Type B 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 \$ 780,26 660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515,49 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515,49 660-4-11 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971,31 660-4-11 Vehicle Detection System, F&I, Optical, Cabinet Electronics EA \$ 31,971,31 660-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detector EA \$ 1,714,44 663-1-112 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronic </td <td></td> <td></td> <td></td> <td>_</td> <td></td>				_	
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 \$ 790.00 660-2-102 Loop Detector Inductive, F&I, Type B EA \$ 780.26 660-2-110 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 4,128.33 660-3-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Wrodeo, F&I, Above Ground Equipment EA \$ 4,751.79 660-4-11 Vehicle Detection System-Wrodeo, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Wrodeo, F&I, Above Ground Equipment EA \$ 3,757.56 660-4-12 Vehicle Detection System-F&I, Optical Detection Education Education System F&I, Optical Detection Education Education Education Education Education Education Education Education Educa		Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$	1,395.34
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 B 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 \$ 4,128.33 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515.49 660-3-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 660-7-11 Vehicle Detection System-Wideo, F&I, Cabinet Equipment EA \$ 3,1971.31 663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 3,1971.31 663-1-112 Traffic Controller Assembly,				_	
650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-101 Loop Detector Inductive, F&I, Type B EA \$ 389.94 660-1-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-101 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 9,751.49 660-7-11 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 5,752.44 665-1-13 Podestrian Detector, F&I, Passive Pedestrian Detector EA \$ 1,714.44 665-1-14 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 670-5-140 Traf					
660-1-110 Loop Detector Inductive, F&I, Type B EA \$ 389.94 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-2-110 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.26 660-3-11 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 \$ 9,515.49 660-4-11 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 1,971.31 660-4-12 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 1,971.31 663-1-131 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,791.44 663-1-12 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 665-1-14 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 2,7645.38 670-5-10 Traffic Cont				\$	35,775.62
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 \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Wrong, F&I, Obove Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Wrong, F&I, Optical, Detection EA \$ 3,171.79 660-7-11 Vehicle Detection System-Wrong, F&I, Optical, Detection EA \$ 3,171.44 663-1-111 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 3,2011.37 670-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 2,7645.38 671-2-40 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 2,7645.38 671-2-20 T				_	
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 \$ 8,228.73 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 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 \$ 1,704.44 665-1-12 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 2,764.38 670-5-140 Traffic Controller Assembly, F&I, Modify EA \$ 1,942.50 671-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,980.00 672-2-12 Traffic Controller, Modify EA \$ 1,890.00 676-2-11				_	
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, Cabinet Equipment EA \$ 9,751.79 660-4-12 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 660-1-11 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-12 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 5,752.44 663-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 6671-3 Pedestrian Detector, F&I, Passive Pedestrian Detection AS \$ 2,645.38 670-5-140 Traffic Controller Assembly, F&I, MEMA, Two Preemption Plans AS \$ 32,011.37 670-5-140 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-11 Traffic Controller Assembly, Modify EA \$ 1,890.00 671-2-240 Traffic Controller, Modify EA \$ 1,890.00 6776-2-112 Tirs Gabinet, F&I, Pole Moun					
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 \$ 4,751.79 660-4-11 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 1,774.44 663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,774.44 665-1-13 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 \$ 27,645.38 670-5-401 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 671-2-10 Traffic Controller Without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 671-2-20 Traffic Controller, Modify EA \$ 1,890.00 681-000 Con		<u> </u>			
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 \$ 3,1971.31 663-1-111 Signal Priority and Preemption System, F&I, Optical, Detector 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 \$ 4,500.00 670-5-140 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.37 670-5-400 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 670-5-410 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 Traffic Controller, Modify EA \$ 1,890.00 676-2-113 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946.60 681-000 Connected Vehicle Equipment, Roadside Un		Vehicle Detection System-Microwave, F&I, Above Ground Equipment		\$	
660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 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 \$ 1,890.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 Till Till Till Till Till Till Till Till	660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$	9,515.49
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 \$ 1,942.50 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-12 ITS Cabinet, F&I, Pole Mount, 336S, 24* X 46* 22* EA \$ 8,946.60 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-13 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 \$ 1,776.47 684-1-1 Device Server, F&I EA	660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$	4,751.79
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, Meddel 2070, 1 Preemption AS \$ 27,645.38 670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-41 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,892.50 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-11 TS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946.60 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 1,950.00 682-1-113 ITS CSTV Camera, F&I, Ome 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 \$ 7,833.76 685-3-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA	660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$	31,971.31
665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 4,500.00 670-5-140 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 \$ 4,500.00 671-2-10 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,466.00 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-13 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&I EA \$ 778.37 685-3-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832.51 685-3-1 Remote Power Management Unit, F&I EA \$ 1,554.12 695-8-11 Cellular Modem, F&I EA \$ 3,550.00	663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$	5,752.44
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 Tis Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,496.60 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&I EA \$ 3,792.46 684-2-1 Device Server, F&I EA \$ 778.37 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 685-3-1 Remote Power Management Unit, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.43 700-11-1 Electronic	663-1-112	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$	1,714.44
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 \$ 9,946.60 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-13 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 \$ 779.37 685-1-31 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	665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$	4,500.00
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 \$ 4,500.00 671-2-10 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 \$ 7,500.00 682-1-13 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 \$ 778.37 684-1-1 Device Server, F&I EA \$ 778.37 685-3-1 Remote Power Management Unit, F&I 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 \$ 1,545.12 695-8-10 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"	670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$	32,011.37
671-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 4,500.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-40 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 \$ 7,837 685-3-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,545.12 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 5,000.00 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.85 700-11-2	670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$	27,645.38
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 \$ 9,946.00 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 1,0176.47 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 778.37 684-2-1 Device Server, F&I EA \$ 778.37 685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 778.37 685-3-1 Remole Power Management Unit, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 3,500.00 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.82 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.82 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,348.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 9,352.32 <td>670-5-400</td> <td>Traffic Controller Assembly, Modify</td> <td>EA</td> <td>\$</td> <td>1,942.50</td>	670-5-400	Traffic Controller Assembly, Modify	EA	\$	1,942.50
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 \$ 778.37 685-1-3 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832.21 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modem, F&I EA \$ 3,000.00 700-10-123 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, Ground Mount, Blankout Sign, 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, 701-200 SF AS \$ 9,352.32 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF EA \$ 4,072.57 <t< td=""><td>671-2-11</td><td>Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA</td><td>EA</td><td>\$</td><td>4,500.00</td></t<>	671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$	4,500.00
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 \$ 778.37 685-1-3 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832.51 685-8-11 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 Beacns AS \$ 3,948.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, TAC POWERED, 12-20 SF AS \$ 9,352.32 700-7-232 Embedded Dynamic Message Sign, F&I, Wo UPS, Full Color, 12-20 SF EA	671-2-40	Traffic Controller, Modify	EA	\$	1,890.00
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 \$ 1,545.12 685-3-1 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, Cverhead Mount, Blankout Sign, 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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, Wo UPS, Full Color, 12-20 SF EA <	676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$	8,946.60
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 \$ 778.37 685-3-1 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 \$ 6,624.43 700-11-1 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 \$ 3,348.03 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,348.03 700-2-16 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$	7,500.00
684-2-1 Device Server, F&I EA \$ 778.37 685-1-3 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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$	10,176.47
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	684-1-1	Managed Field Ethernet Switch, F&I	EA	\$	3,792.46
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	684-2-1	Device Server, F&I	EA	\$	778.37
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$	6,832.51
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	685-3-1	Remote Power Management Unit, F&I	EA	\$	1,545.12
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 Beacns 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	695-8-11	Cellular Modem, F&I	EA	\$	3,500.00
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 Beacns 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	700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$	66,024.43
700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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	700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$	6,254.85
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	700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$	7,122.87
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	700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$	3,948.03
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	700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$	9,352.32
700-7-232 Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF EA \$ 17,000.00	700-6-12		EA	\$	4,072.57
700-8-135 Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF EA \$ 52,572.76	700-7-232		EA	\$	
	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/site/finity/docs/defaultsource/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month_pdf.pdf?sfvrsn=4e4
2771_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%

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

\$ 539,591.64
\$ 337,244.78
\$ 2,697,958.22
\$ 4,785,503.40
INPUT
11
16
4
25%
100%
50%
50%
55%
TOTAL
8
16
(
16
4
8
28

"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, Contigency)	-
	INPUT
Number of Off-Ramps	(
Number of On-Ramps	(
Mainline Congestion from On-Ramp?	NC
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
	TOTAL
No. of Wrong Way Driving Systems	(
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, Contigency)	\$ -
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized) No. of Kit "C" - Vehicle-to-Bicycle	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, Contigency)	-
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Parking Stalls	0

Pay Item	Description	Unit	Uni	it 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	· · · · · · · · · · · · · · · · · · ·	EA	\$	389.94
	Loop Detector Inductive, F&I, Type 10	EA	\$	780.26
660-2-102	Loop Assembly, F&I, Type B		_	
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
700-10-123	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$	6,254.85
		AS	\$	
700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"		_	7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	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://dotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month pdf.pdf?sfvrsn=4e4c 771 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%

Project 109: US 1, Post Road to Eyster Blvd

"ATMS" Project Calculator	
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, Contigency)	\$ 2,959,553.94
	INPUT
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%
	TOTAL
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

"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, Contigency)	\$ -
	INPUT
Number of Off-Ramps	(
Number of On-Ramps	(
Mainline Congestion from On-Ramp?	NC
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
	TOTAL
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, Contigency)	\$
	INPUT
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, Contigency)	-
	INPUT
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, Contigency)	\$ -
	INPUT
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	S	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	FA	\$	9,515.49
660-4-11	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
663-1-111		EA	\$	1,714.44
665-1-13	Signal Priority and Preemption System, F&I, Optical, Detector Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$	4,500.00
000-1-10	redestrian Detector, rai, rassive redestrian Detection	EA	Ŷ	4,300.00
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 Beacns	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.

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

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

"ATMS" Project Calculator			
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, Contigency)	\$	4,362,809.42	
		INPUT	
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%	
		TOTAL	
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		(
No. of Network Connections		20	

"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, Contigency)	\$ -
	INPUT
Number of Off-Ramps	(
Number of On-Ramps	(
Mainline Congestion from On-Ramp?	NC
Mainline Congestion from Off-Ramp?	NC
Geometric Concerns for Truck Speed on Off-Ramp?	NC
	TOTAL
No. of Wrong Way Driving Systems	(
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, Contigency)	\$ -
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	INPUT 0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	INPUT 0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized) No. of Kit "B" - Vehicle-to-Vehicle (signalized)	INPUT 0
, ,	0 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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Parking Stalls	0

Pay Item			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	S	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
700-10-123	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$	6,254.85
700-11-1	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$	7.122.87
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$	3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$	9,352.32
700-2-16		EA	\$	
700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$	4,072.57 17,000.00
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	FA	s	52.572.76
100-0-100	i ioni nocess Dynamic Message Sign, Fan W. UFS, Full Guidt, 31-100 SF	EA	ą	02,012.10

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

https://dotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month_pdf.pdf?sfvrsn=4e4c771_2

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

Project 112: Wickham Road, Minton Road to Suntree Blvd

"ATMS" Project Calculator	
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, Contigency)	\$ 8,284,880.58
	INPUT
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%
	TOTAL
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

"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, Contigency)	\$ -
	INPUT
Number of Off-Ramps	(
Number of On-Ramps	(
Mainline Congestion from On-Ramp?	NC
Mainline Congestion from Off-Ramp?	NC
Geometric Concerns for Truck Speed on Off-Ramp?	NC
	TOTAL
No. of Wrong Way Driving Systems	(
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPU
No. of Parking Stalls	(

Pay Item	Description	Unit	Uni	t 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
700-10-123	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$	6,254.85
700-11-1	Electronic Display Sign, F&I, Ground Wount, Blankout Sign , 48" X 48"	AS	\$	7,122.87
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacons	AS	\$	3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$	9,352.32
700-2-16	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$	4,072.57
700-6-12	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/defaultsource/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month_pdf.pdf?sfvrsn=4e4c
771_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%

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

\$ 176,298.26
\$ 110,186.41
\$ 881,491.30
\$ 1,563,545.20
\$ 1,565,545.20
INPUT
4.4
5
1
25%
100%
50%
50%
50%
TOTAL
3
5
2
5
1
2
8

"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, Contigency)	\$ -
	INPU
Number of Off-Ramps	
Number of On-Ramps	
Mainline Congestion from On-Ramp?	N
Mainline Congestion from Off-Ramp?	N
Geometric Concerns for Truck Speed on Off-Ramp?	N
	TOTA
No. of Wrong Way Driving Systems	
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, Contigency)	\$ -
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	
TTO: OF THE 71 TOTALIO TO TOTALIO (UTTOT GITALIDA)	
Total Transition (all alguments)	
,	(
No. of Kit "B" - Vehicle-to-Vehicle (signalized) No. of Kit "C" - Vehicle-to-Bicycle	(

"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, Contigency)	-
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Parking Stalls	0

Pay Item	Description	Unit	Un	it 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	FA	\$	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	\$	
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$	5,752.44
663-1-111	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$	1,714.44
665-1-112	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
070 5 440	<u> </u>			
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	TS 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	\$	
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	\$,
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 Beacns	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://idohuww.blob.core.windows.net/sitefinity/idocs/idefault-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month_pdf.pdf?sfvrsn=4e4 c771_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%

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

"ATMS" Project Calculator	
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, Contigency)	\$ 2,243,184.03
	INPUT
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%
	TOTAL
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

"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, Contigency)	\$ -
	INPUT
Number of Off-Ramps	(
Number of On-Ramps	(
Mainline Congestion from On-Ramp?	NC
Mainline Congestion from Off-Ramp?	NC
Geometric Concerns for Truck Speed on Off-Ramp?	NC
	TOTAL
No. of Wrong Way Driving Systems	(
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Key Decision Points / Intersections	(

"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, Contigency)	\$
	INPUT
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	FA	\$	3,500.00
700-10-123	•	EA	\$	66.024.43
700-10-123	DMS Support Structure, Cantilever 31-40 FT	AS	\$	
700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS		6,254.85
	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"		\$	7,122.87
700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	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/defaultsource/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month_pdf.pdf?sfvrsn=4e4c7
71.2

Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.59

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

"ATMS" Project Calculator	
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, Contigency)	\$ 3,524,811.49
	INPU
Fiber Optic (in miles)	7.
No. of Traffic Signals	1
No. of ADMS	
Percentage of Cabinet Replacements	259
Percentage of Controller Replacements	1009
Percentage of Video Detection Systems	509
Percentage of CCTV Camera Coverage	33'
Percentage of Mid-Block Coverage	50'
	TOTA
No. of CCTV Cameras	
No. of Roadside Units/Bluetooth	
No. of Midblock Detectors	
No. of Controllers	
No. of Controller Cabinet Assemblies	
No. of Video Detection Systems	
No. of Network Connections	2

"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, Contigency)	-
	INPUT
Number of Off-Ramps	(
Number of On-Ramps	(
Mainline Congestion from On-Ramp?	NC
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
	TOTAL
No. of Wrong Way Driving Systems	(
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, Contigency)	\$	
		INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)		0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)		0
No. of Kit "B" - Vehicle-to-Vehicle (signalized) No. of Kit "C" - Vehicle-to-Bicycle		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, Contigency)	-
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Parking Stalls	0

Pay Item	Description	Unit	Un	it 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	\$	
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	\$	
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://idohuww.blob.core.windows.net/sitefinity/idocs/idefault-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month_pdf.pdf?sfvrsn=4e4 c771_2

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

Project 116: Post Rd, Wickham Road to US 1

"ATMS" Project Calculator	
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, Contigency)	\$ 859,184.91
	INPUT
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%
	TOTAL
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

"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, Contigency)	\$ -
	INPUT
Number of Off-Ramps	(
Number of On-Ramps	(
Mainline Congestion from On-Ramp?	NC
Mainline Congestion from Off-Ramp?	NC
Geometric Concerns for Truck Speed on Off-Ramp?	NC
	TOTAL
No. of Wrong Way Driving Systems	(
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, Contigency)	\$ -
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	C
No. of Kit "C" - Vehicle-to-Bicycle	C
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Parking Stalls	0

6302-212 Conduit, F&I, Directional Bore LF \$ 21.37 6322-7-1 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 \$ 3.34 633-3-13 Fiber Optic Connection, Install, Splice EA \$ 39.07 633-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 899.92 635-2-11 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 635-2-12 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 \$ 2,384.57 635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-11 Electrical Service Wire, F&I LF \$ 7.17 639-2-11 Electrical Service Wire, F&I LF \$ 7.1378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.34 641-2-15 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.34 649-2-105 Stell M	Pay Item	Description	Unit	Unit Cost
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 \$ 39.07 633-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 899.92 633-3-15 Fiber Optic Connection Hardware, F&I, Peterminated Patch Panel EA \$ 1,801.63 635-2-11 Pull & Splice Box, F&I, 13" X 24" EA \$ 1,801.63 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 635-2-17 Pull & Splice Box, F&I, 24" X 36" EA \$ 2,384.57 639-1-111 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,885.00 639-2-1 Electrical Service Wire, F&I Power Power Company AS \$ 2,850.00 639-2-1 Electrical Service Wire, F&I Power Power Company AS \$ 2,850.00 639-2-1 Electrical Service Secone, F&I, Pole Mount EA \$ 1,378.66 641-2-11 Prestressed Concrete Pole, F&I, Type P-II EA <	630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
633-1-123 Fiber Optic Cable, F&I, Underground Cable, 48-96 LF \$.34 633-2-31 Fiber Optic Connection, Install, Splice EA \$.3907 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 \$.899.92 633-2-17 Pull & Splice Box, F&I, 37 X 24* EA \$.732.66 635-2-12 Pull & Splice Box, F&I, 37 X 24* EA \$.732.66 635-2-12 Pull & Splice Box, F&I, 37 X 24* EA \$.2,850.00 635-2-13 Pull & Splice Box, F&I, 30 X 60* Rectangular or 36* Round EA \$.2,265.00 639-2-11 Electrical Service Wire, F&I EA \$.2,345.75 639-2-11 Electrical Service Wire, F&I EA \$.717.65 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$.1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II EA \$.1,328.34 640-2-10 Auminum Pole - Index 695-001, F&I, 20* EA \$.2,166.50 660-2-11 Auminum Pole - Ind	630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
633-2-31 Fiber Optic Connection, Install, Splice EA \$ 39.07 633-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 899.92 633-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 1,801.63 635-2-11 Pull & Splice Dox, F&I, 137 × 247 EA \$ 7,226 635-2-12 Pull & Splice Box, F&I, 247 × 36" EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 370 × 60" Rectangular or 36" Round EA \$ 2,384.57 639-2-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company S 2,850.00 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.54 642-2-10 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 649-2-110 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 660-1-10 Loop Detector Inductive, F&I, Type 10 EA \$ 399.94	632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-3-11 Fiber Optic Connection Hardware, F&l. Splice Enclosure EA \$ 899.92 633-3-15 Fiber Optic Connection Hardware, F&l. Preterminated Patch Panel EA \$ 1,801.63 635-2-11 Pull & Splice Box, F&l. 13" X2" EA EA \$ 1,265.36 635-2-12 Pull & Splice Box, F&l. 3" X2" X5" EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&l. 3" X6" Rectangular or 36" Round EA \$ 2,384.57 635-2-13 Pull & Splice Box, F&l. 3" X6" Rectangular or 36" Round EA \$ 2,384.57 639-1-11 Electrical Service Wire, F&l. Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Disconnect, F&l. Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&l. Type P-II Pedestal EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&l. Type P-II Pedestal EA \$ 1,328.37 646-2-115 Aluminum Pole - Index 695-01, F&l. 20" EA \$ 2,166.50 660-1-13 Vehicial Detection Aystem-Microwave, F&l. Cabinet Equipment EA \$ 389.94 660-2-10 Step Assembly, F&l. Type B EA	633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
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 \$ 725.68 635-2-12 Pull & Splice Box, F&I, 13" X 24" EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furrished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Wire, F&I FAI, Pole Mount EA \$ 1,378.56 6412-11 Prestressed Concrete Pole, F&I, Type P-IIP Pedestal EA \$ 1,385.34 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.74 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.74 642-21-01 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 3,5775.62 649-21-01 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 3,775.62 660-1-11 Loop Detection Inductive, F&I, Type 10 EA \$ 2,806.60 660-1-11 Loop Detection Inductive, F&I, Type 10 EA \$ 3,804.60	633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
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 \$ 1,265.36 639-1-11 Electrical Service Wire, F&I LF \$ 7,17 639-2-11 Electrical Service Wire, F&I LF \$ 7,17 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283.74 641-2-15 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283.74 646-2-165 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 \$ 790.00 660-2-102 Loop Assembly, F&I, Type B EA \$ 389.94 660-2-102 Loop Assembly, F&I, Type B EA \$ 4,128.33 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipme	633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
S35-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 E35-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 E39-1-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 E1-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 E41-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,385.46 EA \$ 1,385.47 EA \$ 1,385.47	633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-13 Pull & Splice Box, F.B.I., 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-1-111 Electrical Power Service, F.B.I., Overhead, Meter Furnished by Power Company AS \$ 2,880.00 639-2-1 Electrical Service Wire, F.B.I. F.B. F.B.I. F.B. F.B.I. F.P. F.B.I. F.B. F.B.I. F.P. F.B.I. F.B. F.B.I. F.B. F.B.I. F.B. F.B.I.	635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
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 \$ 7.17 639-2-11 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 \$ 13,283.74 646-2-15 Aluminum Pole - Index 965-001, 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 \$ 790.00 660-1-10 Loop Desector Inductive, F&I, Type B EA \$ 790.00 660-2-102 Loop Desection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 4,228.37 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment	635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
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 \$ 1,395.34 642-2-115 Aluminum Pole - Index 699-001, F&I, 20° EA \$ 2,166.50 649-21-101 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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 660-2-102 Loop Assembly, F&I, Type B EA \$ 790.00 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.26 660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,251.49 660-4-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 1,971.40	635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378,56 641-2-11 Prestressed Concrete Pole, F&I, Type P-III Pedestal EA \$ 1,395,34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328,374 646-2-15 Aluminum Pole - Index 695-001, F&I, Zyp 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 \$ 790,00 660-1-10 Loop Detector Inductive, F&I, Type 10 EA \$ 399,40 660-2-102 Loop Assembly, F&I, Type B EA \$ 780,20 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 1,226 660-3-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515,49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515,49 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515,49 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515,	639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
641-2-11 Prestressed Concrete Pole, F.B.I, Type P-II Pedestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F.B.I, Type P-III EA \$ 13,283.74 640-2-15 Aluminum Pole - Index 695-001, F.B.I, 20° EA \$ 2,166.50 649-21-01 Steel Mast Arm Assembly, F.B.I, 30° Single AS 3,377.52 650-1-13 Vehicular Traffic Signal, F.B.I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.06 660-1-110 Loop Detector Inductive, F.B.I, Type 10 EA \$ 389.94 660-2-102 Loop Assembly, F.B.I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F.B.I, Cabinet Equipment EA \$ 1,782.36 660-3-11 Vehicle Detection System-Video, F.B.I, Cabinet Equipment EA \$ 1,781.49 660-4-12 Vehicle Detection System-Video, F.B.I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F.B.I, Above Ground Equipment EA \$ 3,751.49 660-4-11 Vehicle Detection System-Video, F.B.I, Above Ground Equipment EA \$ 3,751.49 660-4-11 Vehicle Detection System-Video, F.B.I, Above Ground Equipment<	639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type B EA \$ 780.06 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 1,283.36 660-3-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 8,228.73 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Detector EA \$ 13,971.31	639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
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 \$ 35,775.65 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-10 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 \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,1971.31 660-1-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,971.37 660-7-11 Vehicle Detection System-Video, F&I, Above Ground	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 \$ 2,166.50 649-21-01 Steel Mast Arm Assembly, F&I, 30' Single AS \$ 35,775.65 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-10 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 \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,1971.31 660-1-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,971.37 660-7-11 Vehicle Detection System-Video, F&I, Above Ground	641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283,74
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 \$790.00 660-3-110 Loop Detection Mudcive, 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 \$1780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$4,128.33 660-3-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$9,515.49 660-4-11 Vehicle Detection System-Wrong, F&I, Optical, Cabinet Electronics EA \$5,752.44 660-1-11 Vehicle Detection System-Wrong, F&I, Optical, Cabinet Electronics EA \$5,762.44 663-1-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$1,714.44 665-1-13 Pedestrian Detector, F&			EA	\$ 2,166,50
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 \$ 389.94 660-1-110 Loop Desembly, F&I, Type B EA \$ 780.26 660-2-102 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-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Wideo, F&I, Cabinet Equipment EA \$ 3,1971.31 660-7-12 Traffic Controller Assembly, F&I, Mole Detection El	649-21-01		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 \$ 760.26 660-2-110 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 700.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 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 \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,971.44 663-1-131 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,971.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, NEMA Two Preemption Plans AS \$ 32,711.37 670-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 670-5-400 Traffic Controller Assem		<u> </u>		
660-2-102 Lop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,258.73 660-4-12 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-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 31,971.31 660-1-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 31,971.31 663-1-111 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 665-1-11 Traffic Controller Assembly, F&I, NEMA Two Preemption Plans AS \$ 32,7645.38 670-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.00				
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 \$ 8,228.73 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-11 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 Detector EA \$ 1,741.44 667-5-140 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.37 670-5-400 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 671-2-11 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-40 Traffic Controller, Modify EA \$ 1,942.50 671-2-11				
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, Cabrinet Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,751.79 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,751.79 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,761.79 660-7-11 Vehicle Detection System-Video, F&I, Detector EA \$ 5,752.44 663-1-12 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,761.44 663-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,760.00 670-5-140 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.37 670-5-410 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 670-5-400 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 671-2-11 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-240				
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 \$ 4,751.79 660-4-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 1,791.31 660-4-11 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 \$ 5,752.44 663-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,741.44 666-1-12 Traffic Controller Assembly, F&I, NEMA Two Preemption Plans AS \$ 22,013.33 670-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 671-2-40 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-210 Traffic Controller Without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,890.00 671-2-210 Traffic Controller, Modify EA \$ 1,890.00 671-2-211		<u> </u>		
660-4-12 Vehicle Detection System-Virdeo, F&I, Above Ground Equipment EA \$ 4,751.79 660-7-11 Vehicle Detection System - Wirong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 660-7-111 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 \$ 4,500.00 670-5-140 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.37 670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-11 Traffic Controller Without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,880.00 676-2-112 TrS 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 \$ 7,780.70 684-2-1 Device Se		· · · · · · · · · · · · · · · · · · ·		
660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 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 \$ 4,500.00 670-5-140 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.37 670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,942.50 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS 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 \$ 7,500.00 682-1-13 Managed Fleid Ethernet Switch, F&I EA \$ 1,0176.47 684-2-1 Device Server, F&I EA \$ 3,792.46 685-3-1 <td></td> <td></td> <td></td> <td>,</td>				,
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 \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection AS \$ 2,764.54 670-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-41 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 4,500.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&I EA \$ 3,792.46 <td></td> <td></td> <td></td> <td></td>				
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 \$ 1,942.50 671-2-41 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,942.50 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,460 681-000 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 \$ 7,750.00 684-2-1 Device Server, F&I EA \$ 7,837 685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA		, , , , , , , , , , , , , , , , , , , ,		
665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 4,500.00 670-5-142 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 \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,466.00 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 1,0176.47 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 7,783.7 685-1-13 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 \$ 6,022.43 <td></td> <td></td> <td></td> <td></td>				
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 \$ 1,942.50 671-2-41 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 Til S Cobinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,946.60 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&I EA \$ 3,792.46 684-1-3 Managed Field Ethernet Switch, F&I EA \$ 6,832.51 685-3-1 Remote Power Managem				
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 \$ 1,992.00 671-2-10 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 \$ 7.78.37 685-3-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832.51 685-3-1 Remote Power Management Unit, F&I EA \$ 1,5451.2 695-8-11 Cellular Modem, F&I EA \$ 3,000.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.43 700-11-1 Elec				
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 \$ 4,500.00 671-2-10 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,946.60 681-000 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 Managage Flield Ethernet Switch, F&I EA \$ 3,792.46 684-2-1 Device Server, F&I EA \$ 778.37 685-3-13 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 \$ 3,000.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.33 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.83 700-12-12	C70 F 440	<u> </u>	40	
671-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 4,500.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-40 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 \$ 3,792.46 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 778.37 685-1-31 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832.51 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 3,500.00 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.88 700-		<u> </u>		
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 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 \$ 778.37 685-3-1 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, Ground Mount, Blankout Sign , 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948.03 700				
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 \$ 778.37 685-1-3 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 \$ 66,024.35 700-11-1 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, AP Powered, Two Beacns AS \$ 3,948.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, AP Powered, Two Beacns AS \$ 9,352.32	-	· • • • • • • • • • • • • • • • • • • •		
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 \$ 778.37 685-1-3 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, AP Powered, Two Beacns 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				
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 \$ 778.37 685-1-3 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,545.12 685-3-1 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, Ground Mount, Blankout Sign, 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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, F&II Color, 12-20 SF EA <t< td=""><td></td><td></td><td></td><td></td></t<>				
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 \$ 778.37 685-3-1 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 Beacns 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, Wo UPS, F&II Color, 12-20 SF EA \$ 17,000.00		* *		
684-2-1 Device Server, F&I EA \$ 778.37 685-1-3 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, Cantillever 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, AP Powered, Two Beacns 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, Wo UPS, F&II Color, 12-20 SF EA \$ 17,000.00				
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 \$ 1,545.12 685-3-1 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 Beacns 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, Wo UPS, F&II Color, 12-20 SF EA \$ 17,000.00				, .
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, Cantiliever 31-40 FT EA \$ 6,60.24.43 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.85 700-11-2 Electronic Display Sign, F&I, Ground Mount, Elankout Sign, 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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, Wo UPS, F&II Color, 12-20 SF EA \$ 17,000.00		<u> </u>		
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 Beacns 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, Wo UPS, F&II Color, 12-20 SF EA \$ 17,000.00		11.2		
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00		•		
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00		· · · · · · · · · · · · · · · · · · ·		
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00		**		
700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00				
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				
700-6-12 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		• • • • • • • • • • • • • • • • • • • •		\$ 3,948.03
700-7-232 Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF EA \$17,000.00				\$ 9,352.32
, , , , , , , , , , , , , , , , , , , ,	700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-8-135 Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF EA \$ 52,572.76	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/site/finity/docs/defaultsource/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month pdf.pdf?sfvrsn=4e
4c771_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%

Project 117: Parkway Drive, Wickham Rd to US 1

"ATMS" Project Calculator	
Design / Engineering Cost:	\$ 89,946.5
Construction Engineering & Inspection Cost:	\$ 56,216.6
Construction Cost (Material + Labor):	\$ 449,732.9
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contigency)	\$ 797,713.7
	INPL
Fiber Optic (in miles)	1
No. of Traffic Signals	
No. of ADMS	
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
	TOT
No. of CCTV Cameras	
No. of Roadside Units/Bluetooth	
No. of Midblock Detectors	
No. of Controllers	
No. of Controller Cabinet Assemblies	
No. of Video Detection Systems	
No. of Network Connections	

"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, Contigency)	\$ -
	INPU
Number of Off-Ramps	(
Number of On-Ramps	(
Mainline Congestion from On-Ramp?	NC
Mainline Congestion from Off-Ramp?	NC
Geometric Concerns for Truck Speed on Off-Ramp?	NC
	TOTAL
No. of Wrong Way Driving Systems	(
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, Contigency)	\$
	INPUT
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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 Beacns	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://idotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month_pdf.pdf?sfvrsn=4e 4c771_2

COSTING ASSUMPTIONS:		
Contingency	1	15%
Maintenance of Traffic	1	0%
Mobilization	1	0%
Erosion and Sediment Control		5%
Design / Engineering	2	20%
Construction Engineering and Inspection	12.	.5%

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

\$	93,514.44
\$	58,446.53
\$	467,572.21
s	829.356.21
_	,
	INPUT
	2.1
	4
	0
	25%
	100%
	50%
	50%
	50%
	TOTAL
	2
	4
	1
	4
	1
	2
	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, Contigency)	\$	-
	IN	IPUT
Number of Off-Ramps		(
Number of On-Ramps		(
Mainline Congestion from On-Ramp?		NC
Mainline Congestion from Off-Ramp?		NC
Geometric Concerns for Truck Speed on Off-Ramp?		NC
	TC	TAL
No. of Wrong Way Driving Systems		(
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, Contigency)	\$
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	INPUT 0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	INPUT 0
	0 0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized) No. of Kit "B" - Vehicle-to-Vehicle (signalized) No. of Kit "C" - Vehicle-to-Bicycle	0 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, Contigency)	-
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Parking Stalls	0

Pay Item	Description	Unit	Un	it 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	FA	_	31.971.3
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	s	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	\$	6,832.5
685-3-1	Remote Power Management Unit, F&I	EA	\$	1,545.12
695-8-11	Cellular Modern, F&I	EA	\$	3.500.00
700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	_	66,024.43
700-10-123	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$	6,254.85
700-11-1	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 46 "X 46" 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
700-6-12 700-7-232	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA EA	\$	4,072.57
700-7-232	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=4e4 c771 2

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

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

"ATMS" Project Calculator	
Design / Engineering Cost:	\$ 169,189.6
Construction Engineering & Inspection Cost:	\$ 105,743.5
Construction Cost (Material + Labor):	\$ 845,948.0
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contigency)	\$ 1,500,500.3
	INPL
Fiber Optic (in miles)	3
No. of Traffic Signals	
No. of ADMS	
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
	TOT
No. of CCTV Cameras	
No. of Roadside Units/Bluetooth	
No. of Midblock Detectors	
No. of Controllers	
No. of Controller Cabinet Assemblies	
No. of Video Detection Systems	
No. of Network Connections	

"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, Contigency)	\$ -
	INPUT
Number of Off-Ramps	(
Number of On-Ramps	(
Mainline Congestion from On-Ramp?	NC
Mainline Congestion from Off-Ramp?	NC
Geometric Concerns for Truck Speed on Off-Ramp?	NC
	TOTAL
No. of Wrong Way Driving Systems	(
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, Contigency)	\$ -
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	INPUT 0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	INPUT 0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	INPUT 0
, ,	INPUT 0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized) No. of Kit "B" - Vehicle-to-Vehicle (signalized) No. of Kit "C" - Vehicle-to-Bicycle	0 0 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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Parking Stalls	0

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 \$ 5,796.13 633-1-3 Fiber Optic Cohe, F&I, Underground Cable, 48-96 LF \$ 3,307 633-3-11 Fiber Optic Connection, Install, Splice EA \$ 39.07 633-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 1,801.63 635-2-11 Pull & Splice Box, F&I, 13" X 24" EA \$ 1,801.63 635-2-13 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 635-2-13 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 \$ 2,384.57 639-2-11 Electrical Service Wire, F&I Per February LF \$ 7.17 639-2-11 Electrical Service Wire, F&I Per Pull & Splice Box, F&I, 30" Splice LF \$ 7.17 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,385.34 641-2-	Pay Item	Description	Unit	Unit Cost
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 \$ 39.07 633-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 1,801.63 635-2-11 Pull & Splice Box, F&I, 13° X-24" EA \$ 1,801.63 635-2-12 Pull & Splice Box, F&I, 13° X-24" EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 30° X-60° Rectangular or 36° Round EA \$ 1,265.36 635-2-14 Pull & Splice Box, F&I, 30° X-60° Rectangular or 36° Round EA \$ 1,265.36 635-2-17 Pull & Splice Box, F&I, 30° X-60° Rectangular or 36° Round EA \$ 2,384.57 639-1-111 Electrical Service Bisconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,385.34 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,305.34				
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 \$ 3.34 633-3-15 Fiber Optic Connection, Install, Splice EA \$ 39.07 633-3-17 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 899.92 633-3-15 Fiber Optic Connection Hardware, F&I, Peterminated Patch Panel EA \$ 1,801.53 635-2-12 Pull & Splice Box, F&I, 13" X 24" EA \$ 732.68 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 2,384.57 639-2-11 Pull & Splice Box, F&I, 20" X 30" Rectangular or 36" Round EA \$ 2,384.57 639-2-11 Electrical Service Wire, F&I Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II EA \$ 1,328.54 641-2-11 Auriminum Pole - Index 699-50.11, F&I, 20" EA \$ 1,369.54				
633-1-123 Fiber Optic Cable, F&I, Underground Cable, 48-96 LF \$.34 633-2-31 Fiber Optic Connection, Install, Splice EA \$.39.07 633-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$.899.92 633-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$.899.92 635-2-11 Pull & Splice Box, F&I, 13" X 24" X 36" EA \$.722.68 635-2-12 Pull & Splice Box, F&I, 21" X 60" Rectangular or 36" Round EA \$.2850.00 635-2-13 Pull & Splice Box, F&I, 20" X 60" Rectangular or 36" Round EA \$.2850.00 639-2-11 Electrical Service Wire, F&I, Overhead, Meter Furnished by Power Company AS \$.2850.00 639-2-11 Electrical Service Disconnect, F&I, Overhead, Meter Furnished by Power Company AS \$.2850.00 639-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$.393.71 641-2-13 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$.393.75 641-2-15 Prestressed Concrete Pole, F&I, Type P.II EA \$.326.50 649-2-10 Steel Mast Arm Assembly, F&I, 20" St				
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, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 635-2-13 Pull & Splice Box, F&I, 00" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-2-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 646-2-115 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, 41 Juminum, 2 Section, 1-2 Ways EA \$ 790.00 660-3-11 Vehicular Detection System-Microwave, F&I, Cabinet Equipme				
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, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 635-2-13 Pull & Splice Box, F&I, 00" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-2-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 646-2-115 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, 41 Juminum, 2 Section, 1-2 Ways EA \$ 790.00 660-3-11 Vehicular Detection System-Microwave, F&I, Cabinet Equipme	633-2-31	Fiber Ontic Connection Install Solice	FA	\$ 39.07
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, 31" X 24" EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,394.57 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-11 Electrical Service Wire, F&I, User Pell Pedestal LF \$ 1,378.56 639-2-11 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 \$ 1,328.37 646-2-15 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 640-2-10 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 650-1-13 Vehicla Detection Gystem-Microwave, F&I, Cabinet Equipment EA \$ 790.00 660-2-102 Loop Assembly, F&I, Type B EA \$ 790.20				
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, 24" X 36" EA \$ 2,286.57 639-2-10 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,880.00 639-2-1 Electrical Service Wire, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,880.00 639-2-1 Electrical Service Wire, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.34 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283.74 642-2-15 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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type B EA \$ 339.94 660-2-102 Loop Assembly, F&I, Type B EA \$ 339.94 660-3-11<				
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 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 \$ 1,328.74 646-2-115 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 \$ 790.00 660-3-110 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 660-3-11 Vehicular Traffic Signal, F&I, Type F EA \$ 780.00 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 4,128.33 660-4-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA		* * * * * * * * * * * * * * * * * * * *		
635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-1-1111 Ellectrical 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 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 \$ 790.00 660-2-102 Loop Detector Inductive, F&I, Type B EA \$ 790.26 660-3-10 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,28.33 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515.49 </td <td></td> <td></td> <td></td> <td></td>				
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 \$ 7.17 639-2-1 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 969-001, 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, Type 10 EA \$ 780.00 660-2-102 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 31,771.14 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA				
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 \$ 1,395.34 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,395.34 646-2-115 Aluminum Pole - Index 695-001, F&I, 20' EA \$ 2,166.50 649-21-01 Steel Mast Arm Assembly, F&I, 30' Single AS \$ 35,775.26 660-3-11 Loop Detector Inductive, F&I, Type 10 EA \$ 790.00 660-3-10 Loop Detector Inductive, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 389.24 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 660-3-11 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 \$ 3,1971.31 660-4-11 Vehicle Detection System-Video, F&I, Pasive Pedestrian Detector EA \$ 1,714.44 <td></td> <td></td> <td></td> <td></td>				
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 \$ 1,335.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,335.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 649-21-01 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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type B EA \$ 790.00 660-1-10 Loop Desembly, F&I, Type B EA \$ 780.00 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,781.73 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,751.79 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,751.79				, ,
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 Am Assembly, F&I, 30' Single AS \$ 35,775.62 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-10 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 \$ 780.26 660-3-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-7-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-7-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 1,971.4				
6412-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283.74 6462-21-15 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 649-21-01 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 660-2-10 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 \$ 1,283.33 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,157.79 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,157.79 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,157.79 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment		<u> </u>		
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, Jype 10 EA \$ 790.00 660-2-102 Loop Detector Inductive, F&I, Type 10 EA \$ 399.94 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 4,128.33 660-3-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,751.79 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,752.44 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,752.44 660-7-11 Vehicle Detection System-Video, F&I, Detection Equipment EA \$ 3,752.44 660-1-13 Signal Priority and Preemption System, F&I, Optical		* * * *		
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 \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 1,751.79 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 31,971.31 660-1-13 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 31,971.31 663-1-131 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passiv	-			
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 \$ 780.26 660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 8,228.73 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-1-11 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,971.44 663-1-111 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,741.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detector EA \$ 1,741.44 665-1-16 Traffic Control				
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, Above Ground Equipment EA \$ 4,128.33 660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, F&I, Detector EA \$ 31,971.31 660-1-13 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 6670-5-102 Traffic Controller Assembly, F&I, NGdel 2070, 1 Preemption AS \$ 32,7645.38 670-5-400 Traffic Cont		, · · · · ·		
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 \$ 9,515.48 660-4-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 660-4-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 660-4-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 Signal Priority and Preemption System, F&I, Optical, Cetector EA \$ 5,752.44 663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,752.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,500.00 670-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 670-5-410 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 1,942.50		•		
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 \$ 9,515.49 660-4-12 Vehicle Detection System-Wirdo, F&I, Above Ground Equipment EA \$ 1,791.31 660-4-12 Vehicle Detection System-Wirdo, F&I, Above Ground Equipment EA \$ 1,791.31 660-7-11 Vehicle Detection System-Wirdo, F&I, Above Ground Equipment EA \$ 1,791.31 660-1-13 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,791.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection AS \$ 32,7645.38 670-5-140 Traffic Controller Assembly, F&I, MeM Preemption Plans AS \$ 27,645.38 670-5-140 Traffic Controller Assembly, F&I, MeM Preemption Plans AS \$ 27,645.38 <				
660-3-12 Vehicle Detection System-Microwave, F.B., Above Ground Equipment EA \$ 8,228.73 660-4-11 Vehicle Detection System-Video, F.B., Cabrinet Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F.B., Above Ground Equipment EA \$ 9,515.49 660-7-11 Vehicle Detection System-Video, F.B., Above Ground Equipment EA \$ 1,751.79 660-7-11 Vehicle Detection System-Video, F.B., Above Ground Equipment EA \$ 1,711.79 663-1-111 Signal Priority and Preemption System, F.B., Optical, Cabinet Electronics EA \$ 1,791.44 663-1-13 Pedestrian Detector, F.B., Passive Pedestrian Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F.B., Passive Pedestrian Detection EA \$ 3,20.11.37 670-5-140 Traffic Controller Assembly, F.B., McMa, Two Preemption Plans AS \$ 327,645.38 670-5-400 Traffic Controller Assembly, F.B., McMa, Two Preemption Plans AS \$ 277,645.38 671-2-41 Traffic Controller Assembly, F.B., Include 1270, 1 Preemption AS \$ 277,645.38 670-5-400 Traffic Controller Assembly, F.B., Include 1270, 1 Preemption AS		· · · · · · · · · · · · · · · · · · ·		
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 \$ 4,751.79 660-4-11 Vehicle Detection System- Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 660-4-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 6670-5-140 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.37 670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-11 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-12 Traffic Controller, Modify EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,942.50 671-2-12 Traffic Controller, Modify EA \$ 1,942.50 672-2-112 Traffic Controller, Modify EA \$ 1,980.00				
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 Detector EA \$ 1,741.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detector EA \$ 1,400.00 670-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 32,011.37 670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-11 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-40 Traffic Controller, Modify EA \$ 1,942.50 676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,466.00 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 1,700.00 682-1-11 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-D		7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		
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 \$ 1,890.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 TG Controller Modify EA \$ 1,890.00 676-2-112 TG Controller, Modify EA \$ 1,890.00 676-2-112 TG Controller, Modify EA \$ 1,890.00 676-2-112 TG Controller, Modify EA \$ 1,890.00		• • • • • • • • • • • • • • • • • • • •		
663-1-1111 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 5,752.44 663-1-1112 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, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 670-5-401 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 670-5-400 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 671-2-41 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,942.50 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 6762-2112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946.50 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-11				
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, Modify EA \$ 1,942.50 671-2-12 Traffic Controller, Modify EA \$ 1,980.00 676-2-112 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 \$ 10,76.47 684-2-1 Device Server, F&I EA \$ 7,783.7 685-3-1 Remote Power Supply, F&I, Line Interactive with Cabinet EA \$ 7,783.7 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12		, , , , , , , , , , , , , , , , , , , ,		
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 \$ 1,980.00 671-2-40 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 Managad Field Ethernet Switch, F&I EA \$ 7,780.00 685-1-13 Uninterruptible Power Supphy, F&I, Line Interactive with Cabinet EA \$ 7,783.7 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 685-8-11 Cellular Modem, F&I EA \$ 3,500.00 <td></td> <td>Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics</td> <td>EA</td> <td></td>		Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	
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 \$ 778.37 684-2-1 Device Server, F&I EA \$ 778.37 685-3-1 Remote Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832.51 685-3-1 Remote Power Management Unit, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cartilever 31-40 FT EA \$ 66,024.43				
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 \$ 1,980.00 676-2-112 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 \$ 7783.7 684-1-1 Device Server, F&I EA \$ 7783.7 685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,545.12 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-11-12 Blectronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 6,254.85 700-11-1	665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
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 \$ 1,890.00 671-2-12 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 Uninterrupitible Power Supply, F&I, Line Interactive with Cabinet EA \$ 7,783.7 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modern, 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 \$ 6,254.85 700-12-12 <	670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
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 \$ 778.37 684-2-1 Device Server, F&I EA \$ 778.37 685-1-13 Uninterrupitible Power Supply, F&I, Line Interactive with Cabinet EA \$ 778.37 685-3-1 Remote Power Management Unit, 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 \$ 6,254.82 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 3,948.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352.32 </td <td>670-5-140</td> <td>Traffic Controller Assembly, F&I, Model 2070, 1 Preemption</td> <td>AS</td> <td>\$ 27,645.38</td>	670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
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 6821-113 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 \$ 778.37 685-3-1 Device Server, F&I EA \$ 1,545.12 685-3-1 Remote Power Management Unit, 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, Ground Mount, Blankout Sign , 48" X 48" AS \$ 3,348.03 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948.03 700-2-16 Multi-Post Sign, F&I, GROUND MOUNT-AC POWERED, 12-20 SF EA \$ 4,072.57 700-7-232 <td>670-5-400</td> <td>Traffic Controller Assembly, Modify</td> <td>EA</td> <td>\$ 1,942.50</td>	670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
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 \$ 66,024.43 700-11-12 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, 10-200 SF AS \$ 3,948.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352.32	671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
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 DINS Support Structure, Cantilever 31-40 FT EA \$ 660.024.43 700-11-1 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 Beacns 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 \$ 1,070.57	671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
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 \$ 1,545.12 685-3-1 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, Ground Mount, Blankout Sign , 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352.32 700-7-232 Embedded Dynamic Message Sign, F&I, Wo UPS, F&II Color, 12-20 SF EA \$ 17,000.00	676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
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 \$ 6,024.43 700-11-1 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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
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 Beacns 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, Wo UPS, F&II Color, 12-20 SF EA \$ 17,000.00	682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
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 Beacns 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, Wo UPS, F&II Color, 12-20 SF EA \$ 17,000.00	684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modern, 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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	684-2-1	Device Server, F&I	EA	\$ 778.37
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
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	700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
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	700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-7-232 Embedded Dynamic Message Sign, F&I, wlo UPS, Full Color, 12-20 SF EA \$17,000.00	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, wlo UPS, Full Color, 12-20 SF EA \$17,000.00	700-6-12	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-8-135 Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF EA \$52,572.76	700-7-232		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://idotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month_pdf.pdf?sfvrsn=4e 4c771_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%

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

'ATMS" Project Calculator		
Design / Engineering Cos	: \$	113,151.12
Construction Engineering & Inspection Cos	: \$	70,719.45
Construction Cost (Material + Labor	: \$	565,755.58
Total Project Cost (w/ Mobilization, Maintenance of Traffic Erosion and Sediment Control, Contigency		1,003,508.95
	_	INPUT
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%
		TOTAL
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	T	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, Contigency)	\$ -
	INPUT
Number of Off-Ramps	(
Number of On-Ramps	(
Mainline Congestion from On-Ramp?	NC
Mainline Congestion from Off-Ramp?	NC
Geometric Concerns for Truck Speed on Off-Ramp?	NC
	TOTAL
No. of Wrong Way Driving Systems	(
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, Contigency)	\$
	INPUT
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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 Beacns	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://idotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month_pdf.pdf?sfvrsn=4e 4c771_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%

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

"ATMS" Project Calculator	
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, Contigency)	\$ 1,380,014.01
	INPU'
Fiber Optic (in miles)	6.
No. of Traffic Signals	
No. of ADMS	
Percentage of Cabinet Replacements	25%
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	509
Percentage of CCTV Camera Coverage	409
Percentage of Mid-Block Coverage	259
	TOTA
No. of CCTV Cameras	
No. of Roadside Units/Bluetooth	
No. of Midblock Detectors	
No. of Controllers	
No. of Controller Cabinet Assemblies	
No. of Video Detection Systems	
No. of Network Connections	

"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, Contigency)	\$ -
	INPUT
Number of Off-Ramps	0
Number of On-Ramps	C
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
	TOTAL
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue 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, Contigency)	\$ -
	INPUT
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
INO. OF THE C - VEHICLE-LO-DICYCLE	

"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, Contigency)	\$ -
	INPUT
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, Contigency)	-
	INPUT
No. of Parking Stalls	0

6302-12 Conduit, F&I, Directional Bore LF \$ 21 6327-13 Signal Cable - New or Reconstructed Intersection, F&I PI \$ 5,796 633-1-123 Filber Optic Cable, F&I, Underground Cable, 48-96 LF \$ 3 633-2-31 Filber Optic Connection, Install, Splice EA \$ 39 633-2-31 Filber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 899 633-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 1,801 6352-11 Pull & Splice Box, F&I, 13" X-24" EA \$ 1,801 6352-12 Pull & Splice Box, F&I, 30" X-60" Rectangular or 36" Round EA \$ 1,265 6352-13 Pull & Splice Box, F&I, 30" X-60" Rectangular or 36" Round EA \$ 2,856 6352-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,856 6392-11 Electrical Service Wire, F&I LF \$ 7 6393-11 Electrical Service Wire, F&I LF \$ 7 6412-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,338 6412-13 Prestressed Concrete	Pay Item	Description	Unit	Unit Cost
6327-1 Signal Cable - New or Reconstructed Intersection, F&I PI \$ 5,796 6331-123 Fiber Optic Cable, F&I, Underground Cable, 48-96 LF \$ 3 6332-31 Fiber Optic Connection, Install, Splice EA \$ 39 6333-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 899 6352-11 Pull & Splice Box, F&I, 13* X 24* EA \$ 1,801 6352-12 Pull & Splice Box, F&I, 13* X 24* EA \$ 732 6352-13 Pull & Splice Box, F&I, 30* X 24* EA \$ 1,265 6352-17 Pull & Splice Box, F&I, 30* X 60* Rectangular or 36* Round EA \$ 2,384 6359-11 Electrical Service Wire, F&I EA \$ 1,365 6392-11 Electrical Service Disconnect, F&I, Overhead, Metter Furnished by Power Company AS \$ 2,885 6392-11 Electrical Service Wire, F&I EA \$ 1,375 6412-21 Prestressed Concrete Pole, F&I, Type P-IIP Pedestal EA \$ 1,335 6412-211 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328 6462-2115 Auminum Pole - Index 695-001, F&I,	630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
633-1-123 Fiber Optic Cable, F&I, Underground Cable, 48-96 LF \$ 3 633-2-31 Fiber Optic Connection, Install, Splice EA \$ 89 633-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 899 633-3-15 Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel EA \$ 1,801 635-2-11 Pull & Splice Box, F&I, 13" X 24" EA \$ 1,265 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265 635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384 639-111 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,886 639-2-11 Electrical Service Wire, F&I Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395 6412-211 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395 6412-211 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395 6412-210 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395 6412-211 Prestressed Concrete Pole, F&I, Type P-II Pedestal	630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
633-2-31 Fiber Optic Connection, Install, Splice EA \$ 39 633-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 899 633-3-15 Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel EA \$ 1,801 635-2-11 Pull & Splice Box, F&I, 13" X 24" EA \$ 1,265 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265 635-2-13 Pull & Splice Box, F&I, 20" X 60" Rectangular or 36" Round EA \$ 2,384 639-111 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,886 639-2-11 Electrical Service Wire, F&I FAI The F \$ 7 639-3-11 Electrical Service Wire, F&I Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,395 6412-21 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,385 6412-211 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,385 640-2-101 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 3,5775 660-1-110 Loop Detector Inductive, F&I, Type 10 EA \$ 389 </td <td>632-7-1</td> <td>Signal Cable - New or Reconstructed Intersection, F&I</td> <td>PI</td> <td>\$ 5,796.13</td>	632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
633-3-11 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 899 633-3-15 Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel EA \$ 1,801 633-2-11 Pull & Splice Box, F&I, 13" X 24" EA \$ 7,32 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265 635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,856 639-2-12 Electrical Service Wire, F&I F&I \$ 7 639-3-11 Electrical Service Disconnect, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,856 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,326 641-2-13 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,328 641-2-10 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,338 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA <td< td=""><td>633-1-123</td><td>Fiber Optic Cable, F&I, Underground Cable, 48-96</td><td>LF</td><td>\$ 3.34</td></td<>	633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
6333-315 Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel EA \$ 1,801 6352-211 Pull & Splice Box, F&I, 13" X 24" EA \$ 732 6352-212 Pull & Splice Box, F&I, 20" X 36" EA \$ 1,265 6352-213 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384 6392-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850 6392-12 Electrical Service Wire, F&I LF \$ 7 6392-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378 6412-211 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,385 6412-213 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,3283 642-21-13 Avenicular Traffic Signal, F&I, 20" EA \$ 1,3283 649-21-10 Steel Mast Am Assembly, F&I, 20" Single AS \$ 35,775 650-1-13 Vehicular Traffic Signal, F&I, Huminum, 2 Section, 1-2 Ways EA \$ 790 660-2-10 Loop Desection Inductive, F&I, All Type B EA \$ 380 660-2-11 V	633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
635-2-11 Pull & Splice Box, F&I, 13" X 24" S6" EA \$ 732 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265 635-2-13 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265 639-1-11 Electrical Service Wire, F&I LF \$ 7 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378 641-2-11 Prestressed Concrete Pole, F&I, Type P-IIP Pedestal EA \$ 1,378 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,326 646-2-115 Aluminum Pole - Index 695-001, F&I, Type P-III EA \$ 1,326 646-2-115 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166 649-21-01 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775 650-1-13 Vehicular Traffic Signal, F&I, Type ID EA \$ 38 660-2-102 Loop Detection Inductive, F&I, Type ID EA \$ 38 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,228 660-3-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment	633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
6352-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265 6352-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384 6392-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850 6392-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378 6412-11 Prestressed Concrete Pole, F&I, Type P-IIP Pedestal EA \$ 1,395 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,326 642-115 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166 649-21-01 Steel Mast Arm Assembly, F&I, Type 10 EA \$ 389 660-1-110 Loop Detection Inductive, F&I, Type 10 EA \$ 389 660-1-110 Loop Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128 660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515 660-4-1	633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850 639-2-1 Electrical Service Wire, F&I LF \$ 7 639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,385 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283 646-2-115 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166 649-21-01 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790 660-1-10 Loop Detector Inductive, F&I, Type B EA \$ 780 660-1-10 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128 660-4-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515 660-4-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 3,972 <tr< td=""><td>635-2-11</td><td>Pull & Splice Box, F&I, 13" X 24"</td><td>EA</td><td>\$ 732.68</td></tr<>	635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
639-1-111 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850 639-2-1 Electrical Service Wire, F&I LF \$ 7 639-2-11 Electrical Service Wire, F&I \$ 1,378 641-2-11 Prestressed Concrete Pole, F&I, Type P-IIP Pedestal EA \$ 1,338 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283 6462-2-115 Aluminum Pole - Index 695-001, F&I, 20° EA \$ 2,166 649-2-1-01 Steel Mast Arm Assembly, F&I, 30° Single AS \$ 3,5775 650-1-13 Vehicular Traffic Signal, F&I, Muminum, 2 Section, 1-2 Ways EA \$ 790 660-1-10 Loop Detector Inductive, F&I, Type B EA \$ 780 660-2-102 Loop Assembly, F&I, Type B EA \$ 780 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,251 660-4-11 Vehicle Detection System-Wideo, F&I, Cabinet Equipment EA \$ 4,751 660-7-11 Vehicle Detection Syste	635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
639-2-1 Electrical Service Wire, F&I LF \$ 7 639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,396 646-2-115 Aluminum Pole - Index 695-001, F&I, 20° EA \$ 2,166 649-21-01 Steel Mast Arm Assembly, F&I, 30° Single AS \$ 35,775 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 2,166 660-1-10 Loop Detector Inductive, F&I, Type 10 EA \$ 389 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 4,128 660-3-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 2,266 660-4-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,751 660-7-11 Vehicle Detection System-Wideo, F&I, Optical, Detector EA \$ 3,1971	635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378 641-2-11 Prestressed Concrete Pole, F&I, Type P-IIP Pedestal EA \$ 1,395 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,326 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,326 649-21-01 Steel Mast Arm Assembly, F&I, 30° Single AS \$ 35,775 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790 660-1-110 Loop Detector Inductive, F&I, Type 10 EA \$ 389 660-1-110 Loop Detection System-Microwave, F&I, Cabinet Equipment EA \$ 389 660-3-12 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128 660-3-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,751 660-4-12 Vehicle Detection System-F&I, Optical, Cabinet Equipment EA \$ 3,75	639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283 646-2-115 Aluminum Pole - Index 695-001, F&I, Type P-III EA \$ 2,166 649-21-01 Steel Mast Arm Assembly, F&I, 30° Single AS \$ 35,775 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790 660-1-10 Loop Detector Inductive, F&I, Type B EA \$ 780 660-1-10 Loop Detection System-Microwave, F&I, Cabinet Equipment EA \$ 389 660-2-102 Loop Assembly, F&I, Type B EA \$ 780 660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 4,128 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,971 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,515 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,915	639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$12,283 646-2-115 Aluminum Pole - Index 695-001, F&I, 20° EA \$ 2,166 649-21-01 Steel Mast Arm Assembly, F&I, 30° Single AS \$ 35,775 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790 660-1-10 Loop Detector Inductive, F&I, Type I0 EA \$ 389 660-2-102 Loop Assembly, F&I, Type B EA \$ 780 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128 660-3-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,288 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,261 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,751 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,751 660-7-12 Vehicle Detection System-Wideo, F&I, Optical, Detector EA \$ 3,751 660-7-13 Vehicle Detection System-Wideo, F&I, Optical, Detector EA \$ 3,791 </td <td>639-3-11</td> <td>Electrical Service Disconnect, F&I, Pole Mount</td> <td>EA</td> <td>\$ 1,378.56</td>	639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
646-2-115 Aluminum Pole - Index 695-001, F&I, 20' EA \$ 2,166 649-21-01 Steel Mast Arm Assembly, F&I, 30' Single AS \$ 35,775 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790 660-3-11 Loop Detector Inductive, F&I, Type 10 EA \$ 388 660-2-102 Loop Assembly, F&I, Type B EA \$ 780 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 8,228 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751 660-4-11 Vehicle Detection System-F&I, Optical, Cabinet Equipment EA \$ 4,751 660-4-11 Vehicle Detection System-F&I, SA, Above Ground Equipment EA	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 \$ 2,166 649-21-01 Steel Mast Arm Assembly, F&I, 30° Single AS \$ 33,775 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790 660-1-10 Loop Detector Inductive, F&I, Type 10 EA \$ 389 660-2-102 Loop Assembly, F&I, Type B EA \$ 780 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128 660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 2,228 660-4-11 Vehicle Detection System-Wideo, F&I, Oabinet Equipment EA \$ 9,515 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,751 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,751 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,751 660-7-11 Vehicle Detection System-Wideo, F&I, Optical, Detector EA \$ 3,971 660-7-11 Vehicle Detection System-Wideo, F&I, Optical, Detector EA \$ 3	641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790 660-1-10 Loop Detector Inductive, F&I, Type B EA \$ 389 660-1-102 Loop Assembly, F&I, Type B EA \$ 780 660-3-10 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128 660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 8,228 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,750 660-4-13 Vehicle Detection System-Video, F&I, Detector EA \$ 1,714 660-4-11 Vehicle Detection System-Video, F&I, Detector EA <td>646-2-115</td> <td>Aluminum Pole - Index 695-001, F&I, 20'</td> <td>EA</td> <td>\$ 2,166.50</td>	646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790 660-1-10 Loop Detector Inductive, F&I, Type B EA \$ 389 660-1-102 Loop Assembly, F&I, Type B EA \$ 780 660-3-102 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128 660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 8,228 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515 660-4-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,750 660-4-12 Vehicle Detection System-Video, F&I, Detector EA \$ 1,714 660-4-11 Vehicle Detection System-Video, F&I, Detector EA		* *		\$ 35,775.62
660-1-110 Loop Detector Inductive, F&I, Type 10 EA \$ 389 660-2-102 Loop Assembly, F&I, Type B EA \$ 780 660-2-102 Loop Assembly, F&I, Type B EA \$ 780 660-2-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 4,128 660-3-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,751 660-4-11 Vehicle Detection System-Wrode, F&I, Optical, Optical, Detector EA \$ 4,751 660-4-12 Vehicle Detection System-Wrode, F&I, Optical, Detector EA \$ 31,971 663-1-13 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714 667-5-140 Traffic Controller Assembly, F&I, MeM, Two Preemption Plans AS \$ 27,645 670-5-400 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS </td <td>650-1-13</td> <td>Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways</td> <td>EA</td> <td>\$ 790.00</td>	650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-2-102 Loop Assembly, F&I, Type B EA \$ 780 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128 660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 8,228 660-4-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515 660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971 663-1-112 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 5,752 663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,771 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 4,500 670-5-140 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011 670-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645 671-2-11 Traffic Controller Assembly, Modify EA \$ 1,942 671-2-40 Traffic Controller, Mo	660-1-110		EA	\$ 389.94
660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128 660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 8,228 660-3-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515 660-4-12 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971 660-7-11 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971 663-1-12 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 5,752 663-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 4,500 670-5-10 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 22,645 670-5-40 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645 671-2-11 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 2,764 671-2-12 <td>660-2-102</td> <td></td> <td>EA</td> <td>\$ 780.26</td>	660-2-102		EA	\$ 780.26
660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 8,228 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515 660-4-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515 660-4-12 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 3,797 660-7-11 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 3,971 663-1-111 Signal Priority and Preemption System, F&I, Optical, Cebinet Electronics EA \$ 5,752 663-1-12 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 4,500 670-5-112 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011 670-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645 670-5-400 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 2,7645 671-2-11 Traffic Controller Assembly, F&I, Inspection		<u> </u>		\$ 4.128.33
660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751 660-4-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971 663-1-11 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 4,500 670-5-112 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,764 670-5-400 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645 670-5-401 Traffic Controller Assembly, F&I, in Existing Cabinet, NEMA EA \$ 1,942 671-2-41 Traffic Controller Whout Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,890 671-2-12 Traffic Controller Modify EA \$ 1,890 676-2-112 Traffic Controller Modify EA \$ 1,890 676-2-113 ITS Cabinet, F&I, Pole Mount, 336S, 24* X 46* 22* <td></td> <td>, , , , , , , , , , , , , , , , , , , ,</td> <td>FA</td> <td>\$ 8,228.73</td>		, , , , , , , , , , , , , , , , , , , ,	FA	\$ 8,228.73
660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751 660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971 663-1-111 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 5,752 663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,7714 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 4,500 670-5-140 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011 670-5-400 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645 670-5-400 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645 670-2-401 Traffic Controller Assembly, F&I, Modify EA \$ 1,942 671-2-40 Traffic Controller, Modify EA \$ 1,890 671-2-211 TTS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 1,0176 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP,		•		\$ 9.515.49
6607-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971 6637-111 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 5,752 6637-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,704 665-1-12 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011 670-5-101 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645 670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942 671-2-11 Traffic Controller Assembly, Modify EA \$ 1,942 671-2-40 Traffic Controller, Modify EA \$ 1,890 676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500 682-1-113 ITS Cabinet, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 7,700 <td></td> <td></td> <td></td> <td>, .,</td>				, .,
663-1-111 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 5,752 663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 4,500 670-5-112 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011 670-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645 670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942 671-2-11 Traffic Controller, Modify EA \$ 1,942 671-2-40 Traffic Controller, Modify EA \$ 1,942 671-2-11 Traffic Controller, Modify EA \$ 1,890 6762-112 Tis Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500 682-1-113 Tis Cot'ru Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 7,700 685-1-				
663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 4,500 670-5-112 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011 670-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645 670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942 670-2-400 Traffic Controller Assembly, Modify EA \$ 1,942 671-2-11 Traffic Controller, Modify EA \$ 1,890 671-2-12 Traffic Controller, Modify EA \$ 1,890 676-2-121 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500 684-131 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176 684-141 Managed Field Ethernet Switch, F&I EA \$ 7,780 684-211 Device Server, F&I EA \$ 7,780 685-1-13 Uninterruptible Power Managem		, , , , , ,		
665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 4,500 670-5-142 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011 670-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645 670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942 671-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 4,500 671-2-40 Traffic Controller, Modify EA \$ 1,890 671-2-12 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 3,792 684-2-1 Device Server, F&I EA \$ 3,792 685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 7,780 685-3-1 Remote Power Management Unit, F&I EA \$ 3,500 700-10-123				
670-5-112 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011 670-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645 670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942 671-2-40 Traffic Controller, Modify EA \$ 1,890 671-2-40 Traffic Controller, Modify EA \$ 1,890 671-2-121 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 3,792 684-2-1 Device Server, F&I EA \$ 778 684-1-1 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 778 685-1-3 Remote Power Management Unit, F&I EA \$ 1,545 695-8-11 Cellular Modem, F&I EA \$ 3,500 700-11-21 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48"				
670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942 671-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 4,500 671-2-40 Traffic Controller, Modify EA \$ 1,890 671-2-12 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 3,792 684-2-1 Device Server, F&I EA \$ 7,780 684-2-1 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 7,780 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545 695-8-11 Cellular Modem, F&I EA \$ 3,500 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 7,122 700-12-12 Sign Beacon, F&I, Ground Mount, AC				\$ 32,011.37
670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942 671-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 4,500 671-2-40 Traffic Controller, Modify EA \$ 1,890 671-2-12 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 3,792 684-2-1 Device Server, F&I EA \$ 7,780 684-2-1 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 7,780 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545 695-8-11 Cellular Modem, F&I EA \$ 3,500 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 7,122 700-12-12 Sign Beacon, F&I, Ground Mount, AC	670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemotion	AS	\$ 27,645.38
671-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 4,500 671-2-40 Traffic Controller, Modify EA \$ 1,890 676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 3,792 684-2-1 Device Server, F&I EA \$ 778 684-1-3 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 778 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545 695-8-11 Cellular Modem, F&I EA \$ 3,500 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,224 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 7,122 700-12-12 Sign B		20 10 10 10 10 10 10 10 10 10 10 10 10 10		\$ 1,942.50
671-2-40 Traffic Controller, Modify EA \$ 1,890 676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 3,792 684-2-1 Device Server, F&I EA \$ 778 684-2-1 Device Server, F&I EA \$ 778 685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545 695-8-11 Cellular Modem, F&I EA \$ 3,500 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254 700-11-2 Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48" AS \$ 7,122 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Bea				\$ 4,500.00
676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$.946 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 3,792 684-2-1 Device Server, F&I EA \$ 778 685-3-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545 695-8-11 Cellular Modem, F&I EA \$ 3,500 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF EA \$ 4,072 700-7-232 Embedd				\$ 1,890.00
681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 3,792 684-2-1 Device Server, F&I EA \$ 778 685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545 695-8-11 Cellular Modem, F&I EA \$ 3,500 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 6,6024 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 7,122 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF EA \$ 4,072 700-7-232 <td></td> <td></td> <td></td> <td>\$ 8,946.60</td>				\$ 8,946.60
682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176 684-1-11 Managed Field Ethernet Switch, F&I EA \$ 3,792 684-2-1 Device Server, F&I EA \$ 778 684-2-1 Device Server, F&I EA \$ 778 685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545 695-8-11 Cellular Modem, F&I EA \$ 3,500 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,224 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 7,122 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352 700-6-12 HIGHLIGHTED SiGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF EA \$ 4,072 700-7-232 Embedded Dyn				\$ 7,500.00
684-1-1 Managed Field Ethernet Switch, F&I EA \$ 3,792 684-2-1 Device Server, F&I EA \$ 778 685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545 695-8-11 Cellular Modem, F&I EA \$ 3,500 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 6,624 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,224 700-11-2 Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48" AS \$ 7,122 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF EA \$ 4,072 700-7-232 Embedded Dynamic Message Sign, F&I, Wo UPS, Full Color, 12-20 SF EA \$ 1,700		The state of the s		\$ 10,176.47
684-2-1 Device Server, F&I EA \$ 778 685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545 695-8-11 Cellular Modem, F&I EA \$ 3,500 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254 700-11-2 Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48" AS \$ 7,122 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF EA \$ 4,072 700-7-232 Embedded Dynamic Message Sign, F&I, Wo UPS, Full Color, 12-20 SF EA \$ 17,000		-		\$ 3,792.46
685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545 695-8-11 Cellular Modem, F&I EA \$ 3,500 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254 700-11-2 Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48" AS \$ 7,122 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948 700-21-6 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF EA \$ 4,072 700-7-232 Embedded Dynamic Message Sign, F&I, Wo UPS, Full Color, 12-20 SF EA \$ 17,000		•		, .
685-3-1 Remote Power Management Unit, F&I EA \$ 1,545 695-8-11 Cellular Modem, F&I EA \$ 3,500 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254 700-11-2 Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48" AS \$ 7,122 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352 700-6-12 HIGHLIGHTED SiGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF EA \$ 4,072 700-7-232 Embedded Dynamic Message Sign, F&I, wo UPS, Full Color, 12-20 SF EA \$ 17,000		•		\$ 6,832.51
695-8-11 Cellular Modem, F&I EA \$ 3,500 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,224 700-11-2 Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48" AS \$ 7,122 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF EA \$ 4,072 700-7-232 Embedded Dynamic Message Sign, F&I, Wo UPS, Full Color, 12-20 SF EA \$ 17,000				
700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254 700-11-2 Electronic Display Sign, F&I, Overhead Mount, Blankout Sign, 48" X 48" AS \$ 7,122 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF EA \$ 4,072 700-7-232 Embedded Dynamic Message Sign, F&I, wlo UPS, Full Color, 12-20 SF EA \$ 17,000		•		\$ 3,500.00
700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 6,254 700-11-2 Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48" AS \$ 7,122 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF EA \$ 4,072 700-7-232 Embedded Dynamic Message Sign, F&I, wlo UPS, Full Color, 12-20 SF EA \$ 17,000				, .,
700-11-2 Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48" AS \$ 7,122 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF EA \$ 4,072 700-7-232 Embedded Dynamic Message Sign, F&I, wo UPS, Full Color, 12-20 SF EA \$ 17,000				
700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF EA \$ 4,072 700-7-232 Embedded Dynamic Message Sign, F&I, wo UPS, Full Color, 12-20 SF EA \$ 17,000				\$ 7,122.87
700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF EA \$ 4,072 700-7-232 Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF EA \$ 17,000				
700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF EA \$ 4,072 700-7-232 Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF EA \$ 17,000				
700-7-232 Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF EA \$17,000				
				\$ 17,000.00
700.8.135 Front Access Dynamic Massage Sign F&Lw/ LIDS Full Color 51.100 SE FA 6.67.579	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=4e_4c771_2

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

Project 122: Fay Blvd, Homestead Ave to US 1

_	
	, , ,
\$	75,964.82
\$	607,718.54
•	4 077 040 77
Þ	1,077,940.77
	INPUT
	3.7
	5
	0
	25%
	100%
	50%
	33%
	25%
	TOTAL
	2
	5
	1
	5
	1
	2
	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, Contigency)	-
	INPUT
Number of Off-Ramps	(
Number of On-Ramps	(
Mainline Congestion from On-Ramp?	NO
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
	TOTAL
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, Contigency)	\$	-
		INPUT
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	Ť	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, Contigency)	-
	INPUT
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, Contigency)	\$ -
	INPU
No. of Parking Stalls	(

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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-2-10	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
. 50 0 100		Lit	¥ 02,012.10

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

https://idotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month_pdf.pdf?sfvrsn=4e 4c771_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%

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

"ATMS" Project Calculator		
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, Contigency)	\$	1,238,893.98
		INPUT
Fiber Optic (in miles)	_	INPU
No. of Traffic Signals	_	
No. of ADMS	_	
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%
-		TOTAL
No. of CCTV Cameras		2
No. of Roadside Units/Bluetooth		
No. of Midblock Detectors		2
No. of Controllers		
No. of Controller Cabinet Assemblies		1
No. of Video Detection Systems		2
No. of Network Connections		7

"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, Contigency)	\$ -
	INPUT
Number of Off-Ramps	(
Number of On-Ramps	(
Mainline Congestion from On-Ramp?	NC
Mainline Congestion from Off-Ramp?	NC
Geometric Concerns for Truck Speed on Off-Ramp?	NC
	TOTAL
No. of Wrong Way Driving Systems	(
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Key Decision Points / Intersections	C

'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, Contigency)	\$ -
	INPU
No. of Parking Stalls	(

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 Beacns	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
100-0-100	From Fronces Dynamic Message Sign, Facility Of S, Fall Cold, ST-100 SF	ĽΛ	¥ JZ,J1Z.10

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.
https://fdotwww.blob.core.windows.net/sitefinity/docs/defaultsource/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month_pdf.pdf?sfvrsn=4e
4c771_2

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

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

Project 124: Emerson Drive, Degroodt Road to Malabar Road

"ATMS" Project Calculator	
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, Contigency)	\$ 1,540,326.9
	INPU
Fiber Optic (in miles)	INPU
No. of Traffic Signals	
No. of ADMS	
Percentage of Cabinet Replacements	250
Percentage of Controller Replacements	1009
Percentage of Video Detection Systems	50'
Percentage of CCTV Camera Coverage	40'
Percentage of Mid-Block Coverage	33'
	TOTA
No. of CCTV Cameras	
No. of Roadside Units/Bluetooth	
No. of Midblock Detectors	
No. of Controllers	
No. of Controller Cabinet Assemblies	
No. of Video Detection Systems	
No. of Network Connections	

"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, Contigency)	\$	-
		NPUT
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
	T	OTAL
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, Contigency)	\$ -
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized) No. of Kit "C" - Vehicle-to-Bicycle	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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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
663-1-111	Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-112	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
000-1-13	redestrial Detector, Pat, Passive redestrial 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 Beacns	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://idotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month_pdf.pdf?sfvrsn=4e 4c771_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%

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

: \$	94,315.11
: \$	58,946.94
: \$	471,575.54
	836,457.11
	INPUT
	2.5
	3
	(
	25%
	100%
	50%
	50%
	75%
	TOTAL
	2
	3
	2
	3
	(
	1
	5
	\$

"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, Contigency)	\$ -
	INPUT
Number of Off-Ramps	(
Number of On-Ramps	(
Mainline Congestion from On-Ramp?	NC
Mainline Congestion from Off-Ramp?	NC
Geometric Concerns for Truck Speed on Off-Ramp?	NC
	TOTAL
No. of Wrong Way Driving Systems	(
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, Contigency)	\$	-
		INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)		0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)		0
140. Of the B verillole to verillole (signalized)		
No. of Kit "C" - Vehicle-to-Bicycle		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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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		EA	\$ 1,714.44
665-1-13	Signal Priority and Preemption System, F&I, Optical, Detector Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
	redestrian Detector, Fax, Fassive Fedestrian Detection		\$ 4,300.00
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 Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-2-10	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-0-12	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
		ГΛ	
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://idotwww.blob.core.windows.net/sitefinity/docs/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month_pdf.pdf?sfvrsn=4e 4c771_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%

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

"ATMS" Project Calculator	
Design / Engineering Cost:	\$ 187,059.7
Construction Engineering & Inspection Cost:	\$ 116,912.3
Construction Cost (Material + Labor):	\$ 935,298.7
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contigency)	\$ 1,658,986.0
	INPU
Fiber Optic (in miles)	5.7
No. of Traffic Signals	
No. of ADMS	
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
	TOTA
No. of CCTV Cameras	
No. of Roadside Units/Bluetooth	
No. of Midblock Detectors	
No. of Controllers	
No. of Controller Cabinet Assemblies	
No. of Video Detection Systems	
No. of Network Connections	

"INTERSTATE" Project Calculator	ì	
Design / Engineering Cost:	\$	-
Construction Engineering & Inspection Cost:	\$	-
Construction Cost (Material + Labor):	\$	-
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contigency)	\$	-
		INPUT
Number of Off-Ramps		C
Number of On-Ramps		C
Mainline Congestion from On-Ramp?		NC
Mainline Congestion from Off-Ramp?		NC
Geometric Concerns for Truck Speed on Off-Ramp?		NC
		TOTAL
No. of Wrong Way Driving Systems		C
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, Contigency)	\$
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Key Decision Points / Intersections	(

"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, Contigency)	\$ -
	INPUT
No. of Parking Stalls	0

6302-21 Conduit, F&I, Open Trench LF \$ 7.15 6302-212 Conduit, F&I, Directional Bore LF \$ 21.3 632-7-1 Signal Cable - New or Reconstructed Intersection, F&I PI \$ 5,796.15 632-7-1 Signal Cable - New or Reconstructed Intersection, F&I PI \$ 5,796.15 633-1-123 Fiber Optic Cable, F&I, Underground Cable, 48-96 LF \$ 3.3 633-2-31 Fiber Optic Connection, Install, Splice EA \$ 39.01 633-3-11 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 899.92 633-2-11 Pull & Splice Box, F&I, 13" X 24" EA \$ 732.66 635-2-12 Pull & Splice Box, F&I, 13" X 24" EA \$ 732.66 635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.5 639-2-11 Electrical Service Wire, F&I LF \$ 7.11 639-2-11 Electrical Service Wire, F&I Poll Mount EA \$ 2,385.00 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.51 641-2-11 Prestressed Concrete Pole,	Pay Item	Description	Unit	Unit Cost	t
632-7-1 Signal Cable - New or Reconstructed Intersection, F&I PI \$ 5,796.1: 633-1-123 Fiber Optic Cable, F&I, Underground Cable, 48-96 LF \$ 3.3. 633-2-31 Fiber Optic Connection, Install, Splice EA \$ 39.0: 633-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 899.9: 633-3-15 Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel EA \$ 1,801.6: 633-2-11 Pull & Splice Box, F&I, 13" X 24" EA \$ 732.6! 635-2-12 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 1,265.3 635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,284.5' 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.0! 639-2-12 Electrical Service Wire, F&I Pole Mount EA \$ 1,376.5! 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.3 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.3 642-2-11 Aluminum Pole - Index 695-001, F&I, Type P-I	630-2-11	Conduit, F&I, Open Trench	LF	\$ 7	.13
Sa3-1-123 Fiber Optic Cable, F&I, Underground Cable, 48-96 LF \$ 3.3	630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21	.37
Fiber Optic Connection, Install, Splice	632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796	.13
633-3-11 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 899.9.6 633-3-15 Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel EA \$ 1,8016.6 635-2-11 Pull & Splice Box, F&I, 13" X 24" EA \$ 732.61 635-2-12 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 1,265.31 635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.51 639-2-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.01 639-2-11 Electrical Service Wire, F&I LF \$ 7.1" 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.51 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.31 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.31 644-2-15 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.51 649-2-101 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 3,5775.61 660-1-110 Loop Detectior Inductive, F&I, Type 10 EA \$	633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3	.34
633-3-15 Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel EA \$ 1,801.66 633-2-12 Pull & Splice Box, F&I, 13" X 24" EA \$ 732.66 635-2-12 Pull & Splice Box, F&I, 13" X 24" EA \$ 732.66 635-2-12 Pull & Splice Box, F&I, 13" X 36" EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.56 639-1-111 Electrical Service Wire, F&I LF \$ 7.1 639-2-11 Electrical Service Wire, F&I LF \$ 7.1 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.51 641-2-11 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 \$ 1,395.34 642-2-15 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.56 642-2-10 Steel Mast Arm Assembly, F&I, 30' Single AS \$ 35,775.60 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, Z Section, 1-2 Ways EA \$ 790.00 660-3-10 Loop Detector I	633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39	.07
635-2-11 Pull & Splice Box, F&I, 13" X 24" EA \$ 732.6i 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.3i 635-2-13 Pull & Splice Box, F&I, 24" X 36" EA \$ 2,384.5i 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,384.5i 639-2-11 Electrical Service Disconnect, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,985.0i 639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.5i 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,398.3i 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283.7i 646-2-115 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.5i 649-21-01 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.6i 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 780.0i 660-3-10 Loop Detector Inductive, F&I, Type 10 EA \$ 389.9i 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.0i	633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899	.92
635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.34 635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.5" 639-2-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.01 639-2-11 Electrical Service Wire, F&I LF 7.1" 639-3-111 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,376.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.3 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,395.3 646-2-115 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.56 649-2-1-01 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.66 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 780.20 660-3-11 Loop Detector Inductive, F&I, Type 10 EA \$ 389.9 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.3 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515.4	633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801	.63
635-2-13 Pull & Splice Box, F & I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.51 639-1-111 Electrical Power Service, F & I, Overhead, Meter Furnished by Power Company AS \$ 2,850.01 639-2-11 Electrical Service Disconnect, F & I, Pole Mount EA \$ 1,378.51 639-3-11 Electrical Service Disconnect, F & I, Pole Mount EA \$ 1,378.51 641-2-11 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 \$ 1,395.34 641-2-13 Aluminum Pole - Index 695-001, F & I, 20" EA \$ 2,166.56 642-21-10 Steel Mast Arm Assembly, F & I, 30" Single AS \$ 35,775.60 650-1-13 Vehicular Traffic Signal, F & I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.01 660-1-101 Loop Detector Inductive, F & I, Type 10 EA \$ 389.9 660-2-102 Loop Assembly, F & I, Type B EA \$ 780.21 660-3-11 Vehicle Detection System-Microwave, F & I, Cabinet Equipment EA \$ 4,128.33 660-3-12 Vehicle Detection System-Video, F & I, Above Ground Equipment <td>635-2-11</td> <td>Pull & Splice Box, F&I, 13" X 24"</td> <td>EA</td> <td>\$ 732</td> <td>.68</td>	635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732	.68
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 \$ 7.11 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.51 641-2-11 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 \$ 2,166.57 649-21-01 Steel Mast Arm Assembly, F&I, 30° Single AS \$ 35,775.66 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.01 660-1-10 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 660-1-11 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.02 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 660-3-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49	635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265	.36
639-2-1 Electrical Service Wire, F&I LF \$ 7.1 639-2-1 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.5 639-3-11 Electrical Service Disconnect, F&I, Type P-II Pedestal EA \$ 1,378.5 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,398.3 642-2-115 Aluminum Pole - Index 695-001, F&I, 20° EA \$ 2,166.5 649-21-01 Steel Mast Arm Assembly, F&I, 30° Single AS \$ 35,775.6 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.0 660-1-10 Loop Detector Inductive, F&I, Type 10 EA \$ 389.9 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.0 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.3 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.4 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.4 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.4	635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384	.57
639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-12 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.3 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,395.3 646-2-15 Aluminum Pole - Index 695-001, F&I, 20° EA \$ 2,166.5 649-21-01 Steel Mast Arm Assembly, F&I, 30° Single AS \$ 35,775.6 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.0 660-1-101 Loop Detector Inductive, F&I, Type P EA \$ 389.9 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.2 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.3 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.4 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.4 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,571.7 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,515.4 <td>639-1-111</td> <td>Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company</td> <td>AS</td> <td>\$ 2,850</td> <td>.00</td>	639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850	.00
641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.3* 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283.7* 646-2-115 Alurnium Pole - Index 695-001, F&I, 20° EA \$ 2,166.5* 646-2-115 Steel Mast Am Assembly, F&I, 30° Single AS \$ 35,775.6* 649-21-01 Steel Mast Am Assembly, F&I, 30° Single AS \$ 35,775.6* 650-1-13 Vehicular Traffic Signal, F&I, Alurninum, 2 Section, 1-2 Ways EA \$ 790.0* 660-1-10 Loop Detector Inductive, F&I, Type 10 EA \$ 389.9* 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.0* 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.2* 660-3-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.4* 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.4* 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,971.3* 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$	639-2-1	Electrical Service Wire, F&I	LF	\$ 7	.17
641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283,74 646-2-2-115 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166,25 649-21-01 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775,66 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, Z Section, 1-2 Ways EA \$ 790,00 660-1-110 Loop Detector Inductive, F&I, Type 10 EA \$ 389,90 660-2-102 Loop Assembly, F&I, Type B EA \$ 780,00 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 1,28,33 660-3-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515,49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515,49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515,49 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 31,971,37 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,1971,37 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment	639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378	.56
646-2-115 Aluminum Pole - Index 695-001, F.&I, 20° EA \$ 2,166.50 649-2-1-01 Steel Mast Arm Assembly, F.&I, 30° Single AS \$ 35,775.65 650-1-13 Vehicular Traffic Signal, F.&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.01 660-1-110 Loop Detector Inductive, F.&I, Type 10 EA \$ 389.9 660-2-102 Loop Assembly, F.&I, Type B EA \$ 780.21 660-3-11 Vehicle Detection System-Microwave, F.&I, Cabinet Equipment EA \$ 4,128.31 660-3-12 Vehicle Detection System-Microwave, F.&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F.&I, Cabinet Equipment EA \$ 9,515.49 660-7-11 Vehicle Detection System-Video, F.&I, Above Ground Equipment EA \$ 4,751.71 660-7-11 Vehicle Detection System-Wideo, F.&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Signal Priority and Preemption System, F.&I, Optical, Cabinet Electronics EA \$ 3,1971.31 663-1-112 Signal Priority and Preemption System, F.&I, Optical, Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F.	641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395	.34
649-21-01 Steel Mast Arm Assembly, F&I, 30' Single AS \$ 35,775.6' 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.0' 660-1-101 Loop Detection fundurive, F&I, Type 10 EA \$ 389.9' 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.2' 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 1,128.3' 660-3-12 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 9,515.4' 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.4' 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.7' 660-7-11 Vehicle Detection System-Wrong Way for Exit Ramp. 1 or 2 Lanes EA \$ 3,1911.3' 663-1-112 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 5,752.4' 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detector EA \$ 1,714.4' 667-5-112 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.3'	641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283	.74
650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.01 660-1-110 Loop Detector Inductive, F&I, Type 10 EA \$ 389.9 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.21 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 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 \$ 4,751.73 660-7-11 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 \$ 5,752.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 665-1-12 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.31					
650-1-13 Vehicular Traffic Signal, F&l, Aluminum, 2 Section, 1-2 Ways EA \$ 790.01 660-1-110 Loop Detector Inductive, F&l, Type 10 EA \$ 389.9 660-2-102 Loop Assembly, F&l, Type B EA \$ 780.21 660-3-11 Vehicle Detection System-Microwave, F&l, Cabinet Equipment EA \$ 128.31 660-3-12 Vehicle Detection System-Microwave, F&l, Above Ground Equipment EA \$ 9.515.49 660-4-11 Vehicle Detection System-Video, F&l, Cabinet Equipment EA \$ 9.515.49 660-4-12 Vehicle Detection System-Video, F&l, 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&l, Optical, Cabinet Electronics EA \$ 5,752.44 665-1-13 Pedestrian Detector, F&l, Passive Pedestrian Detection EA \$ 1,714.44 6670-5-112 Traffic Controller Assembly, F&l, NEMA, Two Preemption Plans AS \$ 32,011.31	649-21-01		AS	\$ 35,775	.62
660-1-110 Loop Detector Inductive, F&I, Type 10 EA \$ 389.9 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.2 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.3 660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515.4 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.4 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.7 660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.3 663-1-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 5,752.4 663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.4 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,704.0 670-5-112 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.3	650-1-13	7	FA		
660-2-102 Loop Assembly, F.8.I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F.8.I, Cabinet Equipment EA \$ 4,128.37 660-3-12 Vehicle Detection System-Microwave, F.8.I, Above Ground Equipment EA \$ 8,228.77 660-4-11 Vehicle Detection System-Video, F.8.I, Cabinet Equipment EA \$ 9,515.48 660-4-12 Vehicle Detection System-Video, F.8.I, Above Ground Equipment EA \$ 4,751.77 660-7-11 Vehicle Detection System-Wingo, F.8.I, Above Ground Equipment EA \$ 3,1971.3 663-1-111 Signal Priority and Preemption System, F.8.I, Optical, Cabinet Electronics EA \$ 3,752.44 663-1-112 Signal Priority and Preemption System, F.8.I, Optical, Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F.8.I, Passive Pedestrian Detection EA \$ 4,500.00 670-5-112 Traffic Controller Assembly, F.8.I, NEMA, Two Preemption Plans AS \$ 32,011.31					
660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.3 660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 2,228.7 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.4 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.7* 660-7-11 Vehicle Detection System - Wrong Way for Ext Ramp, 1 or 2 Lanes EA \$ 31,971.3* 663-1-111 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 5,752.4* 663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.4* 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 \$ 32,011.3*		· · · · · · · · · · · · · · · · · · ·			
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 \$ 9,515.44 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.73 660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 3,1971.33 663-1-111 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 \$ 32,011.31					
660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.48 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.71 660-7-11 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 \$ 4,500.01 670-5-112 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.31		<u> </u>			
660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.75 660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.37 663-1-111 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					
660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.3 663-1-111 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 5,752.4 663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.4 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 4,500.0 670-5-112 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.3					
663-1-111 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 5,752.4* 663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.4* 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 4,500.0* 670-5-112 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.3*					_
663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.4 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 4,500.0 670-5-112 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.3		, , , , , , , , , , , , , , , , , , , ,			
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 \$ 32,011.33					
670-5-112 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.3					
21 1 1	000-1-10	Pedestrian Detector, Fat, Passive Pedestrian Detection	EA	\$ 4,500	.00
670-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27.645.38		**			
		21 1 1			
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		Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500	.00
671-2-40 Traffic Controller, Modify EA \$ 1,890.00	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	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	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 \$10,176.4	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 \$ 3,792.40	684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792	.46
684-2-1 Device Server, F&I EA \$ 778.3	684-2-1	Device Server, F&I	EA	\$ 778	.37
685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832.5	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	685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545	.12
695-8-11 Cellular Modem, F&I EA \$ 3,500.00	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	700-10-123	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	700-11-1	**	AS	\$ 6,254	.85
700-11-2 Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48" AS \$ 7,122.8:		1 7 0 1 1 0 1			
700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948.03	700-12-12	1 7 0 1 1			
700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352.33					
700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF EA \$ 4,072.5:					
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	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/site/finity/docs/defaultsource/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month pdf.pdf?sfvrsn=4e
4c771_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%

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

"ATMS" Project Calculator	
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, Contigency)	\$ 1,393,855.92
	INPUT
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%
	TOTAL
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

"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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPU'
No. of Key Decision Points / Intersections	

"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, Contigency)	\$ -
	INPUT
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	FA	\$ 4,500.00
671-2-40	Traffic Controller, Modify	FA	\$ 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	FA	\$ 66.024.43
700-10-123	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
700-11-1	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 46" X 46" Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12		AS	
	Multi-Post Sign, F&I, Ground Mount, 101-200 SF		\$ 9,352.32
700-6-12 700-7-232	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA EA	\$ 4,072.57 \$ 17,000.00
700 0 125		FA	¢ 50 570 70
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	ŁΑ	\$ 52,572.76

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

https://idohuww.blob.core.windows.net/sitefinity/dos/default-source/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month pdf.pdf?sfvrsn=4e 4c771_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%

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

"ATMS" Project Calculator	
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, Contigency)	\$ 3,487,347.36
	INPUT
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%
_	TOTAL
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

"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, Contigency)	\$ -
	INPU'
Number of Off-Ramps	- 1
Number of On-Ramps	
Mainline Congestion from On-Ramp?	N
Mainline Congestion from Off-Ramp?	NO
Geometric Concerns for Truck Speed on Off-Ramp?	NO
	TOTA
No. of Wrong Way Driving Systems	
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, Contigency)	\$ -
	INPUT
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:	\$ 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, Contigency)	\$ 337,893.08
	INPUT
No. of Key Decision Points / Intersections	5

"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, Contigency)	
	INPUT
No. of Parking Stalls	0

Pay Item	Description	Unit Unit Cost		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		EA	\$	
663-1-111	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes			31,971.31
	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 Beacns	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

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

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

"ATMS" Project Calculator	
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, Contigency)	\$ 575,553.87
	INPU
Fiber Optic (in miles)	(
No. of Traffic Signals	
No. of ADMS	
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%
	TOTAL
No. of CCTV Cameras	(
No. of Roadside Units/Bluetooth	
No. of Midblock Detectors	(
No. of Controllers	
No. of Controller Cabinet Assemblies	(
No. of Video Detection Systems	
No. of Network Connections	,

"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, Contigency)	\$ -
	INPUT
Number of Off-Ramps	C
Number of On-Ramps	
Mainline Congestion from On-Ramp?	NC
Mainline Congestion from Off-Ramp?	NC
Geometric Concerns for Truck Speed on Off-Ramp?	NC
	TOTAL
No. of Wrong Way Driving Systems	(
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
_	INPUT
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, Contigency)	\$ -
	INPU'
No. of Parking Stalls	(

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	FA	\$ 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
663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13		EA	
670-5-112	Pedestrian Detector, F&I, Passive Pedestrian Detection Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 4,500.00 \$ 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	FA	\$ 3,792,46
684-2-1	Device Server, F&I	EA	\$ 3,792.40
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 Beacns	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

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

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

"ATMS" Project Calculator	
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, Contigency)	\$ 1,428,838.98
	INPU
Fiber Optic (in miles)	4.
No. of Traffic Signals	
No. of ADMS	
Percentage of Cabinet Replacements	1009
Percentage of Controller Replacements	100%
Percentage of Video Detection Systems	1009
Percentage of CCTV Camera Coverage	669
Percentage of Mid-Block Coverage	209
	TOTA
No. of CCTV Cameras	
No. of Roadside Units/Bluetooth	
No. of Midblock Detectors	
No. of Controllers	
No. of Controller Cabinet Assemblies	
No. of Video Detection Systems	
No. of Network Connections	

"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, Contigency)	\$ -
	INPUT
Number of Off-Ramps	(
Number of On-Ramps	(
Mainline Congestion from On-Ramp?	NC
Mainline Congestion from Off-Ramp?	NC
Geometric Concerns for Truck Speed on Off-Ramp?	NC
	TOTAL
No. of Wrong Way Driving Systems	(
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, Contigency)	\$
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	INPUT 0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	INPUT 0
	0 0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized) No. of Kit "B" - Vehicle-to-Vehicle (signalized) No. of Kit "C" - Vehicle-to-Bicycle	0 0 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, Contigency)	-
	INPUT
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, Contigency)	\$ -
	INPU
No. of Parking Stalls	(

6302-212 Conduit, F&I, Directional Bore LF \$ 21.37 6322-7-1 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 \$ 1,801.63 6352-11 Pull & Splice Box, F&I, 137 X-24" EA \$ 1,801.63 6352-121 Pull & Splice Box, F&I, 137 X-24" EA \$ 722.68 6352-121 Pull & Splice Box, F&I, 247 X-36" EA \$ 1,265.36 6352-13 Pull & Splice Box, F&I, 307 X-60" Rectangular or 36" Round EA \$ 2,384.57 6392-111 Electrical Power Service, F&I, 30" Or Rectangular or 36" Round EA \$ 2,384.57 6392-111 Electrical Service Wire, F&I FAI Cype Pull EA \$ 1,378.56 6412-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.34 6412-11 Prestressed Concrete Pole, F&I, Type P-II EA \$ 1,325.34 <t< th=""><th>Pay Item</th><th>Description</th><th>Unit</th><th>Unit Cost</th></t<>	Pay Item	Description	Unit	Unit Cost
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 \$ 899.92 633-2-11 Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel EA \$ 1,801.63 635-2-12 Pull & Splice Box, F&I, 13" X 24" EA \$ 722.68 635-2-12 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 \$ 2,384.57 639-2-11 Electrical Service Wire, F&I LF \$ 7,17 639-2-11 Electrical Service Wire, F&I LF \$ 7,17 641-2-11 Prestressed Concrete Pole, F&I, Type P-IP Pedestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-IP Pedestal EA \$ 1,326.53 641-2-15 Auminum Pole - Index 695-001, F&I, 20" EA \$ 1,366.50 649-2-10 <t< td=""><td>630-2-11</td><td>Conduit, F&I, Open Trench</td><td>LF</td><td>\$ 7.13</td></t<>	630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
633-1-123 Fiber Optic Cable, F&I, Underground Cable, 48-96 LF \$ 3,34 633-2-31 Fiber Optic Connection, Install, Splice EA \$ 39,07 633-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 899,92 633-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 1,801,63 635-2-17 Pull & Splice Box, F&I, 30° X-60° Retaingular or 36° Round EA \$ 1,265,36 635-2-13 Pull & Splice Box, F&I, 30° X-60° Rectangular or 36° Round EA \$ 2,2850,00 639-2-11 Electrical Service Wire, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850,00 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378,56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,383,37 642-115 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,383,37 646-2-115 Aurnium Pole - Index 695-001, F&I, 20° EA \$ 2,166,50 649-2-1-10 Steel Mast Arm Assembly, F&I, 30° Single AS \$ 3,577,562 660-3-11 Vehicla Prestric Signal, F&I, Aluminum, 2 Section, 1-2 Ways <td>630-2-12</td> <td>Conduit, F&I, Directional Bore</td> <td>LF</td> <td>\$ 21.37</td>	630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
Sa3-2-31 Fiber Optic Connection, Install, Splice EA \$. 39.07	632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
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, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-2-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,375.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,335.34 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.34 646-2-115 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 649-21-01 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 3,775.62 650-1-13 Vehicular Traffic Signal, F&I, 41 Junnium, 2 Section, 1-2 Ways EA \$ 790.00 660-3-11 Vehicular Detection System-Microwave, F&I, Cabinet Equipmen	633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
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, 3" X 24" EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,885.00 639-2-11 Electrical Service Wire, F&I LF \$ 7.17.6 639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,375.4 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283.74 642-21-15 Atuminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 649-21-10 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 \$ 790.00 660-2-10 Loop Desector Inductive, F&I, Type TO EA \$ 389.94	633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
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, 24" X 36" Rectangular or 36" Round EA \$ 2,384.57 639-1-11 Electrical Service Wire, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,860.00 639-2-1 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.66 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Podestal EA \$ 1,378.66 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283.74 646-2-155 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 640-2-110 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 660-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type B EA \$ 389.94 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 780.66	633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
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 \$ 2,384.57 639-2-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,335.34 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,355.34 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,355.34 642-2-11 Aluminum Pole Index 695-001, F&I, 20" EA \$ 2,166.50 649-21-01 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 3,5775.62 650-1-13 Vehicular Traffic Sipan, F&I, 30" F&I, 30" Single EA \$ 790.00 660-3-10 Loop Detector Inductive, F&I, Type 10 EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 4,128.33 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA	633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
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 Am Assembly, F&I, 30" Single AS \$ 35,775.62 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 2,287.3 660-3-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 2,755.4	635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
639-1-1111 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Disconnect, F&I, Pole Mount LF \$ 7,17 639-2-11 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, Type 10 EA \$ 389.94 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.06 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.26 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 31,971.31 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA	635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
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 \$ 1,395-34 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328-374 646-2-115 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 \$ 790.00 660-3-10 Loop Detector Inductive, F&I, Type 10 EA \$ 399.94 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,197.13 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,	635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
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 \$ 1,335.34 641-2-13 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 B EA \$ 790.00 660-1-110 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-12 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 660-3-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 4,751.79 660-4-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,751.44 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,	639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
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 \$ 790.00 660-1-10 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 \$ 780.26 660-3-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-7-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 1,971.	639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
641-2-13 Prestressed Concrete Pole, F&I, Type P-III	639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
646-2-115 Aluminum Pole - Index 695-001, Fål, 20' EA \$ 2,166.50 649-21-01 Steel Mast Arm Assembly, Fål, 30' Single AS \$ 35,775.62 650-1-13 Vehicular Traffic Signal, Fål, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-3-10 Loop Detector Inductive, Fål, Type 10 EA \$ 399.94 660-3-11 Vehicle Detection System-Microwave, Fål, Cabinet Equipment EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, Fål, Above Ground Equipment EA \$ 4,128.33 660-3-11 Vehicle Detection System-Microwave, Fål, Cabinet Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, Fål, Cabinet Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, Fål, Above Ground Equipment EA \$ 4,751.79 660-7-11 Vehicle Detection System-Video, Fål, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Video, Fål, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Video, Fål, Above Ground Equipment EA \$ 3,1971.31 661-113 Prome Sala System Fål	641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
646-2-115 Aluminum Pole - Index 695-001, Fål, 20' EA \$ 2,166.50 649-21-01 Steel Mast Arm Assembly, Fål, 30' Single AS \$ 35,775.62 650-1-13 Vehicular Traffic Signal, Fål, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-3-10 Loop Detector Inductive, Fål, Type 10 EA \$ 399.94 660-3-11 Vehicle Detection System-Microwave, Fål, Cabinet Equipment EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, Fål, Above Ground Equipment EA \$ 4,128.33 660-3-11 Vehicle Detection System-Microwave, Fål, Cabinet Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, Fål, Cabinet Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, Fål, Above Ground Equipment EA \$ 4,751.79 660-7-11 Vehicle Detection System-Video, Fål, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Video, Fål, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Video, Fål, Above Ground Equipment EA \$ 3,1971.31 661-113 Prome Sala System Fål	641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-101 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 660-1-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-102 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.26 660-3-11 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 \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 31,971.31 663-1-111 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,971.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,741.44 665-1-14 Traffic Controller			EA	
650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-101 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 660-1-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-102 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.26 660-3-11 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 \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 31,971.31 663-1-111 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,971.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,741.44 665-1-14 Traffic Controller				
660-1-110 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-2-111 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.26 660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9.515.49 660-4-11 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 \$ 9.515.49 660-4-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 9.515.49 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 9.515.49 660-4-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 9.515.49 660-4-12 Vehicle Detection System-Wideo, F&I, Detector EA \$ 3.719.11 660-7-13 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 667-1-12 Traffic Controller Asse		, · · · · ·		
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 \$ 8,228.73 660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 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 \$ 31,971.31 663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 5,752.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detector EA \$ 1,714.44 665-1-12 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,741.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detector EA \$ 1,742.44 665-1-12 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 670-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 670-5-400<		· · · · · · · · · · · · · · · · · · ·	FA	
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 \$ 8,228.73 660-3-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 31,971.31 660-1-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 31,971.31 663-1-11 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,744.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,744.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection AS \$ 27,645.38 670-5-101 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 670-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38				
660-3-12 Vehicle Detection System-Microwave, F.8I, Above Ground Equipment EA \$ 8,228.73 660-4-11 Vehicle Detection System-Video, F.8I, Cabrinet Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F.8I, Above Ground Equipment EA \$ 9,515.49 660-7-11 Vehicle Detection System-Video, F.8I, Above Ground Equipment EA \$ 1,714.71.79 660-7-11 Vehicle Detection System-Video, F.8I, Above Ground Equipment EA \$ 1,971.71 663-1-13 Signal Priority and Preemption System, F.8I, Optical, Cabrinet Electronics EA \$ 1,771.44 665-1-13 Pedestrian Detector, F.8I, Passive Pedestrian Detection EA \$ 1,714.44 665-1-13 Pedestrian Detector, F.8I, Passive Pedestrian Detection EA \$ 3,20.01.37 670-5-102 Traffic Controller Assembly, F.8I, NEMA, Two Preemption Plans AS \$ 27,645.30 670-5-140 Traffic Controller Assembly, F.8I, Model 2070, 1 Preemption AS \$ 27,645.38 671-2-40 Traffic Controller Assembly, F.8I, In Existing Cabinet, NEMA EA \$ 1,942.50 671-2-410 Traffic Controller Without Cabinet, F.8I in Existing Cabinet, NEMA EA <t< td=""><td></td><td>· · · · · · · · · · · · · · · · · · ·</td><td></td><td></td></t<>		· · · · · · · · · · · · · · · · · · ·		
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 \$ 4,751.79 660-4-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 1,713.71 660-7-11 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 \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 6670-5-102 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.37 670-5-400 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 671-2-41 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,942.50 671-2-12 Traffic Controller, Modify EA \$ 1,890.00 6762-112 ITS Cabinet, F&I, Pole Mount, 336S, 2				
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 Detecton EA \$ 4,500.00 670-5-112 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,011.37 670-5-400 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 670-5-401 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-41 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,942.50 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946.00 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 1,500.00 682-1-113 ITS CCTV Cam				
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 \$ 1,774.44 665-1-13 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, NEMA, Two 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 \$ 1,890.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 TS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,466.00 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 TIS Cabinet, F&I, Done Enclosure PTZ, IP, High-Definition EA \$ 7,800.00 684-2-1 Device Server, F&I<		7 1 1 1 1		
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 \$ 1,942.50 671-2-41 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,942.50 671-2-40 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 Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 3,792.46 684-2-1 Device Server, F&I EA \$ 7,500.00 684-1-1 Managed Field Ethernet Switch, F&I EA <t< td=""><td></td><td></td><td></td><td></td></t<>				
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 \$ 32,011.37 670-5-400 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 670-5-400 Traffic Controller Assembly, Hodrify EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,942.50 671-2-120 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 \$ 7,500.00 684-131 ITS CCTV Camera, F&I, Done Enclosure PTZ, IP, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&I EA \$ 778.37 685-3-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 7,500.00 685-3-1 Remote Power Management Unit, F&I EA \$ 3,500.00		, , , , ,		
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 \$ 1,980.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-12 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 \$ 778.37 684-2-1 Device Server, F&I EA \$ 778.37 685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,545.12 695-8-11 Cellular Modem, F&I EA \$ 1,545.12				
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 \$ 8,946.00 681-000 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 \$ 778.37 684-2-1 Device Server, F&I EA \$ 778.37 685-3-1 Remote 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 \$ 3,500.00 700-11-2				
670-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-41 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 \$ 8,946.00 681-100 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 \$ 778.37 684-2-1 Device Server, F&I EA \$ 778.37 685-1-31 Remote Power Supply, F&I, Line Interactive with Cabinet EA \$ 778.37 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-11-21 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 6,254.85 700-11-2				
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 \$ 1,890.00 671-2-412 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 \$ 7,837 685-3-1 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 \$ 6,60.24.43 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 7,122.87 700-12-12 <t< td=""><td></td><td><u> </u></td><td></td><td></td></t<>		<u> </u>		
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 \$ 8,946.00 681-000 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 \$ 778.37 685-1-31 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 778.37 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-11-21 DMS Support Structure, Cantilever 31-40 FT EA \$ 6,6024.43 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 6,254.85 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 7,22.87		* * * * * * * * * * * * * * * * * * * *		
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 \$ 778.37 685-3-1 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, Ground Mount, Blankout Sign , 48" X 48" AS \$ 7,222.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948.03 7		Traffic Controller Assembly, Modify		
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 \$ 66,024.43 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 6,244.85 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352.32		Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA		
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 \$ 6,6024.43 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.85 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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 </td <td></td> <td></td> <td></td> <td>\$ 1,890.00</td>				\$ 1,890.00
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 \$ 6,60.24.43 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 6,254.85 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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, Wo UPS, Full Color, 12-20 SF EA	676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
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 \$ 778.37 685-3-1 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 Beacns 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, Wo UPS, F&II Color, 12-20 SF EA \$ 17,000.00				\$ 7,500.00
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 \$ 6,024.43 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 6,254.85 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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, Wo UPS, F&II Color, 12-20 SF EA \$ 17,000.00	682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
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, Ground Mount, Blankout Sign, 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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, Wo UPS, F&II Color, 12-20 SF EA \$ 17,000.00	684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
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, Cantiliever 31-40 FT EA \$ 66,024.48 700-11-1 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 Beacns 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, Wo UPS, F&II Color, 12-20 SF EA \$ 17,000.00	684-2-1	Device Server, F&I	EA	\$ 778.37
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
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 Beacns AS \$ 3,948.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, 100-200 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
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 Beacns AS \$ 3,948.03 700-21-6 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
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	700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
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	700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
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	700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-7-232 Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF EA \$17,000.00			EA	\$ 4,072.57
700-8-135 Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF EA \$ 52.572.76				\$ 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.

Contingency	15%
Maintenance of Traffic	10%
Mobilization	10%
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.59

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

"ATMS" Project Calculator Design / Engineering Cost: \$ 390,99 Construction Engineering & Inspection Cost: \$ 244,377 Construction Cost (Material + Labor): \$ 1,954,989 Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contigency) \$ 3,467,659	
Construction Engineering & Inspection Cost \$ 244,37: Construction Cost (Material + Labor): \$ 1,954,98i Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contigency) IN	
Construction Cost (Material + Labor): \$ 1,954,981 Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contigency) \$ 3,467,651	7.25
Total Project Cost (w/ Mobilization, Maintenance of Traffic, Erosion and Sediment Control, Contigency) \$ 3,467,656	3.28
Erosion and Sediment Control, Contigency \$ 3,467,650	6.24
	6.83
Fiber Optic (in miles)	IPUT
	17.7
No. of Traffic Signals	1
No. of ADMS	2
Percentage of Cabinet Replacements 1	00%
Percentage of Controller Replacements 1	00%
Percentage of Video Detection Systems	00%
Percentage of CCTV Camera Coverage	50%
Percentage of Mid-Block Coverage	25%
TO	TAL
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	

"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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized) No. of Kit "C" - Vehicle-to-Bicycle	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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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	FA	\$ 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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12			
	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12 700-7-232	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA EA	\$ 4,072.57 \$ 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.

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

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

"ATMS" Project Calculator	
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, Contigency)	\$ 2,614,533.63
	INPUT
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%
	TOTAL
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 2 2
No. of Video Detection Systems	2
No. of Network Connections	4

"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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$
	INPUT
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 Beacns	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

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

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

\$ 314,280.19
\$ 196,425.12
\$ 1,571,400.93
\$ 2,787,272.41
INPUT
12.2
2
2
100%
100%
100%
50%
33%
TOTAL
6
2
4
2
2
2
4

"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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	MINUT
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	INPUT 0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
	0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized) No. of Kit "B" - Vehicle-to-Vehicle (signalized) No. of Kit "C" - Vehicle-to-Bicycle	0 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, Contigency)	\$ -
	INPUT
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, Contigency)	\$
	INPUT
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	FA	\$ 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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12			
	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12 700-7-232	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA EA	\$ 4,072.57 \$ 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.

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

Project 198: Micco Road, Babcock Street to US 1

"ATMS" Project Calculator	
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, Contigency)	
	INPUT
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%
	TOTAL
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

"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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized) No. of Kit "C" - Vehicle-to-Bicycle	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, Contigency)	-
	INPU
No. of Key Decision Points / Intersections	

"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, Contigency)	\$ •
	INPUT
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
660-3-11	Vehicle Detection System-Microwave, F. &, Cabinet Equipment Vehicle Detection System-Microwave, F. &I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	FA	\$ 9,515.49
	7 1 1 1 1		
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 Beacns	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-2-10	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
100-0-100	Troncriocos Dynamic incosage orgin, Fall W/ UFS, Full Cului, 31-100 SF	ĿA	ψ υΖ,υ1Ζ./0

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

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

Project 201: I-95 @ Wickham Rd

"ATMS" Project Calculator		
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,	\$	39.553.03
Erosion and Sediment Control, Contigency)	Ψ	00,000.00
		INPUT
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%
		TOTAL
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:	\$ 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, Contigency)	\$ 1,038,420.62
	INPUT
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
	TOTAL
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	-

"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, Contigency)	\$ -
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	(
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	(
No. of Kit "C" - Vehicle-to-Bicycle	(
No. of Kit "D" - Vehicle-to-Pedestrian	

"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, Contigency)	\$ -
	INPUT
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, Contigency)	\$
	INPUT
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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9.352.32
700-2-16	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-6-12	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 4,072.57
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76
. 00 0.100		ᅜ	ψ UZ,U1 Z.1 U

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

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

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

"ATMS" Project Calculator	
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, Contigency)	\$ 39,553.03
Erosion and Sediment Control, Contigency)	
	INPUT
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%
	TOTAL
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:	\$	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, Contigency)	\$	289,663.29
		INPUT
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
		TOTAL
No. of Wrong Way Driving Systems		2
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, Contigency)	\$ -
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
, ü ,	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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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
660-3-11	Vehicle Detection System-Microwave, F. &, Cabinet Equipment Vehicle Detection System-Microwave, F. &I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	FA	\$ 9,515.49
	7 1 1 1 1		
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 Beacns	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-2-10	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
100-0-100	Troncriocos Dynamic incosage orgin, Fall W/ UFS, Full Cului, 31-100 SF	ĿA	ψ υΖ,υ1Ζ./0

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

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

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

"ATMS" Project Calculator	
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, Contigency)	\$ 39,553.03
	INPUT
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%
	TOTAL
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:	\$ 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, Contigency)	\$ 289,663.29
	INPUT
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
	TOTAL
No. of Wrong Way Driving Systems	2
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, Contigency)	\$ -
	INPUT
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, Contigency)	-
	INPUT
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, Contigency)	\$ -
	INPUT
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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9.352.32
700-2-16	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-6-12	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 4,072.57
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76
. 00 0.100		ᅜ	ψ UZ,U1 Z.1 U

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

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

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

"ATMS" Project Calculator	
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, Contigency)	\$ 39,553.03
i e e e e e e e e e e e e e e e e e e e	INPUT
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%
	TOTAL
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:	\$ 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, Contigency)	\$ 289,663.29
	INPUT
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
	TOTAL
No. of Wrong Way Driving Systems	2
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, Contigency)	\$ -
	INPUT
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 Nit C - Verlicie-to-Dicycle	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, Contigency)	\$ -
	INPUT
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, Contigency)	\$
	INPUT
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 Beacns	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

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

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

"ATMS" Project Calculator	
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, Contigency)	\$ 39,553.03
	INPUT
Fiber Optic (in miles)	0.25
No. of Traffic Signals	C
No. of ADMS	C
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%
	TOTAL
No. of CCTV Cameras	C
No. of Roadside Units/Bluetooth	C
No. of Midblock Detectors	C
No. of Controllers	C
No. of Controller Cabinet Assemblies	C
No. of Video Detection Systems	C
No. of Network Connections	0

"INTERSTATE" Project Calculator	
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, Contigency)	\$ 550,761.01
	INPUT
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
	TOTAL
No. of Wrong Way Driving Systems	2
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	2

"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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$,
	INPUT
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 Beacns	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

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

Project 206: I-95 @Port John Expressway

"ATMS" Project Calculator	
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, Contigency)	\$ 39,553.03
	INPUT
Fiber Optic (in miles)	0.25
No. of Traffic Signals	C
No. of ADMS	C
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%
	TOTAL
No. of CCTV Cameras	C
No. of Roadside Units/Bluetooth	C
No. of Midblock Detectors	C
No. of Controllers	C
No. of Controller Cabinet Assemblies	0
No. of Video Detection Systems	C
No. of Network Connections	0

"INTERSTATE" Project Calculator	
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, Contigency)	\$ 289,663.29
	INPUT
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
	TOTAL
No. of Wrong Way Driving Systems	2
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
•	INPUT
No. of Key Decision Points / Intersections	C

"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, Contigency)	\$
	INPUT
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	FA	\$ 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, Fat, Optical, Cabinet Electronics 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
671-2-11	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	*	EA	\$ 66.024.43
	DMS Support Structure, Cantilever 31-40 FT		
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 Beacns	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

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

Project 207: I-95 @ SR 524

"ATMS" Project Calculator	
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, Contigency)	\$ 39,553.03
	INPUT
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%
	TOTAL
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

\$ 36,811.86
\$ 23,007.41
\$ 184,059.28
\$ 289,663.29
INPUT
2
2
NO
NO
NO
TOTAL
2
-
-
-
\$

"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, Contigency)	\$ -
	INPUT
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized) No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
	0 0 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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9.352.32
700-2-16	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-6-12	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 4,072.57
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76
. 00 0.100		ᅜ	ψ UZ,U1 Z.1 U

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

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

Project 208: I-95 @ SR 520

"ATMS" Project Calculator	
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, Contigency)	\$ 39,553.03
Erosion and Sediment Control, Contigency)	
	INPUT
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%
	TOTAL
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:	\$ 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, Contigency)	\$ 289,663.29
	INPUT
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
	TOTAL
No. of Wrong Way Driving Systems	2
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, Contigency)	\$ -
	INPUT
AL CICCHAR MAIL AND A MAIL A CONTRACTOR	
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "A" - Venicle-to-Venicle (unsignalized)	0
	0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized) No. of Kit "B" - Vehicle-to-Vehicle (signalized) No. of Kit "C" - Vehicle-to-Bicycle	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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9.352.32
700-2-16	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-6-12	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 4,072.57
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76
. 00 0.100		ᅜ	ψ UZ,U1 Z.1 U

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

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

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

"ATMS" Project Calculator	
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, Contigency)	\$ 39,553.03
	INPUT
Fiber Optic (in miles)	0.25
No. of Traffic Signals	(
No. of ADMS	(
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%
	TOTAL
No. of CCTV Cameras	(
No. of Roadside Units/Bluetooth	(
No. of Midblock Detectors	(
No. of Controllers	(
No. of Controller Cabinet Assemblies	(
No. of Video Detection Systems	(
No. of Network Connections	(

"INTERSTATE" Project Calculator	
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, Contigency)	\$ 550,761.01
	INPUT
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
	TOTAL
No. of Wrong Way Driving Systems	2
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	2

"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, Contigency)	\$ -
	INPUT
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

\$ -
\$
\$
\$ -
INPUT
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, Contigency)	\$
	INPUT
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 Beacns	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

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

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

"ATMS" Project Calculator	
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, Contigency)	\$ 39,553.03
	INPUT
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%
	TOTAL
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:	\$ 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, Contigency)	\$ 289,663.29
	INPUT
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
	TOTAL
No. of Wrong Way Driving Systems	2
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-2-16	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-6-12	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
100-0-133	From Access Dynamic Message Sign, Fall W/ UPS, Full Color, 51-100 SF	EA	φ 52,512./b

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

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

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

"ATMS" Project Calculator	
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, Contigency)	\$ 39,553.03
	INPUT
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%
	TOTAL
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:	\$ 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, Contigency)	\$ 289,663.29
	INPUT
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
	TOTAL
No. of Wrong Way Driving Systems	2
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, Contigency)	
	INPUT
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-2-10	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	FA	\$ 52,572.76
100-0-100	Tions nocess by natific intessage sign, rail with ors, rull color, 51-100 SF	EM	\$ 52,512.10

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

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

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

"ATMS" Project Calculator	
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, Contigency)	\$ 39,553.03
	INPUT
Fiber Optic (in miles)	0.25
No. of Traffic Signals	C
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%
	TOTAL
No. of CCTV Cameras	C
No. of Roadside Units/Bluetooth	C
No. of Midblock Detectors	C
No. of Controllers	C
No. of Controller Cabinet Assemblies	C
No. of Video Detection Systems	C
No. of Network Connections	C

"INTERSTATE" Project Calculator	
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, Contigency)	\$ 289,663.29
	INPUT
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
	TOTAL
No. of Wrong Way Driving Systems	2
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, Contigency)	\$ -
	INPUT
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 Nit C - Verlicie-to-Dicycle	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, Contigency)	\$ -
	INPUT
No. of Key Decision Points / Intersections	(

"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, Contigency)	\$
	INPUT
No. of Parking Stalls	0

6302-11 Conduit, Fâl, Directional Bore LF \$ 7.13 6302-21 Conduit, Fâl, Directional Bore LF \$ 21.37 632-7-1 Signal Cable - New or Reconstructed Intersection, Fâl PI \$ 5,786.13 633-1-123 Fiber Optic Cable, Fâl, Underground Cable, 48-96 LF \$ 3.9.07 633-3-15 Fiber Optic Connection, Install, Splice EA \$ 39.07 633-3-15 Fiber Optic Connection Hardware, Fâl, Splice Enclosure EA \$ 899.92 633-3-15 Fiber Optic Connection Hardware, Fâl, Poter Principle Principle Connection Hardware, Fâl, Poter Principle Principle Principle P	Pay Item	Description	Unit	Unit Cost
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 \$ 899.92 633-3-11 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 \$ 732.88 635-2-12 Pull & Splice Box, F&I, 3" X-24" EA \$ 1,266.36 635-2-11 Pull & Splice Box, F&I, 30" X-30" Rectangular or 36" Round EA \$ 1,266.36 635-2-11 Pull & Splice Box, F&I, 30" X-30" Rectangular or 36" Round EA \$ 2,365.36 639-1-111 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-10 Electrical Service Wire, F&I FAI Yel Power Service, FAI <t< td=""><td>630-2-11</td><td>Conduit, F&I, Open Trench</td><td>LF</td><td>\$ 7.13</td></t<>	630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
Sa3-1-123 Fiber Optic Cable, F&I, Underground Cable, 48-96	630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
Fiber Optic Connection, Install, Splice	632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
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, 137 V.X EA \$ 1,265.36 635-2-12 Pull & Splice Box, F&I, 247 V.36° EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 307 V.80° Rectangular or 36° Round EA \$ 2,384.57 6393-111 Electrical Service Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,385.34 642-2-10.1 Stele Mast Arm Assembly, F&I, 30° Single AS \$ 35,775.62 659-2-10.2 Verbicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 780.00 660-1-11 Verbicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 780.00 660-2-10.2 Loop Assembly, F&I, Type B <td< td=""><td>633-1-123</td><td>Fiber Optic Cable, F&I, Underground Cable, 48-96</td><td>LF</td><td>\$ 3.34</td></td<>	633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
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, 13" X 24" EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 20" X 36" EA \$ 1,265.36 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,880.00 639-1-11 Electrical Service Wire, F&I LF \$ 7.17 639-2-11 Electrical Service Wire, F&I LF \$ 7.17 639-1-12 Electrical Service Wire, F&I LF \$ 7.17 639-2-11 Electrical Service Wire, F&I Pull Pedestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,325.34 642-21-01 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 650-1-13 Vehicular Traffic Singla, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-3-10 Loop A	633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
635-2-11 Pull & Splice Box, F&I, 13" X 24" Services EA \$ 732.68 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 639-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 2,384.57 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,3283.74 646-2-15 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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type B EA \$ 780.26 660-3-12 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 \$ 1,251.71 66	633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
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 \$ 2,384.57 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 642-2-15 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 649-2-10-1 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 650-1-11 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 \$ 4,128.33 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,751.			EA	
635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Wire, F&I F 7.17 639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,385.34 642-2-15 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 \$ 790.00 660-3-10 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 3,228.73 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA				
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 \$ 7.17 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.34 641-2-15 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283.74 646-2-115 Aluminum Pole - Index 695-001, F&I, 20° EA \$ 2,166.50 649-2-1-01 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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 660-2-101 Loop Desembly, F&I, Type B EA \$ 790.00 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-10 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 660-4-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 3,251.49 <		Pull & Splice Box, F&I, 24" X 36"		
Electrical Service Wire, F&I LF \$ 7.17	635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	
639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-12 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 646-2-115 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 \$ 790.00 660-1-101 Loop Detector Inductive, F&I, Type P0 EA \$ 389.94 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 170.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 4,122.36 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.31 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.41 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equip				
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 \$ 35,775.52 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-101 Loop Desetch Inductive, F&I, Type 10 EA \$ 389.94 660-1-110 Loop Desetch Inductive, F&I, Type 10 EA \$ 390.94 660-1-11 Uebicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.26 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,128.33 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 660-4-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment				
641-2-13		* *		
646-2-115 Aluminum Pole - Index 695-001, Fål, 20° EA \$ 2,166.50 649-2-1-01 Steel Mast Arm Assembly, Fål, 30° Single AS \$ 35,775.52 650-1-13 Vehicular Traffic Signal, Fål, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-10 Loop Detector Inductive, Fål, Type 10 EA \$ 389.94 660-2-102 Loop Assembly, Fål, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, Fål, Above Ground Equipment EA \$ 4,128.33 660-3-12 Vehicle Detection System-Microwave, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 3,1971.31 660-4-12 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 3,1971.31 660-1-13 Signal Priority and Preemption System, Fål, Optical, Detector EA \$ 3,1971.31 663-1-13 Pedestrian Detector, Fål, Passive Pede	641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
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-Wickoe, F&I, Cabinet Equipment EA \$ 8,228.73 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 176.71-79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Signal Priority and Preemption Sy	641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
660-1-13	646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
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 \$ 9,515.49 660-4-12 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 \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,1971.31 663-1-13 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 13,971.31 663-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, NEMA, Two Preemption Plans AS \$ 327,645.38 670-5-140 Traffic Controller As	649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
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 \$ 8,228.73 660-4-12 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-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Video, F&I, Detection EA \$ 3,197.14 660-1-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 1,714.44 660-1-13 Pedestrian Detection EA \$ 1,714.44 665-1-13 Pedestrian Detection EA	650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
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 \$ 8,228.73 660-3-11 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 \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 9,751.79 660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detector EA \$ 1,714.44 665-1-12 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, Modify EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-121 ITS Cabinet, F&I,	660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 8.228.73 660-4-12 Vehicle Detection System-Video, F&I, Cabrinet Equipment EA \$ 9.515.49 660-4-12 Vehicle Detection System-Video, F&I, Cabrinet Equipment EA \$ 9.515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,971.37 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,971.79 660-7-11 Vehicle Detection System-Video, F&I, Detector EA \$ 1,971.34 663-1-111 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,740.44 665-1-12 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 \$ 27,645.38 670-5-140 Traffic Controller Assembly, F&I, in Existing Cabinet, NEMA EA \$ 1,942.50 671-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,890.00	660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
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 \$ 31,971.31 660-7-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 31,971.31 663-1-111 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 Assembly, Modify EA \$ 1,942.50 671-2-12 Traffic Controller Modify EA \$ 1,940.50 676-2-112 TrS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 1,890.00 677-2-11 TrS Cabinet, F&I, Pole Mount, 34	660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
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 \$ 31,971.31 663.7-111 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 3,752.44 663.1-112 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 \$ 32,011.37 670-5-400 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, Modify EA \$ 1,942.50 671-2-12 ITS Cobinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946.60 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 1,070.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 1,076.00 684-2-1 Device Server, F	660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-7-11	660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 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, Modify EA \$ 1,890.00 671-2-10 ITS Controller, Modify EA \$ 1,890.00 676-2-121 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, P, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&I EA <	660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
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 \$ 1,942.50 671-2-41 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,496.00 681-000 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 \$ 3,792.46 685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,645.12	660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
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 \$ 1,942.50 671-2-41 Traffic Controller Modify EA \$ 1,942.50 671-2-21 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 3366, 24" X 46" 22" EA \$ 9,806.00 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 1,700.00 682-1-113 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 \$ 3,800.00 685-3-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,845.12	663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5.752.44
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 Modify EA \$ 1,942.50 671-2-21 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 \$ 10,176.47 684-2-1 Device Server, F&I EA \$ 778.37 685-3-1-3 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,554.51 695-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 6,624.43 700-11-1	663-1-112		EA	
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 \$ 1,900.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-10 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 Device Server, F&I EA \$ 3,792.46 684-2-1 Device Server, F&I EA \$ 778.37 685-1-31 Remote Power Management Unit, F&I EA \$ 1,545.12 6958-8-11 Cellular Modern, F&I EA \$ 3,000.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66.024.43 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.85 700-11-2 Sign Beacon, F&	665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-11 Traffic Controller without Cabinet, F&l in Existing Cabinet, NEMA EA \$ 4,500.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&l, 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&l, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&l EA \$ 3,792.46 684-3-1 Device Server, F&l EA \$ 778.37 685-3-1 Remote Power Management Unit, F&l EA \$ 1,545.12 695-8-11 Cellular Modern, F&l EA \$ 1,545.12 695-8-11 Cellular Modern, F&l EA \$ 3,000.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66.024.43 700-11-1 Electronic Display Sign, F&l, Ground Mount, Blankout Sign, 48" X 48" AS	670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
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 \$ 3,792.46 684-1-1 Device Server, F&I EA \$ 778.37 685-1-31 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 6958-8-11 Cellular Modern, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.43 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.85 700-11-2 Sign Beacon, F&I, Ground Mount, AD Powered, Two Beacns AS \$ 3,948.03 70	670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
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, P, 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 \$ 7783.7 685-1-13 Uninterrupitible 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 \$ 6,754.85 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 6,754.85 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948.03 <td< td=""><td>670-5-400</td><td>Traffic Controller Assembly, Modify</td><td>EA</td><td>\$ 1,942.50</td></td<>	670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
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 \$ 6,832.21 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modern, 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 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,348.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, MOUNT- AC POWERED, 12-20 SF AS \$ 9,352.32 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF EA \$ 1,000.00 <td>671-2-11</td> <td></td> <td>EA</td> <td>\$ 4,500.00</td>	671-2-11		EA	\$ 4,500.00
681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 6821-1113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 3,792.46 684-1-1 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 6958-8-11 Cellular Modern, 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 Sign Beacon, F&I, Ground Mount, AD Powered, Two Beacns 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, wio UPS, F&III Color, 12-20 SF EA \$ 17,000.00 <td>671-2-40</td> <td>Traffic Controller, Modify</td> <td>EA</td> <td>\$ 1,890.00</td>	671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, 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 6958-8-11 Cellular Modern, 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, AD Powered, Two Beacns AS \$ 3,948.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352.32 700-12-12 Embedded Dynamic Message Sign, F&I, Wio UPS, Full Color, 12-20 SF EA \$ 17,000.	676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
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, Ground Mount, Blankout Sign, 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AP Powered, Two Beacns 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, F&II Color, 12-20 SF EA \$ 17,000.00	682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
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 Modern, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.43 700-11-12 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 Beacns 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	684-1-1		EA	
685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modern, 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 Beacns 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, Wo UPS, F&II Color, 12-20 SF EA \$ 17,000.00	684-2-1	Device Server, F&I	EA	\$ 778.37
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 \$ 6,254.85 700-12-12 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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
695-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantiliever 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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
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 Beacns 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, wlo UPS, Full Color, 12-20 SF EA \$ 17,000.00	695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
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 Beacns 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, wlo UPS, Full Color, 12-20 SF EA \$ 17,000.00	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 \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00			AS	
700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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				
700-2-16 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		1 7 0 7 7		
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		• • • • • • • • • • • • • • • • • • • •		
700-7-232 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				
	700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

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

Project 213: I-95 @ Palm Bay Rd

"ATMS" Project Calculator	
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, Contigency)	\$ 39,553.03
	INPUT
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%
	TOTAL
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		
•	•	20,044,00
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, Contigency)	\$	289,663.29
		INPUT
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
		TOTAL
No. of Wrong Way Driving Systems		2
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Key Decision Points / Intersections	(

"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, Contigency)	\$
	INPUT
No. of Parking Stalls	0

6302-211 Conduit, F&I, Directional Bore LF \$ 7.13 6302-212 Conduit, F&I, Directional Bore LF \$ 21.37 6327-71 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 \$ 3.34 633-3-15 Fiber Optic Connection, Install, Splice EA \$ 39.07 633-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 899.92 633-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 1,801.53 633-2-11 Pull & Splice Box, F&I, 13" X 24" EA \$ 1,805.36 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 2,345.75 639-1-111 Electrical Power Service, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-1-111 Electrical Service Disconnect, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-1-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 6412-211 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.34	Pay Item	Description	Unit	Unit Cost
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 \$ 899.92 633-2-11 Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel EA \$ 1,801.63 633-2-12 Pull & Splice Box, F&I, 13" X-24" EA \$ 732.88 635-2-12 Pull & Splice Box, F&I, 3" X-24" EA \$ 1,266.36 635-2-11 Pull & Splice Box, F&I, 30" X-30" Rectangular or 36" Round EA \$ 1,266.36 635-2-12 Pull & Splice Box, F&I, 30" X-30" Rectangular or 36" Round EA \$ 2,365.00 639-1-111 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,880.00 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,328.37 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal	630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
Sa3-1-123 Fiber Optic Cable, F&I, Underground Cable, 48-96	630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
Sa32-311 Fiber Optic Connection, Install, Splice EA \$ 899.92	632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
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, 137 × 24 EA \$ 7,226 635-2-12 Pull & Splice Box, F&I, 247 × 36° EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 307 × 60° Rectangular or 36° Round EA \$ 2,384.57 639-1-11 Electrical Service Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-III Pedestal EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-III Pedestal EA \$ 1,385.34 642-2-10.1 Steel Mast Arm Assembly, F&I, 30° Single AS \$ 35,775.62 649-2-10.1 Steel Mast Arm Assembly, F&I, Type 10 EA \$ 389.94 660-1-11 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 780.00 660-2-102 Loop Assembly, F&I, Type B EA \$ 780	633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
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 2" EA \$ 732.68 635-2-12 Pull & Splice Box, F&I, 13" X 2" EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-1-11 Electrical Service Wire, F&I LF \$ 7.17 639-2-1 Electrical Service Wire, F&I LF \$ 7.17 639-2-1 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-IIP Pedestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,385.34 642-2-15 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 642-2-10 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 \$ 790.00 660-3-10 Loop Detector Inductive, F&I, Type 10 EA \$ 3,89.4 660-3-11 Vehicle Detec	633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
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 \$ 1,265.36 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 639-2-11 PUIL & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,32,83.76 641-2-15 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,32,83.76 641-2-15 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.52 650-1-10 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 650-1-11 Loop Detector Inductive, F&I, Type B EA \$ 790.00 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 1,22.26 660-3-11 Vehicle Detection	633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
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 \$ 2,384.57 639-2-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 646-2-115 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 649-2-101 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.5c 650-1-13 Vehicular Traffic Signal, F&I, Murninum, Z Section, 1-2 Ways EA \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 660-2-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 4,128.33 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Wideo, F&I, Dove Ground Equipment	633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
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 FA 7.17 639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,385.34 642-2-15 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 649-2-1-01 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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type F EA \$ 780.26 660-1-11 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 3,221.37 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,275.49	635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
639-1-111 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 6392-21 Electrical Service Wire, F&I LF \$ 7.17 6393-211 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.34 641-2-15 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 \$ 790.00 660-1-10 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 \$ 780.26 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,251.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,191.31	635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
Electrical Service Wire, F&I Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.66	635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	
639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-12 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 \$ 1,328.37 646-2-15 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 \$ 790.00 660-2-102 Loop Detector Inductive, F&I, Type PI EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 1,228 660-3-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,1971.31 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,1971.31 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,1971.31 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipmen	639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
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 \$ 35,775.52 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 6601-1-10 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 6602-102 Loop Assembly, F&I, Type B EA \$ 780.26 6603-311 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 660-3-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 8,228.73 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,1971.31 660-4-12 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 660-4-12 Vehicle Detection System-FWrong Way for Exit Ramp, 1 or 2 Lanes <	639-2-1	Electrical Service Wire, F&I		
641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283.74 646-2-1101 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 \$ 790.00 660-1-10 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 \$ 780.26 660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,751.79 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,751.54 660-4-12 Vehicle Detection System-Video, F&I, Optical, Detector EA \$ 31,91.31 660-1-13 Predestrian Detector EA \$ 31,91.31 <td>639-3-11</td> <td>Electrical Service Disconnect, F&I, Pole Mount</td> <td>EA</td> <td>\$ 1,378.56</td>	639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
646-2-115 Aluminum Pole - Index 695-001, Fål, 20° EA \$ 2,166.50 649-21-01 Steel Mast Arm Assembly, Fål, 30° Single AS \$ 35,775.52 6501-13 Vehicular Traffic Signal, Fål, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 6601-310 Loop Detector Inductive, Fål, Type 10 EA \$ 389.94 6602-102 Loop Assembly, Fål, Type B EA \$ 780.26 6603-31 Vehicle Detection System-Microwave, Fål, Cabinet Equipment EA \$ 4,128.33 6603-41 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 9,515.49 6604-41 Vehicle Detection System-Video, Fål, Above Ground Equipment EA \$ 9,515.49 6604-11 Vehicle Detection System-Video, Fål, Above Ground Equipment EA \$ 31,971.31 6604-12 Vehicle Detection System-Video, Fål, Above Ground Equipment EA \$ 3,1971.31 6603-11 Signal Priority and Preemption System, Fål, Optical, Detector EA \$ 3,1971.31 663-1-113 Signal Priority and Preemption System, Fål, Optical, Detector EA \$ 1,744.44 665-1-13 Pedestrian Detector, Fål, Passive Pedestrian Detectio	641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
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 \$ 9,515.49 660-4-11 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-Video, F&I, Above Ground Equipment EA \$ 131.971.31 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 31.971.31 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 31.971.31 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 31.971.31 660-7-12 Signal Priority and Preemptio	641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 660-2-102 Loop Desembly, 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, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Wirdeo, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Wirdeo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-4-12 Vehicle Detection System-Wirdeo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Wirdeo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Mirdeo EA \$ 4,751.79 660-7-11 Vehicle Detection System-Mirdeo <td>646-2-115</td> <td>Aluminum Pole - Index 695-001, F&I, 20'</td> <td>EA</td> <td>\$ 2,166.50</td>	646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
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 \$ 1,28.33 660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 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 \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-1-11 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,971.44 663-1-111 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,744.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,744.44 665-1-14 Traffic Controller Assembly, F&I, NEMA, Two Preemption AS \$ 27,645.38 670-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 670-5-140 Traffic Controller	649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 6603-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 6603-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 8,228.73 6604-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 6604-12 Vehicle Detection System-Wideo, F&I, Cabinet Equipment EA \$ 4,751.79 6607-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 6607-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 6607-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 31.971.31 6607-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 31.971.31 661-12 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,704.00 670-5-140 Traffic Controller Assembly, F&I, NEMA Two Preemption Plans AS \$ 27,645.38 670-5	650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
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 \$ 8,228.73 660-3-11 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 \$ 9,515.49 660-4-11 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 660-1-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detector EA \$ 1,714.44 665-1-12 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, Modify EA \$ 1,890.00 671-2-11 ITS C	660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 8,228.73 660-4-12 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 \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,971.31 660-4-12 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 1,971.31 6603-1-111 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,774.44 663-1-131 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, NEMA, Two Preemption Plans AS \$ 32,011.37 670-5-140 Traffic Controller Assembly, F&I, NeMA Two Preemption Plans AS \$ 27,645.38 670-5-140 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 670-5-140 Traffic Controller Assembly, F&I, including FAI including Plant	660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
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 \$ 31,971.31 663-1-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 1,771.44 663-1-131 Pedestrian Detector, F&I, Passive Pedestrian Detection 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 Assembly, Modify EA \$ 1,942.50 671-2-12 Traffic Controller Modify EA \$ 1,942.50 676-2-112 Tis Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,46.60 681-000 Connected Vehicle Equipment, Roadside Unit	660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 6607-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 5,752.44 665-1-13 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, NEMA, Two Preemption AS \$ 27,645.38 670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,942.50 671-2-211 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946.60 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 1,01.76.47 684-2-1 Device Server, F&I </td <td>660-3-12</td> <td>Vehicle Detection System-Microwave, F&I, Above Ground Equipment</td> <td>EA</td> <td>\$ 8,228.73</td>	660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
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, Model 2070, 1 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, Modify EA \$ 1,890.00 671-2-10 ITS Cobinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946.60 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-11 ITS COTV Camera, F&I, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&I EA \$ 7,792.46 685-3-1 Remote Power Management Unit, F&I EA <td>660-4-11</td> <td>Vehicle Detection System-Video, F&I, Cabinet Equipment</td> <td>EA</td> <td>\$ 9,515.49</td>	660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
6607-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 6631-111 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 5,752.44 6631-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 6651-13 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, Modify EA \$ 1,942.50 671-2-10 ITS Cotrolroller, Modify EA \$ 1,890.00 670-2-121 ITS Cabinet, F&I, Pole Mount, 336S, 24* X 46* 22* EA \$ 9,466.80 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&I EA <td< td=""><td>660-4-12</td><td>Vehicle Detection System-Video, F&I, Above Ground Equipment</td><td>EA</td><td>\$ 4,751.79</td></td<>	660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
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 \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,4500.00 670-5-140 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 22,645.38 670-5-400 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 \$ 1,890.00 671-2-41 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 TIS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946.60 681-000 Connected Vehicle Equipment, Readside Unit EA \$ 1,754.47 684-11 Managed Field Ethernet Switch, F&I EA \$ 1,764.74 684-1-1 Device Server, F&I EA \$ 3,792.46	660-7-11		EA	\$ 31.971.31
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 \$ 1,942.50 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,466.00 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,760.47 684-2-1 Device Senver, F&I EA \$ 3,792.46 685-3-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$	663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5.752.44
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, Modify EA \$ 1,942.50 671-2-10 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 8,946.00 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 ITS CCTV Camera, F&I, Done Enclosure PTZ, IP, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&I EA \$ 778.37 685-3-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 3,500.00 685-3-1 Remote Power Management Unit, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.43 700-11				
Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	665-1-13	0 , , , , , , , , , , , , , , , , , , ,	EA	
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 \$ 1,890.00 671-2-10 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,946.60 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-1-1 Device Server, F&I EA \$ 3,792.46 684-2-1 Device Server, F&I EA \$ 778.37 685-1-31 Remote Power Management Unit, F&I EA \$ 6,832.51 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 6958-8-11 Cellular Modem, F&I EA \$ 3,000.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66.024.43 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.85 700-11-2 Sign Beacon, F&I, Ground Mount, AD Powered,	670-5-112		AS	
671-2-11 Traffic Controller without Cabinet, F&l in Existing Cabinet, NEMA EA \$ 4,500.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&l, 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&l, Dome Enclosure PTZ, IP, High-Definition EA \$ 10,176.47 684-1-1 Managed Field Ethernet Switch, F&l EA \$ 3,792.46 684-2-1 Device Server, F&l EA \$ 778.37 685-1-31 Uninterruptible Power Supply, F&l, Line Interactive with Cabinet EA \$ 6,832.51 685-3-1 Remote Power Management Unit, F&l EA \$ 1,545.12 6958-8-11 Cellular Modern, F&l 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&l, Ground Mount, Blankout Sign , 48" X 48" AS \$ 6,254.85 700-12-12 Sign Beacon, F&l, Ground Mount, Borneed, Two Beacns AS \$ 3,948.03 700-	670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
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 \$ 7783.7 685-1-13 Uninterrupitble Power Supply, F&I, Line Interactive with Cabinet EA \$ 7,832.51 685-3-1 Remote Power Management Unit, F&I EA \$ 3,500.00 695-8-11 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 \$ 6,254.85 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352.32 700-6-12	670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
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 \$ 6,254.65 700-11-2 Sign Beacon, F&I, Ground Mount, AP Powered, Two Beacns AS \$ 7,122.87 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,382.32 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF EA \$ 4,072.57	671-2-11	Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
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 \$ 778.37 685-1-3 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 6958-8-11 Cellular Modern, 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, Ground Mount, Blankout Sign, 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AD Powered, Two Beacns AS \$ 3,948.03 700-2-16 Multi-Post 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 \$	671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
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 \$ 778.37 685-1-31 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,545.12 685-8-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modern, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 660.024.43 700-11-1 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 6,254.85 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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	676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
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 \$ 6,254.85 700-12-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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	681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
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, AP Powered, Two Beacns 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, wio UPS, Full Color, 12-20 SF EA \$ 17,000.00	682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
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 Modern, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.43 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.85 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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	684-1-1	Managed Field Ethernet Switch, F&I	EA	\$ 3,792.46
685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modern, 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 Beacns 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	684-2-1	Device Server, F&I	EA	\$ 778.37
695-8-11 Cellular Modern, 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 Beacns AS \$ 3,348.03 700-2-16 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	685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
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 Beacns 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	685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
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 Beacns 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	700-10-123	DMS Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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	700-11-1	Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
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	700-11-2	Electronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
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	700-12-12	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
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	700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-7-232 Embedded Dynamic Message Sign, F&I, w/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				
	700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

Contingency	159
Maintenance of Traffic	109
Mobilization	109
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5

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

"ATMS" Project Calculator		
Design / Engineering Cost:	65	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, Contigency)	\$	39,553.03
		INPUT
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%
		TOTAL
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:	\$ 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, Contigency)	\$ 289,663.29
	INPUT
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
	TOTAL
No. of Wrong Way Driving Systems	2
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, Contigency)	\$ -
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
	0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized) No. of Kit "B" - Vehicle-to-Vehicle (signalized) No. of Kit "C" - Vehicle-to-Bicycle	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, Contigency)	\$ -
	INPUT
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, Contigency)	\$
	INPUT
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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-2-10	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	FA	\$ 52,572.76
100-0-100	Tions nocess by natific intessage sign, rail with ors, rull color, 51-100 SF	EM	\$ 52,512.10

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

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

Project 215: I-95 @ Vierra Blvd

"ATMS" Project Calculator	
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, Contigency)	\$ 39,553.03
	INPUT
Fiber Optic (in miles)	0.25
No. of Traffic Signals	C
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%
	TOTAL
No. of CCTV Cameras	C
No. of Roadside Units/Bluetooth	C
No. of Midblock Detectors	C
No. of Controllers	C
No. of Controller Cabinet Assemblies	C
No. of Video Detection Systems	C
No. of Network Connections	C

"INTERSTATE" Project Calculator	
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, Contigency)	\$ 289,663.29
	INPUT
Number of Off-Ramps	2
Number of On-Ramps	2
Mainline Congestion from On-Ramp?	NC
Mainline Congestion from Off-Ramp?	NC
Geometric Concerns for Truck Speed on Off-Ramp?	NO
	TOTAL
No. of Wrong Way Driving Systems	2
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Key Decision Points / Intersections	(

"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, Contigency)	\$
	INPUT
No. of Parking Stalls	0

6302-11 Conduit, Fâl, Directional Bore LF \$ 7.13 6302-21 Conduit, Fâl, Directional Bore LF \$ 21.37 632-7-1 Signal Cable - New or Reconstructed Intersection, Fâl PI \$ 5,786.13 633-1-123 Fiber Optic Cable, Fâl, Underground Cable, 48-96 LF \$ 3.9.07 633-3-15 Fiber Optic Connection, Install, Splice EA \$ 39.07 633-3-15 Fiber Optic Connection Hardware, Fâl, Splice Enclosure EA \$ 899.92 633-3-15 Fiber Optic Connection Hardware, Fâl, Poter Principle Principle Connection Hardware, Fâl, Poter Principle Principle Principle P	Pay Item	Description	Unit	Unit Cost
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 \$ 899.92 633-3-11 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 \$ 732.88 635-2-12 Pull & Splice Box, F&I, 3" X-24" EA \$ 1,266.36 635-2-11 Pull & Splice Box, F&I, 30" X-30" Rectangular or 36" Round EA \$ 1,266.36 635-2-11 Pull & Splice Box, F&I, 30" X-30" Rectangular or 36" Round EA \$ 2,365.36 639-1-111 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-10 Electrical Service Wire, F&I FAI Yel Power Service, FAI <t< td=""><td>630-2-11</td><td>Conduit, F&I, Open Trench</td><td>LF</td><td>\$ 7.13</td></t<>	630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
Sa3-1-123 Fiber Optic Cable, F&I, Underground Cable, 48-96	630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
Fiber Optic Connection, Install, Splice	632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
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, 137 V.X EA \$ 1,265.36 635-2-12 Pull & Splice Box, F&I, 247 V.36° EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 307 V.80° Rectangular or 36° Round EA \$ 2,384.57 6393-111 Electrical Service Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,385.34 642-2-10.1 Stele Mast Arm Assembly, F&I, 30° Single AS \$ 35,775.62 659-2-10.2 Verbicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 780.00 660-1-11 Verbicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 780.00 660-2-10.2 Loop Assembly, F&I, Type B <td< td=""><td>633-1-123</td><td>Fiber Optic Cable, F&I, Underground Cable, 48-96</td><td>LF</td><td>\$ 3.34</td></td<>	633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
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, 13" X 24" EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 20" X 36" EA \$ 1,265.36 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,880.00 639-1-11 Electrical Service Wire, F&I LF \$ 7.17 639-2-11 Electrical Service Wire, F&I LF \$ 7.17 639-1-12 Electrical Service Wire, F&I LF \$ 7.17 639-2-11 Electrical Service Wire, F&I Pull Pedestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,325.34 642-21-01 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 650-1-13 Vehicular Traffic Singla, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-3-10 Loop A	633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
635-2-11 Pull & Splice Box, F&I, 13" X 24" Services EA \$ 732.68 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 639-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 2,384.57 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,3283.74 646-2-15 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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type B EA \$ 780.26 660-3-12 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 \$ 1,251.71 66	633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
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 \$ 2,384.57 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 642-2-15 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 649-2-10-1 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 650-1-11 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 \$ 4,128.33 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,751.			EA	
635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Wire, F&I F 7.17 639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,385.34 642-2-15 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 \$ 790.00 660-3-10 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 3,228.73 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA				
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 \$ 7.17 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.34 641-2-15 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283.74 646-2-115 Aluminum Pole - Index 695-001, F&I, 20° EA \$ 2,166.50 649-2-1-01 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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 660-2-101 Loop Desembly, F&I, Type B EA \$ 790.00 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-10 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 660-4-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 3,251.49 <		Pull & Splice Box, F&I, 24" X 36"		
Electrical Service Wire, F&I LF \$ 7.17	635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	
639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-12 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 646-2-115 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 \$ 790.00 660-1-101 Loop Detector Inductive, F&I, Type P0 EA \$ 389.94 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 170.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 4,122.36 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.31 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.41 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equip				
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 \$ 35,775.52 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-101 Loop Desetch Inductive, F&I, Type 10 EA \$ 389.94 660-1-110 Loop Desetch Inductive, F&I, Type 10 EA \$ 390.94 660-1-11 Uebicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.26 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,128.33 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 660-4-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment				
641-2-13		* *		
646-2-115 Aluminum Pole - Index 695-001, Fål, 20° EA \$ 2,166.50 649-2-1-01 Steel Mast Arm Assembly, Fål, 30° Single AS \$ 35,775.52 650-1-13 Vehicular Traffic Signal, Fål, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-10 Loop Detector Inductive, Fål, Type 10 EA \$ 389.94 660-2-102 Loop Assembly, Fål, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, Fål, Above Ground Equipment EA \$ 4,128.33 660-3-12 Vehicle Detection System-Microwave, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 3,1971.31 660-4-12 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 3,1971.31 660-1-13 Signal Priority and Preemption System, Fål, Optical, Detector EA \$ 3,1971.31 663-1-13 Pedestrian Detector, Fål, Passive Pede	641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
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-Wickoe, F&I, Cabinet Equipment EA \$ 8,228.73 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 176.71-79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Signal Priority and Preemption Sy	641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
660-1-13	646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
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 \$ 9,515.49 660-4-12 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 \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,1971.31 663-1-13 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 13,971.31 663-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, NEMA, Two Preemption Plans AS \$ 327,645.38 670-5-140 Traffic Controller As	649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
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 \$ 8,228.73 660-4-12 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-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Video, F&I, Detection EA \$ 3,197.14 660-1-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 1,714.44 660-1-13 Pedestrian Detection EA \$ 1,714.44 665-1-13 Pedestrian Detection EA	650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
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 \$ 8,228.73 660-3-11 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 \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 9,751.79 660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detector EA \$ 1,714.44 665-1-12 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, Modify EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-121 ITS Cabinet, F&I,	660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 8.228.73 660-4-12 Vehicle Detection System-Video, F&I, Cabrinet Equipment EA \$ 9.515.49 660-4-12 Vehicle Detection System-Video, F&I, Cabrinet Equipment EA \$ 9.515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,971.37 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,971.79 660-7-11 Vehicle Detection System-Video, F&I, Detector EA \$ 1,971.34 663-1-111 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,740.44 665-1-12 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 \$ 27,645.38 670-5-140 Traffic Controller Assembly, F&I, in Existing Cabinet, NEMA EA \$ 1,942.50 671-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,890.00	660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
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 \$ 31,971.31 660-7-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 31,971.31 663-1-111 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 Assembly, Modify EA \$ 1,942.50 671-2-12 Traffic Controller Modify EA \$ 1,940.50 676-2-112 TrS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 1,890.00 677-2-11 TrS Cabinet, F&I, Pole Mount, 34	660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
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 \$ 31,971.31 663.7-111 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 3,752.44 663.7-112 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 \$ 32,011.37 670-5-400 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, Modify EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-121 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, Hig	660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-7-11	660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 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, Modify EA \$ 1,890.00 671-2-10 ITS Controller, Modify EA \$ 1,890.00 676-2-121 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, P, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&I EA <	660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
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 \$ 1,942.50 671-2-41 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,496.00 681-000 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 \$ 3,792.46 685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,645.12	660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
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 \$ 1,942.50 671-2-41 Traffic Controller Modify EA \$ 1,942.50 671-2-21 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 3366, 24" X 46" 22" EA \$ 9,806.00 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 1,700.00 682-1-113 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 \$ 3,800.00 685-3-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,845.12	663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5.752.44
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 Modify EA \$ 1,942.50 671-2-21 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 \$ 10,176.47 684-2-1 Device Server, F&I EA \$ 778.37 685-3-1-3 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,554.51 695-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 6,624.43 700-11-1	663-1-112		EA	
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 \$ 1,900.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-10 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 Device Server, F&I EA \$ 3,792.46 684-2-1 Device Server, F&I EA \$ 778.37 685-1-31 Remote Power Management Unit, F&I EA \$ 1,545.12 6958-8-11 Cellular Modern, F&I EA \$ 3,000.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66.024.43 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.85 700-11-2 Sign Beacon, F&	665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-11 Traffic Controller without Cabinet, F&l in Existing Cabinet, NEMA EA \$ 4,500.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&l, 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&l, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&l EA \$ 3,792.46 684-3-1 Device Server, F&l EA \$ 778.37 685-3-1 Remote Power Management Unit, F&l EA \$ 1,545.12 695-8-11 Cellular Modern, F&l EA \$ 1,545.12 695-8-11 Cellular Modern, F&l EA \$ 3,000.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66.024.43 700-11-1 Electronic Display Sign, F&l, Ground Mount, Blankout Sign, 48" X 48" AS	670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
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 \$ 3,792.46 684-1-1 Device Server, F&I EA \$ 778.37 685-1-31 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 6958-8-11 Cellular Modern, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.43 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.85 700-11-2 Sign Beacon, F&I, Ground Mount, AD Powered, Two Beacns AS \$ 3,948.03 70	670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
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, P, 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 \$ 7783.7 685-1-13 Uninterrupitible 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 \$ 6,754.85 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 6,754.85 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948.03 <td< td=""><td>670-5-400</td><td>Traffic Controller Assembly, Modify</td><td>EA</td><td>\$ 1,942.50</td></td<>	670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
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 \$ 6,832.21 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modern, 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 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,348.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, MOUNT- AC POWERED, 12-20 SF AS \$ 9,352.32 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF EA \$ 1,000.00 <td>671-2-11</td> <td></td> <td>EA</td> <td>\$ 4,500.00</td>	671-2-11		EA	\$ 4,500.00
681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 6821-1113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 3,792.46 684-1-1 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 6958-8-11 Cellular Modern, 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 Sign Beacon, F&I, Ground Mount, AD Powered, Two Beacns 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, wio UPS, F&III Color, 12-20 SF EA \$ 17,000.00 <td>671-2-40</td> <td>Traffic Controller, Modify</td> <td>EA</td> <td>\$ 1,890.00</td>	671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, 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 6958-8-11 Cellular Modern, 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, AD Powered, Two Beacns AS \$ 3,948.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352.32 700-12-12 Embedded Dynamic Message Sign, F&I, Wio UPS, Full Color, 12-20 SF EA \$ 17,000.	676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
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, Ground Mount, Blankout Sign, 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AP Powered, Two Beacns 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, F&II Color, 12-20 SF EA \$ 17,000.00	682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
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 Modern, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.43 700-11-12 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 Beacns 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	684-1-1		EA	
685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modern, 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 Beacns 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, Wo UPS, F&II Color, 12-20 SF EA \$ 17,000.00	684-2-1	Device Server, F&I	EA	\$ 778.37
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 \$ 6,254.85 700-12-12 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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
695-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantiliever 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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
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 Beacns 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, wlo UPS, Full Color, 12-20 SF EA \$ 17,000.00	695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
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 Beacns 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, wlo UPS, Full Color, 12-20 SF EA \$ 17,000.00	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 \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00			AS	
700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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				
700-2-16 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		1 7 0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		
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		• • • • • • • • • • • • • • • • • • • •		
700-7-232 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				
	700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

Contingency	159
Maintenance of Traffic	109
Mobilization	109
Erosion and Sediment Control	5%
Design / Engineering	20%
Construction Engineering and Inspection	12.5

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

"ATMS" Project Calculator	
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, Contigency)	\$ 39,553.03
	INPUT
Fiber Optic (in miles)	0.25
No. of Traffic Signals	C
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%
	TOTAL
No. of CCTV Cameras	C
No. of Roadside Units/Bluetooth	C
No. of Midblock Detectors	C
No. of Controllers	C
No. of Controller Cabinet Assemblies	C
No. of Video Detection Systems	C
No. of Network Connections	C

"INTERSTATE" Project Calculator	
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, Contigency)	\$ 289,663.29
	INPUT
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
	TOTAL
No. of Wrong Way Driving Systems	2
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$
	INPUT
No. of Parking Stalls	0

630-2-12 Cor 632-7-1 Sign 633-1-123 Fibe 633-2-31 Fibe 633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	iduit, F&I, Directional Bore and Cable - New or Reconstructed Intersection, F&I ar Optic Cable, F&I, Underground Cable, 48-96 ar Optic Connection, Install, Spice ar Optic Connection Hardware, F&I, Splice Enclosure ar Optic Connection Hardware, F&I, Preterminated Patch Panel & Splice Box, F&I, 13" X 24" & Splice Box, F&I, 24" X 36"	LF PI LF EA EA EA	\$ 7.13 \$ 21.37 \$ 5,796.13 \$ 39.07 \$ 899.92
632-7-1 Sign 633-1-123 Fibe 633-2-31 Fibe 633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	nal Cable - New or Reconstructed Intersection, F&I er Optic Cable, F&I, Underground Cable, 48-96 er Optic Connection, Install, Splice er Optic Connection Hardware, F&I, Splice Enclosure er Optic Connection Hardware, F&I, Preterminated Patch Panel I& Splice Box, F&I, 13" X 24"	PI LF EA EA	\$ 5,796.13 \$ 3.34 \$ 39.07
633-1-123 Fibe 633-2-31 Fibe 633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	er Optic Cable, F.&I, Underground Cable, 48-96 er Optic Connection, Install, Splice er Optic Connection Hardware, F.&I, Splice Enclosure er Optic Connection Hardware, F.&I, Preterminated Patch Panel 8. Splice Box, F.&I, 13" X 24"	LF EA EA	\$ 3.34 \$ 39.07
633-2-31 Fibe 633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	er Optic Connection, Install, Splice er Optic Connection Hardware, F&I, Splice Enclosure er Optic Connection Hardware, F&I, Preterminated Patch Panel l& Splice Box, F&I, 13" X 24"	EA EA	\$ 39.07
633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	er Optic Connection Hardware, F&I, Splice Enclosure er Optic Connection Hardware, F&I, Preterminated Patch Panel & Splice Box, F&I, 13" X 24"	EA EA	
633-3-15 Fibe 635-2-11 Pull	er Optic Connection Hardware, F&I, Preterminated Patch Panel & Splice Box, F&I, 13" X 24"	EA	\$ 899.92
635-2-11 Pull	& Splice Box, F&I, 13" X 24"		
	• • • •	EA	\$ 1,801.63
635_2_12 Doll	& Splice Box F&I 24" X 36"		\$ 732.68
	a opiloo Box, 1 at, 2.1 7/ 00	EA	\$ 1,265.36
635-2-13 Pull	& Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
	ctrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1 Elec	ctrical Service Wire, F&I	LF	\$ 7.17
	ctrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11 Pre	stressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13 Pre	stressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115 Alur	minum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01 Stee	el Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13 Veh	nicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110 Loo	p Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102 Loo	p Assembly, F&I, Type B	EA	\$ 780.26
660-3-11 Veh	nicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12 Veh	nicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11 Veh	nicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12 Veh	nicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11 Veh	nicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111 Sign	nal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
	nal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
-	lestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112 Trai	ffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140 Trat	ffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400 Trat	ffic Controller Assembly, Modify	EA	\$ 1,942.50
	ffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
	ffic Controller, Modify	EA	\$ 1.890.00
	Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
	nnected 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
	naged Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1 Dev	rice Server, F&I	EA	\$ 778.37
685-1-13 Unii	nterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1 Ren	note Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11 Cell	lular Modem, F&I	EA	\$ 3,500.00
	S Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
	ctronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
	ctronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
	n Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
	ti-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
	HLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
	bedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135 From	nt Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

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

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

"ATMS" Project Calculator		
Design / Engineering Cost:	65	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, Contigency)		118,659.09
		INPUT
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%
		TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
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:	\$ 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, Contigency)	\$ 270,314.46
	INPUT
No. of Key Decision Points / Intersections	4

"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, Contigency)	\$ -
	INPUT
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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9.352.32
700-2-16	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-6-12	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 4,072.57
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76
. 00 0.100		ᅜ	ψ UZ,U1 Z.1 U

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

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

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

"ATMS" Project Calculator	
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, Contigency)	\$ 158,212.11
	INPUT
Fiber Optic (in miles)	1
No. of Traffic Signals	(
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%
	TOTAL
No. of CCTV Cameras	C
No. of Roadside Units/Bluetooth	C
No. of Midblock Detectors	C
No. of Controllers	0
No. of Controller Cabinet Assemblies	C
No. of Video Detection Systems	C
No. of Network Connections	C

"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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
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:	\$ 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, Contigency)	\$ 135,157.23
	INPUT
No. of Key Decision Points / Intersections	2

"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, Contigency)	\$ -
	INPUT
No. of Parking Stalls	0

Pay Item	Description	Unit	Unit Cost
630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
630-2-11	Conduit, F&I, Open Trench Conduit, F&I, Directional Bore	LF	\$ 21.37
632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5.796.13
032-7-1	Signal Cable - New of Reconstructed Intersection, P&I	PI	\$ 5,790.13
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
000 1 10	1 caccatan Detector, 1 at, 1 accine 1 caccatan Detection		Ψ 4,000.00
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 Beacns	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
	, ,		,

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

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

"ATMS" Project Calculator	
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, Contigency)	\$ 79,106.06
	INPUT
Fiber Optic (in miles)	0.5
No. of Traffic Signals	C
No. of ADMS	C
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%
	TOTAL
No. of CCTV Cameras	C
No. of Roadside Units/Bluetooth	C
No. of Midblock Detectors	C
No. of Controllers	C
No. of Controller Cabinet Assemblies	C
No. of Video Detection Systems	C
No. of Network Connections	C

"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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
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	ì	
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, Contigency)	\$	405,471.69
		INPUT
No. of Key Decision Points / Intersections		6

"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, Contigency)	\$ -
	INPUT
No. of Parking Stalls	0

6302-11 Conduit, Fâl, Directional Bore LF \$ 7.13 6302-21 Conduit, Fâl, Directional Bore LF \$ 21.37 632-7-1 Signal Cable - New or Reconstructed Intersection, Fâl PI \$ 5,786.13 633-1-123 Fiber Optic Cable, Fâl, Underground Cable, 48-96 LF \$ 3.9.07 633-3-15 Fiber Optic Connection, Install, Splice EA \$ 39.07 633-3-15 Fiber Optic Connection Hardware, Fâl, Splice Enclosure EA \$ 899.92 633-3-15 Fiber Optic Connection Hardware, Fâl, Poter Principle Principle Connection Hardware, Fâl, Poter Principle Principle Principle P	Pay Item	Description	Unit	Unit Cost
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 \$ 899.92 633-3-11 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 \$ 732.88 635-2-12 Pull & Splice Box, F&I, 3" X-24" EA \$ 1,266.36 635-2-11 Pull & Splice Box, F&I, 30" X-30" Rectangular or 36" Round EA \$ 1,266.36 635-2-11 Pull & Splice Box, F&I, 30" X-30" Rectangular or 36" Round EA \$ 2,365.36 639-1-111 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-10 Electrical Service Wire, F&I FAI Yel Power Service, FAI <t< td=""><td>630-2-11</td><td>Conduit, F&I, Open Trench</td><td>LF</td><td>\$ 7.13</td></t<>	630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
Sa3-1-123 Fiber Optic Cable, F&I, Underground Cable, 48-96	630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
Fiber Optic Connection, Install, Splice	632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
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, 137 V.X EA \$ 1,265.36 635-2-12 Pull & Splice Box, F&I, 247 V.36° EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 307 V.80° Rectangular or 36° Round EA \$ 2,384.57 6393-111 Electrical Service Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,385.34 642-2-10.1 Stele Mast Arm Assembly, F&I, 30° Single AS \$ 35,775.62 659-2-10.2 Verbicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 780.00 660-1-11 Verbicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 780.00 660-2-10.2 Loop Assembly, F&I, Type B <td< td=""><td>633-1-123</td><td>Fiber Optic Cable, F&I, Underground Cable, 48-96</td><td>LF</td><td>\$ 3.34</td></td<>	633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
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, 13" X 24" EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 20" X 36" EA \$ 1,265.36 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,880.00 639-1-11 Electrical Service Wire, F&I LF \$ 7.17 639-2-11 Electrical Service Wire, F&I LF \$ 7.17 639-1-12 Electrical Service Wire, F&I LF \$ 7.17 639-2-11 Electrical Service Wire, F&I Pull Pedestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,325.34 642-21-01 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 650-1-13 Vehicular Traffic Singla, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-3-10 Loop A	633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
635-2-11 Pull & Splice Box, F&I, 13" X 24" Services EA \$ 732.68 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 639-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 2,384.57 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,3283.74 646-2-15 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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type B EA \$ 780.26 660-3-12 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 \$ 1,251.71 66	633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
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 \$ 2,384.57 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 642-2-15 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 649-2-10-1 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 650-1-11 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 \$ 4,128.33 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,751.			EA	
635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Wire, F&I F 7.17 639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,385.34 642-2-15 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 \$ 790.00 660-3-10 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 3,228.73 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA				
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 \$ 7.17 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.34 641-2-15 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283.74 646-2-115 Aluminum Pole - Index 695-001, F&I, 20° EA \$ 2,166.50 649-2-1-01 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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 660-2-101 Loop Desembly, F&I, Type B EA \$ 790.00 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-10 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 660-4-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 3,251.49 <		Pull & Splice Box, F&I, 24" X 36"		
Electrical Service Wire, F&I LF \$ 7.17	635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	
639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-12 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 646-2-115 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 \$ 790.00 660-1-101 Loop Detector Inductive, F&I, Type P0 EA \$ 389.94 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 170.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 4,122.36 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.31 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.41 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equip				
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 \$ 35,775.52 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-101 Loop Desetch Inductive, F&I, Type 10 EA \$ 389.94 660-1-110 Loop Desetch Inductive, F&I, Type 10 EA \$ 390.94 660-1-11 Uebicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.26 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,128.33 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 660-4-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment				
641-2-13		* *		
646-2-115 Aluminum Pole - Index 695-001, Fål, 20° EA \$ 2,166.50 649-2-1-01 Steel Mast Arm Assembly, Fål, 30° Single AS \$ 35,775.52 650-1-13 Vehicular Traffic Signal, Fål, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-10 Loop Detector Inductive, Fål, Type 10 EA \$ 389.94 660-2-102 Loop Assembly, Fål, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, Fål, Above Ground Equipment EA \$ 4,128.33 660-3-12 Vehicle Detection System-Microwave, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 3,1971.31 660-4-12 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 3,1971.31 660-1-13 Signal Priority and Preemption System, Fål, Optical, Detector EA \$ 3,1971.31 663-1-13 Pedestrian Detector, Fål, Passive Pede	641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
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-Wickoe, F&I, Cabinet Equipment EA \$ 8,228.73 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 176.71-79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Signal Priority and Preemption Sy	641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
660-1-13	646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
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 \$ 9,515.49 660-4-12 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 \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,1971.31 663-1-13 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 13,971.31 663-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, NEMA, Two Preemption Plans AS \$ 327,645.38 670-5-140 Traffic Controller As	649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
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 \$ 8,228.73 660-4-12 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-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Video, F&I, Detection EA \$ 3,197.14 660-1-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 1,714.44 660-1-13 Pedestrian Detection EA \$ 1,714.44 665-1-13 Pedestrian Detection EA	650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
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 \$ 8,228.73 660-3-11 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 \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 9,751.79 660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detector EA \$ 1,714.44 665-1-12 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, Modify EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-121 ITS Cabinet, F&I,	660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 8.228.73 660-4-12 Vehicle Detection System-Video, F&I, Cabrinet Equipment EA \$ 9.515.49 660-4-12 Vehicle Detection System-Video, F&I, Cabrinet Equipment EA \$ 9.515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,971.37 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,971.79 660-7-11 Vehicle Detection System-Video, F&I, Detector EA \$ 1,971.34 663-1-111 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,740.44 665-1-12 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 \$ 27,645.38 670-5-140 Traffic Controller Assembly, F&I, in Existing Cabinet, NEMA EA \$ 1,942.50 671-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,890.00	660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
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 \$ 31,971.31 660-7-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 31,971.31 663-1-111 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 Assembly, Modify EA \$ 1,942.50 671-2-12 Traffic Controller Modify EA \$ 1,940.50 676-2-112 TrS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 1,890.00 677-2-11 TrS Cabinet, F&I, Pole Mount, 34	660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
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 \$ 31,971.31 663.7-111 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 3,752.44 663.7-112 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 \$ 32,011.37 670-5-400 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, Modify EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-121 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, Hig	660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-7-11	660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 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, Modify EA \$ 1,890.00 671-2-10 ITS Controller, Modify EA \$ 1,890.00 676-2-121 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, P, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&I EA <	660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
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 \$ 1,942.50 671-2-41 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,496.00 681-000 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 \$ 3,792.46 685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,645.12	660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
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 \$ 1,942.50 671-2-41 Traffic Controller Modify EA \$ 1,942.50 671-2-21 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 3366, 24" X 46" 22" EA \$ 9,806.00 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 1,700.00 682-1-113 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 \$ 3,800.00 685-3-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,845.12	663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5.752.44
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 Modify EA \$ 1,942.50 671-2-21 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 \$ 10,176.47 684-2-1 Device Server, F&I EA \$ 778.37 685-3-1-3 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,554.51 695-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 6,624.43 700-11-1	663-1-112		EA	
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 \$ 1,900.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-10 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 Device Server, F&I EA \$ 3,792.46 684-2-1 Device Server, F&I EA \$ 778.37 685-1-31 Remote Power Management Unit, F&I EA \$ 1,545.12 6958-8-11 Cellular Modern, F&I EA \$ 3,000.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66.024.43 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.85 700-11-2 Sign Beacon, F&	665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-11 Traffic Controller without Cabinet, F&l in Existing Cabinet, NEMA EA \$ 4,500.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&l, 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&l, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&l EA \$ 3,792.46 684-3-1 Device Server, F&l EA \$ 778.37 685-3-1 Remote Power Management Unit, F&l EA \$ 1,545.12 695-8-11 Cellular Modern, F&l EA \$ 1,545.12 695-8-11 Cellular Modern, F&l EA \$ 3,000.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66.024.43 700-11-1 Electronic Display Sign, F&l, Ground Mount, Blankout Sign, 48" X 48" AS	670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
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 \$ 3,792.46 684-1-1 Device Server, F&I EA \$ 778.37 685-1-31 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 6958-8-11 Cellular Modern, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.43 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.85 700-11-2 Sign Beacon, F&I, Ground Mount, AD Powered, Two Beacns AS \$ 3,948.03 70	670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
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, P, 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 \$ 7783.7 685-1-13 Uninterrupitible 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 \$ 6,754.85 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 6,754.85 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948.03 <td< td=""><td>670-5-400</td><td>Traffic Controller Assembly, Modify</td><td>EA</td><td>\$ 1,942.50</td></td<>	670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
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 \$ 6,832.21 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modern, 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 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,348.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, MOUNT- AC POWERED, 12-20 SF AS \$ 9,352.32 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF EA \$ 1,000.00 <td>671-2-11</td> <td></td> <td>EA</td> <td>\$ 4,500.00</td>	671-2-11		EA	\$ 4,500.00
681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 6821-1113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 3,792.46 684-1-1 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 6958-8-11 Cellular Modern, 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 Sign Beacon, F&I, Ground Mount, AD Powered, Two Beacns 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, wio UPS, F&III Color, 12-20 SF EA \$ 17,000.00 <td>671-2-40</td> <td>Traffic Controller, Modify</td> <td>EA</td> <td>\$ 1,890.00</td>	671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, 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 6958-8-11 Cellular Modern, 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, AD Powered, Two Beacns AS \$ 3,948.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352.32 700-12-12 Embedded Dynamic Message Sign, F&I, Wio UPS, Full Color, 12-20 SF EA \$ 17,000.	676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
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, Ground Mount, Blankout Sign, 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AP Powered, Two Beacns 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, F&II Color, 12-20 SF EA \$ 17,000.00	682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
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 Modern, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.43 700-11-12 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 Beacns 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	684-1-1		EA	
685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modern, 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 Beacns 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, Wo UPS, F&II Color, 12-20 SF EA \$ 17,000.00	684-2-1	Device Server, F&I	EA	\$ 778.37
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 \$ 6,254.85 700-12-12 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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
695-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantiliever 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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
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 Beacns 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, wlo UPS, Full Color, 12-20 SF EA \$ 17,000.00	695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
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 Beacns 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, wlo UPS, Full Color, 12-20 SF EA \$ 17,000.00	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 \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00			AS	
700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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				
700-2-16 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		1 7 0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		
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		• • • • • • • • • • • • • • • • • • • •		
700-7-232 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				
	700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

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

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

"ATMS" Project Calculator	
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, Contigency)	\$ 79,106.06
	INPUT
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%
	TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$	-
	IN	PUT
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:	\$ 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, Contigency)	\$ 270,314.46
	INPUT
No. of Key Decision Points / Intersections	4

"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, Contigency)	
	INPUT
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
660-3-11	Vehicle Detection System-Microwave, F. &, Cabinet Equipment Vehicle Detection System-Microwave, F. &I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	FA	\$ 9,515.49
	7 1 1 1 1		
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 Beacns	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-2-10	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
100-0-100	Troncriocos Dynamic incosage orgin, Fall W/ UFS, Full Cului, 31-100 SF	ĿA	ψ υΖ,υ1Ζ./0

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

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

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

"ATMS" Project Calculator		
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, Contigency)	\$	395,530.29
		INPUT
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%
		TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
NI - CICLUAN MAN Makinta to Makinta (manina dia a)	
No. of Kit "A" - venicie-to-venicie (unsignalized)	U
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
, ,	0
No. of Kit. "A" - Vehicle-to-Vehicle (signalized) No. of Kit. "B" - Vehicle-to-Vehicle (signalized) No. of Kit. "C" - Vehicle-to-Bicycle	0 0

"EVENT MANAGEMENT" Project Calculator	
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, Contigency)	\$ 337,893.08
	INPUT
No. of Key Decision Points / Intersections	5

"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, Contigency)	\$
	INPUT
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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-2-10	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	FA	\$ 52,572.76
100-0-100	Tions nocess by natific intessage sign, rail with ors, rull color, 51-100 SF	EM	\$ 52,512.10

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

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

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

"ATMS" Project Calculator	
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, Contigency)	\$ 571,621.25
	INPUT
Fiber Optic (in miles)	2
No. of Traffic Signals	2
No. of ADMS	C
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%
	TOTAL
No. of CCTV Cameras	1
No. of Roadside Units/Bluetooth	2
No. of Midblock Detectors	1
No. of Controllers	C
No. of Controller Cabinet Assemblies	2
No. of Video Detection Systems	C
No. of Network Connections	3

"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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
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:	\$ 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, Contigency)	\$ 135,157.23
	INPUT
No. of Key Decision Points / Intersections	2

"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, Contigency)	\$ -
	INPUT
No. of Parking Stalls	0

630-2-12 Cor 632-7-1 Sign 633-1-123 Fibe 633-2-31 Fibe 633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	iduit, F&I, Directional Bore and Cable - New or Reconstructed Intersection, F&I ar Optic Cable, F&I, Underground Cable, 48-96 ar Optic Connection, Install, Spice ar Optic Connection Hardware, F&I, Splice Enclosure ar Optic Connection Hardware, F&I, Preterminated Patch Panel & Splice Box, F&I, 13" X 24" & Splice Box, F&I, 24" X 36"	LF PI LF EA EA EA	\$ 7.13 \$ 21.37 \$ 5,796.13 \$ 39.07 \$ 899.92
632-7-1 Sign 633-1-123 Fibe 633-2-31 Fibe 633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	nal Cable - New or Reconstructed Intersection, F&I er Optic Cable, F&I, Underground Cable, 48-96 er Optic Connection, Install, Splice er Optic Connection Hardware, F&I, Splice Enclosure er Optic Connection Hardware, F&I, Preterminated Patch Panel I& Splice Box, F&I, 13" X 24"	PI LF EA EA	\$ 5,796.13 \$ 3.34 \$ 39.07
633-1-123 Fibe 633-2-31 Fibe 633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	er Optic Cable, F.&I, Underground Cable, 48-96 er Optic Connection, Install, Splice er Optic Connection Hardware, F.&I, Splice Enclosure er Optic Connection Hardware, F.&I, Preterminated Patch Panel 8. Splice Box, F.&I, 13" X 24"	LF EA EA	\$ 3.34 \$ 39.07
633-2-31 Fibe 633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	er Optic Connection, Install, Splice er Optic Connection Hardware, F&I, Splice Enclosure er Optic Connection Hardware, F&I, Preterminated Patch Panel l& Splice Box, F&I, 13" X 24"	EA EA	\$ 39.07
633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	er Optic Connection Hardware, F&I, Splice Enclosure er Optic Connection Hardware, F&I, Preterminated Patch Panel & Splice Box, F&I, 13" X 24"	EA EA	
633-3-15 Fibe 635-2-11 Pull	er Optic Connection Hardware, F&I, Preterminated Patch Panel & Splice Box, F&I, 13" X 24"	EA	\$ 899.92
635-2-11 Pull	& Splice Box, F&I, 13" X 24"		
	• • • •	EA	\$ 1,801.63
635_2_12 Doll	& Splice Box F&I 24" X 36"		\$ 732.68
	a opiloo Box, 1 at, 2.1 7/ 00	EA	\$ 1,265.36
635-2-13 Pull	& Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
	ctrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1 Elec	ctrical Service Wire, F&I	LF	\$ 7.17
	ctrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11 Pre	stressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13 Pre	stressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115 Alur	minum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01 Stee	el Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13 Veh	nicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110 Loo	p Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102 Loo	p Assembly, F&I, Type B	EA	\$ 780.26
660-3-11 Veh	nicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12 Veh	nicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11 Veh	nicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12 Veh	nicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11 Veh	nicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111 Sign	nal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
	nal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
-	lestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112 Trai	ffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140 Trat	ffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400 Trat	ffic Controller Assembly, Modify	EA	\$ 1,942.50
	ffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
	ffic Controller, Modify	EA	\$ 1.890.00
	Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
	nnected 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
	naged Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1 Dev	rice Server, F&I	EA	\$ 778.37
685-1-13 Unii	nterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1 Ren	note Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11 Cell	lular Modem, F&I	EA	\$ 3,500.00
	S Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
	ctronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
	ctronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
	n Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
	ti-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
	HLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
	bedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135 From	nt Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

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

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

"ATMS" Project Calculator	
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, Contigency)	\$ 532,068.22
	INPUT
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%
	TOTAL
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

"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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
, ü ,	0
No. of Kit "C" - Vehicle-to-Bicycle	0
No. of Kit "D" - Vehicle-to-Pedestrian	0

EVENT MANAGEMENT" Project Calculator	
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, Contigency)	\$ 135,157.23
	INPUT
o. of Key Decision Points / Intersections	2

"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, Contigency)	\$ •
	INPUT
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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-2-16	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-6-12	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
100-0-133	From Access Dynamic Message Sign, Fall W/ UPS, Full Color, 51-100 SF	EA	φ 52,512./b

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

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

Project 501: Lori Wilson 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, Contigency)	\$ -
	INPUT
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%
	TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
, ,	0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized) No. of Kit "B" - Vehicle-to-Vehicle (signalized) No. of Kit "C" - Vehicle-to-Bicycle	0 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, Contigency)	\$ -
	INPUT
No. of Key Decision Points / Intersections	0

"PARKING MANAGEMENT" Project Calculator		
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, Contigency)	\$	534,723.51
		INPUT
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	FA	\$ 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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12			
	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-6-12 700-7-232	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA EA	\$ 4,072.57 \$ 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.

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

Project 502: Coconut Point 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, Contigency)	\$ -
	INPUT
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%
	TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
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, Contigency)	-
	INPUT
No. of Key Decision Points / Intersections	0

"PARKING MANAGEMENT" Project Calculator	
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, Contigency)	\$ 415,100.80
	INPUT
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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9.352.32
700-2-16	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-6-12	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 4,072.57
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76
. 00 0.100		ᅜ	ψ UZ,U1 Z.1 U

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

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

Project 503: Seagull 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, Contigency)	\$	-
		INPUT
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%
		TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Key Decision Points / Intersections	C

"PARKING MANAGEMENT" Project Calculator	
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, Contigency)	\$ 335,352.33
	INPUT
No. of Parking Stalls	25

6302-11 Conduit, Fâl, Directional Bore LF \$ 7.13 6302-21 Conduit, Fâl, Directional Bore LF \$ 21.37 632-7-1 Signal Cable - New or Reconstructed Intersection, Fâl PI \$ 5,786.13 633-1-123 Fiber Optic Cable, Fâl, Underground Cable, 48-96 LF \$ 3.9.07 633-3-15 Fiber Optic Connection, Install, Splice EA \$ 39.07 633-3-15 Fiber Optic Connection Hardware, Fâl, Splice Enclosure EA \$ 899.92 633-3-15 Fiber Optic Connection Hardware, Fâl, Poter Principle Principle Connection Hardware, Fâl, Poter Principle Principle Principle P	Pay Item	Description	Unit	Unit Cost
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 \$ 899.92 633-3-11 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 \$ 732.88 635-2-12 Pull & Splice Box, F&I, 3" X-24" EA \$ 1,266.36 635-2-11 Pull & Splice Box, F&I, 30" X-30" Rectangular or 36" Round EA \$ 1,266.36 635-2-11 Pull & Splice Box, F&I, 30" X-30" Rectangular or 36" Round EA \$ 2,365.36 639-1-111 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-10 Electrical Service Wire, F&I FAI Yel Power Service, FAI <t< td=""><td>630-2-11</td><td>Conduit, F&I, Open Trench</td><td>LF</td><td>\$ 7.13</td></t<>	630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
Sa3-1-123 Fiber Optic Cable, F&I, Underground Cable, 48-96	630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
Fiber Optic Connection, Install, Splice	632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
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, 137 V.X EA \$ 1,265.36 635-2-12 Pull & Splice Box, F&I, 247 V.36° EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 307 V.80° Rectangular or 36° Round EA \$ 2,384.57 6393-111 Electrical Service Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,385.34 642-2-10.1 Stele Mast Arm Assembly, F&I, 30° Single AS \$ 35,775.62 659-2-10.2 Verbicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 780.00 660-1-11 Verbicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 780.00 660-2-10.2 Loop Assembly, F&I, Type B <td< td=""><td>633-1-123</td><td>Fiber Optic Cable, F&I, Underground Cable, 48-96</td><td>LF</td><td>\$ 3.34</td></td<>	633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
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, 13" X 24" EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 20" X 36" EA \$ 1,265.36 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,880.00 639-1-11 Electrical Service Wire, F&I LF \$ 7.17 639-2-11 Electrical Service Wire, F&I LF \$ 7.17 639-1-12 Electrical Service Wire, F&I LF \$ 7.17 639-2-11 Electrical Service Wire, F&I Pull Pedestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,325.34 642-21-01 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 650-1-13 Vehicular Traffic Singla, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-3-10 Loop A	633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
635-2-11 Pull & Splice Box, F&I, 13" X 24" Services EA \$ 732.68 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 639-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 2,384.57 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,3283.74 646-2-15 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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type B EA \$ 780.26 660-3-12 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 \$ 1,251.71 66	633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
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 \$ 2,384.57 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 642-2-15 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 649-2-10-1 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 650-1-11 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 \$ 4,128.33 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,751.			EA	
635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Wire, F&I F 7.17 639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,385.34 642-2-15 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 \$ 790.00 660-3-10 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 3,228.73 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA				
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 \$ 7.17 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.34 641-2-15 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283.74 646-2-115 Aluminum Pole - Index 695-001, F&I, 20° EA \$ 2,166.50 649-2-1-01 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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 660-2-101 Loop Desembly, F&I, Type B EA \$ 790.00 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-10 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 660-4-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 3,251.49 <		Pull & Splice Box, F&I, 24" X 36"		
Electrical Service Wire, F&I LF \$ 7.17	635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	
639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-12 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 646-2-115 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 \$ 790.00 660-1-101 Loop Detector Inductive, F&I, Type P0 EA \$ 389.94 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 170.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 4,122.36 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.31 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.41 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equip				
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 \$ 35,775.52 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-101 Loop Desetch Inductive, F&I, Type 10 EA \$ 389.94 660-1-110 Loop Desetch Inductive, F&I, Type 10 EA \$ 390.94 660-1-11 Loop Desembly, 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-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.31 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,7				
641-2-13		* *		
646-2-115 Aluminum Pole - Index 695-001, Fål, 20° EA \$ 2,166.50 649-2-1-01 Steel Mast Arm Assembly, Fål, 30° Single AS \$ 35,775.52 650-1-13 Vehicular Traffic Signal, Fål, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-10 Loop Detector Inductive, Fål, Type 10 EA \$ 389.94 660-2-102 Loop Assembly, Fål, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, Fål, Above Ground Equipment EA \$ 4,128.33 660-3-12 Vehicle Detection System-Microwave, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 3,1971.31 660-4-12 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 3,1971.31 660-1-13 Signal Priority and Preemption System, Fål, Optical, Detector EA \$ 3,1971.31 663-1-13 Pedestrian Detector, Fål, Passive Pede	641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
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-Wickoe, F&I, Cabinet Equipment EA \$ 8,228.73 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 176.71-79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Signal Priority and Preemption Sy	641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
660-1-13	646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
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 \$ 9,515.49 660-4-12 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 \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,1971.31 663-1-13 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 13,971.31 663-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, NEMA, Two Preemption Plans AS \$ 327,645.38 670-5-140 Traffic Controller As	649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
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 \$ 8,228.73 660-4-12 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-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Video, F&I, Detection EA \$ 3,197.14 660-1-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 1,714.44 660-1-13 Pedestrian Detection EA \$ 1,714.44 665-1-13 Pedestrian Detection EA	650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
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 \$ 8,228.73 660-3-11 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 \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 9,751.79 660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detector EA \$ 1,714.44 665-1-12 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, Modify EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-121 ITS Cabinet, F&I,	660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 8.228.73 660-4-12 Vehicle Detection System-Video, F&I, Cabrinet Equipment EA \$ 9.515.49 660-4-12 Vehicle Detection System-Video, F&I, Cabrinet Equipment EA \$ 9.515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,971.37 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,971.79 660-7-11 Vehicle Detection System-Video, F&I, Detector EA \$ 1,971.34 663-1-111 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,740.44 665-1-12 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 \$ 27,645.38 670-5-140 Traffic Controller Assembly, F&I, in Existing Cabinet, NEMA EA \$ 1,942.50 671-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,890.00	660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
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 \$ 31,971.31 660-7-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 31,971.31 663-1-111 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 Assembly, Modify EA \$ 1,942.50 671-2-12 Traffic Controller Modify EA \$ 1,940.50 676-2-112 TrS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 1,890.00 677-2-11 TrS Cabinet, F&I, Pole Mount, 34	660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
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 \$ 31,971.31 663.7-111 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 3,752.44 663.7-112 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 \$ 32,011.37 670-5-400 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, Modify EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-121 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, Hig	660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-7-11	660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 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, Modify EA \$ 1,890.00 671-2-10 ITS Controller, Modify EA \$ 1,890.00 676-2-121 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, P, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&I EA <	660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
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 \$ 1,942.50 671-2-41 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,496.00 681-000 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 \$ 3,792.46 685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,645.12	660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
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 \$ 1,942.50 671-2-41 Traffic Controller Modify EA \$ 1,942.50 671-2-21 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 3366, 24" X 46" 22" EA \$ 9,806.00 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 1,700.00 682-1-113 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 \$ 3,800.00 685-3-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,845.12	663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5.752.44
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 Modify EA \$ 1,942.50 671-2-21 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 \$ 10,176.47 684-2-1 Device Server, F&I EA \$ 778.37 685-3-1-3 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,554.51 695-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 6,624.43 700-11-1	663-1-112		EA	
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 \$ 1,900.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-10 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 Device Server, F&I EA \$ 3,792.46 684-2-1 Device Server, F&I EA \$ 778.37 685-1-31 Remote Power Management Unit, F&I EA \$ 1,545.12 6958-8-11 Cellular Modern, F&I EA \$ 3,000.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66.024.43 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.85 700-11-2 Sign Beacon, F&	665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-11 Traffic Controller without Cabinet, F&l in Existing Cabinet, NEMA EA \$ 4,500.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&l, 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&l, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&l EA \$ 3,792.46 684-3-1 Device Server, F&l EA \$ 778.37 685-3-1 Remote Power Management Unit, F&l EA \$ 1,545.12 695-8-11 Cellular Modern, F&l EA \$ 1,545.12 695-8-11 Cellular Modern, F&l EA \$ 3,000.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66.024.43 700-11-1 Electronic Display Sign, F&l, Ground Mount, Blankout Sign, 48" X 48" AS	670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
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 \$ 3,792.46 684-1-1 Device Server, F&I EA \$ 778.37 685-1-31 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 6958-8-11 Cellular Modern, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.43 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.85 700-11-2 Sign Beacon, F&I, Ground Mount, AD Powered, Two Beacns AS \$ 3,948.03 70	670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
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, P, 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 \$ 7783.7 685-1-13 Uninterrupitible 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 \$ 6,754.85 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 6,754.85 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948.03 <td< td=""><td>670-5-400</td><td>Traffic Controller Assembly, Modify</td><td>EA</td><td>\$ 1,942.50</td></td<>	670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
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 \$ 6,832.21 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modern, 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 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,348.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, MOUNT- AC POWERED, 12-20 SF AS \$ 9,352.32 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF EA \$ 1,000.00 <td>671-2-11</td> <td></td> <td>EA</td> <td>\$ 4,500.00</td>	671-2-11		EA	\$ 4,500.00
681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 6821-1113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 3,792.46 684-1-1 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 6958-8-11 Cellular Modern, 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 Sign Beacon, F&I, Ground Mount, AD Powered, Two Beacns 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, wio UPS, F&III Color, 12-20 SF EA \$ 17,000.00 <td>671-2-40</td> <td>Traffic Controller, Modify</td> <td>EA</td> <td>\$ 1,890.00</td>	671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, 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 6958-8-11 Cellular Modern, 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, AD Powered, Two Beacns AS \$ 3,948.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352.32 700-12-12 Embedded Dynamic Message Sign, F&I, Wio UPS, Full Color, 12-20 SF EA \$ 17,000.	676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
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, Ground Mount, Blankout Sign, 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AP Powered, Two Beacns 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, F&II Color, 12-20 SF EA \$ 17,000.00	682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
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 Modern, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.43 700-11-12 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 Beacns 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	684-1-1		EA	
685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modern, 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 Beacns 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, Wo UPS, F&II Color, 12-20 SF EA \$ 17,000.00	684-2-1	Device Server, F&I	EA	\$ 778.37
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 \$ 6,254.85 700-12-12 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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
695-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantiliever 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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
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 Beacns 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, wlo UPS, Full Color, 12-20 SF EA \$ 17,000.00	695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
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 Beacns 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, wlo UPS, Full Color, 12-20 SF EA \$ 17,000.00	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 \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00			AS	
700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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				
700-2-16 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		1 7 0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		
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		• • • • • • • • • • • • • • • • • • • •		
700-7-232 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				
	700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

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

Project 504: Spessard Holland Beach Park (South)

"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, Contigency)	\$ -
Erosion and Coamon Control, Contigency)	
	INPUT
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%
	TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Key Decision Points / Intersections	0

"PARKING MANAGEMENT" Project Calculator	
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, Contigency)	\$ 454,975.04
	INPUT
No. of Parking Stalls	100

6302-11 Conduit, Fâl, Directional Bore LF \$ 7.13 6302-21 Conduit, Fâl, Directional Bore LF \$ 21.37 632-7-1 Signal Cable - New or Reconstructed Intersection, Fâl PI \$ 5,786.13 633-1-123 Fiber Optic Cable, Fâl, Underground Cable, 48-96 LF \$ 3.9.07 633-3-15 Fiber Optic Connection, Install, Splice EA \$ 39.07 633-3-15 Fiber Optic Connection Hardware, Fâl, Splice Enclosure EA \$ 899.92 633-3-15 Fiber Optic Connection Hardware, Fâl, Poter Principle Principle Connection Hardware, Fâl, Poter Principle Principle Principle P	Pay Item	Description	Unit	Unit Cost
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 \$ 899.92 633-3-11 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 \$ 732.88 635-2-12 Pull & Splice Box, F&I, 3" X-24" EA \$ 1,266.36 635-2-11 Pull & Splice Box, F&I, 30" X-30" Rectangular or 36" Round EA \$ 1,266.36 635-2-11 Pull & Splice Box, F&I, 30" X-30" Rectangular or 36" Round EA \$ 2,365.36 639-1-111 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-10 Electrical Service Wire, F&I FAI Yel Power Service, FAI <t< td=""><td>630-2-11</td><td>Conduit, F&I, Open Trench</td><td>LF</td><td>\$ 7.13</td></t<>	630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
Sa3-1-123 Fiber Optic Cable, F&I, Underground Cable, 48-96	630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
Fiber Optic Connection, Install, Splice	632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
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, 137 V.X EA \$ 1,265.36 635-2-12 Pull & Splice Box, F&I, 247 V.36° EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 307 V.80° Rectangular or 36° Round EA \$ 2,384.57 6393-111 Electrical Service Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,385.34 642-2-10.1 Stele Mast Arm Assembly, F&I, 30° Single AS \$ 35,775.62 659-2-10.2 Verbicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 780.00 660-1-11 Verbicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 780.00 660-2-10.2 Loop Assembly, F&I, Type B <td< td=""><td>633-1-123</td><td>Fiber Optic Cable, F&I, Underground Cable, 48-96</td><td>LF</td><td>\$ 3.34</td></td<>	633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
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, 13" X 24" EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 20" X 36" EA \$ 1,265.36 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,880.00 639-1-11 Electrical Service Wire, F&I LF \$ 7.17 639-2-11 Electrical Service Wire, F&I LF \$ 7.17 639-1-12 Electrical Service Wire, F&I LF \$ 7.17 639-2-11 Electrical Service Wire, F&I Pull Pedestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,325.34 642-21-01 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 650-1-13 Vehicular Traffic Singla, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-3-10 Loop A	633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
635-2-11 Pull & Splice Box, F&I, 13" X 24" Set EA \$ 732.68 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 639-2-12 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,3283.74 646-2-115 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 649-2-1-01 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 \$ 790.00 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 1,262.26 660-3-12 <td>633-3-11</td> <td>Fiber Optic Connection Hardware, F&I, Splice Enclosure</td> <td>EA</td> <td>\$ 899.92</td>	633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
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 \$ 2,384.57 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 642-2-15 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 649-2-10-1 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 650-1-11 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 \$ 4,128.33 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,751.			EA	
635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Wire, F&I F 7.17 639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,385.34 642-2-15 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 \$ 790.00 660-3-10 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 3,228.73 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA				
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 \$ 7.17 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.34 641-2-15 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283.74 646-2-115 Aluminum Pole - Index 695-001, F&I, 20° EA \$ 2,166.50 649-2-1-01 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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 660-2-101 Loop Desembly, F&I, Type B EA \$ 790.00 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-10 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 660-4-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 3,251.49 <		Pull & Splice Box, F&I, 24" X 36"		
Electrical Service Wire, F&I LF \$ 7.17	635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	
639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-12 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 646-2-115 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 \$ 790.00 660-1-101 Loop Detector Inductive, F&I, Type P0 EA \$ 389.94 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 170.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 4,122.36 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.31 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.41 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equip				
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 \$ 35,775.52 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-101 Loop Desetch Inductive, F&I, Type 10 EA \$ 389.94 660-1-110 Loop Desetch Inductive, F&I, Type 10 EA \$ 390.94 660-1-11 Loop Desembly, 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-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.31 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,7				
641-2-13		* *		
646-2-115 Aluminum Pole - Index 695-001, Fål, 20° EA \$ 2,166.50 649-2-1-01 Steel Mast Arm Assembly, Fål, 30° Single AS \$ 35,775.52 650-1-13 Vehicular Traffic Signal, Fål, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-10 Loop Detector Inductive, Fål, Type 10 EA \$ 389.94 660-2-102 Loop Assembly, Fål, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, Fål, Above Ground Equipment EA \$ 4,128.33 660-3-12 Vehicle Detection System-Microwave, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 3,1971.31 660-4-12 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 3,1971.31 660-1-13 Signal Priority and Preemption System, Fål, Optical, Detector EA \$ 3,1971.31 663-1-13 Pedestrian Detector, Fål, Passive Pede	641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
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-Wickoe, F&I, Cabinet Equipment EA \$ 8,228.73 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 176.71-79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Signal Priority and Preemption Sy	641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
660-1-13	646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
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 \$ 9,515.49 660-4-12 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 \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,1971.31 663-1-13 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 13,971.31 663-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, NEMA, Two Preemption Plans AS \$ 327,645.38 670-5-140 Traffic Controller As	649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
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 \$ 8,228.73 660-4-12 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-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Video, F&I, Detection EA \$ 3,197.14 660-1-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 1,714.44 660-1-13 Pedestrian Detection EA \$ 1,714.44 665-1-13 Pedestrian Detection EA	650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
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 \$ 8,228.73 660-3-11 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 \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 9,751.79 660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detector EA \$ 1,714.44 665-1-12 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, Modify EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-121 ITS Cabinet, F&I,	660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 8.228.73 660-4-12 Vehicle Detection System-Video, F&I, Cabrinet Equipment EA \$ 9.515.49 660-4-12 Vehicle Detection System-Video, F&I, Cabrinet Equipment EA \$ 9.515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,971.37 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,971.79 660-7-11 Vehicle Detection System-Video, F&I, Detector EA \$ 1,971.34 663-1-111 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,740.44 665-1-12 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 \$ 27,645.38 670-5-140 Traffic Controller Assembly, F&I, in Existing Cabinet, NEMA EA \$ 1,942.50 671-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,890.00	660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
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 \$ 31,971.31 660-7-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 31,971.31 663-1-111 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 Assembly, Modify EA \$ 1,942.50 671-2-12 Traffic Controller Modify EA \$ 1,940.50 676-2-112 TrS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 1,890.00 677-2-11 TrS Cabinet, F&I, Pole Mount, 34	660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
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 \$ 31,971.31 663.7-111 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 3,752.44 663.7-112 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 \$ 32,011.37 670-5-400 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, Modify EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-121 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, Hig	660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-7-11	660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 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, Modify EA \$ 1,890.00 671-2-10 ITS Controller, Modify EA \$ 1,890.00 676-2-121 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, P, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&I EA <	660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
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 \$ 1,942.50 671-2-41 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,496.00 681-000 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 \$ 3,792.46 685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,645.12	660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
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 \$ 1,942.50 671-2-41 Traffic Controller Modify EA \$ 1,942.50 671-2-21 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 3366, 24" X 46" 22" EA \$ 9,806.00 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 1,700.00 682-1-113 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 \$ 3,800.00 685-3-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,845.12	663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5.752.44
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 Modify EA \$ 1,942.50 671-2-21 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 \$ 10,176.47 684-2-1 Device Server, F&I EA \$ 778.37 685-3-1-3 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,554.51 695-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 6,624.43 700-11-1	663-1-112		EA	
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 \$ 1,900.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-10 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 Device Server, F&I EA \$ 3,792.46 684-2-1 Device Server, F&I EA \$ 778.37 685-1-31 Remote Power Management Unit, F&I EA \$ 1,545.12 6958-8-11 Cellular Modern, F&I EA \$ 3,000.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66.024.43 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.85 700-11-2 Sign Beacon, F&	665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-11 Traffic Controller without Cabinet, F&l in Existing Cabinet, NEMA EA \$ 4,500.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&l, 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&l, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&l EA \$ 3,792.46 684-3-1 Device Server, F&l EA \$ 778.37 685-3-1 Remote Power Management Unit, F&l EA \$ 1,545.12 695-8-11 Cellular Modern, F&l EA \$ 1,545.12 695-8-11 Cellular Modern, F&l EA \$ 3,000.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66.024.43 700-11-1 Electronic Display Sign, F&l, Ground Mount, Blankout Sign, 48" X 48" AS	670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
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 \$ 3,792.46 684-1-1 Device Server, F&I EA \$ 778.37 685-1-31 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 6958-8-11 Cellular Modern, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.43 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.85 700-11-2 Sign Beacon, F&I, Ground Mount, AD Powered, Two Beacns AS \$ 3,948.03 70	670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
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, P, 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 \$ 7783.7 685-1-13 Uninterrupitible 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 \$ 6,754.85 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 6,754.85 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948.03 <td< td=""><td>670-5-400</td><td>Traffic Controller Assembly, Modify</td><td>EA</td><td>\$ 1,942.50</td></td<>	670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
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 \$ 6,832.21 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modern, 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 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,348.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, MOUNT- AC POWERED, 12-20 SF AS \$ 9,352.32 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF EA \$ 1,000.00 <td>671-2-11</td> <td></td> <td>EA</td> <td>\$ 4,500.00</td>	671-2-11		EA	\$ 4,500.00
681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 6821-1113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 3,792.46 684-1-1 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 6958-8-11 Cellular Modern, 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 Sign Beacon, F&I, Ground Mount, AD Powered, Two Beacns 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, wio UPS, F&III Color, 12-20 SF EA \$ 17,000.00 <td>671-2-40</td> <td>Traffic Controller, Modify</td> <td>EA</td> <td>\$ 1,890.00</td>	671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, 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 6958-8-11 Cellular Modern, 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, AD Powered, Two Beacns AS \$ 3,948.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352.32 700-12-12 Embedded Dynamic Message Sign, F&I, Wio UPS, Full Color, 12-20 SF EA \$ 17,000.	676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
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, Ground Mount, Blankout Sign, 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AP Powered, Two Beacns 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, F&II Color, 12-20 SF EA \$ 17,000.00	682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
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 Modern, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.43 700-11-12 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 Beacns 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	684-1-1		EA	
685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modern, 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 Beacns 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, Wo UPS, F&II Color, 12-20 SF EA \$ 17,000.00	684-2-1	Device Server, F&I	EA	\$ 778.37
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 \$ 6,254.85 700-12-12 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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
695-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantiliever 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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
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 Beacns 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, wlo UPS, Full Color, 12-20 SF EA \$ 17,000.00	695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
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 Beacns 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, wlo UPS, Full Color, 12-20 SF EA \$ 17,000.00	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 \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00			AS	
700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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				
700-2-16 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		1 7 0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		
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		• • • • • • • • • • • • • • • • • • • •		
700-7-232 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				
	700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

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

Project 505: Spessard Holland Beach Park (North)

"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, Contigency)	\$ -
	INPUT
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%
	TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Key Decision Points / Intersections	0

"PARKING MANAGEMENT" Project Calculator		
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, Contigency)	\$	574,597.74
		INPUT
No. of Parking Stalls		175

6302-11 Conduit, Fâl, Directional Bore LF \$ 7.13 6302-21 Conduit, Fâl, Directional Bore LF \$ 21.37 632-7-1 Signal Cable - New or Reconstructed Intersection, Fâl PI \$ 5,786.13 633-1-123 Fiber Optic Cable, Fâl, Underground Cable, 48-96 LF \$ 3.9.07 633-3-15 Fiber Optic Connection, Install, Splice EA \$ 39.07 633-3-15 Fiber Optic Connection Hardware, Fâl, Splice Enclosure EA \$ 899.92 633-3-15 Fiber Optic Connection Hardware, Fâl, Poter Principle Principle Connection Hardware, Fâl, Poter Principle Principle Principle P	Pay Item	Description	Unit	Unit Cost
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 \$ 899.92 633-3-11 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 \$ 732.88 635-2-12 Pull & Splice Box, F&I, 3" X-24" EA \$ 1,266.36 635-2-11 Pull & Splice Box, F&I, 30" X-30" Rectangular or 36" Round EA \$ 1,266.36 635-2-11 Pull & Splice Box, F&I, 30" X-30" Rectangular or 36" Round EA \$ 2,365.36 639-1-111 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-10 Electrical Service Wire, F&I FAI Yel Power Service, FAI <t< td=""><td>630-2-11</td><td>Conduit, F&I, Open Trench</td><td>LF</td><td>\$ 7.13</td></t<>	630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
Sa3-1-123 Fiber Optic Cable, F&I, Underground Cable, 48-96	630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
Fiber Optic Connection, Install, Splice	632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
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, 137 V.X EA \$ 1,265.36 635-2-12 Pull & Splice Box, F&I, 247 V.36° EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 307 V.80° Rectangular or 36° Round EA \$ 2,384.57 6393-111 Electrical Service Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,385.34 642-2-10.1 Stele Mast Arm Assembly, F&I, 30° Single AS \$ 35,775.62 659-2-10.2 Verbicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 780.00 660-1-11 Verbicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 780.00 660-2-10.2 Loop Assembly, F&I, Type B <td< td=""><td>633-1-123</td><td>Fiber Optic Cable, F&I, Underground Cable, 48-96</td><td>LF</td><td>\$ 3.34</td></td<>	633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
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, 13" X 24" EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 20" X 36" EA \$ 1,265.36 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,880.00 639-1-11 Electrical Service Wire, F&I LF \$ 7.17 639-2-11 Electrical Service Wire, F&I LF \$ 7.17 639-1-12 Electrical Service Wire, F&I LF \$ 7.17 639-2-11 Electrical Service Wire, F&I Pull Pedestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,325.34 642-21-01 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 650-1-13 Vehicular Traffic Singla, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-3-10 Loop A	633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
635-2-11 Pull & Splice Box, F&I, 13" X 24" Set EA \$ 732.68 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 639-2-12 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,3283.74 646-2-115 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 649-2-1-01 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 \$ 790.00 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 1,262.26 660-3-12 <td>633-3-11</td> <td>Fiber Optic Connection Hardware, F&I, Splice Enclosure</td> <td>EA</td> <td>\$ 899.92</td>	633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
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 \$ 2,384.57 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 642-2-15 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 649-2-10-1 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 650-1-11 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 \$ 4,128.33 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,751.			EA	
635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Wire, F&I F 7.17 639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,385.34 642-2-15 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 \$ 790.00 660-3-10 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 3,228.73 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA				
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 \$ 7.17 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.34 641-2-15 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283.74 646-2-115 Aluminum Pole - Index 695-001, F&I, 20° EA \$ 2,166.50 649-2-1-01 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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 660-2-101 Loop Desembly, F&I, Type B EA \$ 790.00 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-10 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 660-4-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 3,251.49 <		Pull & Splice Box, F&I, 24" X 36"		
Electrical Service Wire, F&I LF \$ 7.17	635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	
639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-12 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 646-2-115 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 \$ 790.00 660-1-101 Loop Detector Inductive, F&I, Type P0 EA \$ 389.94 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 170.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 4,122.36 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.31 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.41 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equip				
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 \$ 35,775.52 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-101 Loop Desetch Inductive, F&I, Type 10 EA \$ 389.94 660-1-110 Loop Desetch Inductive, F&I, Type 10 EA \$ 390.94 660-1-11 Loop Desembly, 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-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.31 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,7				
641-2-13		* *		
646-2-115 Aluminum Pole - Index 695-001, Fål, 20° EA \$ 2,166.50 649-2-1-01 Steel Mast Arm Assembly, Fål, 30° Single AS \$ 35,775.52 650-1-13 Vehicular Traffic Signal, Fål, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-10 Loop Detector Inductive, Fål, Type 10 EA \$ 389.94 660-2-102 Loop Assembly, Fål, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, Fål, Above Ground Equipment EA \$ 4,128.33 660-3-12 Vehicle Detection System-Microwave, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 3,1971.31 660-4-12 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 3,1971.31 660-1-13 Signal Priority and Preemption System, Fål, Optical, Detector EA \$ 3,1971.31 663-1-13 Pedestrian Detector, Fål, Passive Pede	641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
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-Wickoe, F&I, Cabinet Equipment EA \$ 8,228.73 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 176.71-79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Signal Priority and Preemption Sy	641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
660-1-13	646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
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 \$ 9,515.49 660-4-12 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 \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,1971.31 663-1-13 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 13,971.31 663-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, NEMA, Two Preemption Plans AS \$ 327,645.38 670-5-140 Traffic Controller As	649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
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 \$ 8,228.73 660-4-12 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-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Video, F&I, Detection EA \$ 3,197.14 660-1-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 1,714.44 660-1-13 Pedestrian Detection EA \$ 1,714.44 665-1-13 Pedestrian Detection EA	650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
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 \$ 8,228.73 660-3-11 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 \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 9,751.79 660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detector EA \$ 1,714.44 665-1-12 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, Modify EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-121 ITS Cabinet, F&I,	660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 8.228.73 660-4-12 Vehicle Detection System-Video, F&I, Cabrinet Equipment EA \$ 9.515.49 660-4-12 Vehicle Detection System-Video, F&I, Cabrinet Equipment EA \$ 9.515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,971.37 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,971.79 660-7-11 Vehicle Detection System-Video, F&I, Detector EA \$ 1,971.34 663-1-111 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,740.44 665-1-12 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 \$ 27,645.38 670-5-140 Traffic Controller Assembly, F&I, in Existing Cabinet, NEMA EA \$ 1,942.50 671-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,890.00	660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
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 \$ 31,971.31 660-7-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 31,971.31 663-1-111 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 Assembly, Modify EA \$ 1,942.50 671-2-12 Traffic Controller Modify EA \$ 1,940.50 676-2-112 TrS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 1,890.00 677-2-11 TrS Cabinet, F&I, Pole Mount, 34	660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
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 \$ 31,971.31 663.7-111 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 3,752.44 663.7-112 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 \$ 32,011.37 670-5-400 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, Modify EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-121 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, Hig	660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-7-11	660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 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, Modify EA \$ 1,890.00 671-2-10 ITS Controller, Modify EA \$ 1,890.00 676-2-121 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, P, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&I EA <	660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
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 \$ 1,942.50 671-2-41 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,496.00 681-000 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 \$ 3,792.46 685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,645.12	660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
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 \$ 1,942.50 671-2-41 Traffic Controller Modify EA \$ 1,942.50 671-2-21 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 3366, 24" X 46" 22" EA \$ 9,806.00 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 1,700.00 682-1-113 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 \$ 3,800.00 685-3-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,845.12	663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5.752.44
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 Modify EA \$ 1,942.50 671-2-21 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 \$ 10,176.47 684-2-1 Device Server, F&I EA \$ 778.37 685-3-1-3 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,554.51 695-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 6,624.43 700-11-1	663-1-112		EA	
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 \$ 1,900.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-10 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 Device Server, F&I EA \$ 3,792.46 684-2-1 Device Server, F&I EA \$ 778.37 685-1-31 Remote Power Management Unit, F&I EA \$ 1,545.12 6958-8-11 Cellular Modern, F&I EA \$ 3,000.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66.024.43 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.85 700-11-2 Sign Beacon, F&	665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-11 Traffic Controller without Cabinet, F&l in Existing Cabinet, NEMA EA \$ 4,500.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&l, 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&l, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&l EA \$ 3,792.46 684-3-1 Device Server, F&l EA \$ 778.37 685-3-1 Remote Power Management Unit, F&l EA \$ 1,545.12 695-8-11 Cellular Modern, F&l EA \$ 1,545.12 695-8-11 Cellular Modern, F&l EA \$ 3,000.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66.024.43 700-11-1 Electronic Display Sign, F&l, Ground Mount, Blankout Sign, 48" X 48" AS	670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
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 \$ 3,792.46 684-1-1 Device Server, F&I EA \$ 778.37 685-1-31 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 6958-8-11 Cellular Modern, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.43 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.85 700-11-2 Sign Beacon, F&I, Ground Mount, AD Powered, Two Beacns AS \$ 3,948.03 70	670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
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, P, 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 \$ 7783.7 685-1-13 Uninterrupitible 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 \$ 6,754.85 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 6,754.85 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948.03 <td< td=""><td>670-5-400</td><td>Traffic Controller Assembly, Modify</td><td>EA</td><td>\$ 1,942.50</td></td<>	670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
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 \$ 6,832.21 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modern, 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 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,348.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, MOUNT- AC POWERED, 12-20 SF AS \$ 9,352.32 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF EA \$ 1,000.00 <td>671-2-11</td> <td></td> <td>EA</td> <td>\$ 4,500.00</td>	671-2-11		EA	\$ 4,500.00
681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 6821-1113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 3,792.46 684-1-1 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 6958-8-11 Cellular Modern, 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 Sign Beacon, F&I, Ground Mount, AD Powered, Two Beacns 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, wio UPS, F&III Color, 12-20 SF EA \$ 17,000.00 <td>671-2-40</td> <td>Traffic Controller, Modify</td> <td>EA</td> <td>\$ 1,890.00</td>	671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, 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 6958-8-11 Cellular Modern, 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, AD Powered, Two Beacns AS \$ 3,948.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352.32 700-12-12 Embedded Dynamic Message Sign, F&I, Wio UPS, Full Color, 12-20 SF EA \$ 17,000.	676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
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, Ground Mount, Blankout Sign, 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AP Powered, Two Beacns 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, F&II Color, 12-20 SF EA \$ 17,000.00	682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
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 Modern, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.43 700-11-12 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 Beacns 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	684-1-1		EA	
685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modern, 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 Beacns 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, Wo UPS, F&II Color, 12-20 SF EA \$ 17,000.00	684-2-1	Device Server, F&I	EA	\$ 778.37
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 \$ 6,254.85 700-12-12 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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
695-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantiliever 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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
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 Beacns 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, wlo UPS, Full Color, 12-20 SF EA \$ 17,000.00	695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
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 Beacns 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, wlo UPS, Full Color, 12-20 SF EA \$ 17,000.00	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 \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00			AS	
700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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				
700-2-16 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		1 7 0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		
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		• • • • • • • • • • • • • • • • • • • •		
700-7-232 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				
	700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

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

Project 506: Juan Ponce de Leon Landing

"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, Contigency)	\$ -
	INPUT
Fiber Optic (in miles)	C
No. of Traffic Signals	C
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%
	TOTAL
No. of CCTV Cameras	C
No. of Roadside Units/Bluetooth	C
No. of Midblock Detectors	C
No. of Controllers	C
No. of Controller Cabinet Assemblies	C
No. of Video Detection Systems	C
No. of Network Connections	C

"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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$	375,226.57
		INPUT
No. of Parking Stalls		50

6302-11 Conduit, Fâl, Directional Bore LF \$ 7.13 6302-21 Conduit, Fâl, Directional Bore LF \$ 21.37 632-7-1 Signal Cable - New or Reconstructed Intersection, Fâl PI \$ 5,786.13 633-1-123 Fiber Optic Cable, Fâl, Underground Cable, 48-96 LF \$ 3.9.07 633-3-15 Fiber Optic Connection, Install, Splice EA \$ 39.07 633-3-15 Fiber Optic Connection Hardware, Fâl, Splice Enclosure EA \$ 899.92 633-3-15 Fiber Optic Connection Hardware, Fâl, Poter Principle Principle Connection Hardware, Fâl, Poter Principle Principle Principle P	Pay Item	Description	Unit	Unit Cost
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 \$ 899.92 633-3-11 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 \$ 732.88 635-2-12 Pull & Splice Box, F&I, 3" X-24" EA \$ 1,266.36 635-2-11 Pull & Splice Box, F&I, 30" X-30" Rectangular or 36" Round EA \$ 1,266.36 635-2-11 Pull & Splice Box, F&I, 30" X-30" Rectangular or 36" Round EA \$ 2,365.36 639-1-111 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-10 Electrical Service Wire, F&I FAI Yel Power Service, FAI <t< td=""><td>630-2-11</td><td>Conduit, F&I, Open Trench</td><td>LF</td><td>\$ 7.13</td></t<>	630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
Sa3-1-123 Fiber Optic Cable, F&I, Underground Cable, 48-96	630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
Fiber Optic Connection, Install, Splice	632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
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, 137 V.X EA \$ 1,265.36 635-2-12 Pull & Splice Box, F&I, 247 V.36° EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 307 V.80° Rectangular or 36° Round EA \$ 2,384.57 6393-111 Electrical Service Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,385.34 642-2-10.1 Stele Mast Arm Assembly, F&I, 30° Single AS \$ 35,775.62 659-2-10.2 Verbicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 780.00 660-1-11 Verbicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 780.00 660-2-10.2 Loop Assembly, F&I, Type B <td< td=""><td>633-1-123</td><td>Fiber Optic Cable, F&I, Underground Cable, 48-96</td><td>LF</td><td>\$ 3.34</td></td<>	633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
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, 13" X 24" EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 20" X 36" EA \$ 1,265.36 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,880.00 639-1-11 Electrical Service Wire, F&I LF \$ 7.17 639-2-11 Electrical Service Wire, F&I LF \$ 7.17 639-1-12 Electrical Service Wire, F&I LF \$ 7.17 639-2-11 Electrical Service Wire, F&I Pull Pedestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,325.34 642-21-01 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 650-1-13 Vehicular Traffic Singla, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-3-10 Loop A	633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
635-2-11 Pull & Splice Box, F&I, 13" X 24" Set EA \$ 732.68 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 639-2-12 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,3283.74 646-2-115 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 649-2-1-01 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 \$ 790.00 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 1,262.26 660-3-12 <td>633-3-11</td> <td>Fiber Optic Connection Hardware, F&I, Splice Enclosure</td> <td>EA</td> <td>\$ 899.92</td>	633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
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 \$ 2,384.57 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 642-2-15 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 649-2-10-1 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 650-1-11 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 \$ 4,128.33 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,751.			EA	
635-2-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-1-11 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Wire, F&I F 7.17 639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-13 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,385.34 642-2-15 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 \$ 790.00 660-3-10 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 3,228.73 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA				
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 \$ 7.17 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.34 641-2-15 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283.74 646-2-115 Aluminum Pole - Index 695-001, F&I, 20° EA \$ 2,166.50 649-2-1-01 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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 660-2-101 Loop Desembly, F&I, Type B EA \$ 790.00 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-10 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 660-4-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 3,251.49 <		Pull & Splice Box, F&I, 24" X 36"		
Electrical Service Wire, F&I LF \$ 7.17	635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	
639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-12 Prestressed Concrete Pole, F&I, Type P-IIP edestal EA \$ 1,395.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 646-2-115 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 \$ 790.00 660-1-101 Loop Detector Inductive, F&I, Type P0 EA \$ 389.94 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 170.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 4,122.36 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.31 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.41 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equip				
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 \$ 35,775.52 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-101 Loop Desetch Inductive, F&I, Type 10 EA \$ 389.94 660-1-110 Loop Desetch Inductive, F&I, Type 10 EA \$ 390.94 660-1-11 Loop Desembly, 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-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.31 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,7				
641-2-13		* *		
646-2-115 Aluminum Pole - Index 695-001, Fål, 20° EA \$ 2,166.50 649-2-1-01 Steel Mast Arm Assembly, Fål, 30° Single AS \$ 35,775.52 650-1-13 Vehicular Traffic Signal, Fål, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-10 Loop Detector Inductive, Fål, Type 10 EA \$ 389.94 660-2-102 Loop Assembly, Fål, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, Fål, Above Ground Equipment EA \$ 4,128.33 660-3-12 Vehicle Detection System-Microwave, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 3,1971.31 660-4-12 Vehicle Detection System-Wideo, Fål, Above Ground Equipment EA \$ 3,1971.31 660-1-13 Signal Priority and Preemption System, Fål, Optical, Detector EA \$ 3,1971.31 663-1-13 Pedestrian Detector, Fål, Passive Pede	641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
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-Wickoe, F&I, Cabinet Equipment EA \$ 8,228.73 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 176.71-79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,1971.31 660-7-11 Signal Priority and Preemption Sy	641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
660-1-13	646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
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 \$ 9,515.49 660-4-12 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 \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,1971.31 663-1-13 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 13,971.31 663-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, NEMA, Two Preemption Plans AS \$ 327,645.38 670-5-140 Traffic Controller As	649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
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 \$ 8,228.73 660-4-12 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-Wideo, F&I, Above Ground Equipment EA \$ 4,751.79 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 3,197.11 660-7-11 Vehicle Detection System-Video, F&I, Detection EA \$ 3,197.14 660-1-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 1,714.44 660-1-13 Pedestrian Detection EA \$ 1,714.44 665-1-13 Pedestrian Detection EA	650-1-13	Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
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 \$ 8,228.73 660-3-11 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 \$ 9,515.49 660-4-11 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 9,751.79 660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detector EA \$ 1,714.44 665-1-12 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, Modify EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-121 ITS Cabinet, F&I,	660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 8.228.73 660-4-12 Vehicle Detection System-Video, F&I, Cabrinet Equipment EA \$ 9.515.49 660-4-12 Vehicle Detection System-Video, F&I, Cabrinet Equipment EA \$ 9.515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,971.37 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,971.79 660-7-11 Vehicle Detection System-Video, F&I, Detector EA \$ 1,971.34 663-1-111 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,740.44 665-1-12 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 \$ 27,645.38 670-5-140 Traffic Controller Assembly, F&I, in Existing Cabinet, NEMA EA \$ 1,942.50 671-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,890.00	660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
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 \$ 31,971.31 660-7-11 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 31,971.31 663-1-111 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 Assembly, Modify EA \$ 1,942.50 671-2-12 Traffic Controller Modify EA \$ 1,940.50 676-2-112 TrS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 1,890.00 677-2-11 TrS Cabinet, F&I, Pole Mount, 34	660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
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 \$ 31,971.31 663.7-111 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 3,752.44 663.7-112 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 \$ 32,011.37 670-5-400 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, Modify EA \$ 1,942.50 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-121 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, Hig	660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-7-11	660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 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, Modify EA \$ 1,890.00 671-2-10 ITS Controller, Modify EA \$ 1,890.00 676-2-121 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, P, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&I EA <	660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
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 \$ 1,942.50 671-2-41 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-11 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,496.00 681-000 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 \$ 3,792.46 685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,645.12	660-7-11	Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
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 \$ 1,942.50 671-2-41 Traffic Controller Modify EA \$ 1,942.50 671-2-21 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 3366, 24" X 46" 22" EA \$ 9,806.00 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 1,700.00 682-1-113 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 \$ 3,800.00 685-3-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,845.12	663-1-111	Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5.752.44
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 Modify EA \$ 1,942.50 671-2-21 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 \$ 10,176.47 684-2-1 Device Server, F&I EA \$ 778.37 685-3-1-3 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 1,554.51 695-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 6,624.43 700-11-1	663-1-112		EA	
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 \$ 1,900.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-10 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 Device Server, F&I EA \$ 3,792.46 684-2-1 Device Server, F&I EA \$ 778.37 685-1-31 Remote Power Management Unit, F&I EA \$ 1,545.12 6958-8-11 Cellular Modern, F&I EA \$ 3,000.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66.024.43 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.85 700-11-2 Sign Beacon, F&	665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-11 Traffic Controller without Cabinet, F&l in Existing Cabinet, NEMA EA \$ 4,500.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&l, 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&l, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&l EA \$ 3,792.46 684-3-1 Device Server, F&l EA \$ 778.37 685-3-1 Remote Power Management Unit, F&l EA \$ 1,545.12 695-8-11 Cellular Modern, F&l EA \$ 1,545.12 695-8-11 Cellular Modern, F&l EA \$ 3,000.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66.024.43 700-11-1 Electronic Display Sign, F&l, Ground Mount, Blankout Sign, 48" X 48" AS	670-5-112	Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
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 \$ 3,792.46 684-1-1 Device Server, F&I EA \$ 778.37 685-1-31 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 6958-8-11 Cellular Modern, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.43 700-11-12 Electronic Display Sign, F&I, Ground Mount, Blankout Sign, 48" X 48" AS \$ 6,254.85 700-11-2 Sign Beacon, F&I, Ground Mount, AD Powered, Two Beacns AS \$ 3,948.03 70	670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
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, P, 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 \$ 7783.7 685-1-13 Uninterrupitible 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 \$ 6,754.85 700-11-2 Electronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48" AS \$ 6,754.85 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948.03 <td< td=""><td>670-5-400</td><td>Traffic Controller Assembly, Modify</td><td>EA</td><td>\$ 1,942.50</td></td<>	670-5-400	Traffic Controller Assembly, Modify	EA	\$ 1,942.50
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 \$ 6,832.21 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modern, 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 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,348.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, MOUNT- AC POWERED, 12-20 SF AS \$ 9,352.32 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF EA \$ 1,000.00 <td>671-2-11</td> <td></td> <td>EA</td> <td>\$ 4,500.00</td>	671-2-11		EA	\$ 4,500.00
681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 6821-1113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 3,792.46 684-1-1 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 6958-8-11 Cellular Modern, 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 Sign Beacon, F&I, Ground Mount, AD Powered, Two Beacns 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, wio UPS, F&III Color, 12-20 SF EA \$ 17,000.00 <td>671-2-40</td> <td>Traffic Controller, Modify</td> <td>EA</td> <td>\$ 1,890.00</td>	671-2-40	Traffic Controller, Modify	EA	\$ 1,890.00
681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, 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 6958-8-11 Cellular Modern, 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, AD Powered, Two Beacns AS \$ 3,948.03 700-2-16 Multi-Post Sign, F&I, Ground Mount, 101-200 SF AS \$ 9,352.32 700-12-12 Embedded Dynamic Message Sign, F&I, Wio UPS, Full Color, 12-20 SF EA \$ 17,000.	676-2-112	ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	681-000	Connected Vehicle Equipment, Roadside Unit	EA	\$ 7,500.00
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, Ground Mount, Blankout Sign, 48" X 48" AS \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AP Powered, Two Beacns 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, F&II Color, 12-20 SF EA \$ 17,000.00	682-1-113	ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition	EA	\$ 10,176.47
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 Modern, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantilever 31-40 FT EA \$ 66,024.43 700-11-12 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 Beacns 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	684-1-1		EA	
685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modern, 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 Beacns 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, Wo UPS, F&II Color, 12-20 SF EA \$ 17,000.00	684-2-1	Device Server, F&I	EA	\$ 778.37
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 \$ 6,254.85 700-12-12 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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	685-1-13	Uninterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
695-8-11 Cellular Modem, F&I EA \$ 3,500.00 700-10-123 DMS Support Structure, Cantiliever 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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00	685-3-1	Remote Power Management Unit, F&I	EA	\$ 1,545.12
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 Beacns 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, wlo UPS, Full Color, 12-20 SF EA \$ 17,000.00	695-8-11	Cellular Modem, F&I	EA	\$ 3,500.00
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 Beacns 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, wlo UPS, Full Color, 12-20 SF EA \$ 17,000.00	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 \$ 7,122.87 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00			AS	
700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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				
700-2-16 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		1 7 0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		
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		• • • • • • • • • • • • • • • • • • • •		
700-7-232 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				
	700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76

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

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,	s -
Erosion and Sediment Control, Contigency)	•
	INPUT
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%
	TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
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

"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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ 375,226.57
	INPUT
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
660-3-11	Vehicle Detection System-Microwave, F. &, Cabinet Equipment Vehicle Detection System-Microwave, F. &I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	FA	\$ 9,515.49
	7 1 1 1 1		
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 Beacns	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-2-10	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
100-0-100	Troncriocos Dynamic incosage orgin, Fall W/ UFS, Full Cului, 31-100 SF	ĿA	ψ υΖ,υ1Ζ./0

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

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

Project 508: South Patrick Residents Association 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, Contigency)	\$ -
	INPUT
Fiber Optic (in miles)	0
No. of Traffic Signals	C
No. of ADMS	C
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%
	TOTAL
No. of CCTV Cameras	C
No. of Roadside Units/Bluetooth	C
No. of Midblock Detectors	C
No. of Controllers	C
No. of Controller Cabinet Assemblies	C
No. of Video Detection Systems	C
No. of Network Connections	C

"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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Key Decision Points / Intersections	(

"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, Contigency)	\$ 375,226.57
	INPUT
No. of Parking Stalls	50

630-2-12 Cor 632-7-1 Sign 633-1-123 Fibe 633-2-31 Fibe 633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	iduit, F&I, Open Trench iduit, F&I, Directional Bore nal Cable - New or Reconstructed Intersection, F&I er Optic Cable, F&I, Underground Cable, 48-96 er Optic Connection, Install, Spice er Optic Connection Hardware, F&I, Splice Enclosure er Optic Connection Hardware, F&I, Preterminated Patch Panel i& Splice Box, F&I, 13" X 24" i& Splice Box, F&I, 24" X 36"	LF PI LF EA EA EA	\$ 7.13 \$ 21.37 \$ 5,796.13 \$ 39.07 \$ 899.92
632-7-1 Sign 633-1-123 Fibe 633-2-31 Fibe 633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	nal Cable - New or Reconstructed Intersection, F&I er Optic Cable, F&I, Underground Cable, 48-96 er Optic Connection, Install, Splice er Optic Connection Hardware, F&I, Splice Enclosure er Optic Connection Hardware, F&I, Preterminated Patch Panel I& Splice Box, F&I, 13" X 24"	PI LF EA EA	\$ 5,796.13 \$ 3.34 \$ 39.07
633-1-123 Fibe 633-2-31 Fibe 633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	er Optic Cable, F.&I, Underground Cable, 48-96 er Optic Connection, Install, Splice er Optic Connection Hardware, F.&I, Splice Enclosure er Optic Connection Hardware, F.&I, Preterminated Patch Panel 8. Splice Box, F.&I, 13" X 24"	LF EA EA	\$ 3.34 \$ 39.07
633-2-31 Fibe 633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	er Optic Connection, Install, Splice er Optic Connection Hardware, F&I, Splice Enclosure er Optic Connection Hardware, F&I, Preterminated Patch Panel l& Splice Box, F&I, 13" X 24"	EA EA	\$ 39.07
633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	er Optic Connection Hardware, F&I, Splice Enclosure er Optic Connection Hardware, F&I, Preterminated Patch Panel & Splice Box, F&I, 13" X 24"	EA EA	
633-3-15 Fibe 635-2-11 Pull	er Optic Connection Hardware, F&I, Preterminated Patch Panel & Splice Box, F&I, 13" X 24"	EA	\$ 899.92
635-2-11 Pull	& Splice Box, F&I, 13" X 24"		
		EA	\$ 1,801.63
635_2_12 Doll	& Splice Box F&I 24" X 36"		\$ 732.68
	a opiloo Box, 1 at, 2.1 7/ 00	EA	\$ 1,265.36
635-2-13 Pull	& Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
	ctrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1 Elec	ctrical Service Wire, F&I	LF	\$ 7.17
	ctrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11 Pre	stressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13 Pre	stressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115 Alur	minum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01 Stee	el Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13 Veh	nicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110 Loo	p Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102 Loo	p Assembly, F&I, Type B	EA	\$ 780.26
660-3-11 Veh	nicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12 Veh	nicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11 Veh	nicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12 Veh	nicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11 Veh	nicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111 Sign	nal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
	nal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
-	lestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112 Trai	ffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140 Trat	ffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400 Trat	ffic Controller Assembly, Modify	EA	\$ 1,942.50
	ffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
	ffic Controller, Modify	EA	\$ 1.890.00
	Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
	nnected 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
	naged Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1 Dev	rice Server, F&I	EA	\$ 778.37
685-1-13 Unii	nterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1 Ren	note Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11 Cell	lular Modem, F&I	EA	\$ 3,500.00
	S Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
	ctronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
	ctronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
	n Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
	ti-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
	HLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
	bedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135 From	nt 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/silpfinity/docs/defaultsource/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month.pdf.pdf?sfvrsn=4e
4c771_2

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

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, Contigency)	\$ -
	INPUT
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%
	TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Nit D - verificie-to-verificie (signalized)	_
No. of Kit "C" - Vehicle-to-Bicycle	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, Contigency)	\$ -
	INPUT
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, Contigency)	\$	694,220.45
		INPUT
No. of Parking Stalls		250

6302-11 Conduit, F&I, Directional Bore LF \$ 7.13 6302-12 Conduit, F&I, Directional Bore LF \$ 21.37 632-7-1 Signal Cable - New or Reconstructed Intersection, F&I PI \$ 5,786.13 633-1-123 Fiber Optic Connection, Install, Splice EA \$ 39.07 633-2-11 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, 37 X A2* EA \$ 1,205.33 635-2-12 Pull & Splice Box, F&I, 37 X A2* EA \$ 1,266.36 635-2-13 Pull & Splice Box, F&I, 30 Y & DR Rectangular or 36* Round EA \$ 1,266.36 639-11 Electrical Service Wire, F&I Feet Dever Company AS \$ 2,860.00 639-1-11 Electrical Service Wire, F&I Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-1-11 Electrical Service Wire, F&I Fee Development EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-III <	Pay Item	Description	Unit	Unit Cost
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 \$ 39.07 633-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 899.92 633-3-15 Fiber Optic Connection Hardware, F&I, Perterminated Patch Panel EA \$ 1,801.63 635-2-11 Pull & Splice Box, F&I, 13" X 24" EA \$ 1,801.63 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 635-2-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 2,384.57 639-1-111 Electrical Evoire Endit Service Wire, F&I LF \$ 7.77 639-1-111 Electrical Service Wire, F&I LF \$ 7.77 639-1-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.66 641-2-11 Aurinum Pole - Index 695-001, F&I, Type P-II EA \$ 1,328.66 641-2-11 Prestressed Concrete Pole, F&I, Type P-II EA \$ 1,328.66 641-2-10 Steel Mas	630-2-11	Conduit, F&I, Open Trench	LF	\$ 7.13
633-1-123 Fiber Optic Cable, F&I, Underground Cable, 48-96 LF \$ 3.9 633-2-31 Fiber Optic Connection, Install, Splice EA \$ 39.07 633-3-15 Fiber Optic Connection Hardware, F&I, Splice Enclosure EA \$ 899.92 633-3-15 Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel EA \$ 1,801.63 635-2-17 Pull & Splice Box, F&I, 13* Y.24* EA \$ 732.68 635-2-12 Pull & Splice Box, F&I, 13* Y.24* EA \$ 1,265.36 635-2-12 Pull & Splice Box, F&I, 20* X.50* EA \$ 1,265.36 635-2-13 Pull & Splice Box, F&I, 20* X.60* Rectangular or 36* Round EA \$ 1,265.36 639-2-11 Electrical Service Disconnect, F&I, Overhead, Meter Furnished by Power Company \$ 2,800.03 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,389.34 641-2-11 Autorium Fole - Hak Rosembly, F&I, Type P-II Pedestal EA \$ 1,265.64	630-2-12	Conduit, F&I, Directional Bore	LF	\$ 21.37
633-2-31 Fiber Optic Connection, Install, Splice EA \$ 899.92 633-3-15 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, 137 Y.24 EA \$ 7,266 635-2-12 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 \$ 2,384.57 635-2-13 Pull & Splice Box, F&I, 30" X.60" Rectangular or 36" Round EA \$ 2,385.00 639-2-1 Electrical Service Wire, F&I Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Disconnect, F&I, Oper Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,335.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,328.37 646-2-115 Aluminum Pole - Index 695-01, F&I, 20° EA \$ 2,166.50 640-2-101 Steel Mast Arm Assembly, F&I, 30° Single S 3,3	632-7-1	Signal Cable - New or Reconstructed Intersection, F&I	PI	\$ 5,796.13
6333-3-11 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, 137 × 24 EA \$ 7,326 635-2-12 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 \$ 2,384.57 639-2-11 Electrical Service Park, E, Roverhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 641-2-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,385.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,328.37 646-2-115 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 660-2-101 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 660-2-110 Loop Detection Inductive, F&I, Type 10 EA \$ 389.94 660-2-110 Loop Detection Inductive, F&I, Type 10 EA \$ 780.26	633-1-123	Fiber Optic Cable, F&I, Underground Cable, 48-96	LF	\$ 3.34
6333-3-15 Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel EA \$ 1,801.63 6352-11 Pull & Splice Box, F&I, 13" X 24" EA \$ 732.68 6352-12 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 6352-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 639-111 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 6412-211 Prestressed Concrete Pole, F&I, Type P-III Pedestal EA \$ 1,385.34 6412-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283.74 6412-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283.74 6412-11 Steel Mast Arm Assembly, F&I, 30" Single AS \$ 35,775.62 660-1-11 Loop Detector Inductive, F&I, Type IO EA \$ 2,666.50 660-1-11 Loop Detector Inductive, F&I, Type II EA \$ 3,904.60	633-2-31	Fiber Optic Connection, Install, Splice	EA	\$ 39.07
6352-11 Pull & Splice Box, F&I, 13" X 24" EA \$ 732.68 6352-12 Pull & Splice Box, F&I, 24" X 36" EA \$ 1,265.36 6352-13 Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round EA \$ 2,384.57 6393-11 Electrical Service Wire, F&I LF \$ 7.17 6392-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,375.68 6412-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,375.64 6412-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.374 6412-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.374 642-21-15 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 649-21-10 Steel Mast Arm Assembly, F&I, 30' Single AS \$ 35,775.62 660-1-11 Vehicular Traffic Signal, F&I, Hype 10 EA \$ 309.94 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-2-102 Loop Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Ab	633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	\$ 899.92
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 Service Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 639-2-1 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 639-111 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,378.54 641-2-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 641-2-15 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 649-2-101 Steel Mast Arm Assembly, F&I, 30" Sirgle AS \$ 35,775.62 650-1-13 Vehicular Traffe Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type B EA \$ 780.26 660-111 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4128.33 660-3-11 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<	633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
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 F 7.17 639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 6412-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,378.54 6412-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 646-2-115 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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 660-1-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 4,128.33 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA	635-2-11	Pull & Splice Box, F&I, 13" X 24"	EA	\$ 732.68
6391-1111 Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company AS \$ 2,850.00 6392-11 Electrical Service Wire, F&I LF \$ 7.17 6392-11 Electrical Service Wire, F&I LF \$ 7.17 6412-11 Prestressed Concrete Pole, F&I, Type P-II Pedestal EA \$ 1,395.34 6412-11 Prestressed Concrete Pole, F&I, Type P-III EA \$ 13,283.74 6462-115 Aluminum Pole - Index 695-001, F&I, 20" EA \$ 2,166.50 6492-1-01 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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type B EA \$ 780.26 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 4,128.33 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,515.49 660-4-11 Vehicle Detection System-F,F&I, Optical, Cabinet Electronics EA \$ 3,197.13	635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
639-2-1 Electrical Service Wire, F&I LF \$ 7.17 639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.6 641-2-11 Prestressed Concrete Dele, F&I, Type P-II Pedestal EA \$ 1,385.34 641-2-13 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 646-2-115 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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type B EA \$ 780.26 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 1,228.73 660-4-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 1,971.79 6	635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
639-3-11 Electrical Service Disconnect, F&I, Pole Mount EA \$ 1,378.56 6412-211 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,395.34 6412-213 Prestressed Concrete Pole, F&I, Type P-III EA \$ 1,328.37 646-2-115 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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type I0 EA \$ 389.94 660-2-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 4,128.33 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.31 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment	639-1-111	Electrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
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 \$ 13,283.74 640-2-115 Aluminum Pole - Index 695-001, F&I, Zyo EA \$ 2,166.50 649-21-01 Steel Mast Arm Assembly, F&I, 30' Single AS \$ 35,775.52 650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-110 Loop Detection Inductive, F&I, Type B EA \$ 790.00 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 1,702.83 660-3-11 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 1,754.94 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,754.94 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,751.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,751.49 660-4-12 Vehicle Detection System-F&I, Optical, Cabinet Electronics EA <td>639-2-1</td> <td>Electrical Service Wire, F&I</td> <td>LF</td> <td>\$ 7.17</td>	639-2-1	Electrical Service Wire, F&I	LF	\$ 7.17
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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type B 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 \$ 780.26 660-3-12 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Optical, Detector EA \$ 31,971.31 660-1-13 Vehicle Detection System-Video, F&I, Optical, Detector EA \$ 31,971.31 660-1-13 Yehicle Detection System-Pidon System, F&I, Optical, Detector EA	639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
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 \$ 790.00 660-1-10 Loop Detector Inductive, F&I, Type B EA \$ 780.26 660-2-11 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 780.26 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 4,128.33 660-3-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Wrong, F&I, Above Ground Equipment EA \$ 3,1971.31 660-4-11 Vehicle Detection System-Wrong, F&I, Cabinet Equipment EA \$ 3,1971.31 660-4-12 Vehicle Detection System-Wrong, F&I, Cabinet Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Wrong, F&I, Cabinet Equipment EA \$ 3,1971.31 660-7-11 Vehicle Detection System-Wron	641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
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 Detection 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 \$ 4,128.33 660-3-11 Vehicle Detection System-Microwave, F&I, Above Ground Equipment EA \$ 8,228.73 660-3-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Wideo, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 1,717.79 660-7-11 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 1,717.40 660-7-11 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 1,711.44 660-7-11 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 1,717.44 663-1-11 Signal Priority	641-2-13	Prestressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
650-1-13 Vehicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways EA \$ 790.00 660-1-101 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 660-1-110 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-Video, F&I, Cabinet Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,171.31 660-1-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,1971.31 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 3,1971.31 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 660-1-12 Bartin System-F, F&I, Operation System-F,	646-2-115	Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
660-1-110 Loop Detector Inductive, F&I, Type 10 EA \$ 389.94 660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-2-110 Vehicle Detection System-Microwave, F&I, Cabinet Equipment EA \$ 128.23 660-3-11 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, Cabinet Equipment EA \$ 9,751.79 660-4-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 9,751.79 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,751.79 660-7-11 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,751.79 660-7-11 Vehicle Detection System-F&I, Optical, Detector EA \$ 1,971.40 660-7-11 Vehicle Detection System-F&I, Optical, Detector EA \$ 1,791.44 663-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,791.44 665-1-13 Traffic Controller Assembly, F&I, Model 2070, 1 Pre	649-21-01	Steel Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
660-2-102 Loop Assembly, F&I, Type B EA \$ 780.26 660-2-110 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, Above Ground Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 4,751.79 660-4-11 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 3,197.11 660-4-12 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 3,197.13 660-4-11 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 3,197.13 663-1-112 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 1,714.44 665-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 1,714.44 665-1-12 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 32,714.53 670-5-40 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
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 \$ 8,228.73 660-3-11 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 \$ 9,515.49 660-4-11 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 \$ 1,704.44 6670-5-140 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, Modify EA \$ 1,890.00 6762-112 Traffic Controller, Modify EA \$ 1,890.00 6762-113 ITS Cobinet, F&I, Pole Mount,	660-1-110	Loop Detector Inductive, F&I, Type 10	EA	\$ 389.94
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, Cabinet Equipment EA \$ 9,515.49 660-4-12 Vehicle Detection System-Video, F&I, Above Ground Equipment EA \$ 1,971.79 660-7-11 Vehicle Detection System-Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 1,971.79 660-7-11 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 5,752.44 663-1-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,774.44 663-1-13 Pedestrian Detector, F&I, Passive Pedestrian Detection EA \$ 4,500.00 670-5-112 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 Assembly, Modify EA \$ 1,890.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-410 Traffic Controller, Modify	660-2-102	Loop Assembly, F&I, Type B	EA	\$ 780.26
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 \$ 4,751.79 660-4-11 Vehicle Detection System-Wrogo, F&I, Above Ground Equipment EA \$ 4,751.79 663-1-11 Vehicle Detection System-Wrogo, F&I, Above Ground Equipment EA \$ 31,971.31 663-1-112 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics 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, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 671-2-11 Traffic Controller Assembly, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 671-2-12 Traffic Controller Assembly, F&I, In Existing Cabinet, NEMA EA \$ 1,942.50 671-2-12 Traffic Controller Modify EA \$ 1,890.00 671-2-1	660-3-11	Vehicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
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 \$ 31,971.31 660-7-111 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 \$ 4,500.00 670-5-140 Traffic Controller Assembly, F&I, NEMA, Two Preemption Plans AS \$ 227,645.38 670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942.50 671-2-11 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,942.50 671-2-11 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 \$ 1,750.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, High-Definition EA \$ 1,778.37 684-2-1 Device Server	660-3-12	Vehicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
6607-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 6637-111 Signal Priority and Preemption System, F&I, Optical, Cabinet Electronics EA \$ 5,752.44 6637-112 Signal Priority and Preemption System, F&I, Optical, Detector EA \$ 1,714.44 6657-13 Pedestrián Detector, F&I, Passive Pedestrian Detection EA \$ 4,500.00 670-5-112 Traffic Controller Assembly, F&I, McMa, 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 \$ 1,942.50 671-2-41 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,890.00 671-2-410 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 Tis Cabinet, F&I, Pole Mount, 366s, 24" X 46" 22" EA \$ 9,466.80 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-2-1 Device Server	660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-7-11 Vehicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes EA \$ 31,971.31 663-1-112 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 \$ 1,890.00 6761-2-11 Traffic Controller, Modify EA \$ 1,890.00 6762-113 Tis Cabinet, F&I, Pole Mount, 36S, 24" X 46" 22" EA \$ 1,890.00 6762-113 Tis CCTV Camera, F&I, Dome Enclosure PTZ, P, High-Definition EA \$ 1,0176.47 682-1-13 Managed Field Ethernet Switch, F&I EA \$ 7,780.37 684-2-1 Device Server, F&I<	660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4.751.79
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 \$ 1,714.44 665-1-12 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 \$ 1,800.00 671-2-40 Traffic Controller, Modify EA \$ 1,800.00 671-2-40 Traffic Controller, Modify EA \$ 1,800.00 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-13 ITS CCTV Camera, F&I, Dome Enclosure PTZ, IP, High-Definition EA \$ 1,0176.47 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 7,783.7 684-2-1 Device Server, F&I EA \$ 1,742.42 </td <td></td> <td></td> <td>FA</td> <td></td>			FA	
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, F&I, Model 2070, 1 Preemption AS \$ 27,645.38 671-2-40 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 1,942.50 671-2-41 Traffic Controller, Modify EA \$ 1,890.00 671-2-12 ITS Cabinet, F&I, Pole Mount, 336S, 24* X 46* 22* EA \$ 1,890.00 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-13 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 \$ 3,782.46 685-3-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet		, , , , , , , , , , , , , , , , , , , ,		1 - 1
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 6712-211 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 4,500.00 6712-211 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, P, High-Definition EA \$ 10,176.47 684-1-1 Managed Field Ethernet Switch, F&I EA \$ 778.37 684-1-13 Uninterrupible Power Supply, F&I, Line Interactive with Cabinet EA \$ 778.37 685-3-13 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modem, F&I EA \$ 1,050.00				
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 \$ 27,645.38 670-5-140 Traffic Controller Assembly, Modify EA \$ 1,942.50 6712-211 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 4,500.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-41 Traffic Controller, Modify EA \$ 1,890.00 670-2-121 Tis 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, P, High-Definition EA \$ 10,176.47 684-2-1 Device Server, F&I EA \$ 778.37 684-1-1 Managed Fleid Ethernet Switch, F&I EA \$ 778.37 685-3-1 Remote Power Management Unit, F&I EA \$ 1,545.12 695-8-11 Cellular Modem, F&I EA \$ 1,545.12 695-8-11 Cellular Modem, F&I				
670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942-50 6712-211 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 4,500.00 6712-240 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,946.60 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-2-1 Managed Field Ethernet Switch, F&I EA \$ 778.37 685-3-13 Uninterrupible 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				
670-5-400 Traffic Controller Assembly, Modify EA \$ 1,942-50 6712-211 Traffic Controller without Cabinet, F&I in Existing Cabinet, NEMA EA \$ 4,500.00 6712-240 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 ITS Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22" EA \$ 9,946.60 681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-2-1 Managed Field Ethernet Switch, F&I EA \$ 778.37 685-3-13 Uninterrupible 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	670-5-140	Traffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27 645 38
671-2-11 Traffic Controller without Cabinel, F&I in Existing Cabinet, NEMA EA \$ 4,500.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 671-2-40 Traffic Controller, Modify EA \$ 1,890.00 662-112 Tis 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 \$ 7,833.51 685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832.51 685-5-11 Remote Power Management Unit, F&I EA \$ 1,545.12 695-5-11 Cellular Modern, 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, Overhead Mount, Blankout Sign, 48" X 48" AS \$ 7,122.87 700-12-12 Sig		* * * * * * * * * * * * * * * * * * * *		
671-2-40 Traffic Controller, Modify EA \$ 1,890.00 676-2-112 TIS 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, P, 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 \$ 7783.7 685-1-13 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, Ground Mount, Blankout Sign , 48" X 48" AS \$ 6,254.85 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns AS \$ 3,948.03				
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, P, 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 \$ 778.37 685-1-31 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, AP Powered, Two Beacns AS \$ 3,948.03 700-6-12 HIGHLIGHTED SIGN, F&I GROUND MOUNT-AC POWERED, 12-20 SF EA \$ 4,072.57				
681-000 Connected Vehicle Equipment, Roadside Unit EA \$ 7,500.00 682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-1-1 Managed Fleid Ethernet Switch, F&I EA \$ 3,792.46 684-2-1 Device Server, F&I EA \$ 778.37 685-1-3 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, AP Powered, Two Beacns 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 </td <td></td> <td></td> <td></td> <td></td>				
682-1-113 ITS CCTV Camera, F&I, Dome Enclosure PTZ, P, High-Definition EA \$ 10,176.47 684-1-11 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 \$ 1,545.12 685-3-1 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 \$ 660.24.43 700-11-1 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, 101-200 SF 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, Wo UPS, F&III Color, 12-20 SF EA \$ 17,000				
684-1-1 Managed Field Ethernet Switch, F&I EA \$ 3,792.46 6842-1 Device Server, F&I EA \$ 778.37 685-1-13 Uninterruptible Power Supply, F&I, Line Interactive with Cabinet EA \$ 6,832.51 685-8-1 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 \$ 3,948.03 700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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 \$ 1,000.00 Embedded Dynamic Message Sign, F&I, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00				
684-2-1 Device Server, F&I EA \$ 778.37 685-1-3 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 Beacns 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, Wo UPS, F&III Color, 12-20 SF EA \$ 17,000.00		<u> </u>		
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, Elankout Sign, 48" X 48" AS \$ 6,224.85 700-11-2 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 Beacns 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, Wo UPS, F&III Color, 12-20 SF EA \$ 17,000.00		· · · · · · · · · · · · · · · · · · ·	EA	, .
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 Beacns 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, Wo UPS, F&II Color, 12-20 SF EA \$ 17,000.00				
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 Beacns 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, F&III Color, 12-20 SF EA \$ 17,000.00				
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 Beacns 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, Wo UPS, F&III Color, 12-20 SF EA \$ 17,000.00		-		
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 Beacns 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, Wo UPS, Full Color, 12-20 SF EA \$ 17,000.00				
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 Beacns 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		The state of the s		
700-12-12 Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns 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				
700-2-16 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				
700-6-12 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		• • • • • • • • • • • • • • • • • • • •		
700-7-232 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				
	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/defaultsource/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month pdf.pdf?sfvrsn=4e
4c771_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%

Project 510: Port Canaveral

"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, Contigency)	*	
		INPUT
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%
		TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	

IIINTERCECTION CAFETVII Parilla 4 O-laulata	
"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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Key Decision Points / Intersections	0

"PARKING MANAGEMENT" Project Calculator	
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, Contigency)	\$ 2,209,441.39
	INPUT
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 Beacns	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/defaultsource/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month_pdf.pdf?sfvrsn=4e
4c771_2

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

Project 511: Marina 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, Contigency)	\$ -
	INPUT
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%
	TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized) No. of Kit "C" - Vehicle-to-Bicycle	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, Contigency)	-
	INPUT
No. of Key Decision Points / Intersections	(

"PARKING MANAGEMENT" Project Calculator	
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, Contigency)	\$ 494,849.27
	INPUT
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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9.352.32
700-2-16	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-6-12	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 4,072.57
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76
. 00 0.100		ᅜ	ψ UZ,U1 Z.1 U

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

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

Project 512: Space View 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, Contigency)	\$ -
	INPUT
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%
	TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	INPUT 0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	INPUT 0
	INPUT 0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized) No. of Kit "B" - Vehicle-to-Vehicle (signalized) No. of Kit "C" - Vehicle-to-Bicycle	0 0 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, Contigency)	-
	INPUT
No. of Key Decision Points / Intersections	(

"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, Contigency)	375,226.57
	INPUT
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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9.352.32
700-2-16	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-6-12	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 4,072.57
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76
. 00 0.100		ᅜ	ψ UZ,U1 Z.1 U

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

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

Project 513: Sand Point 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, Contigency)	\$ -
	INPUT
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%
	TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	INPUT 0
	INPUT 0
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized) No. of Kit "B" - Vehicle-to-Vehicle (signalized) No. of Kit "C" - Vehicle-to-Bicycle	0 0 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, Contigency)	\$ -
	INPUT
No. of Key Decision Points / Intersections	0

"PARKING MANAGEMENT" Project Calculator	
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, Contigency)	\$ 574,597.74
	INPUT
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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9.352.32
700-2-16	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-6-12	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 4,072.57
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76
. 00 0.100		ᅜ	ψ UZ,U1 Z.1 U

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

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

Project 514: William J. Manzo 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, Contigency)	\$ -
	INPUT
Fiber Optic (in miles)	C
No. of Traffic Signals	C
No. of ADMS	C
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%
	TOTAL
No. of CCTV Cameras	C
No. of Roadside Units/Bluetooth	C
No. of Midblock Detectors	C
No. of Controllers	C
No. of Controller Cabinet Assemblies	C
No. of Video Detection Systems	C
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Key Decision Points / Intersections	0

"PARKING MANAGEMENT" Project Calculator	
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, Contigency)	\$ 335,352.33
	INPUT
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	FA	\$ 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	FA	\$ 9,515.49
660-4-12	Vehicle Detection System-Video, F&I, Above Ground Equipment	FA	\$ 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
663-1-111	Signal Priority and Preemption System, P&I, Optical, Cabinet Electronics Signal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
665-1-13	Pedestrian Detector, F&I, Passive Pedestrian Detection	FA	\$ 4,500.00
000-1-13	Pedestrian Detector, Pai, 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 Beacns	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	FA	\$ 52,572.76
100-0-100	From nocess by namic wessage sign, ranw ors, run color, 51-100 SF	EM	ψ 52,512.70

SOURCE: FDOT HISTORICAL COST - 12 MONTH, STATEWIDE AVG.
https://fdotwww.blob.core.windows.net/sitefinity/docs/defaultsource/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month_pdf.pdf?sfvrsn=4e
4c771_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%

Project 515: Kennedy Point 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, Contigency)	\$	-
		INPUT
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%
		TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
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

HENCHIT MANAGEMENTH Double to Colombia	
"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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ 375,226.57
	INPUT
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 Beacns	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/defaultsource/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month_pdf.pdf?sfvrsn=4e
4c771_2

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

Project 516: Rotary Riverfront 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, Contigency)	\$ -
	INPUT
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%
	TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
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, Contigency)	-
	INPUT
No. of Key Decision Points / Intersections	(

"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, Contigency)	\$ 375,226.57
	INPUT
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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9.352.32
700-2-16	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-6-12	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 4,072.57
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76
. 00 0.100		ᅜ	ψ UZ,U1 Z.1 U

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

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

Project 517: Kennedy Space Center Visitor Complex

ULTUSUS 1 4 S 1 4 4	
"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, Contigency)	\$ -
	INPUT
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%
	TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
No. of Kit "A" - Vehicle-to-Vehicle (unsignalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized)	0
No. of Kit "B" - Vehicle-to-Vehicle (signalized) No. of Kit "C" - Vehicle-to-Bicycle	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, Contigency)	\$	-
		INPUT
No. of Key Decision Points / Intersections		0

"PARKING MANAGEMENT" Project Calculator	
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, Contigency)	5,319,631.73
	INPUT
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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-2-10	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	FA	\$ 52,572.76
100-0-100	Tions nocess by natific intessage sign, rail with ors, rull color, 51-100 SF	EM	\$ 52,512.10

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

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

Project 518: Jetty 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, Contigency)	\$ -
	INPUT
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%
	TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
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, Contigency)	-
	INPUT
No. of Key Decision Points / Intersections	0

"PARKING MANAGEMENT" Project Calculator		
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, Contigency)	\$	454,975.04
		INPUT
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
660-7-11	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 Beacns	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
			,,o o

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

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

Project 519: Banana River 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, Contigency)	\$ -
	INPUT
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%
	TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
No. of Wrong Way Driving Systems	0
No. of Ramp Signal Systems	-
No. of Queue Warning Systems	-
No. of Truck Speed Warning Systems	

IIINTERCECTION CAFETVII Parilla 4 O-laulata	
"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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Key Decision Points / Intersections	-

"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, Contigency)	\$ 375,226.57
	INPUT
No. of Parking Stalls	50

630-2-12 Cor 632-7-1 Sign 633-1-123 Fibe 633-2-31 Fibe 633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	iduit, F&I, Open Trench iduit, F&I, Directional Bore nal Cable - New or Reconstructed Intersection, F&I er Optic Cable, F&I, Underground Cable, 48-96 er Optic Connection, Install, Spice er Optic Connection Hardware, F&I, Splice Enclosure er Optic Connection Hardware, F&I, Preterminated Patch Panel i& Splice Box, F&I, 13" X 24" i& Splice Box, F&I, 24" X 36"	LF PI LF EA EA EA	\$ 7.13 \$ 21.37 \$ 5,796.13 \$ 39.07 \$ 899.92
632-7-1 Sign 633-1-123 Fibe 633-2-31 Fibe 633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	nal Cable - New or Reconstructed Intersection, F&I er Optic Cable, F&I, Underground Cable, 48-96 er Optic Connection, Install, Splice er Optic Connection Hardware, F&I, Splice Enclosure er Optic Connection Hardware, F&I, Preterminated Patch Panel I& Splice Box, F&I, 13" X 24"	PI LF EA EA	\$ 5,796.13 \$ 3.34 \$ 39.07
633-1-123 Fibe 633-2-31 Fibe 633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	er Optic Cable, F.&I, Underground Cable, 48-96 er Optic Connection, Install, Splice er Optic Connection Hardware, F.&I, Splice Enclosure er Optic Connection Hardware, F.&I, Preterminated Patch Panel 8. Splice Box, F.&I, 13" X 24"	LF EA EA	\$ 3.34 \$ 39.07
633-2-31 Fibe 633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	er Optic Connection, Install, Splice er Optic Connection Hardware, F&I, Splice Enclosure er Optic Connection Hardware, F&I, Preterminated Patch Panel l& Splice Box, F&I, 13" X 24"	EA EA	\$ 39.07
633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	er Optic Connection Hardware, F&I, Splice Enclosure er Optic Connection Hardware, F&I, Preterminated Patch Panel & Splice Box, F&I, 13" X 24"	EA EA	
633-3-15 Fibe 635-2-11 Pull	er Optic Connection Hardware, F&I, Preterminated Patch Panel & Splice Box, F&I, 13" X 24"	EA	\$ 899.92
635-2-11 Pull	& Splice Box, F&I, 13" X 24"		
		EA	\$ 1,801.63
635_2_12 Doll	& Splice Box F&I 24" X 36"		\$ 732.68
	a opiloo Box, 1 at, 2.1 7/ 00	EA	\$ 1,265.36
635-2-13 Pull	& Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
	ctrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1 Elec	ctrical Service Wire, F&I	LF	\$ 7.17
	ctrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11 Pre	stressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13 Pre	stressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115 Alur	minum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01 Stee	el Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13 Veh	nicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110 Loo	p Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102 Loo	p Assembly, F&I, Type B	EA	\$ 780.26
660-3-11 Veh	nicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12 Veh	nicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11 Veh	nicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12 Veh	nicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11 Veh	nicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111 Sign	nal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
	nal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
-	lestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112 Trai	ffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140 Trat	ffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400 Trat	ffic Controller Assembly, Modify	EA	\$ 1,942.50
	ffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
	ffic Controller, Modify	EA	\$ 1.890.00
	Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
	nnected 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
	naged Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1 Dev	rice Server, F&I	EA	\$ 778.37
685-1-13 Unii	nterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1 Ren	note Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11 Cell	lular Modem, F&I	EA	\$ 3,500.00
	S Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
	ctronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
	ctronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
	n Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
	ti-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
	HLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
	bedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135 From	nt 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/silpfinity/docs/defaultsource/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month.pdf.pdf?sfvrsn=4e
4c771_2

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

Project 520: Westgate Cocoa Beach Pier

"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, Contigency)	\$ -
	INPUT
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%
	TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Key Decision Points / Intersections	0

"PARKING MANAGEMENT" Project Calculator	
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, Contigency)	\$ 654,346.21
	INPUT
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, Optice Enclosure Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	\$ 1,801.63
635-2-11	Pull & Splice Box, F&I, 13" X 24"	FA	\$ 732.68
635-2-12	Pull & Splice Box, F&I, 24" X 36"	EA	\$ 1,265.36
635-2-12	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 Wile, F&I	EA	\$ 1,378.56
641-2-11	Prestressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,376.30
641-2-11	* * *	EA	\$ 1,395.34
646-2-115	Prestressed Concrete Pole, F&I, Type P-III Aluminum Pole - Index 695-001, F&I, 20'	EA	\$ 13,263.74
	<u> </u>		
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 Beacns	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.

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

Project 521: Shepard 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, Contigency)	\$	-
		INPUT
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%
		TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Key Decision Points / Intersections	(

"PARKING MANAGEMENT" Project Calculator		
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, Contigency)	\$	773,968.92
		INPUT
No. of Parking Stalls		300

630-2-12 Cor 632-7-1 Sign 633-1-123 Fibe 633-2-31 Fibe 633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	iduit, F&I, Open Trench iduit, F&I, Directional Bore nal Cable - New or Reconstructed Intersection, F&I er Optic Cable, F&I, Underground Cable, 48-96 er Optic Connection, Install, Spice er Optic Connection Hardware, F&I, Splice Enclosure er Optic Connection Hardware, F&I, Preterminated Patch Panel i& Splice Box, F&I, 13" X 24" i& Splice Box, F&I, 24" X 36"	LF PI LF EA EA EA	\$ 7.13 \$ 21.37 \$ 5,796.13 \$ 39.07 \$ 899.92
632-7-1 Sign 633-1-123 Fibe 633-2-31 Fibe 633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	nal Cable - New or Reconstructed Intersection, F&I er Optic Cable, F&I, Underground Cable, 48-96 er Optic Connection, Install, Splice er Optic Connection Hardware, F&I, Splice Enclosure er Optic Connection Hardware, F&I, Preterminated Patch Panel I& Splice Box, F&I, 13" X 24"	PI LF EA EA	\$ 5,796.13 \$ 3.34 \$ 39.07
633-1-123 Fibe 633-2-31 Fibe 633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	er Optic Cable, F.&I, Underground Cable, 48-96 er Optic Connection, Install, Splice er Optic Connection Hardware, F.&I, Splice Enclosure er Optic Connection Hardware, F.&I, Preterminated Patch Panel 8. Splice Box, F.&I, 13" X 24"	LF EA EA	\$ 3.34 \$ 39.07
633-2-31 Fibe 633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	er Optic Connection, Install, Splice er Optic Connection Hardware, F&I, Splice Enclosure er Optic Connection Hardware, F&I, Preterminated Patch Panel l& Splice Box, F&I, 13" X 24"	EA EA	\$ 39.07
633-3-11 Fibe 633-3-15 Fibe 635-2-11 Pull	er Optic Connection Hardware, F&I, Splice Enclosure er Optic Connection Hardware, F&I, Preterminated Patch Panel & Splice Box, F&I, 13" X 24"	EA EA	
633-3-15 Fibe 635-2-11 Pull	er Optic Connection Hardware, F&I, Preterminated Patch Panel & Splice Box, F&I, 13" X 24"	EA	\$ 899.92
635-2-11 Pull	& Splice Box, F&I, 13" X 24"		
		EA	\$ 1,801.63
635_2_12 Doll	& Splice Box F&I 24" X 36"		\$ 732.68
	a opiloo Box, 1 at, 2.1 7/ 00	EA	\$ 1,265.36
635-2-13 Pull	& Splice Box, F&I, 30" X 60" Rectangular or 36" Round	EA	\$ 2,384.57
	ctrical Power Service, F&I, Overhead, Meter Furnished by Power Company	AS	\$ 2,850.00
639-2-1 Elec	ctrical Service Wire, F&I	LF	\$ 7.17
	ctrical Service Disconnect, F&I, Pole Mount	EA	\$ 1,378.56
641-2-11 Pre	stressed Concrete Pole, F&I, Type P-II Pedestal	EA	\$ 1,395.34
641-2-13 Pre	stressed Concrete Pole, F&I, Type P-III	EA	\$ 13,283.74
646-2-115 Alur	minum Pole - Index 695-001, F&I, 20'	EA	\$ 2,166.50
649-21-01 Stee	el Mast Arm Assembly, F&I, 30' Single	AS	\$ 35,775.62
650-1-13 Veh	nicular Traffic Signal, F&I, Aluminum, 2 Section, 1-2 Ways	EA	\$ 790.00
660-1-110 Loo	p Detector Inductive, F&I, Type 10	EA	\$ 389.94
660-2-102 Loo	p Assembly, F&I, Type B	EA	\$ 780.26
660-3-11 Veh	nicle Detection System-Microwave, F&I, Cabinet Equipment	EA	\$ 4,128.33
660-3-12 Veh	nicle Detection System-Microwave, F&I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11 Veh	nicle Detection System-Video, F&I, Cabinet Equipment	EA	\$ 9,515.49
660-4-12 Veh	nicle Detection System-Video, F&I, Above Ground Equipment	EA	\$ 4,751.79
660-7-11 Veh	nicle Detection System - Wrong Way for Exit Ramp, 1 or 2 Lanes	EA	\$ 31,971.31
663-1-111 Sign	nal Priority and Preemption System, F&I, Optical, Cabinet Electronics	EA	\$ 5,752.44
	nal Priority and Preemption System, F&I, Optical, Detector	EA	\$ 1,714.44
-	lestrian Detector, F&I, Passive Pedestrian Detection	EA	\$ 4,500.00
670-5-112 Trai	ffic Controller Assembly, F&I, NEMA, Two Preemption Plans	AS	\$ 32,011.37
670-5-140 Trat	ffic Controller Assembly, F&I, Model 2070, 1 Preemption	AS	\$ 27,645.38
670-5-400 Trat	ffic Controller Assembly, Modify	EA	\$ 1,942.50
	ffic Controller without Cabinet, F&I in Existing Cabinet, NEMA	EA	\$ 4,500.00
	ffic Controller, Modify	EA	\$ 1.890.00
	Cabinet, F&I, Pole Mount, 336S, 24" X 46" 22"	EA	\$ 8,946.60
	nnected 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
	naged Field Ethernet Switch, F&I	EA	\$ 3,792.46
684-2-1 Dev	rice Server, F&I	EA	\$ 778.37
685-1-13 Unii	nterruptible Power Supply, F&I, Line Interactive with Cabinet	EA	\$ 6,832.51
685-3-1 Ren	note Power Management Unit, F&I	EA	\$ 1,545.12
695-8-11 Cell	lular Modem, F&I	EA	\$ 3,500.00
	S Support Structure, Cantilever 31-40 FT	EA	\$ 66,024.43
	ctronic Display Sign, F&I, Ground Mount, Blankout Sign , 48" X 48"	AS	\$ 6,254.85
	ctronic Display Sign, F&I, Overhead Mount, Blankout Sign , 48" X 48"	AS	\$ 7,122.87
	n Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
	ti-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
	HLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
	bedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 17,000.00
700-8-135 From	nt 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/silpfinity/docs/defaultsource/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month.pdf.pdf?sfvrsn=4e
4c771_2

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

Project 522: Sidney Fischer 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, Contigency)	\$ -
	INPUT
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%
	TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
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, Contigency)	-
	INPUT
No. of Key Decision Points / Intersections	0

"PARKING MANAGEMENT" Project Calculator		
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, Contigency)		614,471.98
		INPUT
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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9.352.32
700-2-16	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-6-12	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 4,072.57
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76
. 00 0.100		ᅜ	ψ UZ,U1 Z.1 U

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

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

Project 528: City of Melbourne City Hall

"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, Contigency)	\$	-
		INPUT
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%
		TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
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

TENENT MANAGEMENT D		
"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, Contigency)	\$	-
	ı	
		INPUT
No. of Key Decision Points / Intersections		0

"PARKING MANAGEMENT" Project Calculator		
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, Contigency)		574,597.74
		INPUT
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 Beacns	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/defaultsource/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month_pdf.pdf?sfvrsn=4e
4c771_2

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

Project 529: Cocoa Beach, Downtown/City Hall

"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, Contigency)	\$ -
Erosion and Coamon Control, Contigency)	
	INPUT
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%
	TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
No. of Key Decision Points / Intersections	0

"PARKING MANAGEMENT" Project Calculator	ı	
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, Contigency)	\$	694,220.45
		INPUT
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
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 Beacns	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/defaultsource/programmanagement/estimates/historicalcostinformation/files/historicalitemaverages 12month_pdf.pdf?sfvrsn=4e
4c771_2

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

Intersection Safety - Kit A

"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, Contigency)	
	INPUT
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%
	TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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	
INTERSECTION SAFETY Project Calculator	
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, Contigency)	\$ 88,800.70
	INPUT
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

"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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9.352.32
700-2-16	HIGHLIGHTED SIGN, F&I GROUND MOUNT- AC POWERED, 12-20 SF	EA	\$ 4,072.57
700-6-12	Embedded Dynamic Message Sign, F&I, w/o UPS, Full Color, 12-20 SF	EA	\$ 4,072.57
700-8-135	Front Access Dynamic Message Sign, F&I w/ UPS, Full Color, 51-100 SF	EA	\$ 52,572.76
. 00 0.100		ᅜ	ψ UZ,U1 Z.1 U

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

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

Intersection - Kit B

"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, Contigency)	\$ -
	INPUT
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%
	TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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:	\$ 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, Contigency)	\$ 130,935.92
	INPUT
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

"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, Contigency)	\$ -
	INPUT
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, Contigency)	-
	INPUT
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
700-10-123	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
700-11-2	Sign Beacon, F&I, Ground Mount, AC Powered, Two Beacns	AS	\$ 3,948.03
700-12-12	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-2-10	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	FA	\$ 52,572.76
100-0-100	Tions nocess by natific intessage sign, rail with ors, rull color, 51-100 SF	EM	\$ 52,512.10

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

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

Intersection Safety - Kit C

"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, Contigency)	
	INPUT
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%
	TOTAL
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, Contigency)	\$ -
	INPUT
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
	TOTAL
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:	\$ 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, Contigency)	\$ 126,648.29
	INPUT
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

"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, Contigency)	-
	INPUT
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, Contigency)	\$ -
	INPUT
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
660-3-11	Vehicle Detection System-Microwave, F. &, Cabinet Equipment Vehicle Detection System-Microwave, F. &I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	FA	\$ 9,515.49
	7 1 1 1 1		
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 Beacns	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-2-10	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
100-0-100	Troncriocos Dynamic incosage orgin, Fall W/ UFS, Full Cului, 31-100 SF	ĿA	ψ υΖ,υ1Ζ./0

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

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

Intersection Safety - Kit D

"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, Contigency)	\$ -
	INPUT
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%
	TOTAL
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, Contigency)	\$	-
		INPUT
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
		TOTAL
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:	\$ 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, Contigency)	\$ 151,234.18
	INPUT
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

"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, Contigency)	\$ -
	INPUT
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, Contigency)	\$ -
	INPUT
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
660-3-11	Vehicle Detection System-Microwave, F. &, Cabinet Equipment Vehicle Detection System-Microwave, F. &I, Above Ground Equipment	EA	\$ 8,228.73
660-4-11	Vehicle Detection System-Video, F&I, Cabinet Equipment	FA	\$ 9,515.49
	7 1 1 1 1		
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 Beacns	AS	\$ 3,948.03
700-2-16	Multi-Post Sign, F&I, Ground Mount, 101-200 SF	AS	\$ 9,352.32
700-2-10	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
100-0-100	Troncriocos Dynamic incosage orgin, Fall W/ UFS, Full Cului, 31-100 SF	ĿA	ψ υΖ,υ1Ζ./0

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

COSTING ASSUMPTIONS:	
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

SPACE COAST

Transportation Planning Organization

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		Traffic Signal														Added Preventative	Added Emergency	Total	Complexity
Project Type	No.	Communications		CCTV	MVDS	BOS	VVDS	DMS	CVRSU	QWS	ASCT	WWDS	RSS	ATWS	ABPS	PAS	Maintenance		Maintenance	
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 ATMS	103 104	3.4	8 7	4	2		3	2	8 7								87.4	7.5	96.1 82.5	MEDIUM MEDIUM
ATMS	104	3 12.1	18	3 9	6		9	2	18								75 194.1	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	1.0		3	3		â	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)	196 197	11.2 12.2	2	6	3		2	2	2								57.2 60.2	5.7	62.9 66.2	MEDIUM
ATMS (EVAC) ATMS (EVAC)	197	7.7	1	6	2		1	2	1								41.7	6.0 4.2	45.9	MEDIUM MEDIUM
INTERSTATE	201	0.25	1	U			1		<u> </u>	2		2	2				40.25	4.2	44.3	MEDIUM
INTERSTATE	201	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		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	ссту	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



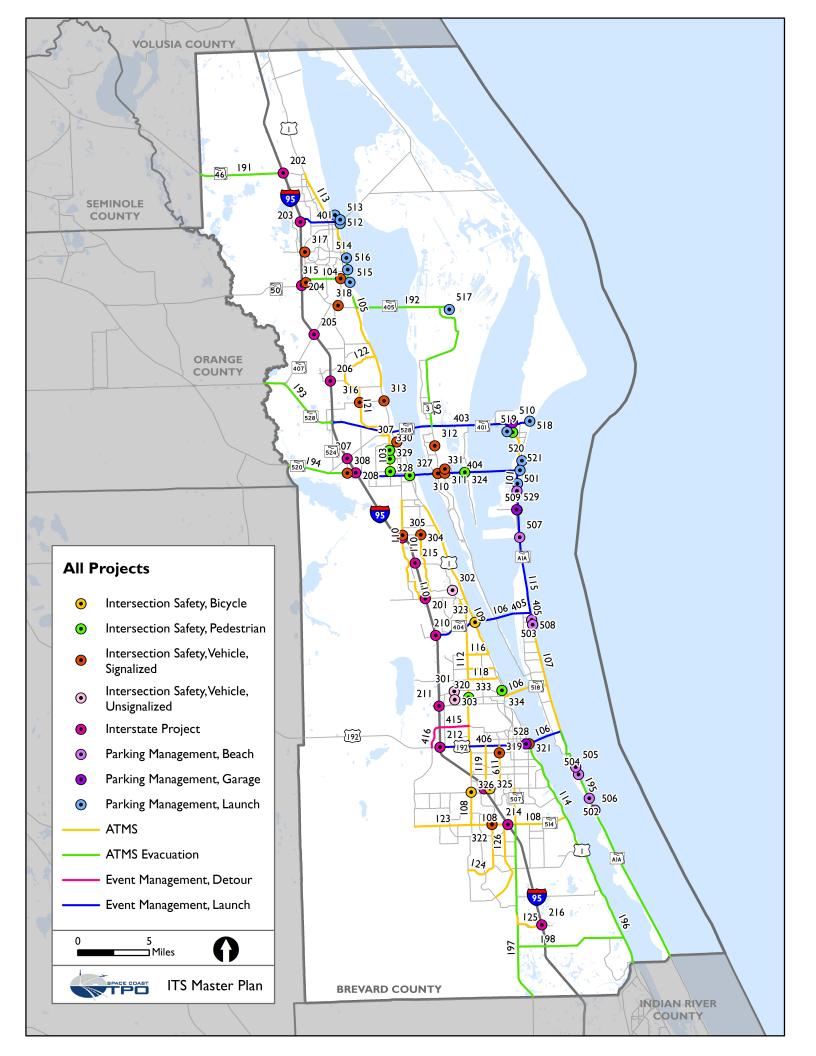


2021 Intelligent Transportation Systems Master Plan Update

Appendix D – Projects Map and List

SPACE COAST

Transportation Planning Organization





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
	ТМС	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	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	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)		High	5-10
104	ATMS	Titusville	Titusville, FDOT	SR 50	South Street	US 1 (Washington	Approx. 3 miles of fiber work, 7 traffic controllers (1 controller per signalized intersection) daaptive 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		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		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		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+

			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		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)	\$ 1,540,32	7 Medium	10+
125	ATMS	Palm Bay	Palm Bay	St John's Heritage Parkway	Interchange		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)	\$ 836,45	7 Low	10+
126	ATMS	Palm Bay	Palm Bay	San Filippo Drive	Cogan Dr		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)	\$ 1,658,98	5 Medium	10+



Space Coast TPO ITS Master Plan Proposed Project List

				AT	MS 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		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		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		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		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		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+

1 6/9/2021

197	ATMS - evacuation	Palm Bay, Brevard County	Palm Bay, Brevard County	Babcock St	Brevard-Indian River County Line	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	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+

2 6/9/2021

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		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 Pr	rojects		Proj	ect Cost	0 & 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									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, Approx5 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, Approx5 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 Mar	agement 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+

6/9/2021

501	Parking Management	Cocoa Beach	Brevard County	Lori Wilson Park	Beach	DMS, Parking spot numbers signage	\$ 534,7	4 Medium	5-10
509	Parking Management	Cocoa Beach	Cocoa Beach	City of Cocoa Public Garage	Garage	DMS, Parking spot numbers signage	\$ 694,2	0 Medium	5-10
520	Parking Management	Cocoa Beach	Privately Owned	Westgate Cocoa Beach Pier	Launch	DMS, Parking spot numbers signage	\$ 654,3	6 Medium	5-10
521	Parking Management	Cocoa Beach	Cocoa Beach	Shepard Park	Launch	DMS, Parking spot numbers signage	\$ 773,9	9 Medium	5-10
522	Parking Management	Cocoa Beach	Cocoa Beach	Sidney Fischer Park	Launch	DMS, Parking spot numbers signage	\$ 614,4	2 Low	5-10
507	Parking Management	Cocoa Beach	Cocoa Beach	Robert P Murkshe Memorial Park	Beach	DMS, Parking spot numbers signage	\$ 375,2	7 Low	10+
529	Parking Management	Cocoa Beach	Cocoa beach	Downtown/City Hall	Garage	DMS, Parking spot numbers signage (approx. 241 stalls)	\$ 694,2	0 Low	10+
518	Parking Management	Port Canaveral	Port Canaveral	Jetty Park	Launch	DMS, Parking spot numbers signage	\$ 454,9	5 Low	5-10
510	Parking Management	Port Canaveral	Port Canaveral	Port Canaveral	Garage	DMS, Parking spot numbers signage	\$ 2,209,4	1 High	10+
511	Parking Management	Titusville	Titusville	Marina Park	Launch	DMS, Parking spot numbers signage	\$ 494,8	9 Medium	5-10
512	Parking Management	Titusville	Titusville	Space View Park	Launch	DMS, Parking spot numbers signage	\$ 375,2	7 Low	5-10
513	Parking Management	Titusville	Titusville	Sand Point Park	Launch	DMS, Parking spot numbers signage	\$ 574,5	8 Medium	5-10
514	Parking Management	Titusville	Titusville	William J. Manzo Memorial Park	Launch	DMS, Parking spot numbers signage	\$ 335,3	2 Low	5-10
515	Parking Management	Titusville	Titusville	Kennedy Point Park	Launch	DMS, Parking spot numbers signage	\$ 375,2	7 Low	5-10





2021 Intelligent Transportation Systems Master Plan Update

Appendix E – Opportunity Cost Formulas

SPACE COAST

Transportation Planning Organization

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:

The following equation is being utilized to determine the detector failure opportunity cost:

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. 9-6)	Annual Psgr-Veh = Delay Cost		Delay per Auto Commuter (Eq. 9-4)		Value of Person Time (\$/hour)	x	Vehicle Occupancy (person/ vehicle)	x	Annual Conversion Factor
(Eq. 9-7)	Annual Psgr Fuel Cost	=	Annual Fuel Wasted in Congestion (Eq. 9-5)	x	Percent of Passenger Vehicles	x	Gasoline Cost	X	Annual Conversion Factor
(Eq. 9-8)	Annual Commercial- Veh. Delay Cost	=	Delay per Auto Commuter (Eq. 9-4)	x	Value of Comm. Vehicle Time (\$/hr)	X	Annual Conversion Factor		
(Eq. 9-9)	Annual Commercial Veh. Fuel Cost	=	Annual Fuel Wasted in Congestion (Eq. 9-5)	x	Percent of Comm. Vehicles	x	Diesel Cost	x	Annual Conversion Factor
(Eq. 9-10)	Annual Cost Due to Congestion	=	Annual Passenger- Vehicle Delay Cost (Eq. 9-6)	+	Annual Passenger Fuel Cost (Eq. 9-7)	+	Annual Comm. Veh. Delay Cost (Eq. 9-8)	+	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. 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:

Finally, it is necessary to obtain the annual congestion cost the following formulas were used:

(Eq. 9-12)	Annual Congestion Cost Per Segment (Enhanced Maintenance Loc.)	=	Annual Congestion Cost Per Mile (Eq. 9-11)	x	Average AADT Per District	x	Average Miles Per Section Per District
(Eq. 9-13)	Annual Congestion Cost (Full AAM Loc.)	=	Annual Congestion Cost Per Mile (Eq. 9-11)	X	AADT Per Arterial Section	x	Miles Per Arterial Section

¹ "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:

Annual
Congestion
(Eq. 9-15) Opportunity Cost of Signal Retiming
(Full AAM)

Opportunity Cost (Congestion Cost) x 8% x % of Signals Coordinated

Arterial Management Opportunity Costs

The following formulas apply:

Adaptive Technology Opportunity Costs

Therefore, to quantify this benefit, the following formula applies:

Opportunity Cost of Annual Congestion % of Adaptive (Eq. 9-18)

Adaptive = Opportunity Cost x 3% x Intersections (Eq. 9-13) (69.42%)

Crash Reduction Opportunity Costs

Per FHWA, studies have indicated that crashes can be reduced up to 15% through improved signal timings.² 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:

(Eq. 9-19) Opportunity Cost of Crash = No. of Crashes/2 x \$141,085 x 15% x 50% Reduction

² "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

SPACE COAST

Transportation Planning Organization

							Opportunity (Cost Analysis - SCTP	O 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 11,366	\$905,778.26 \$98,209.00	\$350.00 \$350.00	\$8.43 \$8.43	\$2,376,206.25 \$594,062.82	8% 8%	\$190,096.50 \$47.525.03	\$271.26 \$67.82	\$25,549.10 \$634.21	3% 3%	\$71,286.19 \$17.821.88	\$2,983,947.75 \$296,278.50
121 122	Grissom Parkway Fay Blyd	6.20 3.70	4	28 37	11,554	\$124,788.06	\$350.00	\$8.43	\$360.374.58	8%	\$28.829.97	\$41.14	\$508.39	3%	\$17,021.00	\$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	\$158.707.40	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
	Tota	1 250.2	295		Subtotal	\$14.196.116.53			\$40.490.574.58		\$3,239,245,97		\$231,295,23		\$1,214,717,24	\$41.341.432.13
	1000		233		Oubtotul	ψ11,100,110.00			Ψ10,100,01-100				VIOTIZIONES		+ 136 1 T/1 1 T 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	WHI, OHI, TOLLIE
				Average AADT	20115								% Adap	tive Intersections =	69.33%	
					TOTALS	\$14,196,117					\$3,239,245,97		\$231,295.23		\$842,203.95	\$41,341,432.13
						VIII,000,111										The second state of the se

Notes:

Only signals with full ITS devices were considered in the Opportunity Cost Cost includes 2% inflation per year

TOTAL \$59,850,293.80
10 YEAR COST ** \$655,344,018.91

