SANTA ROSA COUNTY
DEVELOPMENT SERVICES

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TO: Board of County Commissioners

FROM: Shawn Ward, AICP, Long Range Planning Manager

THROUGH: Beckie Cato, AICP, Planning Director

SUBJECT: Resolution of support for a regional unified Advanced Traffic Management System (ATMS) and a Transportation Management Center (TMC).

DATE: July 1, 2016

DISCUSSION

Discussion of approval of the enclosed Resolution of support for the construction and operation of a regional, unified Advanced Traffic Management System (ATMS) and a Transportation Management Center (TMC) for Escambia County, Santa Rosa County, the City of Pensacola, the City of Milton, and the City of Gulf Breeze and authorize the Chairman to sign all related documents.

BACKGROUND

The Florida-Alabama Transportation Planning Organization (TPO) has designated the Escambia-Santa Rosa Regional Advanced Traffic Management System (ATMS) Project as the number one (1) priority in the TPO's Fiscal Year 2017 - 2021 project priority list. In 2015, the Florida Department of Transportation (FDOT) funded and entered into a Joint Project Agreement (JPA) with the City of Pensacola to administer the development of the Escambia-Santa Rosa Regional ATMS Feasibility Study and Implementation Plan. The feasibility study will define a comprehensive plan to update and modernize traffic management tools and capabilities to prepare and assist the local agencies to meet their increasingly complex future transportation challenges. The Implementation Plan will be a blueprint for the modernization of the traffic signal systems maintained by Escambia County, Santa Rosa County, the City of Pensacola, the City of Milton and the City of Gulf Breeze. The projected completion date of the Regional ATMS Feasibility Study and Implementation Plan is spring of 2016.

An ATMS includes a regional computerized signal system and selected Intelligent Transportation System (ITS) components such as communications and networking, traffic signals, dynamic message signs (DMS), closed-circuit television (CCTV) video monitoring, incident detection, data collection and monitoring system, traffic operations center, regional center-to- center communications, and a public information portal. The ATMS benefits include improved safety, improved air quality mitigation, improved congestion mitigation, improved emergency response, improved regional growth adaptability, improved evacuations, improved system communications, improved cross-jurisdictional traffic flow, improved integration of transportation systems, improved regional security, improved transportation agency operations, and reduced operations and maintenance costs by providing capabilities to remotely troubleshoot hardware and traffic operations before sending a technician to a traffic signal site.

Due to the facts that there will be significant cost and time savings from the joint participation and partnership in all aspects of the regional ATMS and regional Transportation Management Center (TMC) development, deployment, operation and maintenance, the FDOT encourages the creation of a unified ATMS and TMC for Escambia County, Santa Rosa County, the City of Pensacola, the City of Milton, and the City of Gulf Breeze. As such, The FDOT has requested the Board's consideration to adopt the attached Resolution expressing its support for construction and operation of a unified ATMS and TMC for the Escambia County and Santa Rosa County region. The purpose of this Resolution is to establish the process through which the FDOT, Escambia County, Santa Rosa County, the City of Pensacola, the City of Milton and the City of Gulf Breeze establish interagency cooperation and coordination for the implementation and operation of the proposed ATMS and TMC. This Resolution is non-binding, but serves to provide the foundation for the development of a future Joint Project Agreement (JPA) that will be binding and executed specifically for addressing project administration and funding associated with the design, construction, operation and maintenance of the ATMS and TMC.

Currently, local agencies are reimbursed by the FDOT for maintenance of signals along state roads and the Florida-Alabama TPO set-aside $300,000 annually for operation of the signals in Escambia County, Santa Rosa County, the City of Pensacola, the City of Milton and the City of Gulf Breeze. Staff intends to request TPO to increase this set-aside to provide for operation of the proposed ATMS and TMC. Based on the staff's recent conversation/meetings with the FDOT staff, the FDOT has agreed to provide funding assistance for the design, construction, operations and maintenance of the proposed ATMS and TMC.

On May 12, 2016, the Board received a presentation on the US 98 signalization project and a synopsis of the ATMS and ITS components.

Escambia County, City of Milton and City of Pensacola have adopted resolutions of support. A resolution of support from the City of Gulf Breeze is pending.

Next Steps

Upon approval by the board, staff will forward the executed resolution to FDOT.

Enclosures: 1) Resolution of support.
2) Regional Intelligent Transportation Systems Plan 2016 Progress Report.

Regional Intelligent Transportation Systems Plan
2016 Progress Report on Implementation

Introduction

The Florida-Alabama, Okaloosa-Walton, and Bay County Transportation Planning Organizations worked as partners to complete the Regional Intelligent Transportation Systems (ITS) Plan. The Regional ITS Plan was adopted in September of 2010 by each of the three TPOs. The purpose of this report is to outline how each partner has strived to implement the recommendations outlined in the Regional ITS Plan. The vision outlined in the Regional ITS Plan is a looped system that benefits the region.

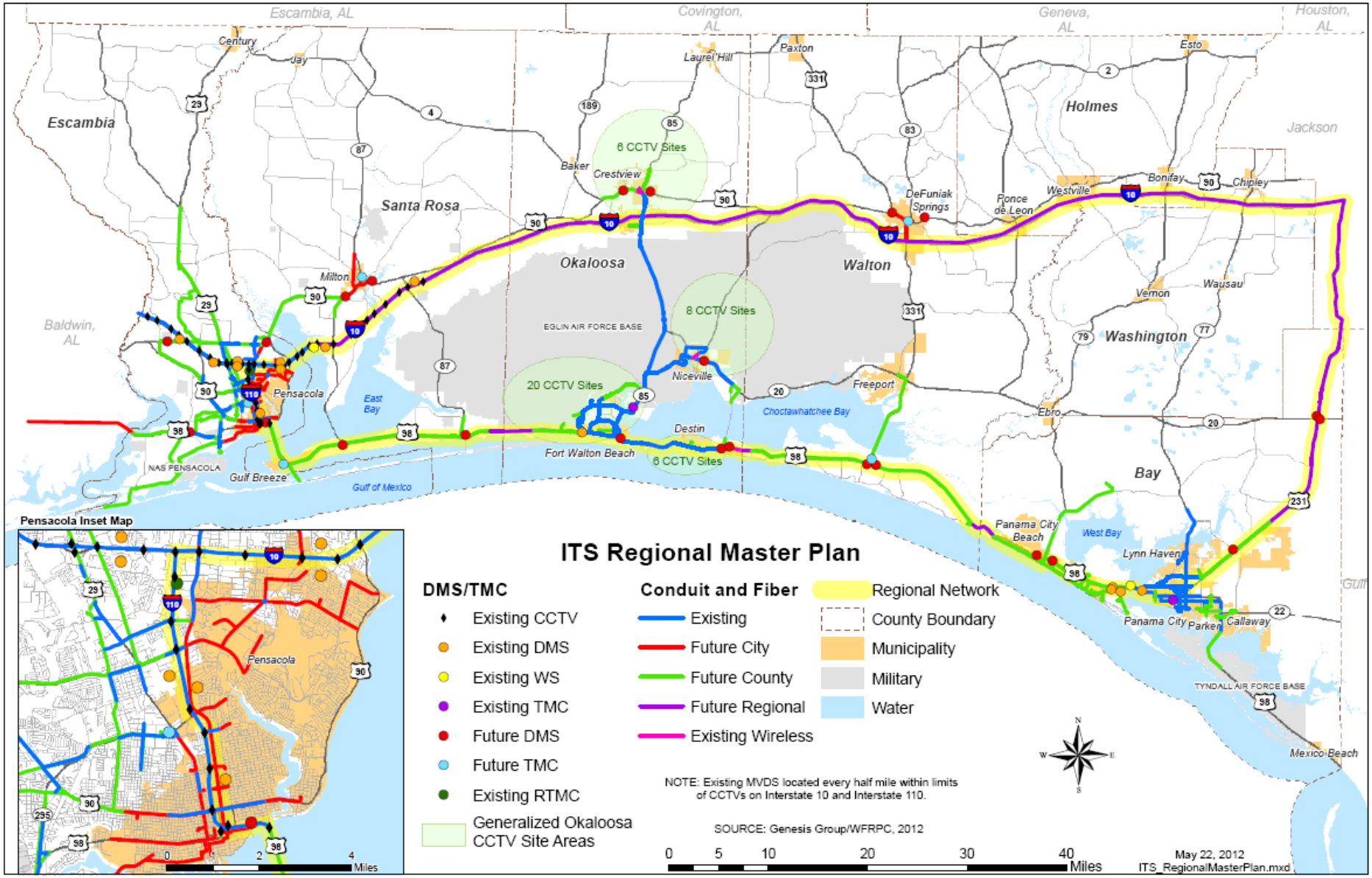
ITS is a program aimed at using computers and communications to make travel smarter, faster, safer, and more convenient. ITS helps reduce the cost of moving goods and services to the marketplace.

The Regional ITS Plan includes a list of ITS system needs for each TPO. Existing ITS networks in each TPO are identified and evaluated in the Regional ITS Plan. Moreover, future needs are evaluated and additional staffing needs for operation and maintenance of future ITS improvements and the implementation of a regional ITS network to benefit all three TPOs is included. The following is a progress report of what each TPO has employed or is planning to employ to implement the recommendations outlined in the Regional ITS Plan.

Regional ITS Network

Sharing transportation information with transportation system users is a key characteristic of ITS applications. As transportation systems become more complex and interconnected, there is a need to share information with others in order to maximize the efficiency of the transportation network. In the Regional ITS Plan, a regional ITS network is recommended to connect all ITS components for all stakeholders in the region. Fiber optic cable is proposed along US 98 throughout the region. A fiber optic ring could be created with the proposed fiber running along US 98 to US 231 in Bay County, north to I-10, west on I-10 to I-110 in Escambia County, and south on I-110 to US 98. Figure 1 illustrates the existing and future needed fiber optic cable for a looped ITS network. A preliminary cost for the additional fiber optic cable is $3,291,740 (2010 Dollars). Cameras, Dynamic Message Signs (DMS), Microwave Vehicle Detection Systems (MVDS), and a weather station exist along I-10 and I-110 to help with incident detection and motorist information.

Figure 1- ITS Regional Master Plan Map



Florida-Alabama TPO

On September 8, 2010, through Resolution FL-AL 10-37, the Florida-Alabama TPO approved the Regional ITS Plan which includes the Florida-Alabama TPO, Okaloosa-Walton TPO, and Bay County TPO regions. The Florida-Alabama TPO has ranked the Escambia-Santa Rosa Regional ITS Project as number one (1) priority in the Transportation Improvement Program (TIP). The FL-AL TPO also created an ITS subcommittee to oversee the ITS implementation efforts in the Escambia and Santa Rosa Counties. The Escambia-Santa Rosa ITS Subcommittee meets monthly and is made up of representatives from Escambia and Santa Rosa Counties, the City of Milton, the City of Gulf Breeze, the City of Pensacola, West Florida Regional Council, and the FDOT. The group works together to ensure the ITS system is comprehensive, and includes a funding plan for the implementation and operation of a regional Advance Traffic Management System (ATMS) and a regional Traffic Management Center (TMC) and related infrastructure.

Escambia County and Santa Rosa County

Since adoption the Regional ITS Plan, the following ITS projects have been deployed in the Escambia and Santa Rosa Counties:

- In 2013, the FDOT funded a continuing contract for implementation of an Active Arterial Management System on SR 291 (Davis Highway). The system consists of approximately 2.5 miles of arterial roadway from the intersection of Davis Highway at Johnson Avenue to the intersection of Davis Highway at SR 750 (Airport Boulevard) and ends at the Pensacola Regional Transportation Management Center (RTMC). The primary goals of this system are to improve safety, congestion, emergency response, incident management, and traffic flow along Davis Highway. Signalized intersections which are integrated in the Davis Highway System include Johnson Avenue, Klinger Street, University Parkway, Olive Road, Northcross Lane, I-10 WB Ramp, I-10 EB Ramp, Bloodworth Lane, Creighton, and Burgess Road. In 2016, two additional signalized intersection were added to the Davis Highway Active Arterial Management System at Longley Avenue and Airport Blvd.

- In 2013, FDOT awarded a design-build contract for implementation of the ATMS Phase I on Brent Lane/Bayou Blvd from North Palafox Street to North 12th Avenue, on North Palafox from Brent Lane to East Fairfield Drive, and on East Fairfield Drive from North Palafox Street to North 12th Avenue. The system includes integration of 18 signalized intersections along these corridors. This project included design, construction and integration of ITS infrastructure, including ten (10) cameras, approximately 6.7 miles of fiber optic cable, an Ethernet communication network, center to center communication, Closed Circuit Television (CCTV), and modification of existing closed loop systems. The project was completed in 2015 and accepted in January 2016.

- In 2015, Escambia County entered into a continuing professional services contract with DRMP, Inc. to provide general traffic engineering operation and management services including signal retiming, transportation engineering, planning and other support services

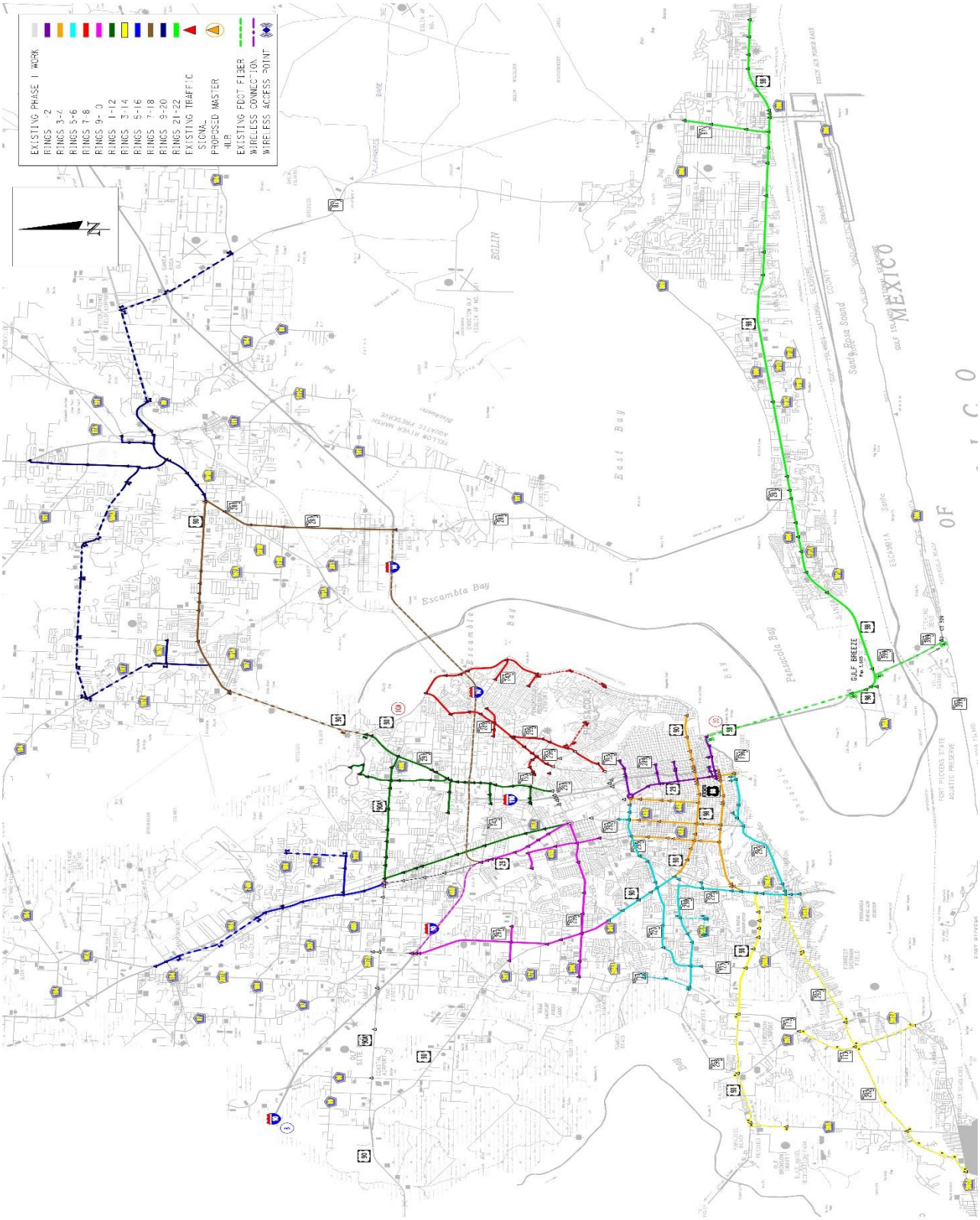
for Escambia and Santa Rosa Counties. In general, the consultant is functioning as an extension of staff for traffic engineering related services.

- In 2015, the Florida Department of Transportation and City of Pensacola initiated development of the Escambia-Santa Rosa Regional ATMS Feasibility Study and Implementation Plan project. The feasibility study will define a comprehensive plan to update and modernize traffic management tools and capabilities to prepare and assist the local agencies to meet their increasingly complex future transportation challenges. The Implementation Plan will be a blueprint for the modernization of the Escambia County and Santa Rosa County signal systems. A hardline communication link will be provided throughout the region with the deployment of 144-count single-mode fiber optic cable along key highways and arterials. More than 150 miles of fiber will be deployed either through proposed underground conduit or via the utilization of existing aerial spans, creating a direct link between all devices and TMC. Isolated signals or remote corridors will be brought onto the grid with the use of wireless network communication in the interest of cost savings. Incorporating ATMS Phase I, the region will deploy a bus network topology for the backbone communications that provides redundancy between the ATMS devices and the tactically positioned master hubs. In total, the proposed work for Phase II carries an estimated cost of $25,000,000. The completion of Phase II will provide the region with the complete infrastructure and communications necessary for a full-scale ATMS system, while providing upgraded hardware to enhance the capability of performing active arterial management functions for improved corridor operations. Phase III of the ATMS system will include the full buildout of the ATMS system including the installation of arterial Dynamic Message Signs (DMS) and structures, Road Weather Information Systems (RWIS), Microwave Vehicle Detection Systems (MVDS), Bluetooth Travel Time Sensors, central software to monitor these devices, supporting communications infrastructure and a Regional Traffic Management Center (RTMC). The estimated cost of the ATMS Phase 3 is $26,000,000. The Escambia-Santa Rosa Regional ATMS Feasibility Study and Implementation Plan will be completed in 2016. A copy of the Escambia-Santa Rosa Regional ATMS map and construction cost estimate for ATMS Phase 2 are included in the following pages.

<u>Lillian, Alabama</u>

Installation of fiber optic cables is recommended along the US 98 corridor or CCTVs at the signalized intersections in the unincorporated community of Lillian in Southwest Baldwin County, Alabama. A recommendation in the Regional ITS Plan is that these signals can be monitored by a small TMC. The total estimated 2010 capital costs are $647,031 for 56,321 feet of fiber optic cable and conduit and five CCTVs in Lillian, Alabama.

Escambia-Santa Rosa Regional ATMS Map



ESCAMBIA/SANTA ROSA COUNTY REGIONAL ATMS MASTERPLAN QUANITITES - Per Network Ring

PREPARED BY ATKINS

November 23, 2015

Version 3.0

Ring No. 17/18

Intersections:

1. US-90/SR-10 at CR-197A/Woodbine Rd
2. US-90/SR-10 at CR-197/Chumucka Hwy
3. US-90/SR-10 at CR-197B/Spencer Field Rd
4. US-90/SR-10 at Spencer Field Rd
5. US-90/SR-10 at Watkins Rd
6. US-90/SR-10/Caroline St at Spears St
7. US-90/SR-10/Caroline St at Cardinal St
8. US-90/SR-10/Caroline St at CR-197A/School Ln
9. US-90/SR-10/Caroline St at SR-281/Avalon Blvd (**MH)
10. SR-281/Avalon Blvd at Carroll Rd
11. SR-281/Avalon Blvd at CR-191A/Mulat Rd/Commerce Rd
12. SR-281/Avalon Blvd at CR-281B/Cynamid Rd/Pebble Ridge Dr

Wireless Intersections:

1. SR-281/Avalon Blvd at I-10 EB

Pay Item Number:	*Description:*	*Unit:*	*Quantity:*	*Note:*	*Unit Price:*	*Total:*
630-2-11	Conduit, F&I, Open Trench	LF	22480		$ 5.33	$ 119,818.40
630-2-12	Conduit, F&I, Directional Bore	LF	22480		$ 11.60	$ 260,768.00
633-1-124	Fiber Optic Cable, F&I, Underground, 144 Fibers	LF	48210		$ 2.81	$ 135,470.10
633-2-31	Fiber Optic Connection, Install, Splice	EA	192		$ 49.53	$ 9,509.76
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	12		$ 916.75	$ 11,001.00
633-3-12	Fiber Optic Connection Hardware, F&I, Splice Tray	EA	24		$ 99.05	$ 2,377.20
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	12		$ 238.82	$ 2,865.84
635-2-12	Pull & Splice Box, F&I, 24"X36" Cover Size	EA	17		$ 858.43	$ 14,593.31
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round Cover Size	EA	12		$ 1,478.04	$ 17,736.48
639-1-122	Electrical Power Service, F&I, Underground	EA	12		$ 1,210.61	$ 14,527.32
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	12		$ 896.74	$ 10,760.88
641-2-12	Prestressed Concrete Pole, F&I, Type P-II Service Pole	EA	12		$ 737.36	$ 8,848.32
670-5-112	Traffic Controller Assembly, F&I, NEMA, 2 Preemption Plan	AS	13		$ 22,500.00	$ 292,500.00
676-2-121	ITS Cabinet, F&I, pole mount, 336, 24" W X 36" H X 20" D, w/ sunshields	EA	1		$ 4,500.00	$ 4,500.00
682-1-11	ITS CCTV Camera, F&I, Dome Enclosure - Pressurized	EA	7		$ 9,450.00	$ 66,150.00
684-1-1	Managed Field Ethernet Switch, F&I	EA	14		$ 2,360.68	$ 33,049.52
684-6-1	Wireless Communication Device, F&I, Ethernet Access Point	EA	2		$ 5,000.00	$ 10,000.00
101-1	Mobilization	LS	$ 50,723.81			
102-1	Maintenance of Traffic	LS	$ 50,723.81			
677-1-11	Equipment Shelter - Master Hub	EA	$ 25,000.00			
999-25	Initial Contingency Amount		$ 114,092.37			
				Ring Total:		**$ 1,255,016.12**

ESCAMBIA/SANTA ROSA COUNTY REGIONAL ATMS MASTERPLAN QUANITITES - Per Network Ring

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November 23, 2015

Version 3.0

Ring No. 19/20

[redacted]

Intersections:

1. US-90/SR-10/Caroline St at Kmart Entrance
2. US-90/SR-10/Caroline St at Parkmore Plaza Dr
3. US-90/SR-10/Caroline St at Glover Ln
4. US-90/SR-10/Caroline St at Santa Rosa County Tax Collector
5. US-90/SR-10/Caroline St at SR-89/Dogwood Dr
6. US-90/SR-10/Caroline St at SR-87/Stewart St
7. US-90/SR-10/Caroline St at CR-191/Canal St
8. US-90/SR-10/Caroline St at Elmira St
9. US-90/SR-10/Caroline St at Willing St
10. US-90/SR-10/Caroline St at SR-89/Ward Basin Rd
11. SR-89/Dogwood Dr at Hamilton Bridge Rd
12. SR-89/Dogwood Dr at CR-184A/Berryhill Rd
13. SR-89/Dogwood Dr at Park Ave
14. SR-89/Dogwood Dr at CR-191/Willard Norris Rd/Magnolia St
15. SR-89/Dogwood Dr at SR-87/Stewart St
16. CR-197/Chumuckla Hwy at CR-197B/Norris Rd
17. CR-197B/Norris Rd at Spencer Field Rd
18. SR-87/Stewart St at CR-184A/Berryhill Rd
19. SR-87/Stewart St at Park Ave
20. CR-87A/Alabama St at CR-191/Munson Hwy

Wireless Intersections:

1. *US-90/SR-10/Caroline St at SR-87*
2. *SR-87/Stewart St at Nichols Lake Rd*
3. CR-184A/Berryhill Rd at CR-197/Chumuckla Hwy
4. CR-197/Chumuckla Hwy at CR-184/Quinnette
5. CR-184A/Berryhill Rd at Spencer Field Rd
6. CR-184A/Berryhill Rd at Berryhill Elementary School
7. CR-184A/Berryhill Rd at Anderson Ln
8. CR-184A/Berryhill Rd at Northrop Rd

Pay Item Number:	*Description:*	*Unit:*	*Quantity:*	*Note:*	*Unit Price:*	*Total:*
630-2-11	Conduit, F&I, Open Trench	LF	28928		$ 5.33	$ 154,186.24
630-2-12	Conduit, F&I, Directional Bore	LF	28928		$ 11.60	$ 335,564.80
630-2-15	Conduit, F&I, Bridge Mount	LF	2628		$ 16.51	$ 43,388.28
633-1-124	Fiber Optic Cable, F&I, Underground, 144 Fibers	LF	63906		$ 2.81	$ 179,575.86
633-2-31	Fiber Optic Connection, Install, Splice	EA	392		$ 49.53	$ 19,415.76
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	26		$ 916.75	$ 23,835.50
633-3-12	Fiber Optic Connection Hardware, F&I, Splice Tray	EA	50		$ 99.05	$ 4,952.50
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	26		$ 238.82	$ 6,209.32
635-2-12	Pull & Splice Box, F&I, 24"X36" Cover Size	EA	17		$ 858.43	$ 14,593.31
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round Cover Size	EA	26		$ 1,478.04	$ 38,429.04
635-3-12	Junction Box, F&I, Mounted	EA	4		$ 842.56	$ 3,370.24
639-1-122	Electrical Power Service, F&I, Underground	EA	28		$ 1,210.61	$ 33,897.08
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	28		$ 896.74	$ 25,108.72
641-2-12	Prestressed Concrete Pole, F&I, Type P-II Service Pole	EA	28		$ 737.36	$ 20,646.08
670-5-112	Traffic Controller Assembly, F&I, NEMA, 2 Preemption Plan	AS	28		$ 22,500.00	$ 630,000.00
676-2-121	ITS Cabinet, F&I, pole mount, 336, 24" W X 36" H X 20" D, w/ sunshields	EA	4		$ 4,500.00	$ 18,000.00
682-1-11	ITS CCTV Camera, F&I, Dome Enclosure - Pressurized	EA	14		$ 9,450.00	$ 132,300.00
684-1-1	Managed Field Ethernet Switch, F&I	EA	32		$ 2,360.68	$ 75,541.76
684-6-1	Wireless Communication Device, F&I, Ethernet Access Point	EA	12		$ 5,000.00	$ 60,000.00
101-1	Mobilization	LS	$ 90,950.72			
102-1	Maintenance of Traffic	LS	$ 90,950.72			
999-25	Initial Contingency Amount		$ 200,091.59			
				Ring Total:		**$ 2,201,007.53**

ESCAMBIA/SANTA ROSA COUNTY REGIONAL ATMS MASTERPLAN QUANITITES - Per Network Ring

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November 23, 2015

Version 3.0

Ring No. 21/22

Intersections:

1 US-98/SR-30/Gulf Breeze Pkwy at Northcliff Dr
2 US-98/SR-30/Gulf Breeze Pkwy at Gulf Breeze Elementary
3 US-98/SR-30/Gulf Breeze Pkwy at Daniel St
4 Daniel St at Shoreline Dr
5 US-98/SR-30/Gulf Breeze Pkwy at Baptist Gulf Breeze Hospital
6 US-98/SR-30/Gulf Breeze Pkwy at Gondolier Blvd/Kelton Blvd
7 US-98/SR-30/Gulf Breeze Pkwy at Whisper Bay Blvd
8 US-98/SR-30/Gulf Breeze Pkwy at CR-191A/Oriole Beach Rd
9 US-98/SR-30/Gulf Breeze Pkwy at CR-399/College Pkwy
10 US-98/SR-30/Gulf Breeze Pkwy at Green Briar Pkwy
11 US-98/SR-30/Gulf Breeze Pkwy at SR-281/Garcon Point Rd
12 US-98/SR-30/Gulf Breeze Pkwy at Portside Dr
13 US-98/SR-30/Gulf Breeze Pkwy at Tiger Point Blvd
14 US-98/SR-30/Gulf Breeze Pkwy at CR-191C/Nantahala Beach Rd
15 US-98/SR-30/Gulf Breeze Pkwy at Edgewood Dr
16 US-98/SR-30/Navarre Pkwy at Sunrise Dr
17 US-98/SR-30/Navarre Pkwy at Coral St
18 US-98/SR-30/Navarre Pkwy at Navarre School Rd
19 US-98/SR-30/Navarre Pkwy at Andorra St
20 US-98/SR-30/Navarre Pkwy at SR-87
21 US-98/SR-30/Navarre Pkwy at CR-399/Navarre Beach Causeway
22 US-98/SR-30/Navarre Pkwy at Pullam St
23 US-98/SR-30/Navarre Pkwy at Winn-Dixie
24 US-98/SR-30/Navarre Pkwy at Panhandle Trl
25 US-98/SR-30/Navarre Pkwy at Wal-Mart Supercenter
26 US-98/SR-30/Navarre Pkwy at Whisper Pines Blvd
27 US-98/SR-30/Navarre Pkwy at Orion Parker Dr
28 SR-87/Stewart Rd at Laredo St
29 SR-87/Stewart Rd at High School Blvd
30 SR-87 at CR-399/E Bay Blvd/Turkey Bluff Rd

Wireless Intersections:

1 SR-399/Pensacola Beach Blvd at Via De Luna Dr/Fort Pickens Rd

Pay Item Number:	*Description:*	*Unit:*	*Quantity:*	*Note:*	*Unit Price:*	*Total:*
630-2-11	Conduit, F&I, Open Trench	LF	65608		$ 5.33	$ 349,687.98
630-2-12	Conduit, F&I, Directional Bore	LF	65608		$ 11.60	$ 761,047.00
633-1-124	Fiber Optic Cable, F&I, Underground, 144 Fibers	LF	139365		$ 2.81	$ 391,615.65
633-2-31	Fiber Optic Connection, Install, Splice	EA	264		$ 49.53	$ 13,075.92
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	30		$ 916.75	$ 27,502.50
633-3-12	Fiber Optic Connection Hardware, F&I, Splice Tray	EA	42		$ 99.05	$ 4,160.10
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	30		$ 238.82	$ 7,164.60
635-2-12	Pull & Splice Box, F&I, 24"X36" Cover Size	EA	43		$ 858.43	$ 36,912.49
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round Cover Size	EA	30		$ 1,478.04	$ 44,341.20
639-1-122	Electrical Power Service, F&I, Underground	EA	31		$ 1,210.61	$ 37,528.91
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	31		$ 896.74	$ 27,798.94
641-2-12	Prestressed Concrete Pole, F&I, Type P-II Service Pole	EA	31		$ 737.36	$ 22,858.16
670-5-112	Traffic Controller Assembly, F&I, NEMA, 2 Preemption Plan	AS	31		$ 22,500.00	$ 697,500.00
676-2-121	ITS Cabinet, F&I, pole mount, 336, 24" W X 36" H X 20" D, w/ sunshields	EA	1		$ 4,500.00	$ 4,500.00
682-1-11	ITS CCTV Camera, F&I, Dome Enclosure - Pressurized	EA	15		$ 9,450.00	$ 141,750.00
684-1-1	Managed Field Ethernet Switch, F&I	EA	32		$ 2,360.68	$ 75,541.76
684-6-1	Wireless Communication Device, F&I, Ethernet Access Point	EA	1		$ 5,000.00	$ 5,000.00
101-1	Mobilization	LS	$ 132,399.26			
102-1	Maintenance of Traffic	LS	$ 132,399.26			
677-1-11	Equipment Shelter - Master Hub	EA	$ 25,000.00			
999-25	Initial Contingency Amount		$ 293,778.37			
				Ring Total:		**$ 3,231,562.10**

ESCAMBIA/SANTA ROSA COUNTY REGIONAL ATMS MASTERPLAN QUANITITES - Per Network Ring

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November 23, 2015

Version 3.0

Additional Devices Regionwide

Remote Intersections:

1 Bratt Rd at Bryneville Rd

2 SR-4 at Commerce St

670-5-112	Traffic Controller Assembly, F&I, NEMA, 2 Preemption Plan	AS	0	$ 22,500.00	$ -
633-2-31	Fiber Optic Connection, Install, Splice	EA	0	$ 49.53	$ -
633-3-11	Fiber Optic Connection Hardware, F&I, Splice Enclosure	EA	0	$ 916.75	$ -
633-3-12	Fiber Optic Connection Hardware, F&I, Splice Tray	EA	0	$ 99.05	$ -
633-3-15	Fiber Optic Connection Hardware, F&I, Preterminated Patch Panel	EA	0	$ 238.82	$ -
635-2-13	Pull & Splice Box, F&I, 30" X 60" Rectangular or 36" Round Cover Size	EA	0	$ 1,478.04	$ -
639-1-122	Electrical Power Service, F&I, Underground	EA	0	$ 1,210.61	$ -
639-3-11	Electrical Service Disconnect, F&I, Pole Mount	EA	0	$ 896.74	$ -
641-2-14	Prestressed Concrete Pole, F&I, Type P-IV	EA	0	$ 1,061.19	$ -
660-3-11	Vehicle Detection System, Microwave, Cabinet Equipment	EA	0	$ 1,800.00	$ -
660-3-12	Vehicle Detection System, Microwave, Above Ground Equipment	EA	0	$ 3,500.00	$ -
660-6-121	Vehicle Detection System - Bluetooth Cabinet Equipment	EA	10	$ 500.00	$ 5,000.00
660-6-122	Vehicle Detection System - Bluetooth Above Ground Equipment	EA	10	$ 3,000.00	$ 30,000.00
676-2-111	ITS Cabinet, Pole Mount, 336	AS	0	$ 7,600.00	$ -
700-8-135	Arterial Dynamic Message Sign, F&I, with UPS, Full Color, 51-100 SF	EA	2	$ 65,000.00	$ 130,000.00
700-10-122	Dynamic Message Support Structure	EA	2	$ 60,000.00	$ 120,000.00
781-3-111	ITS Road Weather Information System	EA	0	$ 50,000.00	$ -
101-1	Mobilization	LS	$ 28,500.00		
102-1	Maintenance of Traffic	LS	$ 28,500.00		
999-25	Initial Contingency Amount		$ 34,200.00		
				Additional Devices Total	**$ 376,200.00**

Project Total **$ 25,099,617.77**

Okaloosa-Walton TPO

Okaloosa County

Okaloosa County has an extensive ITS system already in place according to the Regional ITS Plan adopted by the Okaloosa-Walton TPO on September 16, 2010, through Resolution O-W 10-27. According to the Regional ITS Plan, Okaloosa County would benefit from additional fiber optic cable, CCTVs, and DMSs.

The crossing of the Mid-Bay Bridge with fiber, as recommended in the Regional ITS Plan is complete and will enhance the county's traffic control communication system that allows for incident management and evacuation surveillance over the bridge. Wireless communication installations have been installed to connect additional intersections to the system along the western portion of US 98 including Hurlburt Field and west to the county line. The Mid-Bay bridge signalized intersection on SR 20 and the intersections on SR 85, north of US 90, in Crestview at Stillwell Ave, Garden Street, and Airport Road have been added to the advanced traffic control system. Okaloosa County has also completed a signal retiming project for signals on SR 20 in the City of Niceville area. Before-and-after travel time study shows a significant reduction in average travel times of 10 percent overall during the weekdays and 22 percent during the PM peak hour weekday period. Table 1 shows the progress of ITS system implementation in Okaloosa County.

Table 1 - Existing Inventory, Future ITS Needs, and 2016 Progress for Okaloosa County

Okaloosa County- Incorporated and Unincorporated					
Item	Unit	Existing (2010)	Future	Projected Cost (2010)	Complete (2016)
Signalized Intersections	Each	141	*	N/A	N/A
Wireless Communication	Linear Feet	12,543	*	N/A	N/A
Fiber Optic Cable and Conduit	Linear Feet	404,756	168,984	$1,858,824	118,200
Cameras	Each	19	48	$264,000	76
DMS	Each	1	6	$960,000	None
TMC	Each	1	*	N/A	N/A

*No future needs are identified in the Regional ITS Plan.

The County's goal is to have monitoring capabilities at nearly all signalized intersections. Currently, 76 CCTVs exists throughout Okaloosa County at intersections in the following areas:

- South County - Fort Walton Beach, Shalimar, Mary Esther Urbanized Area (excluding Destin) - 39 CCTVs
- Destin Area - 12 CCTVs
- Niceville/Bluewater - 14 CCTVs
- Crestview Area - 11 CCTVs

Walton County

Fiber optic cable along with CCTV cameras and DMS are also recommended in Walton County. Fiber optic cable is not proposed to extend from DeFuniak Springs to US 98. Development is sparse on US 331 and connecting cable is not cost feasible. A TMC is also not feasible in this county. However, small control rooms in existing offices will allow existing staff to monitor ITS systems in each maintaining agency.

Walton County has entered into a JPA with FDOT in the amount of $100,000. The JPA has allowed procurement of a traffic engineer to facilitate ITS deployment in Walton County. The new traffic engineer, funded through the JPA, will maximize the capabilities and optimization of the existing system of traffic signals within the county, and perform other valuable traffic operations and engineering duties throughout the region. After covering salary expenses, the budget for this project will fund resources to support the traffic engineer's work. Table 2 shows the progress of ITS implementation in Walton County and the City of DeFuniak Springs.

Table 2 - Existing Inventory, Future ITS Needs, and 2016 Progress for Walton County and City of DeFuniak Springs

Walton County					
Item	Unit	Existing (2010)	Future	Projected Cost (2010)	Complete (2016)
Signalized Intersections	Each	22	*	N/A	25
Fiber Optic Cable and Conduit	Linear Feet	None	190,363	$2,093,993	None
Cameras	Each	None	10	$55,000	None
DMS	Each	None	4	$640,000	None
TMC Small Office	Each	None	1	$10,575	None
City of DeFuniak Springs					
Signalized Intersections	Each	9	*	N/A	N/A
Fiber Optic Cable and Conduit	Linear Feet	None	24,592	$270,512	None
Cameras	Each	None	6	$33,000	None
TMC small office	Each	None	1	$10,575	None

*No future needs are identified in the Regional ITS Plan.

Bay County TPO

According to the Regional ITS Plan, Bay County has numerous signalized intersections and roadway corridors that could benefit from ITS expansion, particularly in the City of Panama City Beach. Growth of the beach area continues, and the signals on the beach need to be coordinated with the TMC. In addition, extending the ITS network on US 231 would benefit this major corridor. Adding CCTVs and additional fiber cable for coordination of signals can be controlled by the existing TMC.

Many of the ITS future needs recommended in the Regional ITS Plan have been funded since 2010 to include installation of over 450,000 linear feet of fiber optic cable and conduit. In addition, one Remote Weather Information System was installed. See Table 3 for a progress of ITS system implementation in Bay County.

Table 3 - Existing Inventory, Future ITS Needs, and 2016 Progress for Bay County

Bay County- Incorporated and Unincorporated					
Item	Unit	Existing (2010)	Future	Projected Cost (2010)	Complete (2016)
Signalized Intersections	Each	178	*	N/A	178
Fiber Optic Cable and Conduit	Linear Feet	250,679	359,499	$3,954,489	459,613
Cameras	Each	43	25	$137,500	86
DMS	Each	4	5	$800,000	5
TMC	Each	1	*	N/A	1
Weather Station	Each	1	*	N/A	1

*No future needs are identified in the Regional ITS Plan.

Summary

The goal of this progress report on TPO implementation of the recommendations outlined in the Regional ITS Plan that was adopted in September 2010, is to remind the TPO partners in the region that the vision is to create a looped ITS system that integrates the ITS systems built in each TPO area and provides a compatible and seamless ITS link. If there is a break in the link, other ends of the looped system can communicate, providing information for movement of freight, emergency vehicles and the traveling public. There is a clear economic benefit to looping the systems. The first priority is to build reliable and compatible systems within each TPO area and to work with the FDOT on creating a seamless ITS network.