

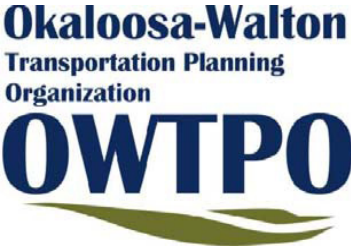


REGIONAL INTELLIGENT TRANSPORTATION SYSTEMS (ITS) PLAN

Florida-Alabama TPO, Okaloosa-Walton TPO and Bay County TPO

**FINAL REPORT
ADOPTED SEPTEMBER 2010**

PREPARED FOR:



PREPARED BY:



GENESIS GROUP



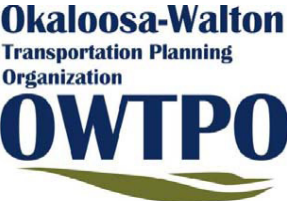
REGIONAL INTELLIGENT TRANSPORTATION SYSTEMS (ITS) PLAN

Florida-Alabama TPO, Okaloosa-Walton TPO and Bay County TPO

WEST FLORIDA REGIONAL PLANNING COUNCIL

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Executive Summary

BACKGROUND

Transportation managers and public officials in the region face a multitude of competing transportation pressures and demands. Population is growing and the demand for travel is increasing even more rapidly. Roads, highways, and public transportation systems are increasingly prone to inefficiency typified by congestion, less reliability, crashes, and travel delays. Congestion on the area’s regional roadway system of interstates, freeways, tollways, and principal arterials has increased greatly.

Officials are recognizing a need to make the best use of existing transportation facilities by implementing measures that actively manage and integrate systems, improve traffic operations and safety, provide accurate real-time information, and reduce the demand for single-occupant motor vehicle travel. In other words, make the existing infrastructure and systems work better. To improve the day-to-day performance of the transportation system, traffic engineers, transportation professionals and transit officials have increasingly enlisted the aid of Intelligent Transportation Systems.



Intelligent Transportation Systems (ITS) are the technology tools and systems that local agencies and jurisdictions use to manage transportation operations. The purpose of this ITS Plan is to facilitate the implementation of a regional vision for transportation operations using both technology and regional partnerships.

PURPOSE

This study will identify ITS projects that can help the region achieve its transportation and land use goals. ITS uses advanced computer, communication, and roadway technologies to improve traffic flow, signal operations, transit operations, incident management, emergency response, and the dissemination of information to travelers.

This study will provide a comprehensive evaluation of the existing network of ITS. In addition, major and minor projects to improve the regions ITS deployment will be evaluated and solutions to these items will be provided.

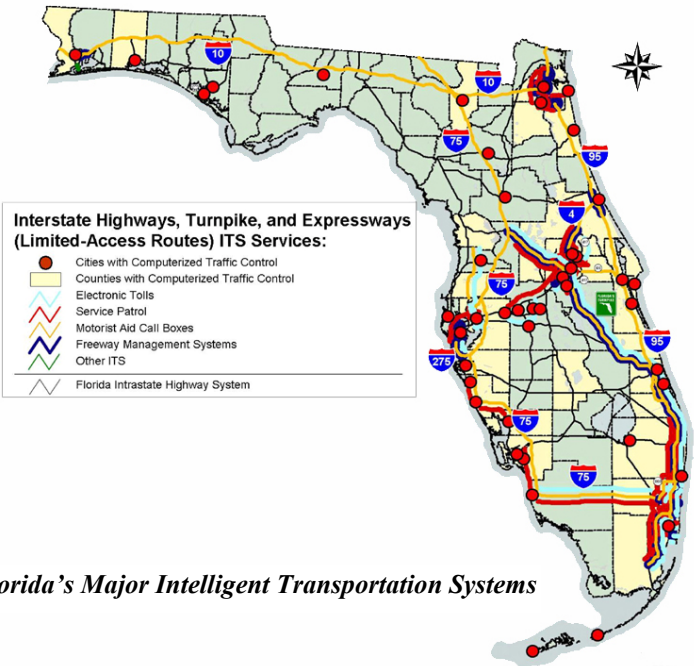
INTENT

Development of a Regional ITS Plan has been initiated by the Florida-Alabama, Okaloosa-Walton and Bay County Transportation Planning Organizations (TPOs) to identify existing and future ITS communications networks and devices needed to enhance the transportation needs and the economic competitiveness of the region. The region consists of the Florida-Alabama, Okaloosa-Walton and Bay County TPOs’ planning areas. **Figure 1** displays a map of the region.

This plan will help facilitate the objectives outlined in the Florida Department of Transportation (FDOT) District 3 ITS Architecture. The purposes of the architecture are to provide relationships between existing and planned ITS elements and to facilitate information exchange across institutional boundaries.

The Regional ITS Plan identified/evaluated the existing ITS networks, evaluated future ITS improvement needs for each TPO and determined additional staffing needs for operations and maintenance of future ITS improvements. All maps prepared for the plan have been created in GIS to allow sharing/managing data uniformly within the region.

This report has been divided into two (2) parts, Part I overviews ITS functionality and how it will benefit the region, and Part II pertains to the existing ITS applications and future ITS needs within each TPO area and overall region.



Florida’s Major Intelligent Transportation Systems

REGIONAL INTELLIGENT TRANSPORTATION SYSTEMS (ITS) PLAN

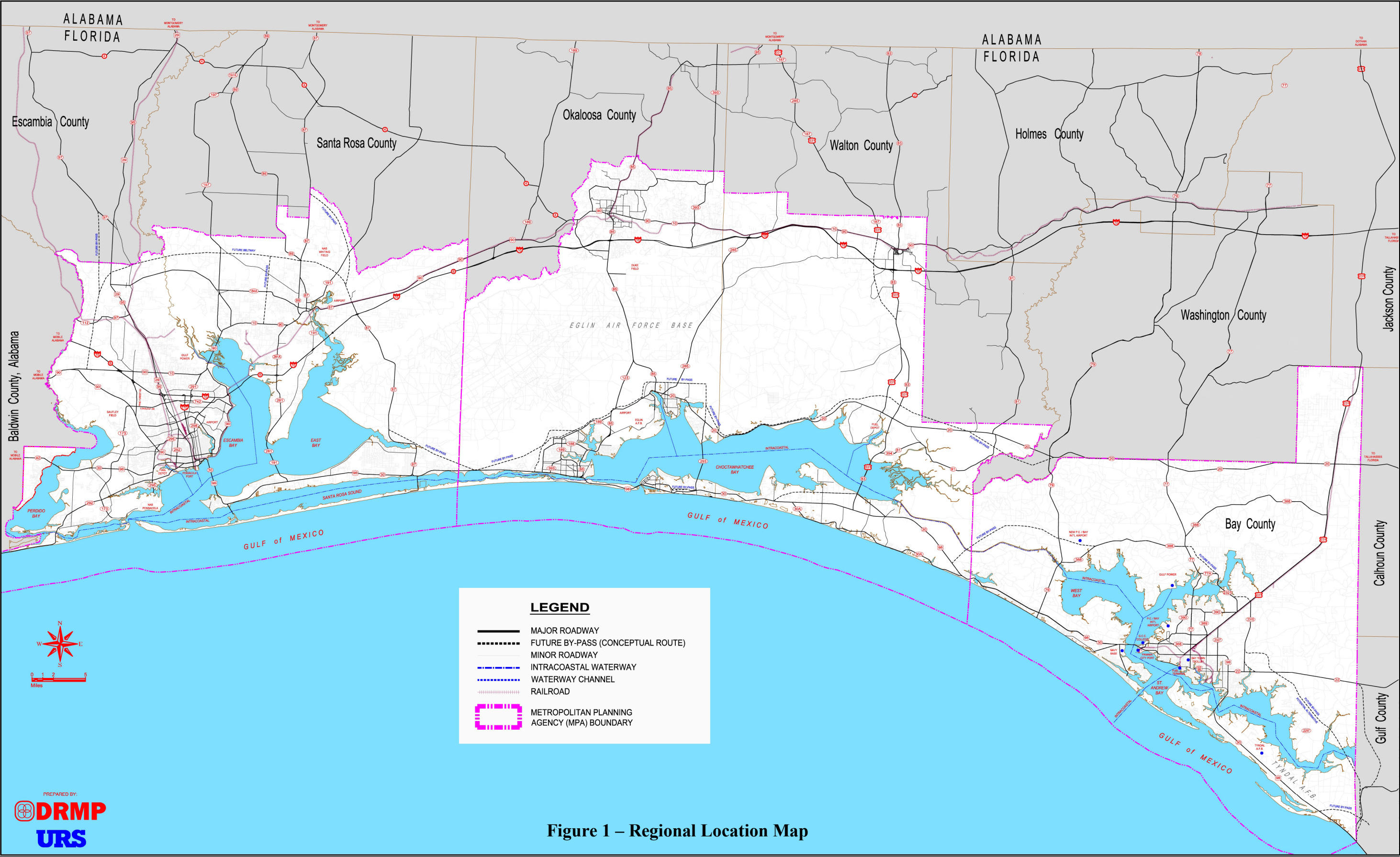


Figure 1 – Regional Location Map

PART I: Intelligent Transportation Systems (ITS)
Overview

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1. Introduction

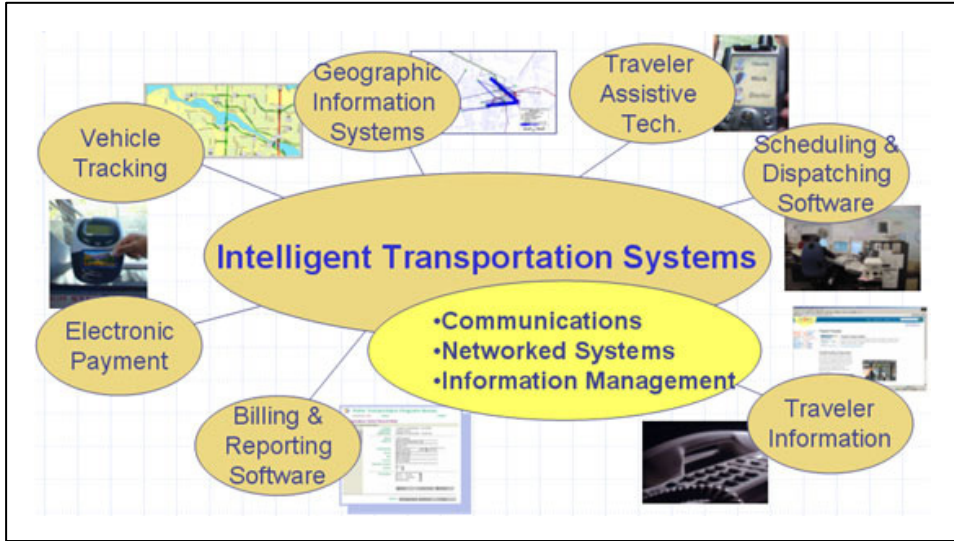
ITS consists of a wide variety of applications intended to improve the safety and mobility of the traveling public, while enabling organizations responsible for providing transportation facilities and services to do so more efficiently. ITS is only a part of the solution to resolving current transport issues when the existing road infrastructure is insufficient for the amount of transportation demand causing congestion, growing accident rates, and environmental pollution. While expanding roadway infrastructure is the traditional solution, this approach is becoming more difficult to apply in urbanized areas due to huge investments in right of way and environmental risks. ITS can be an efficient way of resolving these matters:

- Traffic signal control system improves traffic flow and safety.
- Transit signal priority systems can ease the travel of buses or light-rail vehicles traveling arterial corridors and improve on-time performance.
- Signal preemption for emergency vehicles enhances the safety of emergency responders, reducing the likelihood of crashes while improving response times.
- Advanced signal systems include coordinated signal operations across neighboring jurisdictions, as well as centralized control of traffic signals which may include some necessary technologies for the later development of adaptive signal control.
- Pedestrian detectors, specialized signal heads, and bicycle-actuated signals can improve the safety of all road users at signalized intersections.
- Arterial management systems with unique operating schemes can also smooth traffic flow during special events and incidents.

2. Benefits of ITS

Through the implementation of ITS projects dramatic operational, environmental and safety improvements have resulted throughout the country and around the world. ITS encompasses a broad range of communications-based information, control and electronics technologies. When integrated into the transportation system infrastructure, these technologies help monitor and manage traffic flow, reduce congestion, provide alternate routes to travelers, enhance productivity, improve response to incidents, and alert motorists to adverse weather or other road capacity constricting events.

ITS can be deployed to improve the operation of freeways, arterials, and transit systems. Several applications can support critical transportation functions during emergency situations. Other applications facilitate convenient payment for highway tolls and transit fares. Traveler information programs synthesize information collected by ITS and disseminate it to travelers for their benefit in making travel decisions. Information management programs help transportation organizations manage and analyze the flow of data from deployed ITS and use it to improve transportation operations. As populations increase all over the nation, especially in Florida, congestion of roadways is becoming a major problem. Building roadway infrastructure to handle these increases is becoming difficult to continue. ITS applications are providing alternatives to physical additions of travel lanes by creating more efficient existing roadway facilities. ITS provides a synergy of roadway information with real-time control. The goals



REGIONAL INTELLIGENT TRANSPORTATION SYSTEMS (ITS) PLAN

addressed by the FDOT District 3 Interstate Regional ITS Architecture include: Safety, Mobility, Efficiency, Productivity, Energy, Environment and Customer Satisfaction.

The following are some of the major functions of ITS that will be utilized in this region:

- Traffic Management
- Incident Management
- Traveler Information
- Hurricane Evacuation
- Freight Management

Traffic Management

The surface street system and freeway management system can be evaluated and optimized for improved traffic management. ITS provides the capability to adjust signal timing and to coordinate signalized intersections, resulting in reduction of delay and travel time for motorist, commercial, and emergency vehicle. The environment benefits include improved air quality and the reduction of fuel consumption. Also, synchronizing traffic signals are made more manageable and effective with an Advanced Transportation Management Center. The adjustment can be made from the center in seconds and monitored at the same time and trouble calls can be verified immediately before repair crews are dispatched and accidents can be cleared more effectively. Adaptive control strategies can also be implemented, which would allow for intersections to adapt to changing traffic conditions where conditions are difficult to predict. Recovery from emergency and transit preemption can be enhanced, as well.



Incident Management

Incidents on the roadway network can cause great delays for motorists. ITS will allow for detection, verification, and management of incidents. Emergency vehicles will be able to reduce response times, while adjustments are made throughout the roadway network to reduce the effects of such events. Crashes will be detected quicker and motorists will be notified of alternative routes. Traffic incident management programs have demonstrated success under each of the ITS goals (mobility, safety, efficiency, productivity, energy, environment, and customer satisfaction). This success builds from the ability of the programs to significantly reduce the duration of traffic incidents, from 15 to 65 percent, with the bulk of studies finding savings of 30 to 40 percent.

Traveler Information

Real-time information will be provided to motorists. Information could include travel times, detour routes for incidents and special events, construction periods, and Amber alerts. Evaluation of traveler information services has shown benefits in improved on-time reliability, better trip planning, and reduced early and late arrivals. Studies show that drivers who use route-specific travel time information instead of area-wide traffic advisories can improve on-time performance by 5 to 13 percent.

Hurricane Evacuation and Emergency Management

Traffic can be monitored before, during, and after a hurricane. Coordination between emergency staff and motorists will reduce evacuation time and allow for efficient vehicular movement after such events. ITS applications for emergency management can improve the efficiency of transportation capacity during emergencies, increase productivity for hazardous material (HAZMAT) shipping operations, and improve overall traveler safety and security. Evaluation data collected from a number of studies suggest that customer satisfaction with emergency management is largely positive. Stakeholders perceive positive impacts and indicate that these technologies are widely accepted.



Freight Management

ITS can be deployed to improve freight transportation including commercial vehicle operations and intermodal freight. Evaluations of ITS applied to commercial vehicle operations have shown substantial improvements under the safety, mobility, and productivity goal areas. For example, electronic credentialing reduced paperwork and saved carriers participating in the Commercial Vehicle Information System and Networks (CVISN) Model Deployment 60 to 75 percent on credentialing costs. Both motor coach and truck drivers held favorable opinions of commercial vehicle electronic clearance, while a survey of Maryland motor carriers found that carriers with large fleets (25 or more vehicles) conducting business with State agencies value electronic data interchange and Internet technologies more than small fleets.

To help States track their own progress in deploying CVISN technologies, a self-evaluation requirement was included in the partnership agreements between the U.S. DOT and individual States. States now in the planning, decision-making, or early deployment stages can learn from the experiences of others; and States further along in the deployment process can learn new ideas that might help them improve their existing systems and networks. To this end, a process for reporting CVISN costs data was established, and the results of the costs data collection and analysis were published and the costs data were imported to the ITS Costs Database.

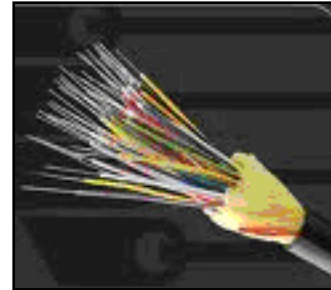
2.1 ITS Components

Critical ITS components essential to the functionality of the system are listed below:

- Fiber Optics
- Closed Circuit Television (CCTV) Cameras
- Dynamic Message Signs (DMS)
- Transportation Management Centers (TMC)

Fiber Optics

Fiber optics are strands of optically pure glass that carry digital information over long distances and can provide a large amount of bandwidth. Fiber optics are lightweight, flexible, non-flammable, low power, and have low signal degradation. These strands are bundled into fiber optic cables. Cables are used to connect all ITS components within the network. It is recommended that fiber optic cable be buried inside of conduit whenever possible to avoid damage from storms, vehicle accidents and squirrels.



Closed Circuit Television (CCTV) Cameras

Cameras should be installed at major intersections and along major arterials and all freeways. Images will allow for real-time observation of traffic conditions, incident management, hurricane/disaster management, signal display verification and maintenance, and roadway maintenance/construction. Cameras will be controlled at a TMC where staff can pan, tilt, and zoom.



Dynamic Message Signs (DMS)

These large digital signs should be installed along major arterials and all freeways. Real-time messages can be changed manually or by automatic control and have the capability of displaying more than one message. During adverse road conditions, traffic incidents and construction these signs have been used very effectively. Messages can also display travel times, alternative routes, AMBER alerts, and other useful messages.



Transportation Management Centers (TMC)

Traffic Management Centers (TMC) link the various ITS components by acting as a hub for all transportation management systems. This hub allows staff to gather, monitor, and disseminate information from the ITS system. Integrated transportation management systems supported by TMCs have the potential to improve traffic management, traveler information, and maintenance operations, and enable more effective use of agency personnel and resources. The TMC will bring together the various jurisdictions, modal interests, and service providers to focus on the common goal of optimizing the performance of the entire surface transportation system. The TMC will consist of a control room where monitors provide views from the CCTV cameras. The cost of TMCs can vary greatly. Primary cost drivers include the size of the facility, the number of agencies present, and the number of functions performed by the facility. The capital cost of physical components can range from \$10k to \$5.0 million per facility, and have operation and maintenance (O&M) costs that range from \$50,000 to \$500,000 per year.



Additional ITS Applications

In addition to the essential components previously listed, ITS networks can also offer a wide range of other practical applications that can be used in this region or applied in the future. Examples of additional ITS applications include **Remote Weather Information Stations (RWIS)**, which can relay weather information to motorist, emergency responders or maintenance staff via DMS, radio, cellular or web based portals. RWIS devices can also be used to execute weather responsive traffic signal control timings to allow for adverse weather conditions, wet or flooded roadway, fog, smoke, etc.



Weather Monitoring Station

Microwave Vehicle Detection Systems (MVDS) can read the speed, count and classification of vehicles. **License Plate Reader (LPR)** devices can read license plates on vehicles to determine speeds, collect tolls, identify red light adherence, travel times for DMS, etc. **Highway Advisory Radio (HAR)** systems can broadcast information extracted from ITS applications. Traffic monitoring sites, such as loop sensors, MVDS, or microwave sensors can calculate vehicle volumes, speeds, classification, etc, which can be used for data purposes or calculation of travel times for DMS display. Location and arrival time of transit can be relayed to multimodal users at transit stations. Pre-emption devices can assist transit travel times and also allow emergency vehicles to transverse signalized intersections quickly and safely. Electronic toll collection allows motorists to remain at travel speeds while tolls are automatically collected, thus reducing congestion. With proper planning and software, several additional ITS applications can be integrated into an ITS network to help increase traffic safety and efficiency while gaining additional analytical tools which can be used to further improve transportation management.

2.2 Costs-Benefit Analysis

A cost-benefit analysis is difficult to project due to quantification of benefits from ITS technologies. Since it difficult to account for possible savings in areas that are often underestimated overlooked or empirically unperceivable, a standard cost-benefit analysis calculation may not be able to easily determine or fully evaluate the complete range of potential benefits. Such monetarily unquantifiable items may include but are not limited to positive affects on land use, productivity and performance gains, and improved relationships between public agencies and the driving community. However, cost-benefit analyses typically show that over time most ITS investments yield tremendous savings to taxpayers. While ITS does require large investment costs, it does have long-term returns and if expansion of roadway infrastructure can be minimized or avoided, savings can be considerable. When emergency dispatch get the right emergency personnel and equipment to an incident quicker, time is saved for other motorists, but more importantly, lives are saved. Reduction of energy use and pollution, increase in use of public transit, and improved motorist comfort are other examples of benefits that are not easily quantified.



Studies demonstrate the ability of traffic control ITS applications to enhance mobility, increase efficiency of the transportation systems, and reduce the impact of automobile travel on energy consumption and air quality. The ability of both adaptive signal control and coordinated signal timing to smooth traffic can lead to corresponding safety improvements through reduced rear-end crashes. Optimizing signal timing is considered a low cost approach to reducing congestion. Metropolitan areas that deploy ITS infrastructure including dynamic message signs (DMS) to manage freeway and arterial traffic, and integrate traveler information with incident management systems can increase peak period freeway speeds by 8 to 13 percent, improve travel time, and according to simulation studies, reduce crash rates and improve trip time reliability with delay reductions ranging from 1 to 22 percent.

Several benefit analysis have been conducted on Advanced Transportation Management Systems (ATMS) or ITS Systems installed and these results show a huge benefit. In Richmond, Virginia, they reduced the average travel time by 10%, reduced the average stops by 28%, reduced fuel consumption by 11% and reduced emissions by 9%. In Fort Collins, Colorado, they reduced the average travel time by 36%.

Another area of ITS Benefits is in Work Zones. ITS technologies deployed for roadway operations and maintenance activities can have system-wide impacts. Network simulation models estimate that smart work zones can reduce total delay by 40 to 65 percent. In addition to improving mobility, work zone ITS can improve safety. Evaluation data show that areas equipped with speed monitoring displays can decrease vehicle speeds by 4 to 6 mi/h, and reduce the number of speeding vehicles by 25 to 70 percent.

2.3 Why Fiber Optics

Fiber Optics vs. Other technologies

ITS networks are built with fiber optic infrastructure as the backbone. DSL (digital subscriber line) and cable networks cannot offer the speeds required by a city wishing to compete in the digital economy. Business, government, and citizens all need affordable and fast access to information networks. Today’s decisions will lay the foundation of telecommunications infrastructure for decades. Fortunately, we already know the solution: wireless solves the mobility problem; fiber solves the speed and capacity problems; and public ownership offers a network built to benefit the community. Those who expect a future without wires are sadly mistaken. Existing wireless networks are perfectly adequate for voice, email, or some Internet surfing, but their limitations preclude high quality video/phone applications and other bandwidth intensive applications. When a company decides to improve its network, most experts agree that it makes more sense for bandwidth-intensive business operations to utilize fiber optic networks rather than subscribe to a service from a local phone company.

Leased lines vs. Installing

In some areas, fiber optic cable is already installed, which allows companies and government agencies the ability to lease dark fiber or bandwidth. Falling prices and newer, cheaper optical equipment means that many midsize companies can afford to take out long-term leases on dark fiber and buy the equipment to run their own network. Cost-conscious fields such as education and health care are finding fiber optic networks provide them the best value for a scalable network to meet their bandwidth needs. However, companies like Ford Motor Co., Bank of America, Bausch & Lomb and Gannett Co. have all decided to acquire their own fiber optic networks because the benefits of investing in them far outweigh the advantages of leasing or renting them. Typically, less bandwidth would be provided for the money. The traditional view of owning your own optical fiber lines has been that it is too expensive and requires specially-trained optics engineers to build and run the networks. On the contrary, a mid-distance optical network has become much more affordable and is easy to handle for anyone who is familiar with Internet Protocol (IP) networking gear. In addition, there are many outsourced consulting firms that can help identify networks, negotiate rates and design the infrastructure.



Depending on your bandwidth requirements, you will be able to save money by owning your optical fiber lines. The decision to utilize a dark fiber network or lease a service from a carrier often comes down to price. If you spend between \$5,000 and \$10,000 per month on telecommunication services, owning a fiber network could save at least 30 percent on your total network costs. Also, owning the network allows flexibility as new services can be provided in a matter of hours or days instead of waiting for months for a service provider to do it. To add capacity to the system will be as simple as changing out the end devices.

PART II: Transportation Planning Organizations (TPOs)
and Regional ITS

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3.1 Florida-Alabama TPO

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3.2 Okaloosa-Walton TPO

3.2.1 Okaloosa County

3.2.2 Walton County

3.3 Bay County TPO

3.3.1 Bay County

4. Regional ITS Network

5. ITS Priorities

6. Funding Sources

7. TPOs’ Adopted Resolutions

3. Identification of ITS per TPO

The region consists of Florida-Alabama TPO, Okaloosa-Walton TPO and Bay County TPO. All counties within the TPOs are located along the Gulf of Mexico, which provides miles of beaches creating major tourist destinations. Other transportation economic activity centers and major corridors are listed for each TPO. This analysis addresses the existing and future ITS needs for each maintaining agency within the TPOs. The ITS components identified in this report are signalized intersections, fiber optic cable, CCTV cameras, MVDS, weather stations, DMS, and TMC’s. ITS components on I-10, I-110 and fiber optic cable connecting counties are part of the regional ITS network and counties or cities are not responsible for maintenance and funding of these systems.

Operations and Maintenance (O&M) staff needs are also addressed for each TPO. Needs are based on existing staff and additional ITS components recommended for the future. Operations will ensure that proper functioning of the system will meet its intended objectives. Maintenance will provide upkeep of equipment and repair/replacement of faulty equipment. As systems grow, additional O&M staff is needed to operate and monitor the system. Adequate training will also need to be addressed for the staff.

Preliminary costs associated with ITS installation or expansion and additions have been calculated for each maintaining agency. Costs consider design, construction, engineering & inspection of each ITS component. Costs for this study are based on individual unit prices; therefore, total project costs may vary depending on magnitude and location. Also, estimated salaries for additional technicians are determined.

All tables and figures for each maintaining agency are listed under each TPO. Tables quantify existing inventory and future ITS components and associated costs of the future ITS needs for each TPO. Figures show maps of existing and future ITS components that can be seen in the appendices. Spreadsheets are listing all ITS components and their locations that can be found in the appendices.



3.1 Florida-Alabama TPO:

The Florida-Alabama TPO consists of the southern half of Escambia County, the southern half of Santa Rosa County and a small portion of southeast Baldwin County (Alabama), which can be characterized by the unincorporated community of Lillian. Some of the Stakeholders within these counties are: City of Pensacola, City of Milton, and City of Gulf Breeze, all of which maintain their own traffic signals. Like all of the areas of this study, this part of Florida consists of a business districts, historical districts and the tourist district of the beaches. The Port of Pensacola is a high traffic area; the Port is planning to install ITS devices to help the truck traffic along the main route to the port. The Pensacola Regional Airport is planning to install fiber optic cable for the signals around the Airport. Santa Rosa County has a large percentage population of military families and Eglin Air Force Base takes up a large portion of the Southeast portion of the county. This keeps most of the local traffic in the Milton area to the north and the beaches to the south.

In addition to Escambia County and Santa Rosa County, the limits of the Florida-Alabama TPO also include a small portion of Baldwin County, Alabama. The segment of US 98 which crosses the FL-AL state line (Escambia-Baldwin county line) at Perdido Bay into the unincorporated community of Lillian is a highway of commerce and a scenic coastal route connecting Pensacola and Mobile, AL.

3.1.1 Escambia County

Major Roadway Corridors: I-10, I-110, US 98, US 90, US 29

Large Commercial Airports: Pensacola Regional Airport

Seaports – Port of Pensacola

Rail Lines – Alabama & Gulf Coast Railroad, CSX

Military Bases – Pensacola Naval Air Station



Existing ITS Inventory:

City of Pensacola is a major urban area of Escambia County. The City is responsible for operation and maintenance of their signalized intersections. City of Pensacola currently does not have a fiber optic central control system for their signals nor do they have CCTV cameras or DMS signs. The city currently has “Closed Loop” systems. Escambia County is currently constructing a TMC to manage the existing coordinated signals. They have some “Closed Loop” systems on some of their major arterials, but are at about 10% complete coverage. They currently do not have CCTV cameras and DMS along their arterials. The Florida Department of Transportation (FDOT) is currently constructing a Freeway Management System on I-10 and I-110. This system is deploying buried fiber optic cable, CCTV cameras, Microwave Vehicle Detectors, Dynamic Message Signs, Remote Weather Station and a Regional Transportation Management Center in Escambia County/Pensacola.

Future ITS Needs:

Escambia County has numerous signalized intersections and roadway corridors that could benefit from ITS expansion. The City of Pensacola and Escambia County both require a TMC to monitor and operate their ITS components. Installing CCTV cameras and additional buried fiber cable for coordination of signals can be controlled by the new TMC. The cost-effective approach would be for both agencies to share a TMC. This would also allow for efficient communication between the agencies. This is a trend that is growing around the country. Note that the future ITS map indicates fiber cable extending to some locations where signalized intersections are not present. This cable is being proposed by the county for connections to other county facilities, schools and colleges. Escambia County has an Emergency Operations Center (EOC) to which these ITS devices can also benefit. The video from the cameras and the information from the weather station can be sent to the EOC, along with the ability to disseminate messages to the DMS on the highways.

Two (2) additional technicians would be recommended for the proposed ITS needs.

Installation of fiber optic cables along US 98 corridor and CCTV cameras at the signalized in the unincorporated community of Lillian in Southwest Baldwin County, Alabama is recommended. These cameras/signals can be monitored by a small TMC. No additional technicians is required for the proposed ITS needs in this portion of Baldwin County.



Small Control Room

Tables, Figures and Spreadsheets:

The following tables identify the existing ITS inventory, future ITS needs, and preliminary costs for Escambia County, City of Pensacola, and Lillian, Alabama.

- Table 3.1.1.1 – Existing inventory and future needs of ITS components in Escambia County (City of Pensacola quantities not included)
- Table 3.1.1.2 – Existing inventory and future needs of ITS components in City of Pensacola
- Table 3.1.1.3 – Existing inventory and future needs of ITS components in Lillian, Alabama
- Table 3.1.1.4 – Preliminary costs for future needs of ITS components in Escambia County (City of Pensacola quantities not included)
- Table 3.1.1.5 – Preliminary costs for future needs of ITS components in City of Pensacola
- Table 3.1.1.6 – Preliminary costs for future needs of ITS components in Lillian, Alabama

The following figures illustrate the locations of existing and future ITS components (i.e., existing signalized intersections, future fiber optic cable, cameras, video detection, DMS, and TMC) in Escambia County, City of Pensacola, and Lillian, Alabama.

- Figure 3.1.1.1 – Existing signalized intersections and fiber optic cable in Escambia County and Lillian, Alabama
- Figure 3.1.1.2 – Existing signalized intersections and fiber optic cable in the City of Pensacola
- Figure 3.1.1.3 – Existing signalized intersections, existing and future fiber optic cable in Escambia County and Lillian, Alabama
- Figure 3.1.1.4 – Future cameras, DMS, and TMC in Escambia County and Lillian, Alabama
- Figure 3.1.1.5 – Existing signalized intersections, existing and future fiber optic cable in City of Pensacola
- Figure 3.1.1.6 – Future cameras in City of Pensacola

The following spreadsheet lists existing and future ITS components in Escambia County.

Spreadsheet 3.1.1.1 – Existing and future ITS components in Escambia County

Table 3.1.1.1 – Existing inventory and future needs of ITS components in Escambia County

Item	Unit	Existing	Future
Signalized Intersections	Each	110	0
Fiber Optic Cable and Conduit	Linear Feet	149,648	1,023,460
Cameras	Each	0	40
DMS	Each	0	4
RTMC	Each	1	0
TMC	Each	0	1

Table 3.1.1.2 – Existing inventory and future needs of ITS components in City of Pensacola

Item	Unit	Existing	Future
Signalized Intersections	Each	90	0
Fiber Optic Cable and Conduit	Linear Feet	20,890	252,142
Cameras	Each	0	23

Table 3.1.1.3 – Existing inventory and future needs of ITS components in Lillian, AL

Item	Unit	Existing	Future
Signalized Intersections	Each	5	0
Fiber Optic Cable and Conduit	Linear Feet	0	56,321
Cameras	Each	0	5

Table 3.1.1.4 – Preliminary costs for future needs of ITS components in Escambia County

Item	Unit	No. Units	Unit Cost	Total Cost
Fiber Optic Cable and Conduit	Linear Feet	1,023,460	\$11	\$11,258,060
Cameras	Each	40	\$5,500	\$220,000
DMS	Each	4	\$160,000	\$640,000
TMC	Each	1	\$750,000	\$750,000
Total				\$12,868,060

Operations and Maintenance (per year)

Item	Unit	No. Units	Unit Cost	Total Cost
Technician	Persons	2	\$50,000	\$100,000

Table 3.1.1.5 – Preliminary costs for future needs of ITS components in City of Pensacola

Item	Unit	No. Units	Unit Cost	Total Cost
Fiber Optic Cable and Conduit	Linear Feet	252,142	\$11	\$2,773,562
Cameras	Each	23	\$5,500	\$126,500
Total				\$2,900,062

Table 3.1.1.6 – Preliminary costs for future needs of ITS components in Lillian, AL

Item	Unit	No. Units	Unit Cost	Total Cost
Fiber Optic Cable and Conduit	Linear Feet	56,321	\$11	\$619,531
Cameras	Each	5	\$5,500	\$27,500
Total				\$647,031

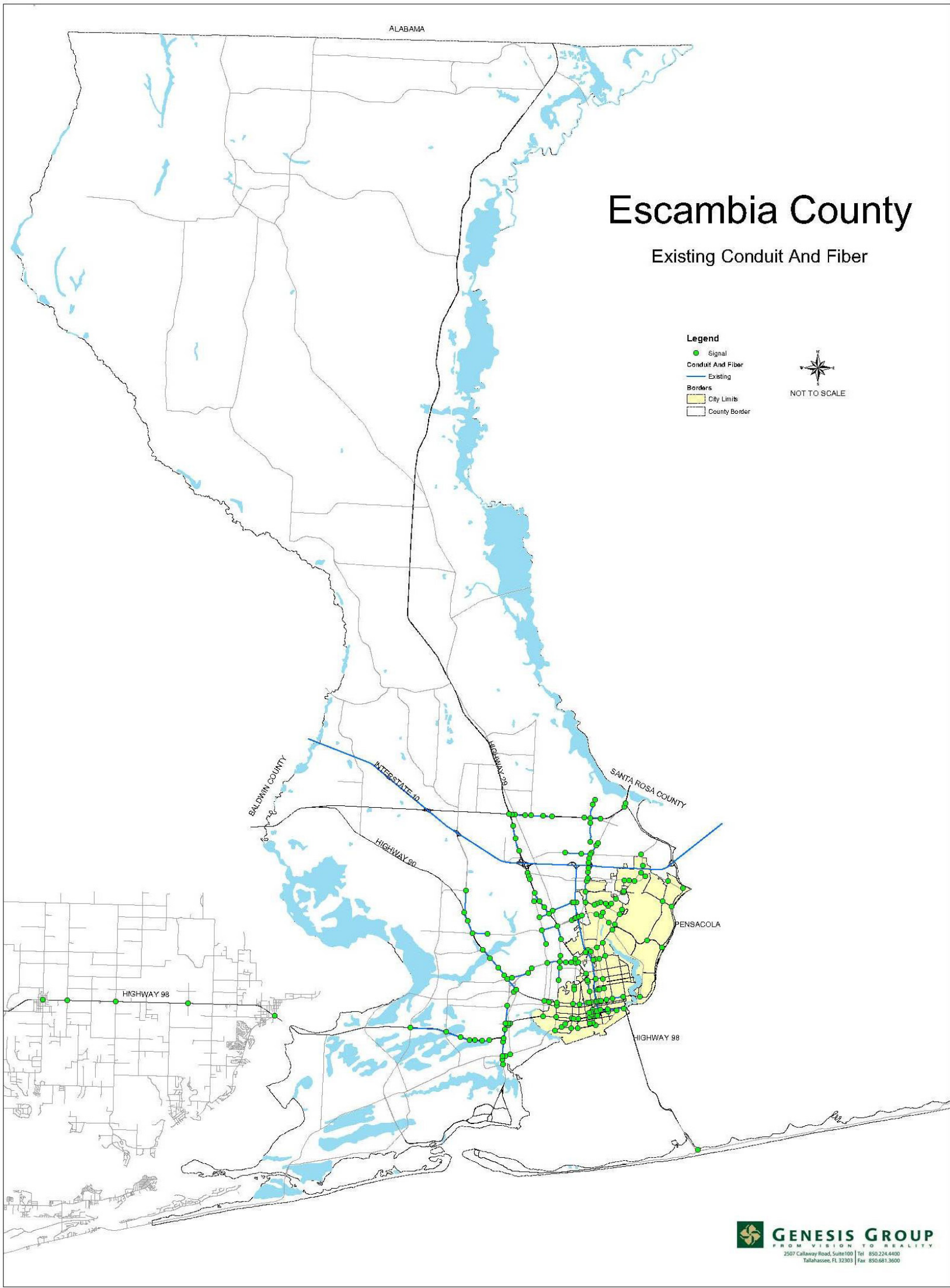


Figure 3.1.1.1 – Existing signalized intersections and fiber optic cable in Escambia County and the City of Lillian, Alabama

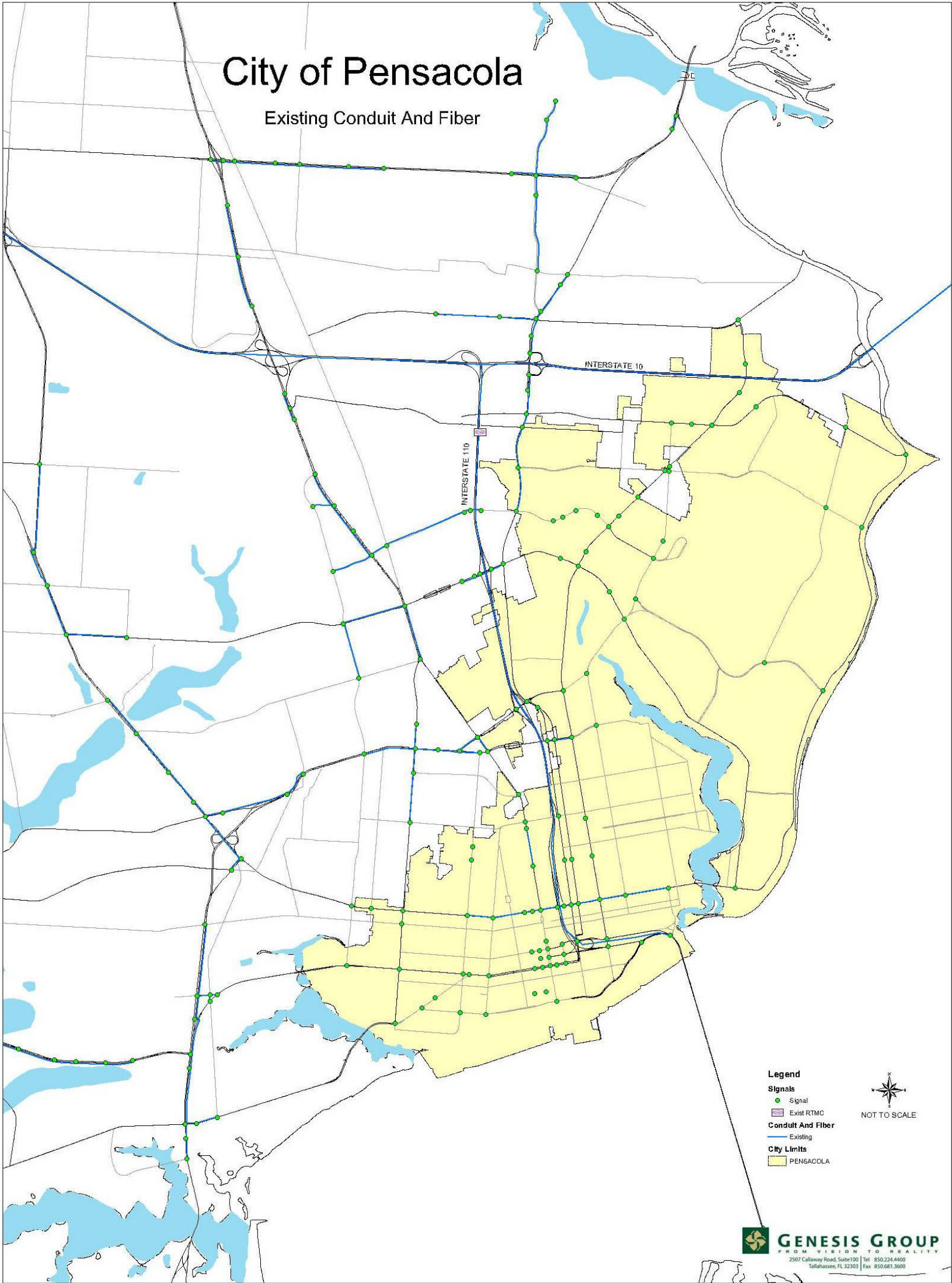


Figure 3.1.1.2 – Existing signalized intersections and fiber optic cable in the City of Pensacola, Florida

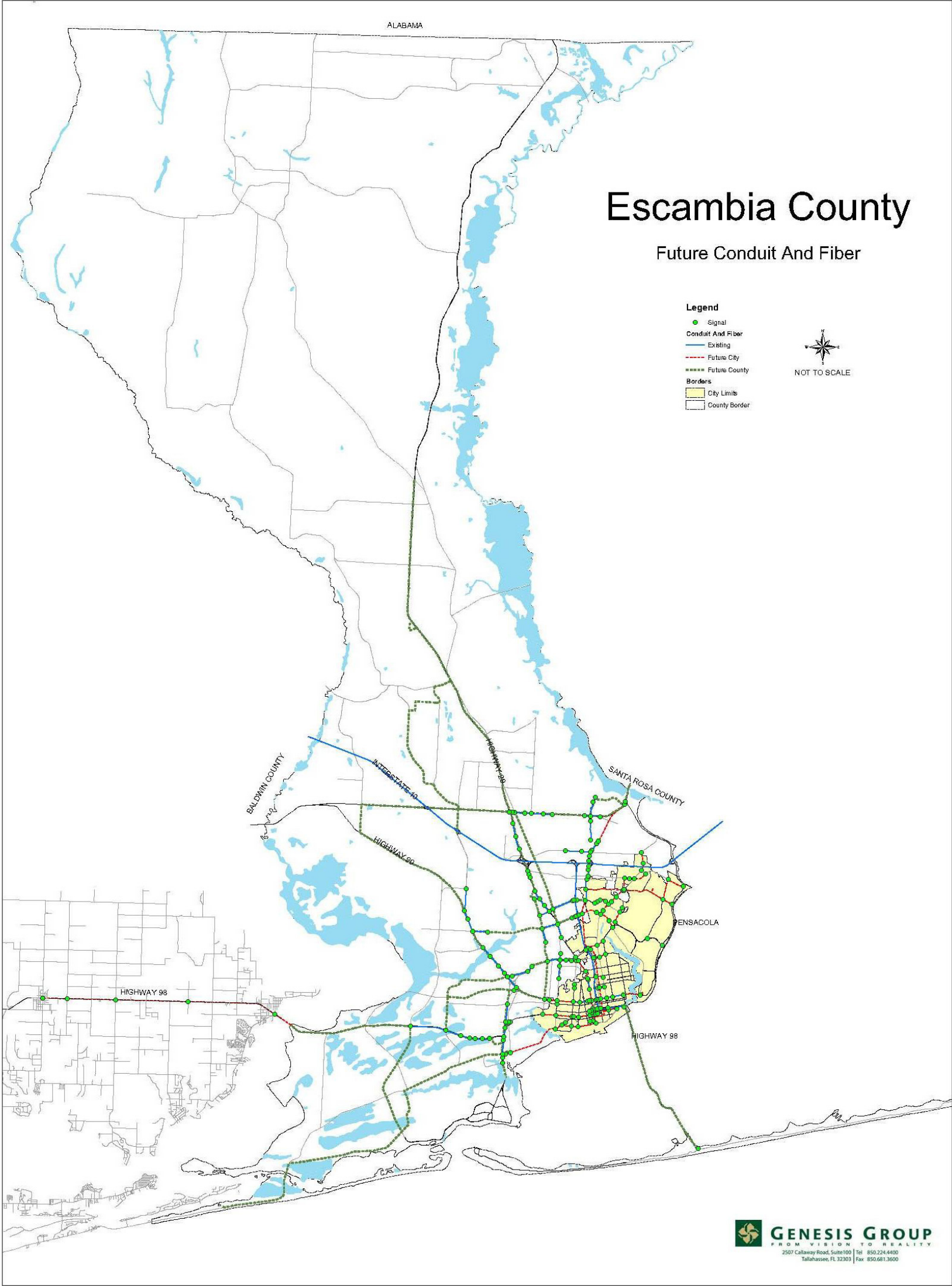


Figure 3.1.1.3 – Existing signalized intersections, existing and future fiber optic cable in Escambia County and the City of Lillian, Alabama

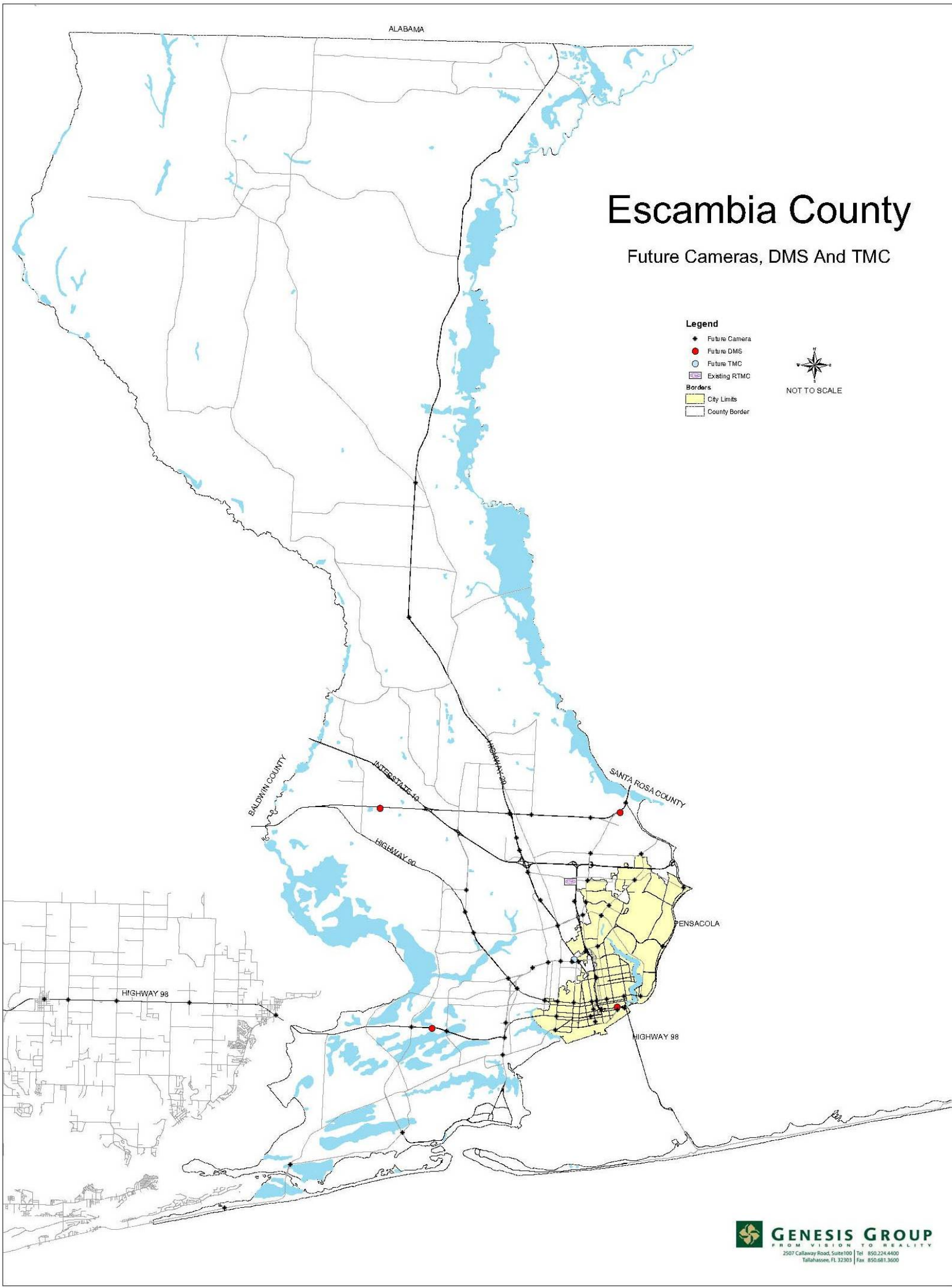


Figure 3.1.1.4 – Future cameras, DMS, and TMC in Escambia County and the City of Lillian, Alabama



Figure 3.1.1.5 – Existing signalized intersections, existing and future fiber optic cable in the City of Pensacola, Florida

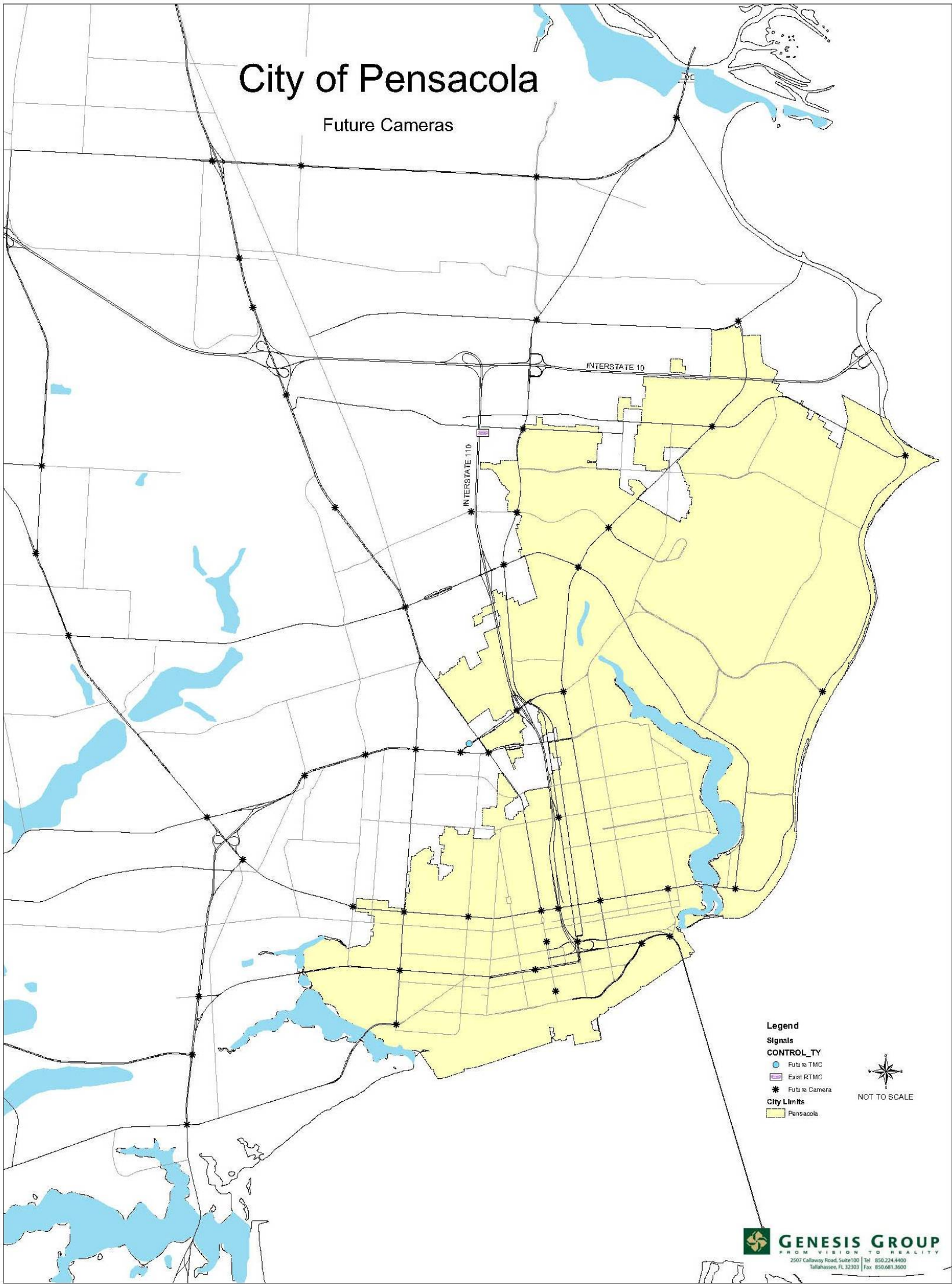


Figure 3.1.1.6 – Future cameras in the city of Pensacola, Florida

REGIONAL INTELLIGENT TRANSPORTATION SYSTEMS (ITS) PLAN

Spreadsheet 3.1.1.1 – Existing and future ITS components in Escambia County

Existing Signalized Intersections

CONTROL_I	CONTROL_	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
E1-1	SIGNAL	Escambia County	SR 295 (NAVY BLVD)	SUNSET AVE / RABY AVE	513436.06	1092680.46
E1-2	SIGNAL	Escambia County	SR 295 (NAVY BLVD)	WINTHROP AVE	514562.45	1092624.08
E1-3	SIGNAL	Escambia County	SR 295 (NAVY BLVD)	SR 292 (GULF BEACH HWY / BARRANCAS AVE)	515348.28	1092591.95
E1-4	SIGNAL	Escambia County	SR 295 (NAVY BLVD)	SOUTHGATE PLAZA	518434.34	1092792.74
E1-5	SIGNAL	Escambia County	US 98 (NAVY BLVD)	US 98 (DR FARIN DR)	519187.81	1092875.89
E1-6	SIGNAL	Escambia County	US 98 (NAVY BLVD)	SR 295 (NEW WARRINGTON RD)	521108.34	1093093.15
E1-7	SIGNAL	Escambia County	SR 295 (NEW WARRINGTON RD)	CR 295B (CHIEFS WAY)	522399.93	1093233.92
E1-8	SIGNAL	Escambia County	SR 295 (NEW WARRINGTON RD)	CR 298A (W JACKSON ST)	526297.59	1093665.60
E1-11	SIGNAL	Escambia County	SR 292 (BARRANCAS AVE)	2ND ST	515364.74	1093209.79
E1-12	SIGNAL	Escambia County	SR 292 (BARRANCAS AVE)	CR 295A (OLD CORRY FIELD RD)	515720.11	1094346.34
E1-14	SIGNAL	Escambia County	US 98 (NAVY BLVD)	CR 295B (CHIEFS WAY)	522452.55	1094348.28
E1-15	SIGNAL	Escambia County	CR 295A (OLD CORRY FIELD RD)	CR 295B (CHIEFS WAY)	522447.78	1093945.61
E2-1	SIGNAL	Escambia County	US 90 (MOBILE HWY)	SR 296 (NEW WARRINGTON RD)	529922.06	1095670.01
E2-2	SIGNAL	Escambia County	US 90 (MOBILE HWY)	SR 727 (W FAIRFIELD DR)	532233.20	1093702.47
E2-3	SIGNAL	Escambia County	US 90 (MOBILE HWY)	EDISON DR	534670.40	1091669.65
E2-4	SIGNAL	Escambia County	US 90 (MOBILE HWY)	MASSACHUSETTS AVE	536782.24	1089901.95
E2-5	SIGNAL	Escambia County	US 90 (MOBILE HWY)	CR 341 (MARLANE DR)	538611.37	1088323.99
E2-6	SIGNAL	Escambia County	SR 295 (NEW WARRINGTON RD)	SR 296 (LILLIAN HWY)	529304.80	1095116.03
E2-7	SIGNAL	Escambia County	SR 295 (W FAIRFIELD DR)	RUBY AVE	533461.33	1098165.75
E2-8	SIGNAL	Escambia County	SR 295 (W FAIRFIELD DR)	HOLLYWOOD AVE	534547.03	1099068.83
E2-9	SIGNAL	Escambia County	US 90 (MOBILE HWY)	CHEROKEE TRL	533017.56	1093051.16
E2-10	SIGNAL	Escambia County	SR 295 (W FAIRFIELD DR)	S DAKOTA ST / LOWES	532439.37	1094654.62
E3-1	SIGNAL	Escambia County	US 90 (MOBILE HWY)	SR 296 (MICHIGAN AVE) / CR 296 (SAUFLEY FIELD RD)	542208.20	1086076.87
E3-2	SIGNAL	Escambia County	US 90 (MOBILE HWY)	BELLVIEW AVE	544914.08	1085014.20
E3-3	SIGNAL	Escambia County	SR 173 (N BLUE ANGEL PKWY)	SR 297 (PINE FOREST RD)	551558.74	1084595.95
E3-4	SIGNAL	Escambia County	US 90 (MOBILE HWY)	SR 297 (PINE FOREST RD)	546740.87	1084262.84
E3-5	SIGNAL	Escambia County	SR 296 (MICHIGAN AVE)	MEMPHIS AVE	542047.21	1089378.61
E4-1	SIGNAL	Escambia County	US 29 (PENSACOLA BLVD)	W PINESTEAD RD	554033.08	1098583.87
E4-2	SIGNAL	Escambia County	US 29 (PENSACOLA BLVD)	SR 742 (W BURGESS RD)	554640.72	1098352.83
E4-3	SIGNAL	Escambia County	US 29 (PENSACOLA BLVD)	DIAMOND DAIRY RD	555431.33	1098057.77
E5-1	SIGNAL	Escambia County	UNIVERSITY PKWY	CAMPUS DR	571511.78	1112904.44
E5-1	SIGNAL	Escambia County	ALT US 90 (W NINE MILE RD)	I-110 SB RAMP	568286.66	1093997.17
E5-2	SIGNAL	Escambia County	ALT US 90 (E NINE MILE RD)	UNIVERSITY PKWY	567425.53	1111823.13
E5-2	SIGNAL	Escambia County	ALT US 90 (W NINE MILE RD)	CR 95A (N PALAFOX ST)	568213.40	1095295.50
E5-3	SIGNAL	Escambia County	UNIVERSITY PKWY	TARGET	566328.51	1111828.90
E5-3	SIGNAL	Escambia County	ALT US 90 (E NINE MILE RD)	CHEMSTRAND RD	568028.61	1098855.76
E5-4	SIGNAL	Escambia County	UNIVERSITY PKWY	E JOHNSON AVE	562186.79	1111880.09
E5-4	SIGNAL	Escambia County	ALT US 90 (E NINE MILE RD)	HOLSBERRY RD	568099.81	1097523.02
E5-5	SIGNAL	Escambia County	UNIVERSITY PKWY	HILLVIEW DR	570472.23	1112419.05
E5-6	SIGNAL	Escambia County	ALT US 90 (E NINE MILE RD)	BALDRIDGE DR / PLAINFIELD AVE	567502.92	1110489.20
E5-6	SIGNAL	Escambia County	ALT US 90 (E NINE MILE RD)	HUMMINGBIRD BLVD	567903.31	1101538.47
E5-7	SIGNAL	Escambia County	ALT US 90 (E NINE MILE RD)	CR 498 (COPTER RD)	567297.17	1114018.57
E5-7	SIGNAL	Escambia County	ALT US 90 (W NINE MILE RD)	I-110 NB RAMP	568247.96	1094683.09
E6-5	SIGNAL	Escambia County	ALT US 90 (E NINE MILE RD)	GUIDY LN	567821.06	1103494.75
E7-1	SIGNAL	Escambia County	CR 399 (PENSACOLA BEACH BLVD)	CR 399 (FORT PICKENS RD)	494707.05	1135369.20
E8-1	SIGNAL	Escambia County	SR 291 (N DAVIS HWY)	AIRPORT BLVD	548979.49	1110746.64
E8-4	SIGNAL	Escambia County	SR 291 (N DAVIS HWY)	SR 742 (E BURGESS RD)	553591.19	1111061.78
E8-5	SIGNAL	Escambia County	SR 291 (N DAVIS HWY)	SR 742 (CREIGHTON RD)	554321.12	1111300.84
E8-6	SIGNAL	Escambia County	SR 291 (N DAVIS HWY)	BLOODWORTH LN	555627.45	1111378.60
E8-7	SIGNAL	Escambia County	SR 291 (N DAVIS HWY)	I-10 EB RAMP	556474.59	1111421.17
E9-1	SIGNAL	Escambia County	US 29 (N PALAFOX ST)	MASSACHUSETTS AVE	540886.44	1105481.86
E9-2	SIGNAL	Escambia County	US 29 (N PALAFOX ST)	SR 296 (BEVERLY PKWY)	543794.20	1104606.50
E9-3	SIGNAL	Escambia County	CR 453 (N W ST)	MASSACHUSETTS AVE	539822.94	1102104.23
E9-4	SIGNAL	Escambia County	SR 296 (BEVERLY PKWY)	CR 453 (N W ST)	542819.60	1101266.63
E10-1	SIGNAL	Escambia County	SR 295 (W FAIRFIELD DR)	CR 453 (N W ST)	535678.17	1102401.97
E10-2	SIGNAL	Escambia County	SR 295 (W FAIRFIELD DR)	SR 292 (N PACE BLVD)	535968.75	1105196.87
E10-3	SIGNAL	Escambia County	SR 295 (W FAIRFIELD DR)	N L ST	535896.50	1106468.94
E10-4	SIGNAL	Escambia County	SR 295 (W FAIRFIELD DR)	SR 752 (W TEXAR DR)	535824.45	1107648.52
E10-5	SIGNAL	Escambia County	US 29 (N PALAFOX ST)	SR 295 (W FAIRFIELD DR)	536574.32	1108619.21
E10-6	SIGNAL	Escambia County	SR 752 (W TEXAR DR)	CR 443 (N E ST)	535748.18	1108733.72
E10-7	SIGNAL	Escambia County	US 29 (N PALAFOX ST)	SR 752 (W TEXAR DR)	535790.12	1109182.63
E10-8	SIGNAL	Escambia County	SR 292 (N PACE BLVD)	W JORDAN ST	531911.45	1104907.34
E10-9	SIGNAL	Escambia County	SR 292 (N PACE BLVD)	ST MARY AVE	534629.81	1105113.18
E10-10	SIGNAL	Escambia County	SR 292 (N PACE BLVD)	W HERMAN AVE	537315.44	1105269.80
E11-2	SIGNAL	Escambia County	SR 752 (E TEXAR DR)	SR 291 (N DAVIS HWY)	536454.04	1112839.88
E11-3	SIGNAL	Escambia County	US 98 (NAVY BLVD)	CR 295A (OLD CORRY FIELD RD)	522106.78	1093967.77
E11-3	SIGNAL	Escambia County	SR 752 (E TEXAR DR)	SR 291 (DR MARTIN LUTHER KING JR DR)	536397.36	1112458.59
E12-10	SIGNAL	Escambia County	SR 291 (N DAVIS HWY)	SR 290 (E OLIVE RD)	559557.42	1111818.04
E12-11	SIGNAL	Escambia County	SR 291 (N DAVIS HWY)	UNIVERSITY PKWY	559943.16	1112088.71
E12-13	SIGNAL	Escambia County	SR 291 (N DAVIS HWY)	KLINGER ST	561416.33	1113152.88
E12-14	SIGNAL	Escambia County	SR 291 (N DAVIS HWY)	E JOHNSON AVE	561967.61	1113550.50
E12-15	SIGNAL	Escambia County	SR 290 (E OLIVE RD)	CODY LN	559826.90	1106337.91
E12-3	SIGNAL	Escambia County	SR 290 (E OLIVE RD)	WHITMIRE DR	559656.58	1109838.28
E12-8	SIGNAL	Escambia County	SR 291 (N DAVIS HWY)	I-10 WB RAMP	557676.36	1111487.06
E12-9	SIGNAL	Escambia County	SR 291 (N DAVIS HWY)	NORTHCROSS LN / MCDONALDS	558619.08	1111553.17

Spreadsheet 3.1.1.1 – Existing and future ITS components in Escambia County

Existing Signalized Intersections (Continued)

CONTROL_I	CONTROL_	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
E13-1	SIGNAL	Escambia County	US 90 (MOBILE HWY)	BROAD ST	560247.02	1096238.77
E13-2	SIGNAL	Escambia County	US 90 (MOBILE HWY)	W DETROIT BLVD	562967.29	1095484.13
E13-3	SIGNAL	Escambia County	US 90 (MOBILE HWY)	W HOOD DR	565787.03	1094905.12
E14-1	SIGNAL	Escambia County	US 90 (MOBILE HWY)	W AIRPORT BLVD	546562.82	1102826.27
E14-10	SIGNAL	Escambia County	AIRPORT BLVD	I-110 NB RAMP	549029.95	1108807.79
E14-2	SIGNAL	Escambia County	CR 95A (N PALAFOX ST)	W AIRPORT BLVD	547104.65	1103641.82
E14-3	SIGNAL	Escambia County	US 90 (MOBILE HWY)	MARCUS POINTE BLVD / STUMPFIELD RD	549270.39	1100750.62
E14-3	SIGNAL	Escambia County	US 90 (MOBILE HWY)	CR 453 (N W ST)	551017.37	1097713.21
E14-5	SIGNAL	Escambia County	CR 453 (N W ST)	W AIRPORT BLVD	545673.49	1100699.06
E14-6	SIGNAL	Escambia County	CR 453 (N W ST)	MARCUS POINTE BLVD	549259.00	1099571.80
E14-7	SIGNAL	Escambia County	US 90 (MOBILE HWY)	INDUSTRIAL BLVD	547893.18	1101801.40
E14-8	SIGNAL	Escambia County	AIRPORT BLVD	HANCOCK LN	548933.01	1107893.52
E14-9	SIGNAL	Escambia County	AIRPORT BLVD	I-110 SB RAMP	549034.88	1108221.04
E15-1	SIGNAL	Escambia County	SR 296 (BRENT LN)	RAWSON LN	545422.21	1108443.45
E15-2	SIGNAL	Escambia County	SR 296 (BRENT LN)	I-110 SB RAMP	545550.90	1108748.83
E15-3	SIGNAL	Escambia County	SR 296 (BRENT LN)	I-110 NB RAMP	545810.31	1109353.91
E15-4	SIGNAL	Escambia County	SR 296 (BRENT LN)	SR 291 (N DAVIS HWY)	546097.80	1110027.46
E15-5	SIGNAL	Escambia County	SR 296 (BRENT LN)	PENSACOLA CHRISTIAN COLLEGE	545145.37	1107777.52
E16-1	SIGNAL	Escambia County	SR 289 (N 9TH AVE)	TIPPIN AVE	551434.06	1119141.93
E16-2	SIGNAL	Escambia County	SR 289 (N 9TH AVE)	LANGLEY AVE	551205.67	1118909.34
E16-3	SIGNAL	Escambia County	TIPPIN AVE	LANGLEY AVE	551189.57	1119128.15
E17-1	SIGNAL	Escambia County	US 90A (N DAVIS HWY)	CAMPUS DR	569953.27	1119294.91
E17-2	SIGNAL	Escambia County	US 90A (N DAVIS HWY)	US 90 (SCENIC HWY)	570682.63	1119508.71
E18-10	SIGNAL	Escambia County	US 98 (DR FARIN DR)	US NAVY HOSPITAL	518779.48	1086590.01
E18-16	SIGNAL	Escambia County	US 98 (DR FARIN DR)	S 61ST AVE	518867.33	1085428.40
E18-17	SIGNAL	Escambia County	US 98	S 72ND AVE	519460.94	1083461.60
E18-18	SIGNAL	Escambia County	US 98	SR 727 (S FAIRFIELD DR)	520600.53	1080245.98
E18-19	SIGNAL	Escambia County	US 98	SR 173 (S BLUE ANGEL PKWY)	521512.26	1072493.97
E18-20	SIGNAL	Escambia County	US 98 (DR FARIN DR)	VETERANS WAY	518719.55	1088211.05
E18-9	SIGNAL	Escambia County	US 98 (DR FARIN DR)	NAVY EXCHANGE RD / PJC	518839.07	1089702.15
	SIGNAL	Escambia County	US 90 (MOBILE HWY)	CR 453 (N W ST)	527333.69	1101709.75
	SIGNAL	Escambia County	W AVERY ST	CR 443 (N E ST)	529834.04	1108287.76
	SIGNAL	Escambia County	US 29 (N PALAFOX ST)	CR 490 (W LEONARD ST)	533444.51	1110867.22
	SIGNAL	Escambia County	SR 289 (N 9TH AVE)	SR 290 (E OLIVE RD)	559486.20	1122929.28
	SIGNAL	Escambia County	SPANISH TRAIL RD	SR 742 (CREIGHTON RD)	553598.07	1128810.65

Total of 110 Signalized Intersections

2	SIGNAL	Pensacola	BARRANCAS AVE	SR 292 (S PACE BLVD)	520864.52	1104094.20
4	SIGNAL	Pensacola	BARRANCAS AVE	W MAIN ST	521728.08	1105557.90
6	SIGNAL	Pensacola	W MAIN ST	S E ST	521479.82	1107659.79
8	SIGNAL	Pensacola	S PALAFOX ST	W MAIN ST	522101.33	1112969.48
12	SIGNAL	Pensacola	BARRANCAS AVE	W GOVERNMENT ST / S I ST	522267.44	1106301.01
14	SIGNAL	Pensacola	W GOVERNMENT ST	S SPRING ST	522509.32	1111770.88
16	SIGNAL	Pensacola	W GOVERNMENT ST	S BAYLEN ST	522620.51	1112395.15
28	SIGNAL	Pensacola	US 98 (W NAVY BLVD)	N W ST	524056.46	1101439.48
32	SIGNAL	Pensacola	US 98 (W GARDEN ST)	US 98 (S PACE BLVD)	523851.61	1104317.64
34	SIGNAL	Pensacola	US 98B (W GARDEN ST)	N E ST	523591.24	1107816.43
36	SIGNAL	Pensacola	US 98B (W GARDEN ST)	BARRANCAS AVE / N D ST	523560.46	1108172.33
38	SIGNAL	Pensacola	US 98B (W GARDEN ST)	N A ST	523484.93	1109236.07
40	SIGNAL	Pensacola	US 98B (W GARDEN ST)	N SPRING ST	523886.72	1111754.13
42	SIGNAL	Pensacola	US 98B (W GARDEN ST)	N BAYLEN ST	523959.55	1112165.52
44	SIGNAL	Pensacola	US 98B (W GARDEN ST)	S PALAFOX ST	524042.76	1112620.73
46	SIGNAL	Pensacola	US 98B (W GARDEN ST)	N JEFFERSON ST	524099.38	1112957.66
48	SIGNAL	Pensacola	US 98B (W GARDEN ST)	N TARRAGONA ST	524192.31	1113453.08
52	SIGNAL	Pensacola	W CHASE ST	N BAYLEN ST	524439.11	1112081.08
54	SIGNAL	Pensacola	S PALAFOX ST	W CHASE ST	524517.01	1112535.12
56	SIGNAL	Pensacola	E CHASE ST	N TARRAGONA ST	524663.35	1113373.50
58	SIGNAL	Pensacola	US 98 (E CHASE ST)	SR 289 (N 9TH AVE)	525082.31	1115772.93
60	SIGNAL	Pensacola	US 98 (E CHASE ST)	SR 196 (BAY FRONT PKWY)	525318.18	1117608.29
64	SIGNAL	Pensacola	W GREGORY ST	N SPRING ST	524801.06	1111586.74
66	SIGNAL	Pensacola	W GREGORY ST	N BAYLEN ST	524872.85	1112003.73
68	SIGNAL	Pensacola	S PALAFOX ST	W GREGORY ST	524953.94	1112461.86
70	SIGNAL	Pensacola	US 98B (E GREGORY ST)	N TARRAGONA ST	525226.26	1113277.31
72	SIGNAL	Pensacola	US 98B (E GREGORY ST)	SR 291 (N ALCANIZ ST)	525399.69	1114080.40
74	SIGNAL	Pensacola	US 98B (E GREGORY ST)	SR 289 (N 9TH AVE)	525514.68	1115700.78
76	SIGNAL	Pensacola	US 98 (BAY FRONT PKWY)	N 17TH AVE	525709.38	1119179.60
77	SIGNAL	Pensacola	S PALAFOX ST	W WRIGHT ST	525396.00	1112383.88
79	SIGNAL	Pensacola	US 90 (W CERVANTES ST)	N T ST	527180.85	1102776.35
80	SIGNAL	Pensacola	US 90 (W CERVANTES ST)	US 98 (S PACE BLVD)	527050.30	1104539.99
82	SIGNAL	Pensacola	US 90 / 98 (W CERVANTES ST)	N E ST	526787.33	1108058.48
84	SIGNAL	Pensacola	US 90 / 98 (W CERVANTES ST)	N A ST	526681.08	1109476.79
86	SIGNAL	Pensacola	US 90 / 98 (W CERVANTES ST)	N SPRING ST	526955.08	1111211.77
88	SIGNAL	Pensacola	US 90 / 98 (W CERVANTES ST)	N BAYLEN ST	527027.45	1111627.76</

REGIONAL INTELLIGENT TRANSPORTATION SYSTEMS (ITS) PLAN

Spreadsheet 3.1.1.1 – Existing and future ITS components in Escambia County

Existing Signalized Intersections (Continued)

CONTROL_I	CONTROL_	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
92	SIGNAL	Pensacola	US 90 / 98 (E CERVANTES ST)	I-110 SB RAMP	527256.25	1113009.44
94	SIGNAL	Pensacola	US 90 / 98 (E CERVANTES ST)	N HAYNE ST	527313.77	1113353.81
96	SIGNAL	Pensacola	US 90 / 98 (E CERVANTES ST)	SR 291 (DR MARTIN LUTHER KING JR DR)	527384.19	1113758.72
98	SIGNAL	Pensacola	US 90 / 98 (E CERVANTES ST)	SR 291 (N DAVIS HWY)	527448.99	1114138.12
100	SIGNAL	Pensacola	US 90 / 98 (E CERVANTES ST)	US 98 / SR 289 (N 9TH AVE)	527669.24	1115331.20
101	SIGNAL	Pensacola	US 90 (E CERVANTES ST)	N 12TH AVE	527909.80	1116731.39
102	SIGNAL	Pensacola	US 90 (E CERVANTES ST)	N 17TH AVE	528311.48	1119076.58
104	SIGNAL	Pensacola	US 90 (E CERVANTES ST)	US 98 (PERRY AVE)	528311.55	1122754.76
105	SIGNAL	Pensacola	W JACKSON ST	US 98 (S PACE BLVD)	526332.04	1104472.20
106	SIGNAL	Pensacola	US 29 (N PALAFOX ST)	W BLOUNT ST	529523.07	1111664.77
108	SIGNAL	Pensacola	SR 291 (DR MARTIN LUTHER KING	E BLOUNT ST	529827.02	1113406.87
110	SIGNAL	Pensacola	SR 291 (N DAVIS HWY)	E BLOUNT ST	529891.75	1113788.43
111	SIGNAL	Pensacola	W MORENO ST	N E ST	530577.52	1108343.69
112	SIGNAL	Pensacola	SR 289 (N 9TH AVE)	E BLOUNT ST	530080.52	1114907.98
116	SIGNAL	Pensacola	US 29 (N PALAFOX ST)	W JORDAN ST	531591.27	1111302.70
118	SIGNAL	Pensacola	SR 289 (N 9TH AVE)	E JORDAN ST	532150.54	1114555.23
120	SIGNAL	Pensacola	US 29 (N PALAFOX ST)	W MAXWELL ST	531936.22	1111242.34
122	SIGNAL	Pensacola	SR 291 (DR MARTIN LUTHER KING	E MAXWELL ST	532252.46	1113054.56
124	SIGNAL	Pensacola	SR 752 (E TEXAR DR)	SR 289 (N 9TH AVE)	536588.28	1113796.38
126	SIGNAL	Pensacola	E TEXAR DR	N 12TH AVE	537236.60	1115128.63
128	SIGNAL	Pensacola	SR 295 (E FAIRFIELD DR)	I-110 SB RAMP	538120.27	1110755.21
130	SIGNAL	Pensacola	SR 291 (N DAVIS HWY)	I-110 NB RAMP	538220.99	1111923.56
132	SIGNAL	Pensacola	SR 295 (E FAIRFIELD DR)	SR 291 (N DAVIS HWY)	538540.31	1111335.11
134	SIGNAL	Pensacola	SR 295 (E FAIRFIELD DR)	SR 289 (N 9TH AVE)	539155.36	1113318.12
136	SIGNAL	Pensacola	SR 296 (BAYOU BLVD)	N 12TH AVE	543057.46	1116665.36
138	SIGNAL	Pensacola	SUMMIT BLVD	N 12TH AVE	544191.71	1117274.17
140	SIGNAL	Pensacola	AIRPORT BLVD	N 12TH AVE	546411.65	1118264.18
142	SIGNAL	Pensacola	COLLEGE BLVD	N 12TH AVE	547346.72	1118792.42
144	SIGNAL	Pensacola	SR 289 (N 9TH AVE)	SR 296 (BAYOU BLVD)	545976.06	1114139.96
145	SIGNAL	Pensacola	SR 296 (BAYOU BLVD)	CORDOVA MALL	544559.43	1115851.67
146	SIGNAL	Pensacola	SR 289 (N 9TH AVE)	SACRED HEART HOSPITAL	546780.25	1114573.21
148	SIGNAL	Pensacola	SR 289 (N 9TH AVE)	AIRPORT BLVD	548154.86	1115803.62
150	SIGNAL	Pensacola	SR 289 (N 9TH AVE)	COLLEGE BLVD	548719.47	1116368.37
151	SIGNAL	Pensacola	SR 289 (N 9TH AVE)	UNDERWOOD AVE	549766.13	1117429.31
154	SIGNAL	Pensacola	SR 289 (N 9TH AVE)	SR 742 (CREIGHTON RD)	553713.50	1121478.57
156	SIGNAL	Pensacola	SR 289 (N 9TH AVE)	DUNMIRE ST / KEATING RD	555508.87	1122972.59
158	SIGNAL	Pensacola	AIRPORT BLVD	COLLEGE PKWY	549022.60	1114014.51
159	SIGNAL	Pensacola	AIRPORT BLVD	CORDOVA CROSSING	548649.44	1113289.73
161	SIGNAL	Pensacola	SPANISH TRAIL RD	SUMMIT BLVD	540664.33	1124343.25
206	SIGNAL	Pensacola	SPANISH TRAIL RD	LANGLEY AVE	549187.26	1127717.73
207	SIGNAL	Pensacola	SR 291 (N DAVIS HWY)	LANGLEY AVE	551364.99	1110854.09
210	SIGNAL	Pensacola	SR 742 (CREIGHTON RD)	TIPPIN AVE	553838.71	1119260.98
212	SIGNAL	Pensacola	US 90 (SCENIC HWY)	LANGLEY AVE	548092.48	1129702.60
214	SIGNAL	Pensacola	SR 295 (E FAIRFIELD DR)	N 12TH AVE	540096.50	1114618.36
222	SIGNAL	Pensacola	SR 289 (N 9TH AVE)	BEAU TERRA LN	557074.91	1123325.02
226	SIGNAL	Pensacola	SR 742 (CREIGHTON RD)	WAL-MART	553777.53	1120360.20
228	SIGNAL	Pensacola	AIRPORT BLVD	K-MART	548774.00	1115197.77
229	SIGNAL	Pensacola	US 90 (SCENIC HWY)	SUMMIT BLVD	539134.24	1127567.24
230	SIGNAL	Pensacola	US 90 (SCENIC HWY)	SR 742 (CREIGHTON RD)	552098.78	1132118.40
231	SIGNAL	Pensacola	W MAIN ST	S A ST	521375.07	1109078.68
	SIGNAL	Pensacola	SR 742 (CREIGHTON RD)	KEATING RD	554730.59	1123907.80
	SIGNAL	Pensacola	AIRPORT BLVD	COBBLEVIEW	548459.30	1112780.07
	SIGNAL	Pensacola	SR 296 (BAYOU BLVD)	RAVE THEATER	546405.52	1113179.16

Total of 90 Signalized Intersections

Existing RTMC

CONTROL_I	CONTROL_	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
	RTMC	Escambia County	INTERSTATE 110	E BURGESS RD	553310.23	1109053.24

Total of 1 RTMC

Spreadsheet 3.1.1.1 – Existing and future ITS components in Escambia County

Future Cameras

CONTROL_I	CONTROL_	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
E1-3	CAMERA	Escambia County	SR 295 (NAVY BLVD)	SR 292 (GULF BEACH HWY / BARRANCAS AVE)	515348.28	1092591.95
E1-5	CAMERA	Escambia County	US 98 (NAVY BLVD)	US 98 (DR FARIN DR)	519187.81	1092875.89
E1-7	CAMERA	Escambia County	SR 295 (NEW WARRINGTON RD)	CR 295B (CHIEFS WAY)	522399.93	1093233.92
E2-1	CAMERA	Escambia County	US 90 (MOBILE HWY)	SR 295 (NEW WARRINGTON RD)	529922.06	1095670.01
E2-8	CAMERA	Escambia County	SR 295 (W FAIRFIELD DR)	HOLLYWOOD AVE	534547.03	1099068.83
E2-2	CAMERA	Escambia County	US 90 (MOBILE HWY)	SR 727 (W FAIRFIELD DR)	532233.20	1093702.47
E3-1	CAMERA	Escambia County	US 90 (MOBILE HWY)	SR 296 (MICHIGAN AVE) / CR 296 (SAUFLEY FIELD RD)	542208.20	1086076.87
E3-4	CAMERA	Escambia County	US 90 (MOBILE HWY)	SR 297 (PINE FOREST RD)	546740.87	1084262.84
E3-3	CAMERA	Escambia County	SR 173 (N BLUE ANGEL PKWY)	SR 297 (PINE FOREST RD)	551558.74	1084595.95
E4-3	CAMERA	Escambia County	US 29 (PENSACOLA BLVD)	DIAMOND DAIRY RD	555431.33	1098057.77
E5-2	CAMERA	Escambia County	ALT US 90 (E NINE MILE RD)	UNIVERSITY PKWY	567425.53	1111823.13
E5-3	CAMERA	Escambia County	ALT US 90 (E NINE MILE RD)	CHEMSTRAND RD	568028.61	1098855.76
E5-1	CAMERA	Escambia County	ALT US 90 (W NINE MILE RD)	I-110 SB RAMP	568286.66	1093997.17
E8-1	CAMERA	Escambia County	SR 291 (N DAVIS HWY)	AIRPORT BLVD	548979.49	1110746.64
E8-4	CAMERA	Escambia County	SR 291 (N DAVIS HWY)	SR 742 (E BURGESS RD)	553591.19	1111061.78
E9-2	CAMERA	Escambia County	US 29 (N PALAFOX ST)	SR 296 (BEVERLY PKWY)	543794.20	1104606.50
E18-18	CAMERA	Escambia County	US 98	SR 727 (S FAIRFIELD DR)	520600.53	1080245.98
E18-19	CAMERA	Escambia County	US 98	SR 173 (S BLUE ANGEL PKWY)	521512.26	1072493.97
E17-2	CAMERA	Escambia County	US 90A (N DAVIS HWY)	US 90 (SCENIC HWY)	570682.63	1119508.71
E15-4	CAMERA	Escambia County	SR 296 (BRENT LN)	SR 291 (N DAVIS HWY)	546097.80	1110027.46
E13-1	CAMERA	Escambia County	US 90 (MOBILE HWY)	BROAD ST	560247.02	1096238.77
E13-2	CAMERA	Escambia County	US 90 (MOBILE HWY)	W DETROIT BLVD	562967.29	1095484.13
E12-10	CAMERA	Escambia County	SR 291 (N DAVIS HWY)	SR 290 (E OLIVE RD)	559557.42	1111818.04
E14-9	CAMERA	Escambia County	AIRPORT BLVD	I-110 SB RAMP	549034.88	1108221.04
E14-3	CAMERA	Escambia County	US 90 (MOBILE HWY)	MARCUS POINTE BLVD / STUMPFIELD RD	549270.39	1100750.62
E10-1	CAMERA	Escambia County	SR 295 (W FAIRFIELD DR)	CR 453 (N W ST)	535678.17	1102401.97
E10-4	CAMERA	Escambia County	SR 295 (W FAIRFIELD DR)	SR 752 (W TEXAR DR)	535824.45	1107648.52
E10-2	CAMERA	Escambia County	SR 295 (W FAIRFIELD DR)	SR 292 (N PACE BLVD)	535968.75	1105196.87
E10-7	CAMERA	Escambia County	US 29 (N PALAFOX ST)	SR 752 (W TEXAR DR)	535790.12	1109182.63
	CAMERA	Escambia County	US 90 (MOBILE HWY)	CR 453 (N W ST)	527333.69	1101709.75
	CAMERA	Escambia County	SR 289 (N 9TH AVE)	SR 290 (E OLIVE RD)	559486.20	1122929.28
	CAMERA	Escambia County	HIGHWAY 29	HIGHWAY 97	640875.41	1073417.68
	CAMERA	Escambia County	HIGHWAY 29		611407.85	1071990.10
	CAMERA	Escambia County	PERDIDO KEY		481820.65	1031559.75
	CAMERA	Escambia County	PERDIDO KEY	GULF BEACH	491409.72	1045916.43
	CAMERA	Escambia County	GULF BEACH	BLUE ANGEL	498332.17	1070535.57

Total of 36 Future Cameras

2	CAMERA	Pensacola	BARRANCAS AVE	SR 292 (S PACE BLVD)	520864.52	1104094.20
18	CAMERA	Pensacola	S PALAFOX ST	W GOVERNMENT ST	522698.69	1112860.55
32	CAMERA	Pensacola	US 98 (W GARDEN ST)	US 98 (S PACE BLVD)	523851.61	1104317.64
40	CAMERA	Pensacola	US 98B (W GARDEN ST)	N SPRING ST	523886.72	1111754.13
60	CAMERA	Pensacola	US 98 (E CHASE ST)	SR 196 (BAY FRONT PKWY)	525318.18	1117608.29
72	CAMERA	Pensacola	US 98B (E GREGORY ST)	SR 291 (N ALCANIZ ST)	525399.69	1114080.40
76	CAMERA	Pensacola	US 98 (BAY FRONT PKWY)	N 17TH AVE	525709.38	1119179.60
77	CAMERA	Pensacola	S PALAFOX ST	W WRIGHT ST	525396.00	1112383.88
80	CAMERA	Pensacola	US 90 (W CERVANTES ST)	US 98 (S PACE BLVD)	527050.30	1104539.99
82	CAMERA	Pensacola	US 90 / 98 (W CERVANTES ST)	N E ST	526787.33	1108058.48
90	CAMERA	Pensacola	US 90 / 98 (W CERVANTES ST)	N PALAFOX ST	527094.90	1112084.15
92	CAMERA	Pensacola	US 90 / 98 (E CERVANTES ST)	I-110 SB RAMP	527256.25	1113009.44
100	CAMERA	Pensacola	US 90 / 98 (E CERVANTES ST)	US 98 / SR 289 (N 9TH AVE)	527669.24	1115331.20
102	CAMERA	Pensacola	US 90 (E CERVANTES ST)	N 17TH AVE	528311.48	1119076.58
104	CAMERA	Pensacola	US 90 (E CERVANTES ST)	SR 296 (PERRY AVE)	528311.55	1122754.76
122	CAMERA	Pensacola	SR 291 (DR MARTIN LUTHER KING	E MAXWELL ST	532252.46	1113054.56
128	CAMERA	Pensacola	SR 295 (E FAIRFIELD DR)	I-110 SB RAMP	538120.27	1110755.21
134	CAMERA	Pensacola	SR 295 (E FAIRFIELD DR)	SR 289 (N 9TH AVE)	539155.36	1113318.12
144	CAMERA	Pensacola	SR 289 (N 9TH AVE)	SR 296 (BAYOU BLVD)	545976.06	1114139.96
148	CAMERA	Pensacola	SR 289 (N 9TH AVE)	AIRPORT BLVD	548154.86	1115803.62
154	CAMERA	Pensacola	SR 289 (N 9TH AVE)	SR 742 (CREIGHTON RD)	553713.50	1121478.57
229	CAMERA	Pensacola	US 90 (SCENIC HWY)	SUMMIT BLVD	539134.24	1127567.24
230	CAMERA	Pensacola	US 90 (SCENIC HWY)	SR 742 (CREIGHTON RD)	552098.78	1132118.40

Total of 23 Future Cameras

Future DMS's

CONTROL_I	CONTROL_	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
	DMS	Baldwin County	N DAVIS HWY	YARROW CIR	568483.02	1118200.60
	DMS	Escambia County	W HIGHWAY 98		521186.99	1077036.77
	DMS	Escambia County	W NINE MILE RD		569503.42	1065625.69
	DMS	Escambia County	US 98 (E GREGORY ST)		525926.20	1117546.03

Total of 4 Future DMS's

3.1.2 Santa Rosa County

Major Roadway Corridors – I-10, US 98, US 90, SR 87

Large Commercial Airports – None

Seaports – None

Rail Lines – CSX

Military Bases – Naval Air Station Whiting Field and Eglin Air Force Base

Existing ITS Inventory:

Santa Rosa County does not have any signalized intersections that are coordinated with communication system; also, they do not have any ITS equipment. The cities of Milton and Gulf Breeze maintain their own signalized intersections.

Future ITS Needs:

Fiber optic cable along with CCTV cameras and DMS is recommended in Santa Rosa County. Video detection is also recommended in Milton on US 90 at three (3) intersections to avoid loop sensor installation that would damage existing brick pavers. The communication system would allow for better response to signal problems, incidents, and evacuations. A TMC is not feasible in this county at this time; however, small control rooms in existing offices will allow existing staff to monitor ITS systems in each maintaining agency. No additional technician is recommended for the proposed ITS needs. Santa Rosa County has an Emergency Operations Center (EOC) that would benefit from ITS devices. The video from the cameras can be sent to the EOC, along with the ability to disseminate messages to the DMS on the highways.



Tables, Figures and Spreadsheets:

The following tables identify the existing ITS inventory, future ITS needs, and preliminary costs for Santa Rosa County, City of Milton, and City of Gulf Breeze.

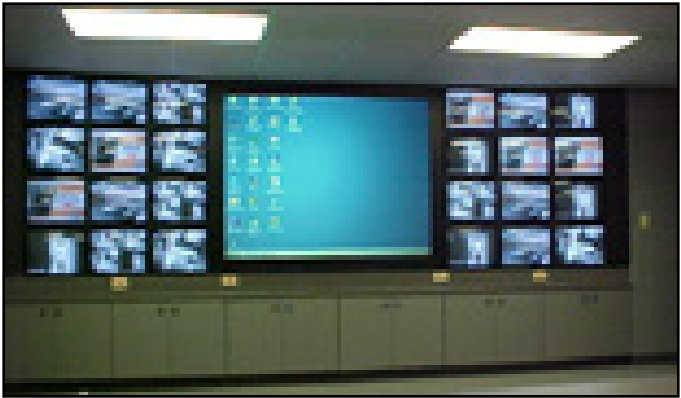
- Table 3.1.2.1 – Existing inventory and future needs of ITS components in Santa Rosa County (City of Milton and City of Gulf Breeze quantities not included)
- Table 3.1.2.2 – Existing inventory and future needs of ITS components in City of Milton
- Table 3.1.2.3 – Existing inventory and future needs of ITS components in City of Gulf Breeze
- Table 3.1.2.4 – Preliminary costs for future needs of ITS components in Santa Rosa County (City of Milton and City of Gulf Breeze quantities not included)
- Table 3.1.2.5 – Preliminary costs for future needs of ITS components in City of Milton
- Table 3.1.2.6 – Preliminary costs for future needs of ITS components in City of Gulf Breeze

The following figures illustrate the locations of existing and future ITS components (i.e., existing signalized intersections, future fiber optic cable, cameras, video detection, DMS, and TMC) in Santa Rosa County, City of Milton, and City of Gulf Breeze.

- Figure 3.1.2.1 – Existing signalized intersections and future fiber optic cable in Santa Rosa County
- Figure 3.1.2.2 – Future cameras, DMS, and TMC in Santa Rosa County
- Figure 3.1.2.3 – Existing signalized intersections and future fiber optic cable in City of Milton
- Figure 3.1.2.4 – Future cameras, DMS, TMC, and Video Detection in City of Milton
- Figure 3.1.2.5 – Existing signalized intersections and future fiber optic cable in City of Gulf Breeze
- Figure 3.1.2.6 – Future cameras and TMC in City of Gulf Breeze

The following spreadsheet lists existing and future ITS components in Santa Rosa County.

Spreadsheet 3.1.2.1 – Existing and future ITS components in Santa Rosa County



REGIONAL INTELLIGENT TRANSPORTATION SYSTEMS (ITS) PLAN

Table 3.1.2.1 – Existing inventory and future needs of ITS components in Santa Rosa County

Item	Unit	Existing	Future
Signalized Intersections	Each	34	0
Fiber Optic Cable and Conduit	Linear Feet	0	169,404
Cameras	Each	0	18
DMS	Each	0	4

Table 3.1.2.4 – Preliminary costs for future needs of ITS components in Santa Rosa County

Item	Unit	No. Units	Unit Cost	Total Cost
Fiber Optic Cable and Conduit	Linear Feet	169,404	\$11	\$1,863,444
Cameras	Each	18	\$5,500	\$99,000
DMS	Each	4	\$160,000	\$640,000
Total				\$2,602,444

Table 3.1.2.2 – Existing inventory and future needs of ITS components in City of Milton

Item	Unit	Existing	Future
Signalized Intersections	Each	19	0
Fiber Optic Cable and Conduit	Linear Feet	0	44,734
Cameras	Each	0	7
TMC small office	Each	0	1
Video Detection	Each	0	3

Table 3.1.2.5 – Preliminary costs for future needs of ITS components in City of Milton

Item	Unit	No. Units	Unit Cost	Total Cost
Fiber Optic Cable and Conduit	Linear Feet	44,734	\$11	\$492,074
Cameras	Each	7	\$5,500	\$38,500
TMC small office	Each	1	\$10,575	\$10,575
Video Detection	Each	3	\$10,300	\$30,900
Total				\$572,049

Table 3.1.2.3 – Existing inventory and future needs of ITS components in City of Gulf Breeze

Item	Unit	Existing	Future
Signalized Intersections	Each	5	0
Fiber Optic Cable and Conduit	Linear Feet	0	26,278
Cameras	Each	0	4
TMC small office	Each	0	1

Table 3.1.2.6 – Preliminary costs for future needs of ITS components in City of Gulf Breeze

Item	Unit	No. Units	Unit Cost	Total Cost
Fiber Optic Cable and Conduit	Linear Feet	26,278	\$11	\$289,058
Cameras	Each	4	\$5,500	\$22,000
TMC small office	Each	1	\$10,300	\$10,300
Total				\$321,358

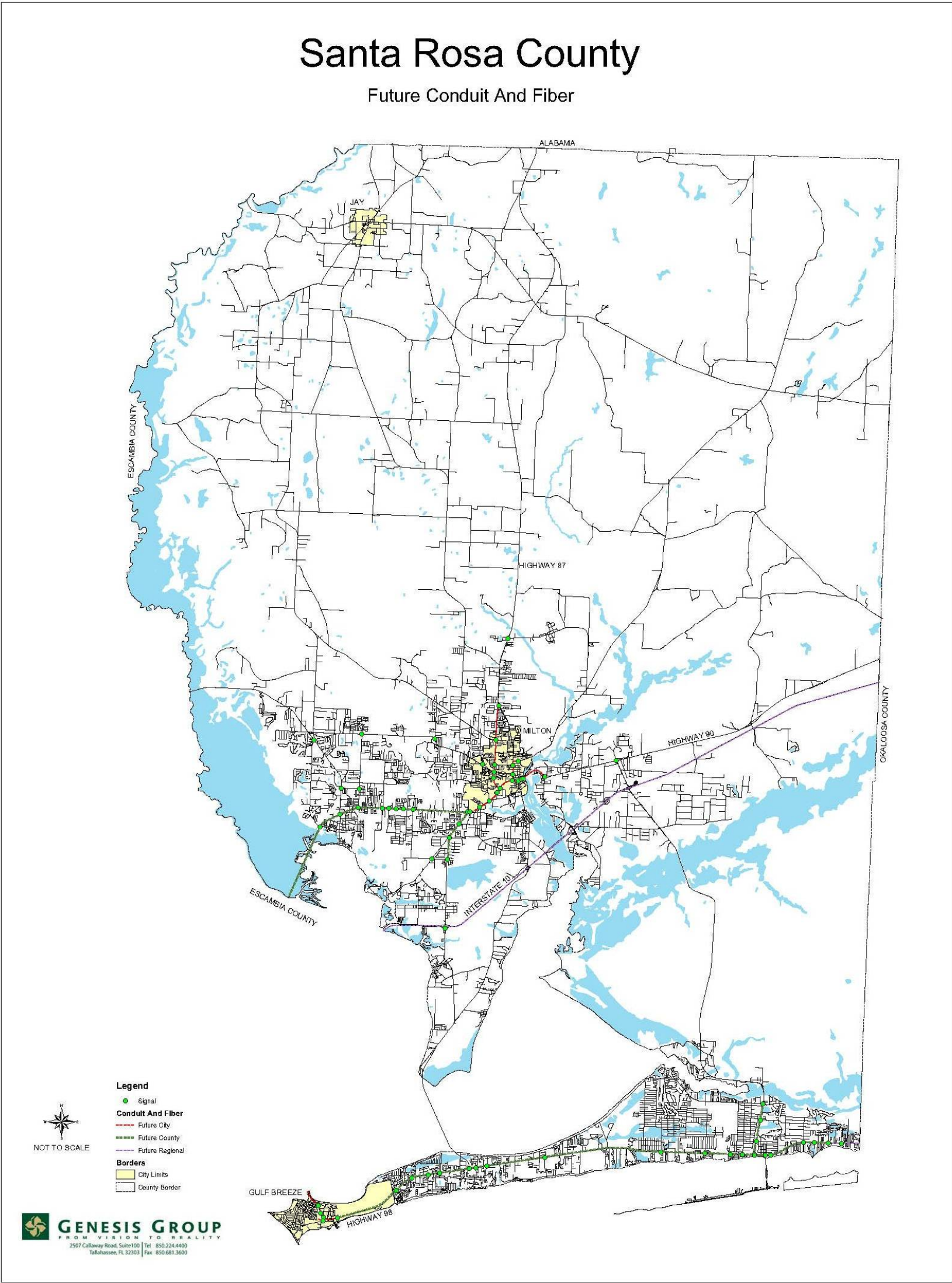


Figure 3.1.2.1 – Existing signalized intersections and future fiber optic cable in Santa Rosa County, Florida

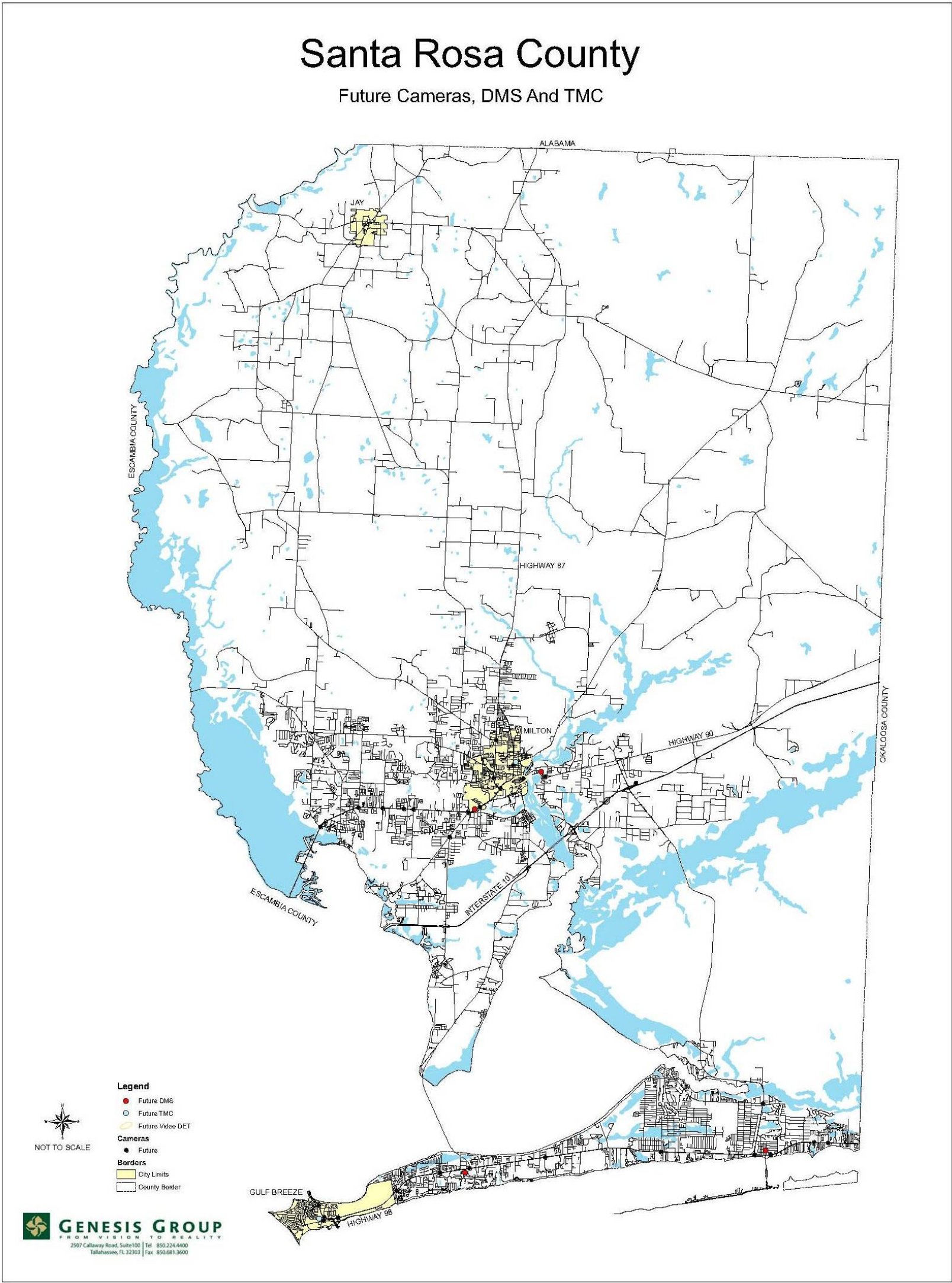


Figure 3.1.2.2 – Future cameras, DMS, and TMC in Santa Rosa County, Florida



Figure 3.1.2.3 – Existing signalized intersections and future fiber optic cable in the City of Milton, Florida



Figure 3.1.2.4 – Future cameras, DMS, TMC, and Video Detection in the City of Milton, Florida

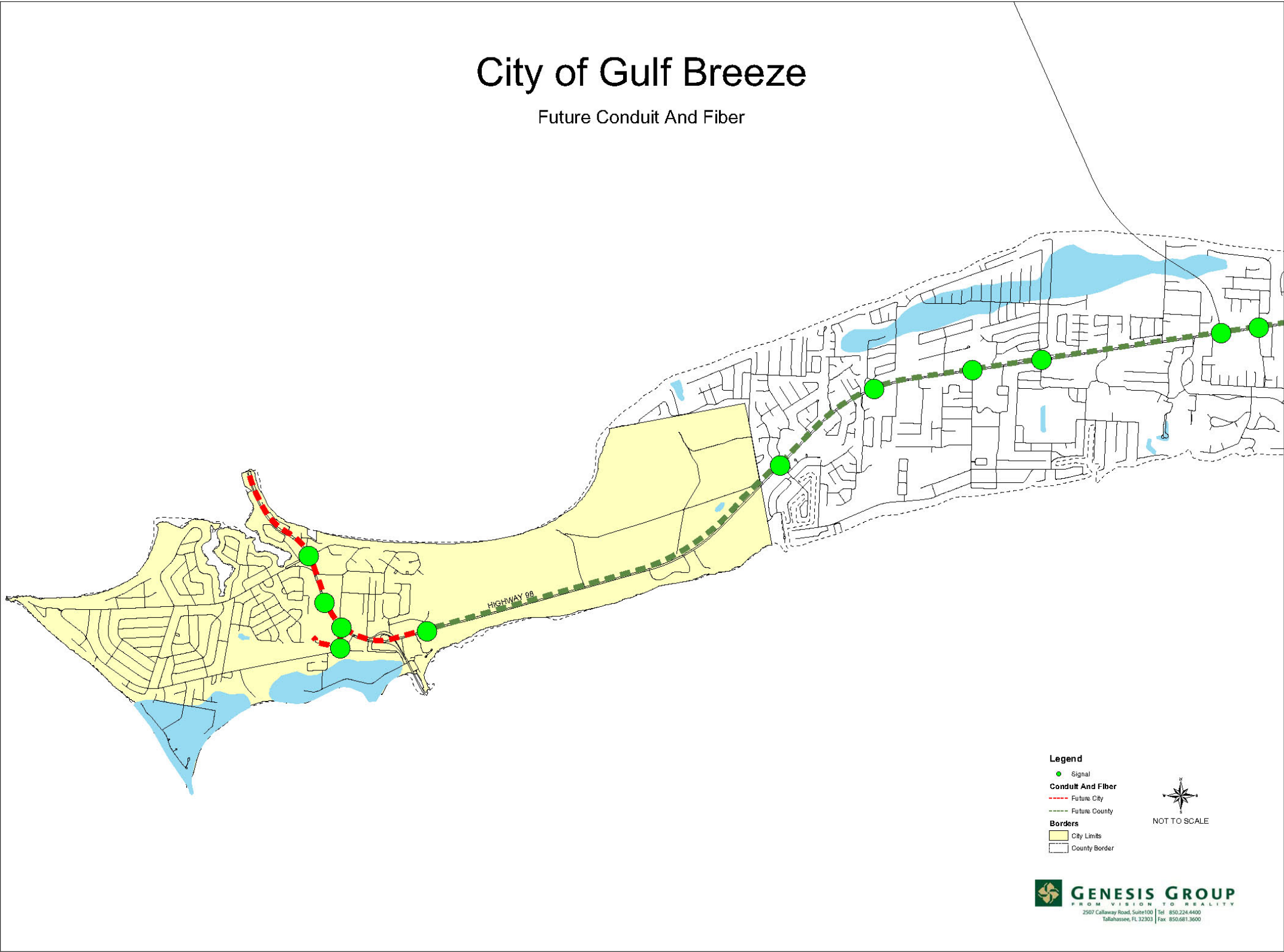


Figure 3.1.2.5 – Existing signalized intersections and future fiber optic cable in the City of Gulf Breeze, Florida

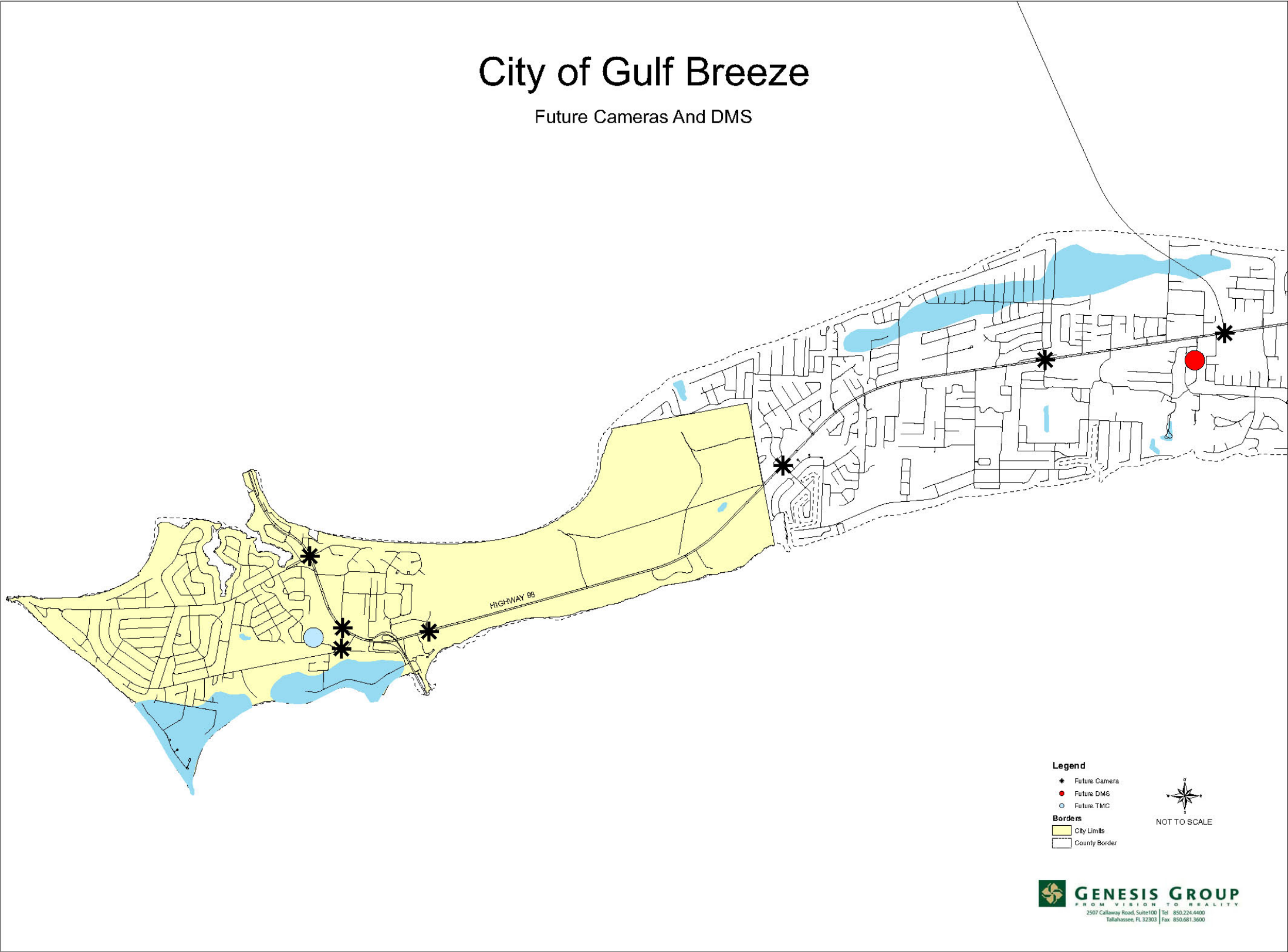


Figure 3.1.2.6 – Future cameras and DMS in the City of Gulf Breeze, Florida

REGIONAL INTELLIGENT TRANSPORTATION SYSTEMS (ITS) PLAN

Spreadsheet 3.1.2.1 – Existing and future ITS components in Santa Rosa County

Existing Signalized Intersections

CONTROL_NO	CONTROL_TY	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
1	SIGNAL	COUNTY	SR 10 (US 90)	CR 197A (WOODBINE RD)	588669.76	1126864.44
2	SIGNAL	COUNTY	SR 10 (US 90)	CR 197 (FLORIDATOWN RD / CHUMUCKLA HWY)	591389.46	1131226.20
3	SIGNAL	COUNTY	SR 10 (US 90)	CR 197B (WEST SPENCER FIELD RD)	592873.19	1135199.93
4	SIGNAL	COUNTY	SR 10 (US 90)	EAST SPENCER FIELD RD	592758.59	1140414.63
5	SIGNAL	COUNTY	SR 10 (US 90)	SPEARS ST / HOME DEPOT	592636.25	1143323.96
6	SIGNAL	COUNTY	SR 10 (US 90)	CARDINAL ST / WAL-MART	592564.70	1144941.36
7	SIGNAL	COUNTY	SR 10 (US 90)	CR 197A (BELL LN)	592468.27	1147032.38
8	SIGNAL	COUNTY	SR 10 (US 90)	SR 281 (AVALON BLVD/PENN JR COLLEGE)	591891.94	1158779.07
9	SIGNAL	COUNTY	SR 10 (US 90)	WARD BASIN RD / DALE ST	599571.86	1175529.09
10	SIGNAL	COUNTY	SR 30 (NAVARRE PKWY)	NAVARRE BEACH CSWY	517410.86	1223369.78
11	SIGNAL	COUNTY	SR 30 (GULF BREEZE PKWY)	GONDOLIER BLVD / KELTON BLVD	509803.28	1143428.85
12	SIGNAL	COUNTY	SR 30 (GULF BREEZE PKWY)	CR 191A (ORIOLE BEACH RD)	513222.20	1150334.65
13	SIGNAL	COUNTY	SR 30 (GULF BREEZE PKWY)	CR 399 (COLLEGE PKWY)	513591.39	1152834.07
14	SIGNAL	COUNTY	SR 30 (GULF BREEZE PKWY)	PORTSIDE DR / TIGER PARK LN	514757.14	1160641.70
15	SIGNAL	COUNTY	SR 30 (GULF BREEZE PKWY)	TIGER POINT BLVD	515100.81	1162956.54
16	SIGNAL	COUNTY	SR 30 (NAVARRE PKWY)	SUNRISE DR	518150.47	1200742.69
17	SIGNAL	COUNTY	SR 30 (NAVARRE PKWY)	NAVARRE SCHOOL RD / THRESHER DR	517663.21	1215703.22
18	SIGNAL	COUNTY	SR 30 (NAVARRE PKWY)	SR 87 S	517497.57	1220952.56
19	SIGNAL	COUNTY	SR 30 (NAVARRE PKWY)	WINN-DIXIE / COWBOYS	517471.40	1224560.01
20	SIGNAL	COUNTY	SR 30 (GULF BREEZE PKWY)	SR 281 (AVALON BLVD)	514553.58	1159273.63
21	SIGNAL	COUNTY	SR 30 (NAVARRE PKWY)	PANHANDLE TR	520231.12	1231579.61
22	SIGNAL	COUNTY	SR 87 S	HIGH SCHOOL BLVD	525104.58	1222242.78
23	SIGNAL	COUNTY	SR 87 S	CR 399 (EAST BAY BLVD / TURKEY BLUFF RD)	528622.10	1222875.18
24	SIGNAL	COUNTY	SR 10 (US 90)	SR 87 S / EAST MILTON RD	603019.31	1190965.09
25	SIGNAL	COUNTY	SR 87 N (STEWART ST)	SR 89 (DOGWOOD DR)	615039.59	1165640.88
26	SIGNAL	COUNTY	SR 87 N	CR 87A (LANGLEY ST)	629582.63	1167636.81
27	SIGNAL	COUNTY	SR 281 (AVALON BLVD)	SR 8 (I 10) EXIT 22 EAST BOUND ON / OFF RAMP	566753.37	1154005.08
29	SIGNAL	COUNTY	SR 281 (AVALON BLVD)	CARROLL RD	589306.77	1156999.09
31	SIGNAL	COUNTY	SR 30 (NAVARRE PKWY)	WHISPERING PINES BLVD	520093.58	1236954.88
32	SIGNAL	COUNTY	SR 30 (NAVARRE PKWY)	ANDORRA ST	517577.16	1218325.78
33	SIGNAL	COUNTY	SR 281 (AVALON BLVD)	CYANAMID RD / PEBBLE RIDGE DR	581573.50	1154469.85
34	SIGNAL	COUNTY	SR 87 S	LAREDO ST	520473.40	1221373.86
35	SIGNAL	COUNTY	SR 30 (NAVARRE PKWY)	WAL-MART	520177.09	1233973.67
36	SIGNAL	COUNTY	SR 10 (US 90)	WATKINS ST / TARGET	592697.31	1141803.84
37	SIGNAL	COUNTY	SR 30 (GULF BREEZE PKWY)	CR 191C (NANTAHALA BEACH RD)	516966.62	1175514.60
38	SIGNAL	COUNTY	SR 30 (NAVARRE PKWY)	ORION PARKER BLVD	520014.29	1239847.03
39	SIGNAL	COUNTY	SR 30 (NAVARRE PKWY)	CORAL ST	517838.61	1210251.71
43	SIGNAL	COUNTY	SR 30 (GULF BREEZE PKWY)	WHISPER BAY BLVD	512546.66	1146797.45
	SIGNAL	COUNTY	SR 281 (AVALON BLVD)	COMMERCE RD	586360.57	1154873.31
	SIGNAL	COUNTY	MULAT RD	CYANAMID RD	581723.25	1151109.37
	SIGNAL	COUNTY	CR 197 (CHUMUCKLA HWY)	CR 184 (QUINTETTE RD) / CR 197A (WOODBINE RD)	607489.41	1125611.96
	SIGNAL	COUNTY	CR 184A (BERRYHILL RD)	ANDERSON LN	607763.67	1151801.89
	SIGNAL	COUNTY	CR 184A (BERRYHILL RD)	CR 197B (WEST SPENCER FIELD RD)	608791.16	1135972.76
	SIGNAL	COUNTY	CR 197 (CHUMUCKLA HWY)	NORRIS RD	597091.05	1131444.43
	SIGNAL	COUNTY	CR 197B (WEST SPENCER FIELD F	NORRIS RD	596894.74	1135376.30
Total of 46 Signalized Intersections						
	SIGNAL	MILTON	SR 10 (US 90)	DOGWOOD DR	597022.67	1165839.25
	SIGNAL	MILTON	SR 10 (US 90)	STEWART ST	598754.72	1168466.63
	SIGNAL	MILTON	DOGWOOD DR	MAGNOLIA ST	607498.84	1164994.86
	SIGNAL	MILTON	DOGWOOD DR	PARK AVE	602171.12	1164742.17
	SIGNAL	MILTON	DOGWOOD DR	BERRYHILL RD	600624.87	1164552.96
	SIGNAL	MILTON	BERRYHILL RD	GLOVER LN	602261.15	1162047.33
	SIGNAL	MILTON	DOGWOOD DR	HAMILTON BRIDGE RD	599327.86	1164466.24
	SIGNAL	MILTON	CAROLINE ST	DOGWOOD DR	597022.90	1165836.84
	SIGNAL	MILTON	CAROLINE ST	CAMPBELL LN	596163.42	1165289.90
	SIGNAL	MILTON	HIGHWAY 90	OLD HIGHWAY 90	594258.90	1163489.56
	SIGNAL	MILTON	HIGHWAY 90	PARKMORE PLAZA DR	592946.89	1161454.81
	SIGNAL	MILTON	HIGHWAY 90	MEDIAN	591888.82	1159315.89
	SIGNAL	MILTON	CAROLINE ST	STEWART ST	598754.87	1168464.11
	SIGNAL	MILTON	STEWART ST	PARK AV	601977.91	1168662.70
	SIGNAL	MILTON	STEWART ST	BERRYHILL ST	600063.62	1168649.68
	SIGNAL	MILTON	MUNSON HWY	ALABAMA ST	602912.27	1169763.09
	SIGNAL	MILTON	CAROLINE ST	CANAL ST	598672.15	1169882.03
	SIGNAL	MILTON	CAROLINE ST	ELMIRA ST	599006.11	1170546.89
	SIGNAL	MILTON	CAROLINE ST	WILLING ST	599202.20	1170816.50
Total of 19 signalized intersections						
	SIGNAL	GULF BREEZE	GULF BREEZE PKWY	NORTHCLIFFE DR	506541.73	1126466.67
	SIGNAL	GULF BREEZE	GULF BREEZE PKWY	DANIEL DR	503975.90	1127650.90
	SIGNAL	GULF BREEZE	GULF BREEZE PKWY	Gulf Breeze Middle School	504864.07	1127036.85
	SIGNAL	GULF BREEZE	SHORELINE DR	DANIEL DR	503230.28	1127607.04
	SIGNAL	GULF BREEZE	GULF BREEZE PKWY	ENTRANCE RD	503844.32	1130732.08
Total of 5 signalized intersections						

Spreadsheet 3.1.2.1 – Existing and future ITS components in Santa Rosa County

Future Cameras

CONTROL_NC	CONTROL_TY	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
1	CAMERA	COUNTY	SR 10 (US 90)	CR 197A (WOODBINE RD)	588669.76	1126864.44
4	CAMERA	COUNTY	SR 10 (US 90)	EAST SPENCER FIELD RD	592758.59	1140414.63
3	CAMERA	COUNTY	SR 10 (US 90)	CR 197B (WEST SPENCER FIELD RD)	592873.19	1135199.93
6	CAMERA	COUNTY	SR 10 (US 90)	CARDINAL ST / WAL-MART	592564.70	1144941.36
7	CAMERA	COUNTY	SR 10 (US 90)	CR 197A (BELL LN)	592468.27	1147032.38
8	CAMERA	COUNTY	SR 10 (US 90)	SR 281 (AVALON BLVD/PENN JR COLLEGE)	591891.94	1158779.07
9	CAMERA	COUNTY	SR 10 (US 90)	WARD BASIN RD / DALE ST	599571.86	1175529.09
23	CAMERA	COUNTY	SR 87 S	CR 399 (EAST BAY BLVD / TURKEY BLUFF RD)	528622.10	1222875.18
11	CAMERA	COUNTY	SR 30 (GULF BREEZE PKWY)	GONDOLIER BLVD / KELTON BLVD	509803.28	1143428.85
13	CAMERA	COUNTY	SR 30 (GULF BREEZE PKWY)	CR 399 (COLLEGE PKWY)	513591.39	1152834.07
20	CAMERA	COUNTY	SR 30 (GULF BREEZE PKWY)	SR 281 (AVALON BLVD)	514553.58	1159273.63
37	CAMERA	COUNTY	SR 30 (GULF BREEZE PKWY)	CR 191C (NANTAHALA BEACH RD)	516966.62	1175514.60
16	CAMERA	COUNTY	SR 30 (NAVARRE PKWY)	SUNRISE DR	518150.47	1200742.69
18	CAMERA	COUNTY	SR 30 (NAVARRE PKWY)	SR 87 S	517497.57	1220952.56
35	CAMERA	COUNTY	SR 30 (NAVARRE PKWY)	WAL-MART	520177.09	1233973.67
31	CAMERA	COUNTY	SR 30 (NAVARRE PKWY)	WHISPERING PINES BLVD	520093.58	1236954.88
19	CAMERA	COUNTY	SR 30 (NAVARRE PKWY)	WINN-DIXIE / COWBOYS	517471.40	1224560.01
	CAMERA	COUNTY	MULAT RD	TOM SAWYER RD	586465.93	1154833.78
Total of 18 Future Cameras						
	CAMERA	MILTON	SR 10 (US 90)	DOGWOOD DR	597022.67	1165839.25
	CAMERA	MILTON	SR 10 (US 90)	STEWART ST	598754.72	1168466.63
	CAMERA	MILTON	DOGWOOD DR	MAGNOLIA ST	607498.84	1164994.86
	CAMERA	MILTON	DOGWOOD DR	HAMILTON BRIDGE RD	599327.86	1164466.24
	CAMERA	MILTON	HIGHWAY 90	PARKMORE PLAZA DR	592946.89	1161454.81
	CAMERA	MILTON	STEWART ST	PARK AV	601977.91	1168662.70
	CAMERA	MILTON	CAROLINE ST	WILLING ST	599202.20	1170816.50
Total of 7 Future Cameras						
	CAMERA	GULF BREEZE	GULF BREEZE PKWY	NORTHCLIFFE DR	506541.73	1126466.67
	CAMERA	GULF BREEZE	GULF BREEZE PKWY	DANIEL DR	503975.90	1127650.90
	CAMERA	GULF BREEZE	SHORELINE DR	DANIEL DR	503230.28	1127607.04
	CAMERA	GULF BREEZE	GULF BREEZE PKWY	ENTRANCE RD	503844.32	1130732.08
Total of 4 Future Cameras						
Future DMS's						
CONTROL_NC	CONTROL_TY	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
	DMS	COUNTY	HIGHWAY 90	BANDOL CT	592487.83	1160316.16
	DMS	COUNTY	HIGHWAY 98	TIGER POINT BLVD	513562.78	1158207.13
	DMS	COUNTY	HIGHWAY 98	ALHAMBRA ST	518423.59	1223411.45
	DMS	COUNTY	HIGHWAY 90		600622.29	1174725.28
Total of 4 Future DMS's						
Future TMC's						
CONTROL_NC	CONTROL_TY	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
	TMC	MILTON	MUNSON HWY	ALABAMA ST	602667.27	1169235.80
	TMC	GULF BREEZE	SHORELINE DR	ENTRANCE RD	503634.87	1126594.63
Total of 2 Future TMC's						

3.2 Okaloosa-Walton TPO:

The Okaloosa-Walton TPO consists of the southern half of Okaloosa County and the southern half Walton County. Some of the Stakeholders within these counties are: City of Crestview, City of Niceville, City of Destin, City of Ft. Walton Beach, and City of DeFuniak Springs. DeFuniak Springs is the only city that maintains their traffic signals. Eglin Air Force Base covers about one third of Okaloosa County. The heavy traffic areas are in the Crestview area to the North and Fort Walton/Niceville/Destin areas to the South. The beautiful beaches are also a large tourist attraction for this area and create heavy traffic during different times of the day and different times of the year. Walton County has a large Eglin footprint in the Southwest part of the County. The large traffic area to the North is the DeFuniak Springs area. The large traffic area to the South is US 98 and the beaches along with the Silver Sands outlet mall.

3.2.1 Okaloosa County

Major Roadway Corridors – I-10, US 98, US 90, SR 85, SR 20

Large Commercial Airports – Northwest Florida Regional Airport

Seaports – None

Rail Lines – CSX

Military Bases – Eglin Air Force Base

Existing ITS Inventory:

Okaloosa County includes a major urban area, City of Fort Walton Beach. Okaloosa County has an extensive existing fiber optic network and an existing small TMC to manage the ITS system. This system was installed in 2001-2004 and has been maintained by Okaloosa County. Okaloosa County has one DMS sign and 19 cameras. These cameras are utilized, daily.

Future ITS Needs:

Okaloosa County has an extensive ITS system in place and would benefit from additional fiber optic cable, CCTV cameras, and DMS. The crossing of the Mid Bay Bridge with fiber would greatly enhance their communication system. This would also allow for incident management and evacuation surveillance over the bridge. Additional ITS components can be controlled by the existing TMC; however, a larger, up to date TMC would allow for improved traffic monitoring and response capabilities, efficient integration of new ITS technologies and capacity for future expansion as the county continues to grow. Okaloosa County has just opened a new Emergency Operations Center (EOC), which would benefit from the ITS devices. The video from the cameras will be sent to the EOC, along with the ability to disseminate messages to the DMS on the highways. No additional technician is recommended for the recommended ITS needs.

Tables, Figures and Spreadsheets

The following tables identify the existing ITS inventory, future ITS needs, and preliminary costs for Okaloosa County.

Table 3.2.1.1 – Existing inventory and future needs of ITS components in Okaloosa County
Table 3.2.1.2 – Preliminary costs for future needs of ITS components in Okaloosa County

The following figures illustrate the locations of existing and future ITS components (i.e., existing signalized intersections, future fiber optic cable, cameras, video detection, DMS, and TMC) in Okaloosa County.

Figure 3.2.1.1 – Existing signalized intersections and fiber optic cable in Okaloosa County
Figure 3.3.1.2 – Existing cameras, DMS, and TMC in Okaloosa County
Figure 3.2.1.3 – Existing signalized intersections, existing and future fiber optic cable in Okaloosa County
Figure 3.2.1.4 – Future cameras and DMS in Okaloosa County

The following spreadsheet lists existing and future ITS components in Okaloosa County.

Spreadsheet 3.2.1.1 – Existing and future ITS components in Okaloosa County

Table 3.2.1.1 – Existing inventory and future needs of ITS components in Okaloosa County

Item	Unit	Existing	Future
Signalized Intersections	Each	141	0
Wireless Communication	Linear Feet	12,543	0
Fiber Optic Cable and Conduit	Linear Feet	404,756	168,984
Cameras	Each	19	48
DMS	Each	1	6
TMC	Each	1	0

Table 3.2.1.2 – Preliminary costs for future needs of ITS components in Okaloosa County

Item	Unit	No. Units	Unit Cost	Total Cost
Fiber Optic Cable and Conduit	Linear Feet	168,984	\$11	\$1,858,824
Cameras	Each	48	\$5,500	\$264,000
DMS	Each	6	\$160,000	\$960,000
Total				\$3,082,824

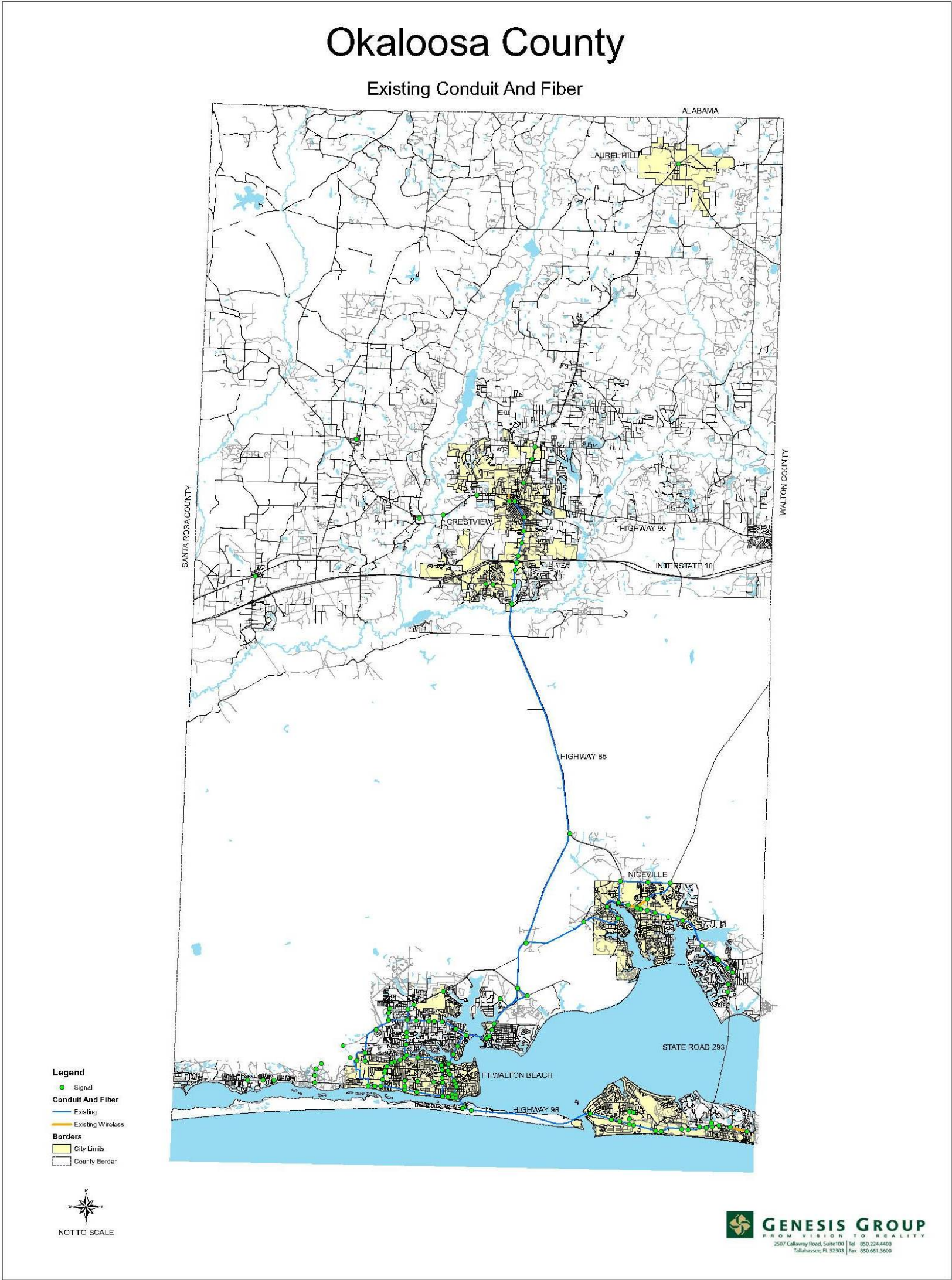


Figure 3.2.1.1 – Existing signalized intersections and fiber optic cable in Okaloosa County, Florida

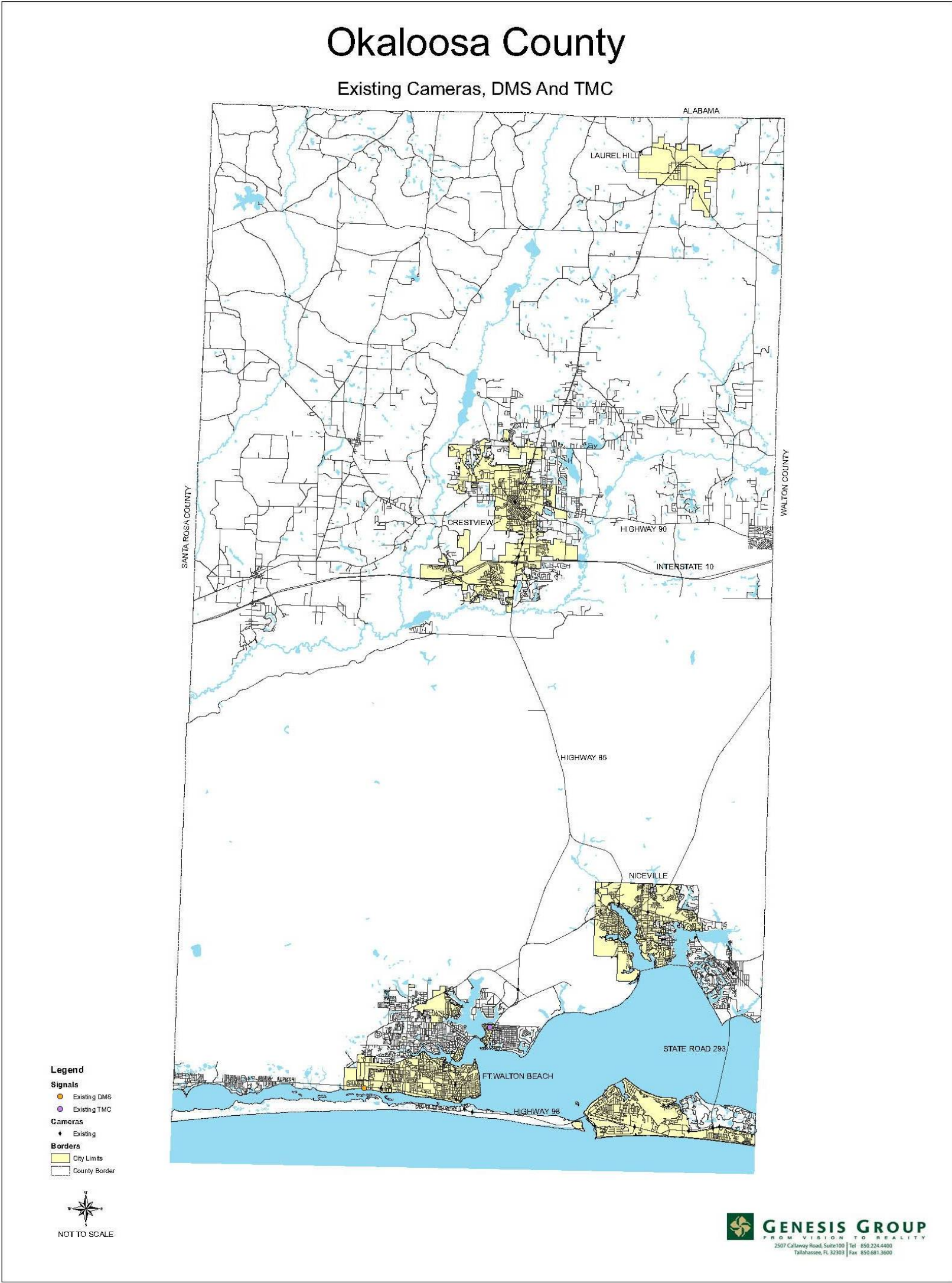


Figure 3.2.1.2 – Existing cameras, DMS, and TMC in Okaloosa County, Florida

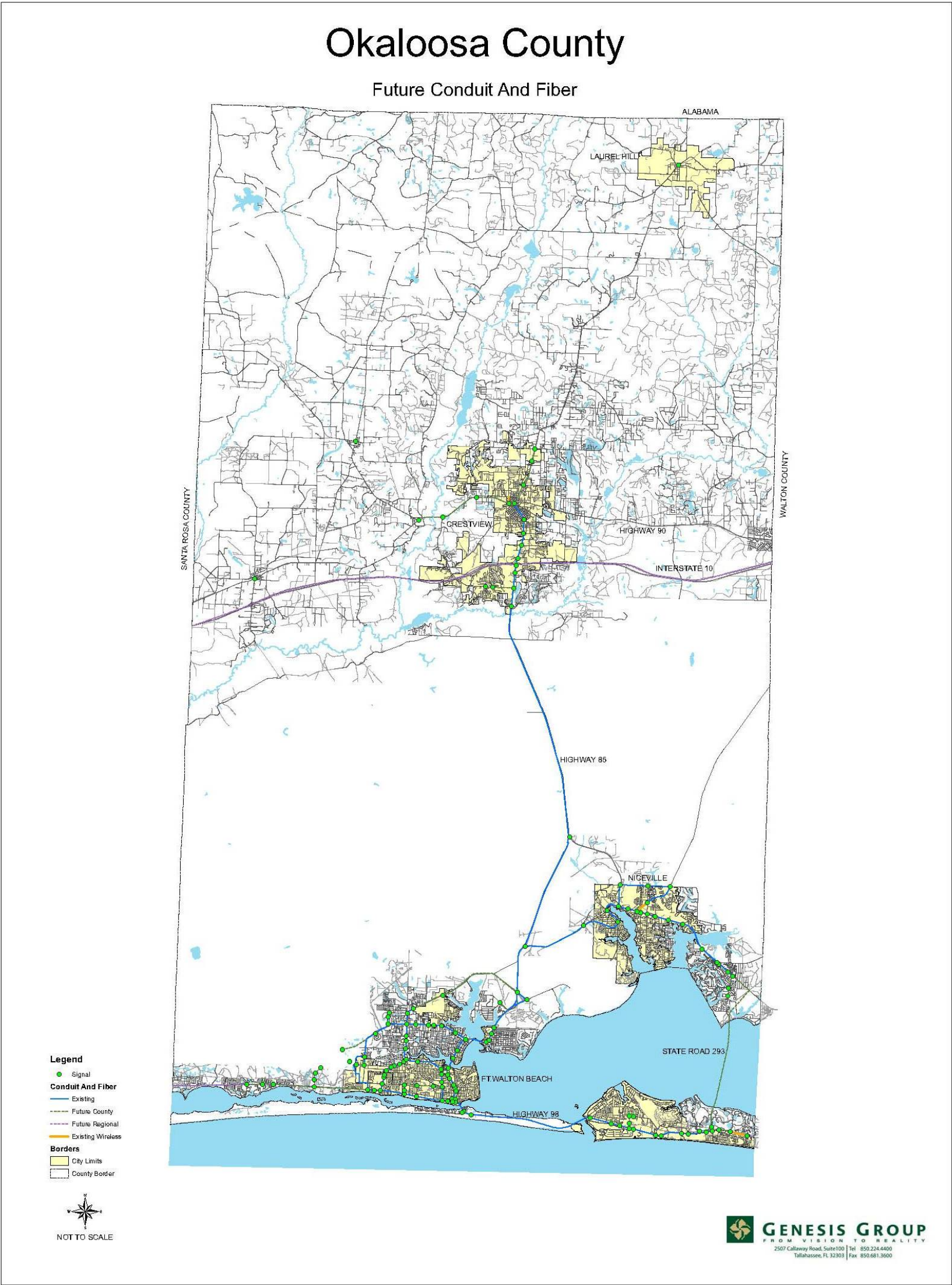


Figure 3.2.1.3 – Existing signalized intersections, existing and future fiber optic cable in Okaloosa County, Florida

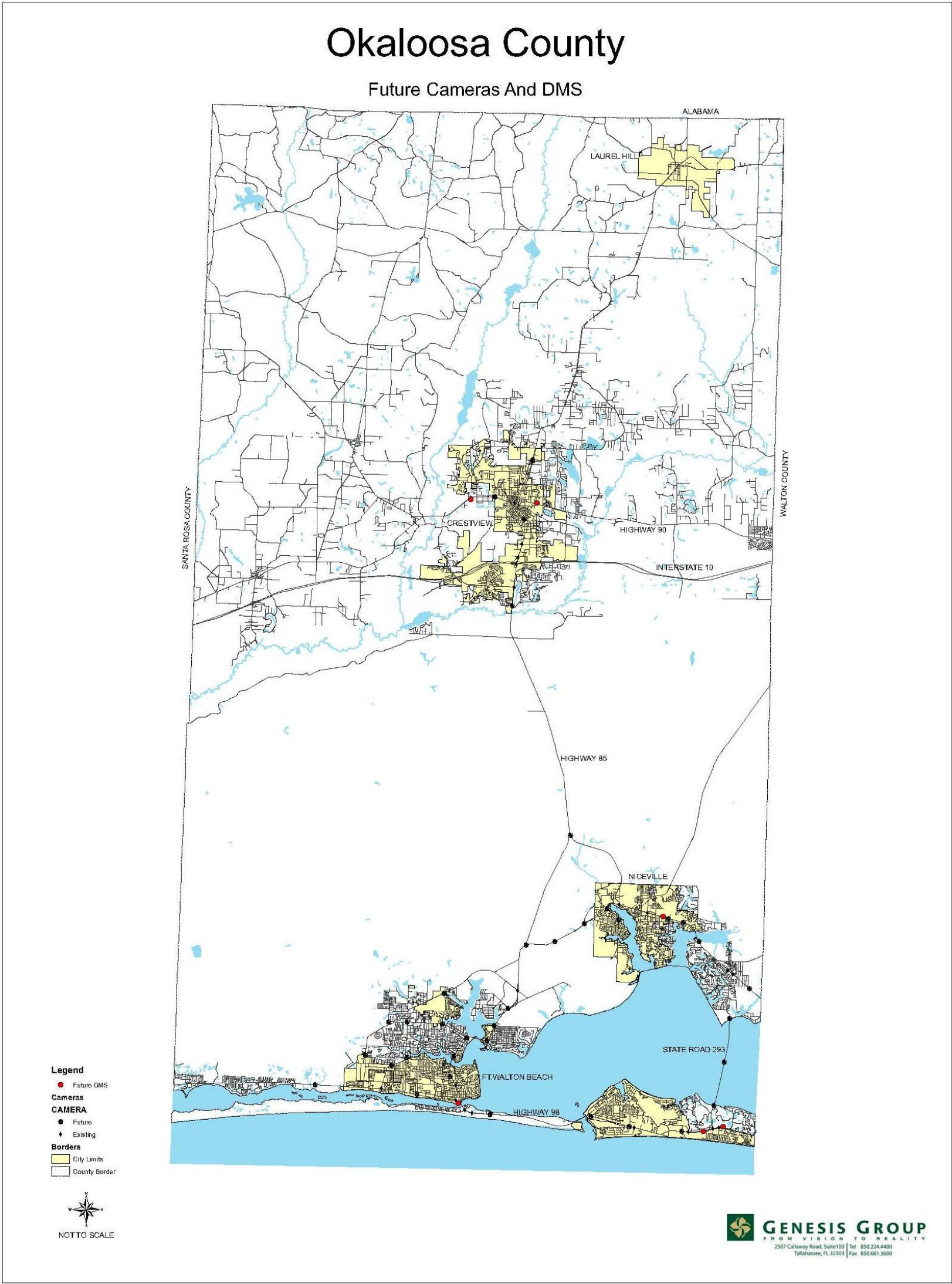


Figure 3.2.1.4 – Future cameras and DMS in Okaloosa County, Florida

REGIONAL INTELLIGENT TRANSPORTATION SYSTEMS (ITS) PLAN

Spreadsheet 3.2.1.1 – Existing and future ITS components in Okaloosa County

Existing Signalized Intersections

CONTROL_NO	CONTROL_TY	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
1010	SIGNAL	COUNTY	US 98	PARISH POINT RD	520339.43	1259884.80
1020	SIGNAL	COUNTY	US 98	FLOROSA FIRE DEPT	520402.98	1263228.66
1025	SIGNAL	COUNTY	US 98	FLOROSA ELEMENTARY	520392.41	1265603.56
1030	SIGNAL	COUNTY	US 98	CODY AVE (HURBURN GATE)	519862.83	1274554.71
1040	SIGNAL	COUNTY	US 98	DOOLITTLE BLVD	519116.20	1286135.47
1050	SIGNAL	COUNTY	US 98	TARGET STORE	519059.06	1287638.56
1060	SIGNAL	COUNTY	US 98	SR 393 (MARY ESTHER BLVD)	519021.91	1288964.43
1070	SIGNAL	COUNTY	US 98	WRIGHT PKWY	518214.64	1294142.62
1080	SIGNAL	COUNTY	US 98	MEMORIAL PKWY	517709.47	1296756.04
1090	SIGNAL	COUNTY	US 98	BEAL (SR 189)	516807.87	1302373.44
1100	SIGNAL	COUNTY	US 98	BROOKS ST	516682.13	1303551.72
1110	SIGNAL	COUNTY	US 98	FLORIDA PLACE	516576.93	1304686.82
1120	SIGNAL	COUNTY	US 98	PERRY AVE (SR 145)	516489.18	1305257.58
1130	SIGNAL	COUNTY	PERRY AVE	FIRST ST	517147.69	1305293.87
1140	SIGNAL	COUNTY	US 98	SANTA ROSA BLVD	514461.48	1307149.24
1150	SIGNAL	COUNTY	SANTA ROSA FIRE STATION		514203.88	1306726.39
1160	SIGNAL	COUNTY	US 98	CONFERENCE CENTER / PIER RD	513740.24	1308734.16
1200	SIGNAL	COUNTY	US 98	STAHLMAN AVE	513021.81	1334664.27
1210	SIGNAL	COUNTY	US 98	BENNING DRIVE	511814.30	1339218.83
1220	SIGNAL	COUNTY	US 98	BEACH DRIVE	511341.03	1341003.75
1230	SIGNAL	COUNTY	US 98	MAIN STREET	510785.39	1343104.66
1240	SIGNAL	COUNTY	MAIN ST	98 PALMS BLVD	511873.45	1343179.50
1250	SIGNAL	COUNTY	MAIN ST	AIRPORT RD / LEGION DR	513511.88	1343143.14
1252	SIGNAL	COUNTY	AIRPORT RD	DESTIN FD	513383.60	1344059.05
1260	SIGNAL	COUNTY	US 98	GULF SHORE DRIVE	510535.35	1344074.36
1280	SIGNAL	COUNTY	US 98	AIRPORT ROAD	509280.16	1348862.17
1290	SIGNAL	COUNTY	US 98	OLD 98 (CR 2378)	509113.34	1350010.87
1300	SIGNAL	COUNTY	US 98	HENDERSON BCH (WAL-MART)	509703.23	1354474.12
1310	SIGNAL	COUNTY	US 98	TRIUMPH RD	509605.25	1355893.48
1320	SIGNAL	COUNTY	COMMONS	KELLY PLANTATION DR	510224.46	1358389.29
1330	SIGNAL	COUNTY	US 98	MATHEW BLVD	509991.95	1359869.32
1340	SIGNAL	COUNTY	US 98	SR 293 / HUTCHINSON ST	510230.48	1361167.62
1350	SIGNAL	COUNTY	US 98	CRYSTAL BCH DR	510451.62	1362575.13
1360	SIGNAL	COUNTY	US 98	REGATTA BAY BLVD	510041.73	1365117.18
1370	SIGNAL	COUNTY	US 98	TEQUESTA DR.	509182.10	1368767.89
1400	SIGNAL	COUNTY	SR 293	COMMONS DR. E	511064.14	1361011.82
2010	SIGNAL	COUNTY	SR 85	FIRST ST	517183.99	1304494.16
2020	SIGNAL	COUNTY	SR 85	FOURTH ST. / SR 145 (PERRY AVE)	518971.38	1305349.31
2030	SIGNAL	COUNTY	SR 85	HOLLYWOOD BLVD	519695.99	1305188.97
2040	SIGNAL	COUNTY	SR 85	HOSPITAL DR	520253.84	1304933.51
2050	SIGNAL	COUNTY	SR 85	WALTER MARTIN RD	521655.55	1304013.14
2060	SIGNAL	COUNTY	SR 85	HUGHES ST	522475.23	1303585.56
2070	SIGNAL	COUNTY	SR 85	YACHT CLUB DR	523918.30	1303692.46
2080	SIGNAL	COUNTY	SR 85	MARINER PLAZA (HIGHWAY AVE.)	526043.81	1304781.34
2090	SIGNAL	COUNTY	SR 85	SOUTH ST / AVE	527748.50	1305693.64
2100	SIGNAL	COUNTY	SR 85	SR 188 (RACETRACK / 4TH AVE)	530153.61	1307510.83
2110	SIGNAL	COUNTY	SR 85	SHALIMAR DRIVE / CHEROKEE RD	529524.07	1311953.07
2120	SIGNAL	COUNTY	SR 85	OLD FERRY	529993.27	1312546.66
2130	SIGNAL	COUNTY	SR 85	FLEET / 9TH AVE	531448.15	1313146.40
2140	SIGNAL	COUNTY	SR 85	12TH AVE / RICHBURG AVE	532671.76	1313657.22
2150	SIGNAL	COUNTY	POQUITO RD	SUNSET LANE	538129.51	1314975.75
2160	SIGNAL	COUNTY	SR 85	SR 189	540423.86	1318763.22
2170	SIGNAL	COUNTY	SR 85	SR 123 SOUTH END	550322.08	1320529.50
2200	SIGNAL	COUNTY	SR 85	SR 123 NORTH END	574208.03	1330188.28
2210	SIGNAL	COUNTY	SR 85	LIVE OAK CHURCH / ANTIOCH	624286.60	1317522.36
2220	SIGNAL	COUNTY	SR 85	P J ADAMS RD	628310.72	1317935.54
2230	SIGNAL	COUNTY	PJ ADAMS FIRE SIGNAL		628508.12	1313421.70
2232	SIGNAL	COUNTY	PJ ADAMS	WILDHORSE	628584.69	1311809.55
2240	SIGNAL	COUNTY	SR 85	JOHN KING ROAD	631640.02	1318297.99
2250	SIGNAL	COUNTY	SR 85	INTERSTATE 10	633249.53	1318478.07
2260	SIGNAL	COUNTY	SR 85	WAL-MART	634725.87	1318840.32
2270	SIGNAL	COUNTY	SR 85	W & E REDSTONE AVE	637596.55	1319681.02
2280	SIGNAL	COUNTY	SR 85	DUGAN AVE / ALPIN RD	640187.00	1320132.13
2290	SIGNAL	COUNTY	SR 85	MAIN ST / CANE AVE	643169.77	1320200.48

Spreadsheet 3.2.1.1 – Existing and future ITS components in Okaloosa County

Existing Signalized Intersections (Continued)

CONTROL_NO	CONTROL_TY	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
2300	SIGNAL	COUNTY	SR 85	US 90 (SR 10)	646655.59	1318081.65
2310	SIGNAL	COUNTY	SR 85	STILLWELL BLVD / 8TH	650740.56	1320008.56
2320	SIGNAL	COUNTY	SR 85	GARDEN ST	655953.68	1321937.03
2330	SIGNAL	COUNTY	SR 85	OLD BETHEL / AIRPORT	658574.87	1322551.29
2340	SIGNAL	COUNTY	SR 85	SECOND AVE (LAUREL HILL)	720261.01	1353864.89
2500	SIGNAL	COUNTY	US 90	WILSON ST / MAIN ST / HICKORY AVE	646712.05	1316927.74
2505	SIGNAL	COUNTY	US 90	OLD BETHEL	647965.68	1309815.47
2510	SIGNAL	COUNTY	US 90	ANTIOCH RD	643766.53	1302582.27
2520	SIGNAL	COUNTY	US 90	SR 4 (MILLIGAN)	643001.39	1297246.40
2530	SIGNAL	COUNTY	US 90	LOG LAKE ROAD (HOLT)	630325.31	1261526.40
3010	SIGNAL	COUNTY	SR 189	HOLLYWOOD BLVD	519856.33	1302457.03
3020	SIGNAL	COUNTY	SR 189	WALTER MARTIN RD	520895.47	1302302.84
3030	SIGNAL	COUNTY	SR 189	HUGHES ST	522532.80	1302311.30
3040	SIGNAL	COUNTY	SR 189	YACHT CLUB DR	523662.89	1302118.37
3050	SIGNAL	COUNTY	SR 189	MEMORIAL PKWY	525307.91	1297065.04
3060	SIGNAL	COUNTY	SR 189	SR 393 (ME) / OAK ST	525788.94	1294553.04
3070	SIGNAL	COUNTY	SR 189	PELHAM RD / DULOFT ST	528106.29	1294388.72
3080	SIGNAL	COUNTY	SR 189	LEWIS ST (SAM'S)	529850.90	1294553.04
3090	SIGNAL	COUNTY	SR 189	CARMEL DR / CLIFFORD DR	530812.94	1294553.04
3100	SIGNAL	COUNTY	SR 189	SR 188 / RACETRACK / HURLBURT R	533485.53	1294670.56
3110	SIGNAL	COUNTY	SR 189	GREEN ACRES DRIVE	535813.18	1294801.09
3120	SIGNAL	COUNTY	SR 189	HOSPITAL DRIVE	536812.36	1296170.95
3140	SIGNAL	COUNTY	SR 189	MOONEY FIRE STATION #2	533110.06	1302389.74
3150	SIGNAL	COUNTY	SR 189	MOONEY RD	539731.38	1302551.75
3160	SIGNAL	COUNTY	SR 189	SR 397 (EGLIN W GATE)	538760.97	1320890.24
3200	SIGNAL	COUNTY	SR 189	SR 4 / GEORGIA AVE (BAKER)	660154.41	1283508.43
3305	SIGNAL	COUNTY	SR 188	MAR WALT DR	533408.11	1296670.67
3310	SIGNAL	COUNTY	SR 188	DENTON BLVD	533269.51	1299344.12
3320	SIGNAL	COUNTY	SR 188	CHOCTAW PLAZA / CHOCTAW HS	533231.72	1300625.27
3330	SIGNAL	COUNTY	SR 188	MOONEY ROAD	533122.85	1302309.34
3340	SIGNAL	COUNTY	SR 188	SKIPPER AVE	531569.62	1305274.36
3500	SIGNAL	COUNTY	HILL AVE	LOVE JOY RD	524553.50	1285450.08
3510	SIGNAL	COUNTY	ML KING	FREEDOM WAY (DEFENSE ACCESS)	526348.82	1285488.94
3520	SIGNAL	COUNTY	ML KING	BUEGE BLVD (AIR FORCE HOUSING)	531431.67	1287865.21
3530	SIGNAL	COUNTY	ML KING	HURLBURT RD	533530.09	1290595.10
3540	SIGNAL	COUNTY	ML KING	CONSERVATION TRL (NWFS COLLEC	535042.71	1290624.25
3550	SIGNAL	COUNTY	GREEN ACRES RD	GREEN ACRES BLVD	535936.48	1290828.26
4005	SIGNAL	COUNTY	SR 393	HOLLYWOOD BLVD	520444.25	1289368.69
4010	SIGNAL	COUNTY	SR 393	BRYN ATHEN BLVD	521904.47	1289757.99
4020	SIGNAL	COUNTY	SR 393	PAGE BACON ROAD	522387.48	1289901.17
4030	SIGNAL	COUNTY	SR 393	ANCHOR	523385.82	1290221.86
4040	SIGNAL	COUNTY	SR 393	LOVE JOY RD	524135.76	1291259.60
4050	SIGNAL	COUNTY	SR 393	JONQUIL AVE	524361.03	1291893.87
4060	SIGNAL	COUNTY	SR 393	MARILYN AVE / SUN PLAZA	524739.14	1293054.54
4070	SIGNAL	COUNTY	SR 393	WRIGHT PKWY	525305.93	1294050.89
4500	SIGNAL	COUNTY	HOLLYWOOD BLVD	MEMORIAL PKWY	520109.24	1296861.17
4510	SIGNAL	COUNTY	HOLLYWOOD BLVD	ROBINWOOD DR	519955.98	1300482.59
4520	SIGNAL	COUNTY	HOLLYWOOD BLVD	WRIGHT	520221.76	1294193.32
4530	SIGNAL	COUNTY	WRIGHT PED CROSSING	EDGE AVE	519005.37	1294177.96
6010	SIGNAL	COUNTY	SR 397 (JOHN SIMS)	SR 85 S / SR 397	555716.30	1340634.98
6020	SIGNAL	COUNTY	SR 20 W	SR 85 N	558190.68	1338221.74
6030	SIGNAL	COUNTY	SR 20 E	ARMSTRONG & FIRE SIGNAL	559072.13	1340784.50
6040	SIGNAL	COUNTY	SR 20	SR 285 (PARTIN)	558511.98	1342802.86
6050	SIGNAL	COUNTY	SR 20	CEDAR ST	557976.18	1344754.25
6060	SIGNAL	COUNTY	SR 20	PALM BLVD	557714.37	1345646.23
6070	SIGNAL	COUNTY	SR 20	BULLOCK BLVD / JUNIPER AVE	557342.97	1347000.94
6080	SIGNAL	COUNTY	SR 20	REDWOOD AVE / REVEL DR	556852.84	1348751.40
6090	SIGNAL	COUNTY	SR 20	ROCKY BAYOU DR / BENTON	556049.15	1351603.90
6100	SIGNAL	COUNTY	SR 20	LANCASTER ROAD	555154.40	1354798.08
6110	SIGNAL	COUNTY	SR 20	RANGE ROAD	549782.53	1358901.59
6120	SIGNAL	COUNTY	SR 20	BAY DRIVE	546865.31	1362259.00
6130	SIGNAL	COUNTY	SR 20	BLUEWATER BLVD	546507.19	1362632.05
6140	SIGNAL	COUNTY	SR 20	SR 293 (WHITE POINT RD)	544813.56	1364579.35
6150	SIGNAL	COUNTY	SR 20		543888.40	1365623.88

Spreadsheet 3.2.1.1 – Existing and future ITS components in Okaloosa County

Existing Signalized Intersections (Continued)

CONTROL_NO	CONTROL_TY	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
6160	SIGNAL	COUNTY	SR 293	WOODLANDS DR	541306.29	1364676.31
6170	SIGNAL	COUNTY	SR 293	NORTH BAY FIRE DEPT	539561.84	1364613.52
6200	SIGNAL	COUNTY	SR 85	WOLVERINE BY-PASS / N GATE	554923.45	1333193.08
6210	SIGNAL	COUNTY	SR 85	CR 190 (COLLEGE BLVD & WOLVERI	563744.86	1341193.73
6215	SIGNAL	COUNTY	COLLEGE BLVD	PALM BLVD	563528.33	1347218.27
6220	SIGNAL	COUNTY	SR 285	CR 190 (COLLEGE BLVD)	563320.93	1351998.13
6230	SIGNAL	COUNTY	SR 285	PALM BLVD	559885.16	1347086.62
7000	SIGNAL	COUNTY	CODY AVE (HURLBURT)	SIMPSON AVE / LUKASIK AVE	522807.49	1274754.41
7010	SIGNAL	COUNTY	CODY AVE (HURLBURT)	TULLEY STREET	523943.63	1275909.76
7020	SIGNAL	COUNTY	CODY AVE (HURLBURT)	INDEPENDENCE RD	521403.71	1274573.35
7030	SIGNAL	COUNTY	INDEPENDENCE (HURLBURT)	BRIMS / LOOP	525347.25	1282286.74
7040	SIGNAL	COUNTY	INDEPENDENCE (HURLBURT)	BRIMS / LOOP	524608.22	1283674.33
7050	SIGNAL	COUNTY	INDEPENDENCE (HURLBURT)	GOLF COURSE / FIRE DEPT.	527930.01	1280714.04

Total of 141 signalized intersections

Existing Cameras

CONTROL_NO	CONTROL_TY	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
1140	CAMERA	COUNTY	US 98	SANTA ROSA BLVD	514461.48	1307149.24
1060	CAMERA	COUNTY	US 98	SR 393 (MARY ESTHER BLVD)	519021.91	1288964.43
2030	CAMERA	COUNTY	SR 85	HOLLYWOOD BLVD	519695.99	1305188.97
1120	CAMERA	COUNTY	US 98	PERRY AVE (SR 145)	516489.18	1305257.58
2160	CAMERA	COUNTY	SR 85	SR 189	540423.86	1318763.22
1160	CAMERA	COUNTY	US 98	CONFERENCE CENTER / PIER RD	513740.24	1308734.16
1260	CAMERA	COUNTY	US 98	GULF SHORE DRIVE	510535.35	1344074.36
1310	CAMERA	COUNTY	US 98	TRIUMPH RD	509605.25	1355893.48
1340	CAMERA	COUNTY	US 98	SR 293 / HUTCHINSON ST	510230.48	1361167.62
1350	CAMERA	COUNTY	US 98	CRYSTAL BCH DR	510451.62	1362575.13
6150	CAMERA	COUNTY	SR 20	SR 293 (WHITE POINT RD)	543888.40	1365623.88
6140	CAMERA	COUNTY	SR 20	BLUEWATER BLVD	544813.56	1364579.35
6070	CAMERA	COUNTY	SR 20	PALM BLVD	557342.97	1347000.94
6030	CAMERA	COUNTY	SR 20 E	SR 85 N	559072.13	1340784.50
2220	CAMERA	COUNTY	SR 85	P J ADAMS RD	628310.72	1317935.54
2270	CAMERA	COUNTY	SR 85	W & E REDSTONE AVE	637596.55	1319681.02
2260	CAMERA	COUNTY	SR 85	WAL-MART	634725.87	1318840.32
2250	CAMERA	COUNTY	SR 85	INTERSTATE 10	633249.53	1318478.07
2300	CAMERA	COUNTY	SR 85	US 90 (SR 10)	646655.59	1318081.65

Total of 19 Existing Cameras

Existing DMS

CONTROL_NO	CONTROL_TY	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
	DMS	COUNTY	US 98 W	ANDERSON DR	519486.66	1285446.90

Total of 1 Existing DMS

Existing TMC

CONTROL_NO	CONTROL_TY	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
	TMC	COUNTY	N EGLIN PKWY	RICHBOURG AVE	532178.24	1312526.43

Total of 1 Existing TMC

Spreadsheet 3.2.1.1 – Existing and future ITS components in Okaloosa County

Future Cameras

CONTROL_NO	CONTROL_TY	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
1030	CAMERA	COUNTY	US 98	CODY AVE (HURBURT GATE)	519862.83	1274554.71
1060	CAMERA	COUNTY	US 98	SR 393 (MARY ESTHER BLVD)	519021.91	1288964.43
1080	CAMERA	COUNTY	US 98	MEMORIAL PKWY	517709.47	1296756.04
1120	CAMERA	COUNTY	US 98	PERRY AVE (SR 145)	516489.18	1305257.58
1140	CAMERA	COUNTY	US 98	SANTA ROSA BLVD	514461.48	1307149.24
1200	CAMERA	COUNTY	US 98	STAHLMAN AVE	513021.81	1334664.27
1230	CAMERA	COUNTY	US 98	MAIN STREET	510785.39	1343104.66
1300	CAMERA	COUNTY	US 98	HENDERSON BCH (WAL-MART)	509703.23	1354474.12
1340	CAMERA	COUNTY	US 98	SR 293 / HUTCHINSON ST	510230.48	1361167.62
2050	CAMERA	COUNTY	SR 85	WALTER MARTIN RD	521655.55	1304013.14
2080	CAMERA	COUNTY	SR 85	MARINER PLAZA (HIGHWAY AVE.)	526043.81	1304781.34
2100	CAMERA	COUNTY	SR 85	SR 188 (RACETRACK / 4TH AVE)	530153.61	1307510.83
2110	CAMERA	COUNTY	SR 85	SHALIMAR DRIVE / CHEROKEE RD	529524.07	1311953.07
2140	CAMERA	COUNTY	SR 85	12TH AVE / RICHBURG AVE	532671.76	1313657.22
2160	CAMERA	COUNTY	SR 85	SR 189	540423.86	1318763.22
2170	CAMERA	COUNTY	SR 85	SR 123 SOUTH END	550322.08	1320529.50
2200	CAMERA	COUNTY	SR 85	SR 123 NORTH END	574208.03	1330188.28
2210	CAMERA	COUNTY	SR 85	LIVE OAK CHURCH / ANTIOCH	624286.60	1317522.36
2220	CAMERA	COUNTY	SR 85	P J ADAMS RD	628310.72	1317935.54
2250	CAMERA	COUNTY	SR 85	INTERSTATE 10	633249.53	1318478.07
2270	CAMERA	COUNTY	SR 85	W & E REDSTONE AVE	637596.55	1319681.02
2290	CAMERA	COUNTY	SR 85	MAIN ST / CANE AVE	643169.77	1320200.48
2300	CAMERA	COUNTY	SR 85	US 90 (SR 10)	646655.59	1318081.65
2320	CAMERA	COUNTY	SR 85	GARDEN ST	655953.68	1321937.03
3060	CAMERA	COUNTY	SR 189	SR 393 (ME) / OAK ST	525788.94	1294553.04
3100	CAMERA	COUNTY	SR 189	SR 188 / RACETRACK / HURLBURT R	533485.53	1294670.56
3150	CAMERA	COUNTY	SR 189	MOONEY RD	539731.38	1302551.75
3330	CAMERA	COUNTY	SR 188	MOONEY ROAD	533122.85	1302309.34
3510	CAMERA	COUNTY	ML KING	FREEDOM WAY (DEFENSE ACCESS)	526348.82	1285488.94
3530	CAMERA	COUNTY	ML KING	HURLBURT RD	533530.09	1290595.10
4040	CAMERA	COUNTY	SR 393	LOVE JOY RD	524135.76	1291259.60
6010	CAMERA	COUNTY	SR 397 (JOHN SIMS)	EDGE AVE	555716.30	1340634.98
6020	CAMERA	COUNTY	SR 20 W	SR 85 S / SR 397	558190.68	1338221.74
6030	CAMERA	COUNTY	SR 20 E	SR 85 N	559072.13	1340784.50
6070	CAMERA	COUNTY	SR 20	PALM BLVD	557342.97	1347000.94
6090	CAMERA	COUNTY	SR 20	REDWOOD AVE / REVEL DR	556049.15	1351603.90
6100	CAMERA	COUNTY	SR 20	ROCKY BAYOU DR / BENTON	555154.40	1354798.08
6150	CAMERA	COUNTY	SR 20	SR 293 (WHITE POINT RD)	543888.40	1365623.88
6200	CAMERA	COUNTY	SR 85	WOLVERINE BY-PASS / N GATE	554923.45	1333193.08
	CAMERA	COUNTY	SR 85	NORTHWEST FLORIDA REG. AIRPOF	551056.45	1326753.61
	CAMERA	COUNTY	SR 85	SUNSET LN	536470.02	1316624.93
	CAMERA	COUNTY	SR 30	MIRACLE STRIP PKWY	513334.87	1312731.45
	CAMERA	COUNTY	SR 20 E	ANSLEY DR	551056.45	1358183.56
	CAMERA	COUNTY	SR 20 E	CAT MAR RD	540814.91	1369186.86
	CAMERA	COUNTY	SR 293	MID-BAY BRIDGE RD	534269.36	1364898.39
	CAMERA	COUNTY	SR 293	DANNY WUERFFEL WAY	524846.01	1363741.64
	CAMERA	COUNTY	SR 293	MID-BAY BRIDGE RD	515281.60	1361456.33
	CAMERA	COUNTY	US 90 W	JAMES LEE BLVD W	647857.30	1313747.14

Total of 48 future Cameras

Future DMS's

CONTROL_NO	CONTROL_TY	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
	DMS	COUNTY	US 98	STATE ROAD 30	515861.86	1305704.44
	DMS	COUNTY	US 98 E	MATTHEW BLVD	509423.41	1359243.79
	DMS	COUNTY	US 98 E	LEGENDARY DR	510796.94	1363507.48
	DMS	COUNTY	US 90		647399.70	1308474.23
	DMS	COUNTY	US 90		646635.08	1322858.58
	DMS	COUNTY	US 90		556464.58	1350426.54

Total of 6 future DMS's

3.2.2 Walton County

Major Roadway Corridors – I-10, US 98, US 90, US 331, SR 20

Large Commercial Airports – None

Seaports – None

Rail Lines – CSX

Military Bases – Eglin Air Force Base

Existing ITS Inventory:

Walton County does not have any signalized intersections that are coordinated by a central system. They also do not have any other ITS equipment. The City of DeFuniak Springs maintains their signalized intersections.

Future ITS Needs:

Fiber optic cable along with CCTV cameras and DMS is proposed in Walton County. The signals on Highway 98 needed to communicate with one another and a small office TMC to synchronize these signals, especially along US 98 in front of the Outlet mall area. Evacuation procedures would also be greatly enhanced by ITS in this region. Fiber 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. Alternatives would include leasing a pair of fibers from another provider along US 331, or allow a sheriff substation to monitor the southern county ITS system. A TMC is 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 an Emergency Operations Center (EOC) to which these ITS devices can also benefit. The video from the cameras can be sent to the EOC, along with the ability to disseminate messages to the DMS on the highways.

Tables, Figures and Spreadsheets:

The following tables identify the existing ITS inventory, future ITS needs, and preliminary costs for Walton County and City of DeFuniak Springs.

- Table 3.2.2.1 – Existing inventory and future needs of ITS components in Walton County (City of DeFuniak Springs quantities not included)
- Table 3.2.2.2 – Existing inventory and future needs of ITS components in City of DeFuniak Springs
- Table 3.2.2.3 – Preliminary costs for future needs of ITS components in Walton County (City of DeFuniak Springs quantities not included)
- Table 3.2.2.4 – Preliminary costs for future needs of ITS components in City of DeFuniak Springs

The following figures illustrate the locations of existing and future ITS components (i.e., existing signalized intersections, future fiber optic cable, cameras, video detection, DMS, and TMC) in Walton County and City of DeFuniak Springs.

- Figure 3.2.2.1 – Existing signalized intersections and future fiber optic cable in Walton County
- Figure 3.2.2.2 – Future cameras, DMS, and TMC in Walton County
- Figure 3.2.2.3 – Existing signalized intersections and future fiber optic cable in City of DeFuniak Springs
- Figure 3.2.2.4 – Future cameras in the City of DeFuniak Springs

The following spreadsheet lists existing and future ITS components in Walton County.

Spreadsheet 3.2.2.1 – Existing and future ITS components in Walton County

Table 3.2.2.1 – Existing inventory and future needs of ITS components in Walton County

Item	Unit	Existing	Future
Signalized Intersections	Each	22	0
Fiber Optic Cable and Conduit	Linear Feet	0	190,363
Cameras	Each	0	10
DMS	Each	0	4
TMC Small Office	Each	0	1

Table 3.2.2.3 – Preliminary costs for future needs of ITS components in Walton County

Item	Unit	No. Units	Unit Cost	Total Cost
Fiber Optic Cable and Conduit	Linear Feet	190,363	\$11	\$2,093,993
Cameras	Each	10	\$5,500	\$55,000
DMS	Each	4	\$160,000	\$640,000
TMC small office	Each	1	\$10,575	\$10,575
Total				\$2,799,568

Table 3.2.2.2 – Existing inventory and future needs of ITS components in City of DeFuniak Springs

Item	Unit	Existing	Future
Signalized Intersections	Each	9	0
Fiber Optic Cable and Conduit	Linear Feet	0	24,592
Cameras	Each	0	6
TMC Small Office	Each	0	1

Table 3.2.2.4 – Preliminary costs for future needs of ITS components in City of DeFuniak Springs

Item	Unit	No. Units	Unit Cost	Total Cost
Fiber Optic Cable and Conduit	Linear Feet	24,592	\$11	\$270,512
Cameras	Each	6	\$5,500	\$33,000
TMC small office	Each	1	\$10,575	\$10,575
Total				\$314,087

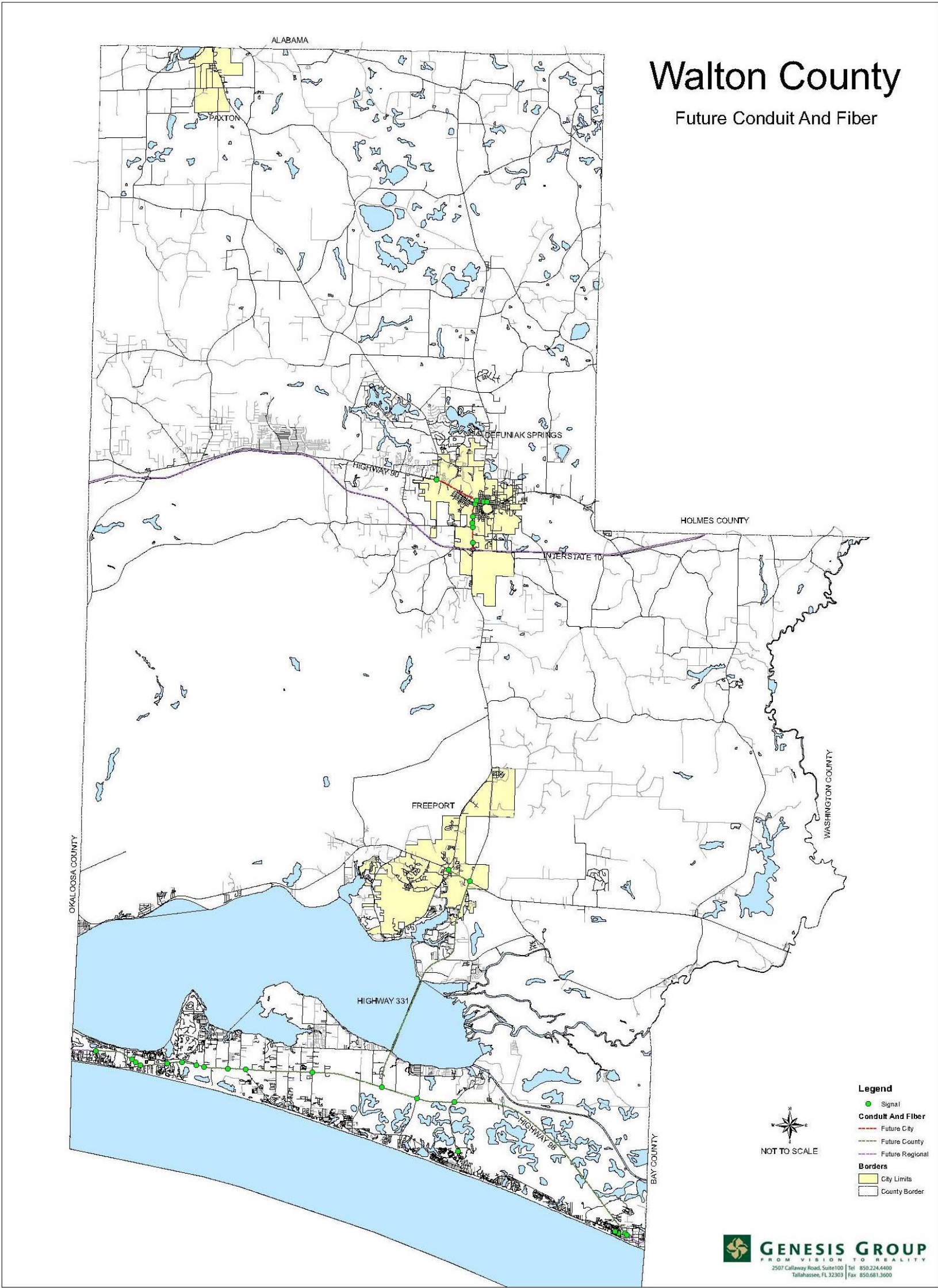


Figure 3.2.2.1 – Existing signalized intersections and future fiber optic cable in Walton County, Florida

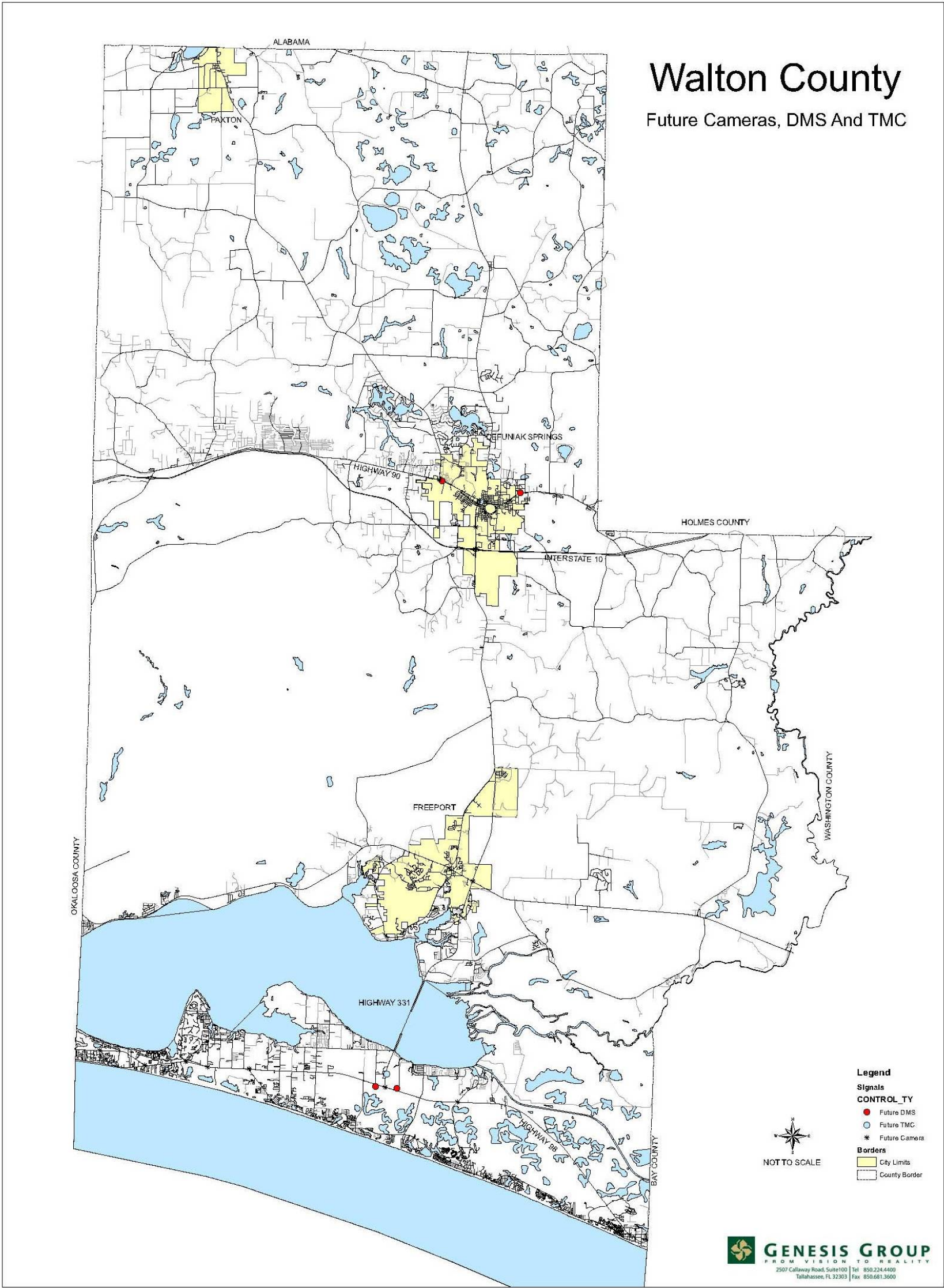


Figure 3.2.2.2 – Future cameras, DMS and TMC in Walton County, Florida

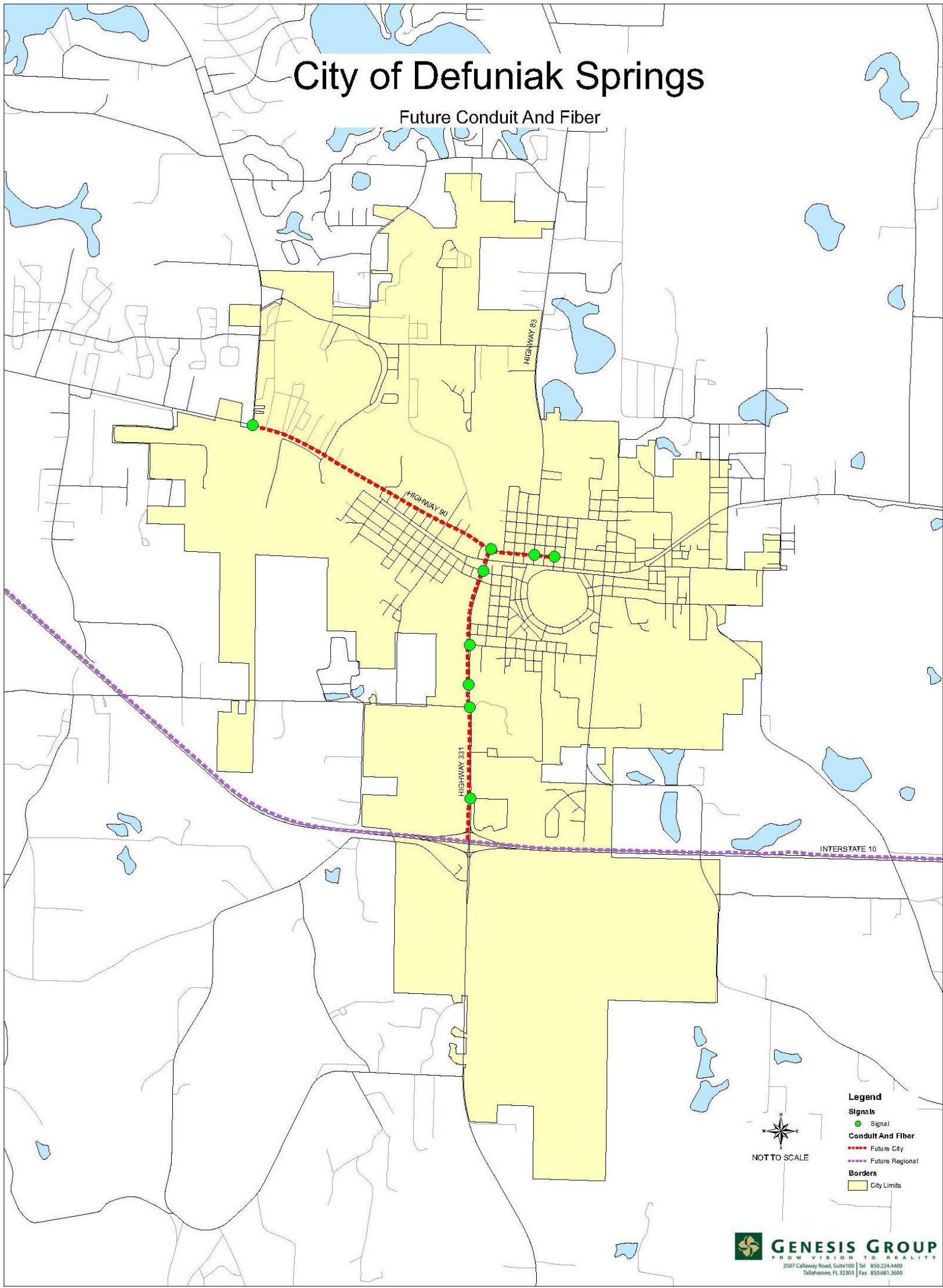


Figure 3.2.2.3 – Existing signalized intersections and future fiber optic cable in the City of DeFuniak Springs, Florida

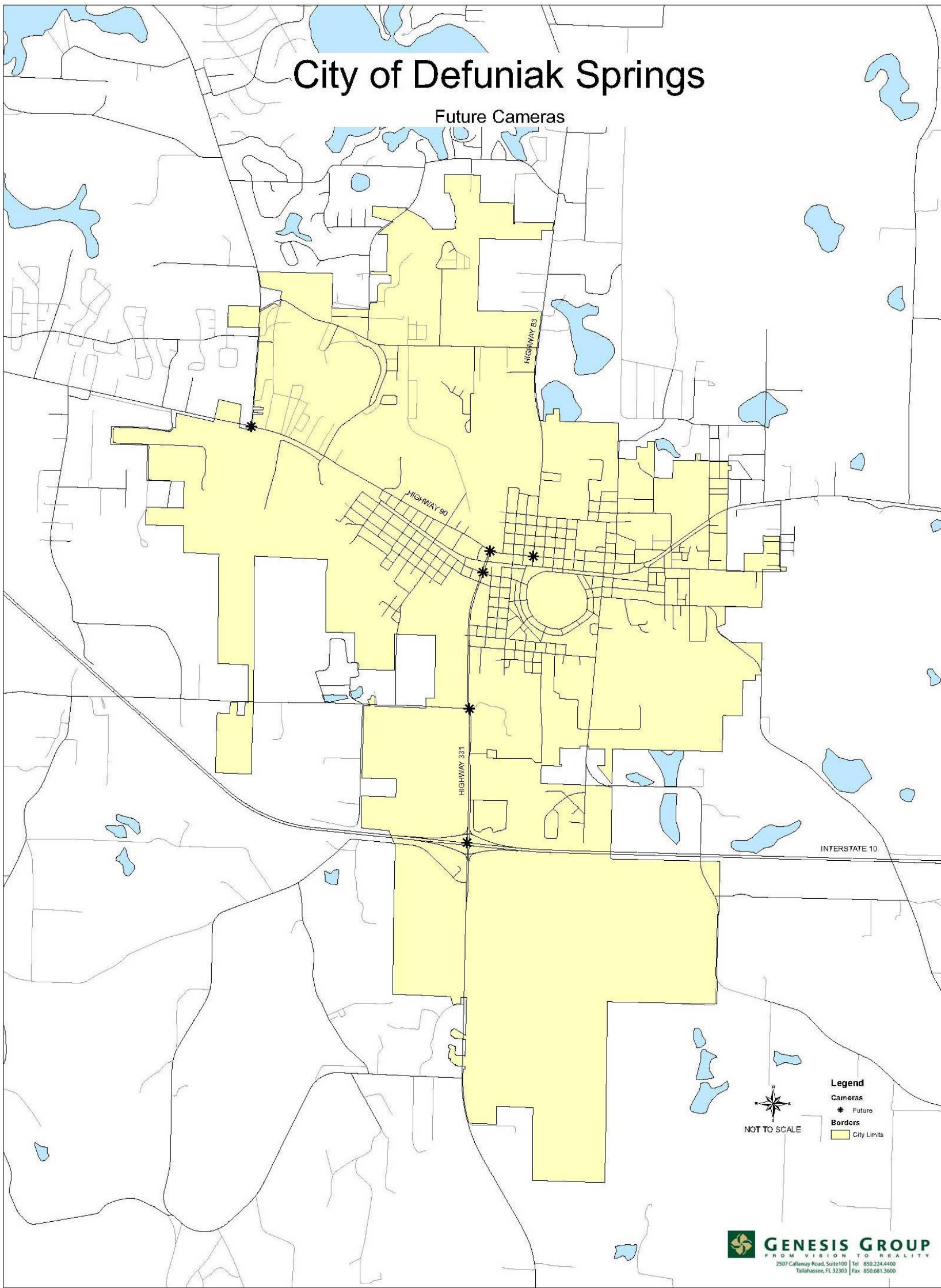


Figure 3.2.2.4 – Future cameras in the City of DeFuniak Springs, Florida

Spreadsheet 3.2.2.1 – Existing and future ITS components in Walton County

Existing Signalized Intersections

CONTROL_TY ADMIN		ST_MAJOR	ST_MINOR	NORTHING	EASTING
SIGNAL	COUNTY	US HIGHWAY 98 W	HOLIDAY RD	508617.32	1375606.80
SIGNAL	COUNTY	US HIGHWAY 98 W	SOUTH SHORE DR	506688.78	1383531.90
SIGNAL	COUNTY	US HIGHWAY 98 W	POINCIANA BLVD	506134.28	1384349.38
SIGNAL	COUNTY	US HIGHWAY 98 W	SCENIC GULF DR	505430.94	1385465.23
SIGNAL	COUNTY	US HIGHWAY 98 W	SANDESTIN BLVD	505867.87	1391360.66
SIGNAL	COUNTY	US HIGHWAY 98 W	BAYTOWNE LN	506132.45	1394517.37
SIGNAL	COUNTY	US HIGHWAY 98 W	SANDESTIN LN	505453.99	1397758.59
SIGNAL	COUNTY	US HIGHWAY 98 W	W HEWETT RD	504689.41	1404671.54
SIGNAL	COUNTY	US HIGHWAY 98 W	CO HIGHWAY 30A	504538.87	1408580.16
SIGNAL	COUNTY	US HIGHWAY 98 W	CO HIGHWAY 393	503821.39	1423275.66
SIGNAL	COUNTY	US HIGHWAY 98 W	US HIGHWAY 331 S	500543.98	1438549.82
SIGNAL	COUNTY	US HIGHWAY 98 W	MACK BAYOU RD	505054.52	1399368.87
SIGNAL	COUNTY	US HIGHWAY 98 E	CO HIGHWAY 283	498153.19	1446247.29
SIGNAL	COUNTY	US HIGHWAY 98 E	CO HIGHWAY 395	497242.54	1454490.20
SIGNAL	COUNTY	CO HIGHWAY 395 S	LAKE FOREST DR	486500.73	1455233.10
SIGNAL	COUNTY	US HIGHWAY 98 E	CO HIGHWAY 30A E	468439.41	1492047.56
SIGNAL	COUNTY	US HIGHWAY 98 E	WALL ST	468054.50	1492483.47
SIGNAL	COUNTY	CO HIGHWAY 30A E	E WATERS ST	468403.08	1490608.19
SIGNAL	COUNTY	CO HIGHWAY 30A E	BARRETT SQ E	468674.48	1489989.92
SIGNAL	COUNTY	CO HIGHWAY 30A E	BARRETT SQ W	468720.57	1489896.35
SIGNAL	COUNTY	US HIGHWAY 331 S	STATE HIGHWAY 20 W	545943.01	1457846.39
SIGNAL	COUNTY	US BUSINESS HIGHWAY 331 S	STATE HIGHWAY 20 E	548510.61	1453196.84

Total of 22 Signalized Intersections

SIGNAL	DEFUNIAK SPRINGS	US HIGHWAY 331 S	BUSINESS PARK RD	620648.43	1458548.65
SIGNAL	DEFUNIAK SPRINGS	US HIGHWAY 331 S	BOB SIKES RD / CORBETT DR	624012.04	1458537.50
SIGNAL	DEFUNIAK SPRINGS	US HIGHWAY 331 S	WINN-DIXIE	624853.39	1458496.53
SIGNAL	DEFUNIAK SPRINGS	US HIGHWAY 331 S	BRUCE AVE	626319.43	1458528.04
SIGNAL	DEFUNIAK SPRINGS	US HIGHWAY 331 S	LIVE OAK AVE	629025.29	1459035.68
SIGNAL	DEFUNIAK SPRINGS	US HIGHWAY 331 S	US HIGHWAY 90	629831.59	1459316.53
SIGNAL	DEFUNIAK SPRINGS	US HIGHWAY 90 E	STATE HIGHWAY 83 / S 9th ST	629626.23	1460907.55
SIGNAL	DEFUNIAK SPRINGS	US HIGHWAY 90 E	7TH ST	629556.60	1461658.15
SIGNAL	DEFUNIAK SPRINGS	US HIGHWAY 90 W	US HIGHWAY 331 N	634400.78	1450517.67

Total of 9 Signalized Intersections

Spreadsheet 3.2.2.1 – Existing and future ITS components in Walton County

Future Cameras

CONTROL_TY ADMIN		ST_MAJOR	ST_MINOR	NORTHING	EASTING
CAMERA	COUNTY	US HIGHWAY 98 W	HOLIDAY RD	508617.32	1375606.80
CAMERA	COUNTY	US HIGHWAY 98 W	SCENIC GULF DR	505430.94	1385465.23
CAMERA	COUNTY	US HIGHWAY 98 W	BAYTOWNE LN	506132.45	1394517.37
CAMERA	COUNTY	US HIGHWAY 98 W	CO HIGHWAY 30A	504538.87	1408580.16
CAMERA	COUNTY	US HIGHWAY 98 W	US HIGHWAY 331 S	500543.98	1438549.82
CAMERA	COUNTY	US HIGHWAY 98 W	MACK BAYOU RD	505054.52	1399368.87
CAMERA	COUNTY	US HIGHWAY 98 E	CO HIGHWAY 395	497242.54	1454490.20
CAMERA	COUNTY	US HIGHWAY 98 E	WALL ST	468054.50	1492483.47
CAMERA	COUNTY	US HIGHWAY 331 S	STATE HIGHWAY 20 W	545943.01	1457846.39
CAMERA	COUNTY	STATE HIGHWAY 20 W	CO HIGHWAY 83A E	548799.39	1452690.20

Total of 10 future Cameras

CAMERA	DEFUNIAK SPRINGS	US HIGHWAY 331 S	BOB SIKES RD / CORBETT DR	624012.04	1458537.50
CAMERA	DEFUNIAK SPRINGS	US HIGHWAY 331 S	LIVE OAK AVE	629025.29	1459035.68
CAMERA	DEFUNIAK SPRINGS	US HIGHWAY 331 S	US HIGHWAY 90	629831.59	1459316.53
CAMERA	DEFUNIAK SPRINGS	US HIGHWAY 90 E	STATE HIGHWAY 83 / S 9th ST	629626.23	1460907.55
CAMERA	DEFUNIAK SPRINGS	US HIGHWAY 90 W	US HIGHWAY 331 N	634400.78	1450517.67
CAMERA	DEFUNIAK SPRINGS	I-10 W	US HIGHWAY 331 S	619087.79	1458458.65

Total of 6 future Cameras

Future DMS's

CONTROL_TY ADMIN		ST_MAJOR	ST_MINOR	NORTHING	EASTING
DMS	COUNTY	US HIGHWAY 98	DOODLE'S FOREST	500285.14	1441198.87
DMS	COUNTY	US HIGHWAY 98	J D MILLER RD	500745.66	1436396.24
DMS	COUNTY	US HIGHWAY 90 W		634153.41	1451049.04
DMS	COUNTY	US HIGHWAY 90 E		631564.82	1468394.93
DMS	COUNTY	US HIGHWAY 90 E		629669.02	1459624.93
DMS	COUNTY	US HIGHWAY 331		503473.03	1438927.07

Total of 6 future DMS's

3.3 Bay County TPO:

The Bay County TPO encompasses of the entire limits of the county. The City of Panama City is the only major stakeholder within the county. Bay County maintains all other traffic signals within the county including those of several contiguous local municipalities such as Panama City Beach, Lynn Haven, Springfield, and Callaway. Bay County also performs the signal timing for all intersections in Bay County including the signals maintained by the City of Panama City. The Port of Panama City remains a large traffic generator for Bay County. This port is located on Hwy 98 just east of the Hathaway Bridge and generates Truck and Rail traffic throughout Bay County. Bay County has just opened a new International Airport on County Road 388. The traffic from this airport will increase the volumes on the roads in Panama City Beach, Panama City and Lynn Haven. With the Northern section of the county being mostly rural the heaviest traffic areas in Bay County are in Panama City and the historical district along with Panama City Beach.

Bay County

Major Roadway Corridors – US 98, US 231, SR 77, SR 79

Large Commercial Airports – Panama City-Bay County International Airport (which was relocated May 23, 2010 and renamed Northwest Florida Beaches International Airport)

Seaports – Port Panama City

Rail Lines – Bayline, CSX

Military Bases – Tyndall Air Force Base and Naval Support Activity/Coastal Systems Station

Existing ITS Inventory:

Bay County includes a major urban area, City of Panama City. Bay County has an existing recently completed TMC to manage ITS traffic systems located in the cities of Panama City and Lynn Haven. They have existing fiber optic network connecting almost 100 intersections, 43 cameras, weather station and 4 DMS signs.

Future ITS Needs:

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 CCTV cameras and additional fiber cable for coordination of signals can be controlled by the existing TMC. Since they already maintain the signals on the beach, no further maintenance personnel would be needed. Bay County has just opened a new Emergency Operations Center (EOC) to which these ITS devices can also benefit. The video from the cameras and the information from the weather station can be sent to the EOC, along with the ability to disseminate messages to the DMS on the highways.

Tables, Figures and Spreadsheets:

The following tables identify the existing ITS inventory, future ITS needs, and preliminary costs for Bay County.

Table 3.3.1.1 – Existing inventory and future needs of ITS components in Bay County

Table 3.3.1.2 – Preliminary costs for future needs of ITS components in Bay County

The following figures illustrate the locations of existing and future ITS components (i.e., existing signalized intersections, future fiber optic cable, cameras, video detection, DMS, and TMC) in Bay County.

Figure 3.3.1.1 – Existing signalized intersections and fiber optic cable in Bay County

Figure 3.3.1.2 – Existing cameras, DMS, TMC, and Weather Station in Bay County

Figure 3.3.1.3 – Existing signalized intersections, existing and future fiber optic cable in Bay County

Figure 3.3.1.4 – Future cameras and DMS in Bay County

The following spreadsheet lists existing and future ITS components in Bay County.

Spreadsheet 3.3.1.1 – Existing and future ITS components in Bay County

Table 3.3.1.1 – Existing inventory and future needs of ITS components in Bay County

Item	Unit	Existing	Future
Signalized Intersections	Each	178	0
Fiber Optic Cable and Conduit	Linear Feet	250,679	359,499
Cameras	Each	43	25
DMS	Each	4	5
TMC	Each	1	0
Weather Station	Each	1	0

Table 3.3.1.2 – Preliminary costs for future needs of ITS components in Bay County

Item	Unit	No. Units	Unit Cost	Total Cost
Fiber Optic Cable and Conduit	Linear Feet	359,499	\$11	\$3,954,489
Cameras	Each	25	\$5,500	\$137,500
DMS	Each	5	\$160,000	\$800,000
Total				\$4,891,989

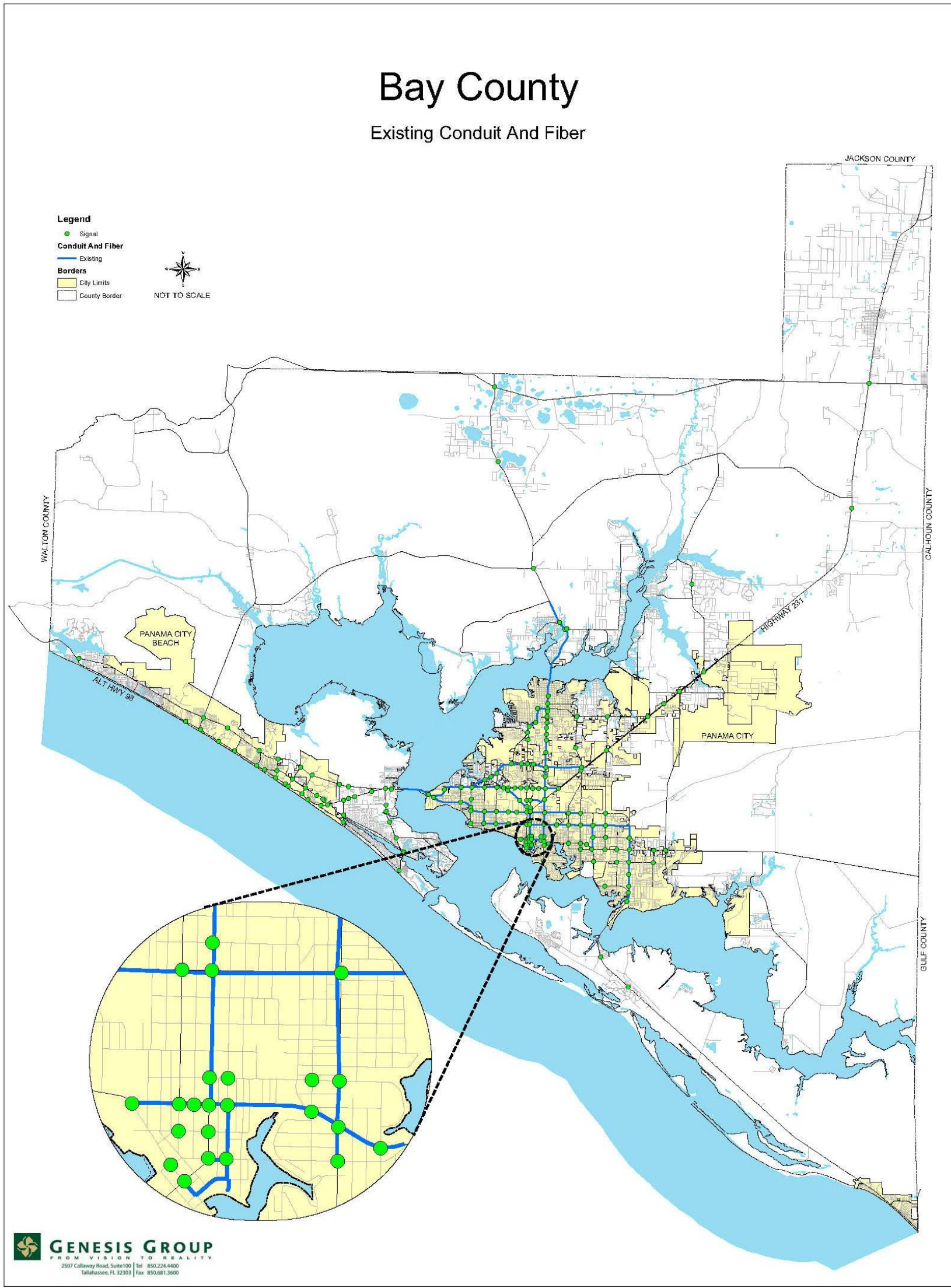


Figure 3.3.1.1 – Existing signalized intersections and fiber optic cable in Bay County, Florida

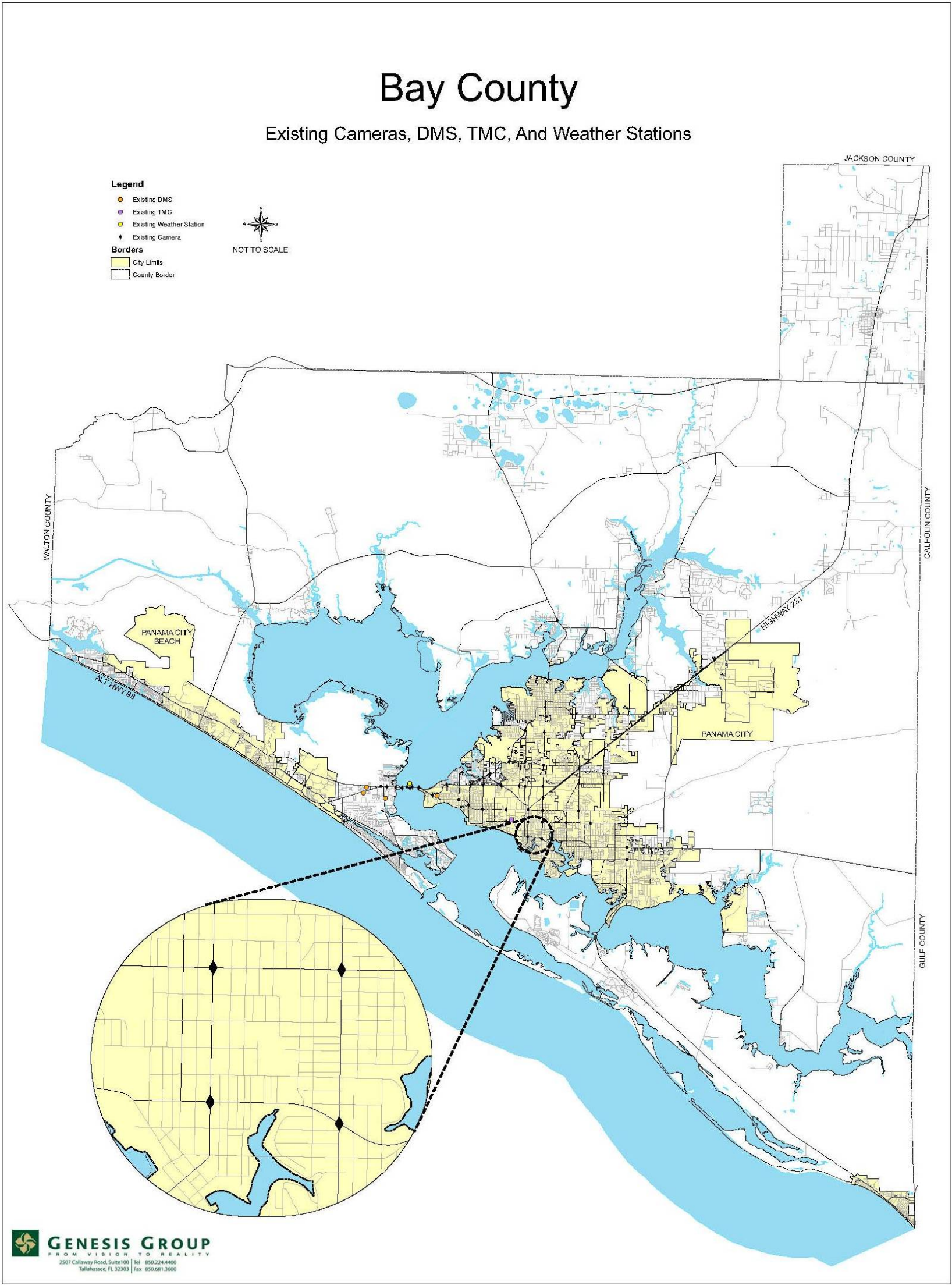


Figure 3.3.1.2 – Existing cameras, DMS, TMC, and Weather Station in Bay County, Florida

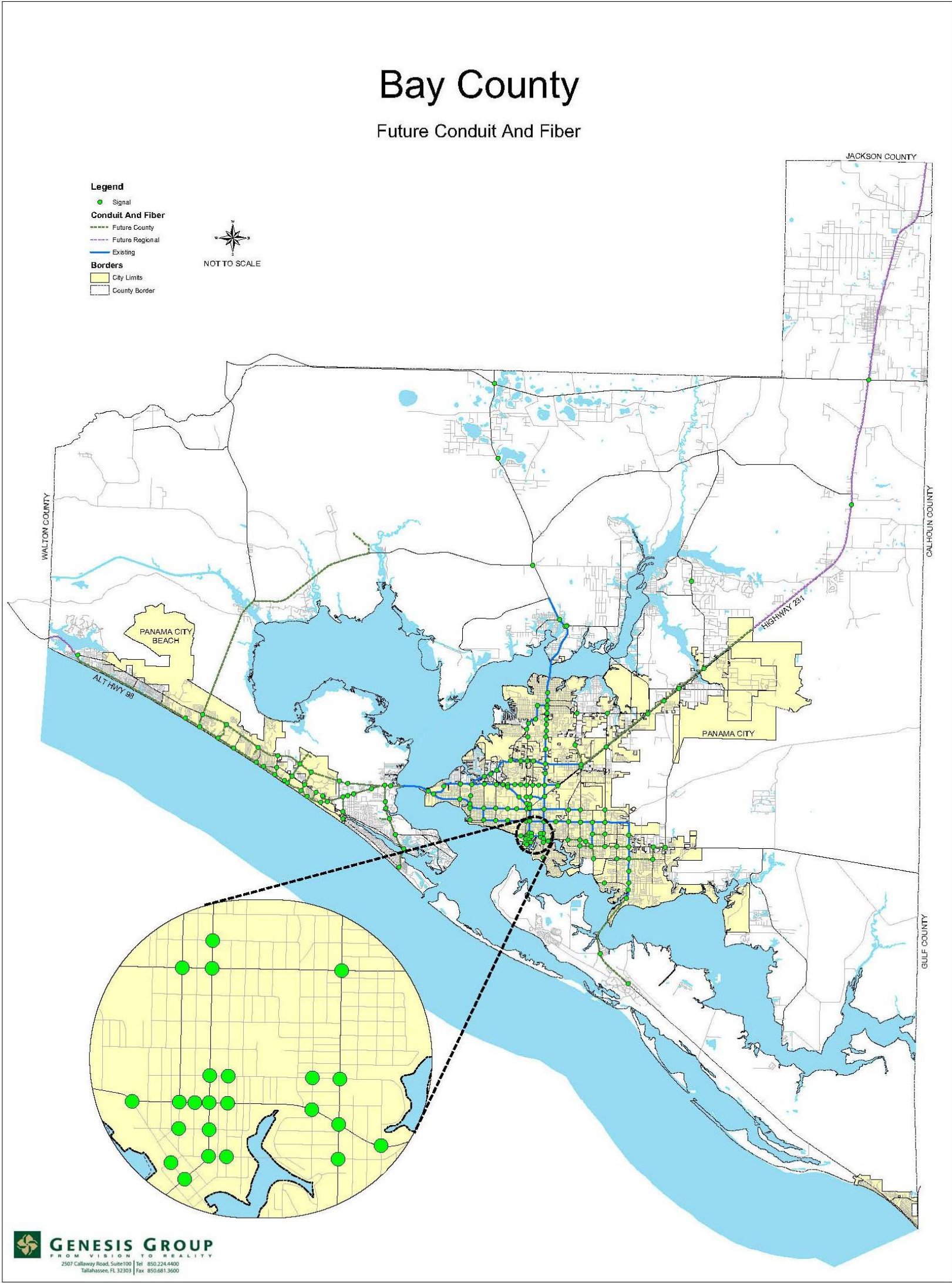


Figure 3.3.1.3 – Existing signalized intersections, existing and future fiber optic cable in Bay County, Florida

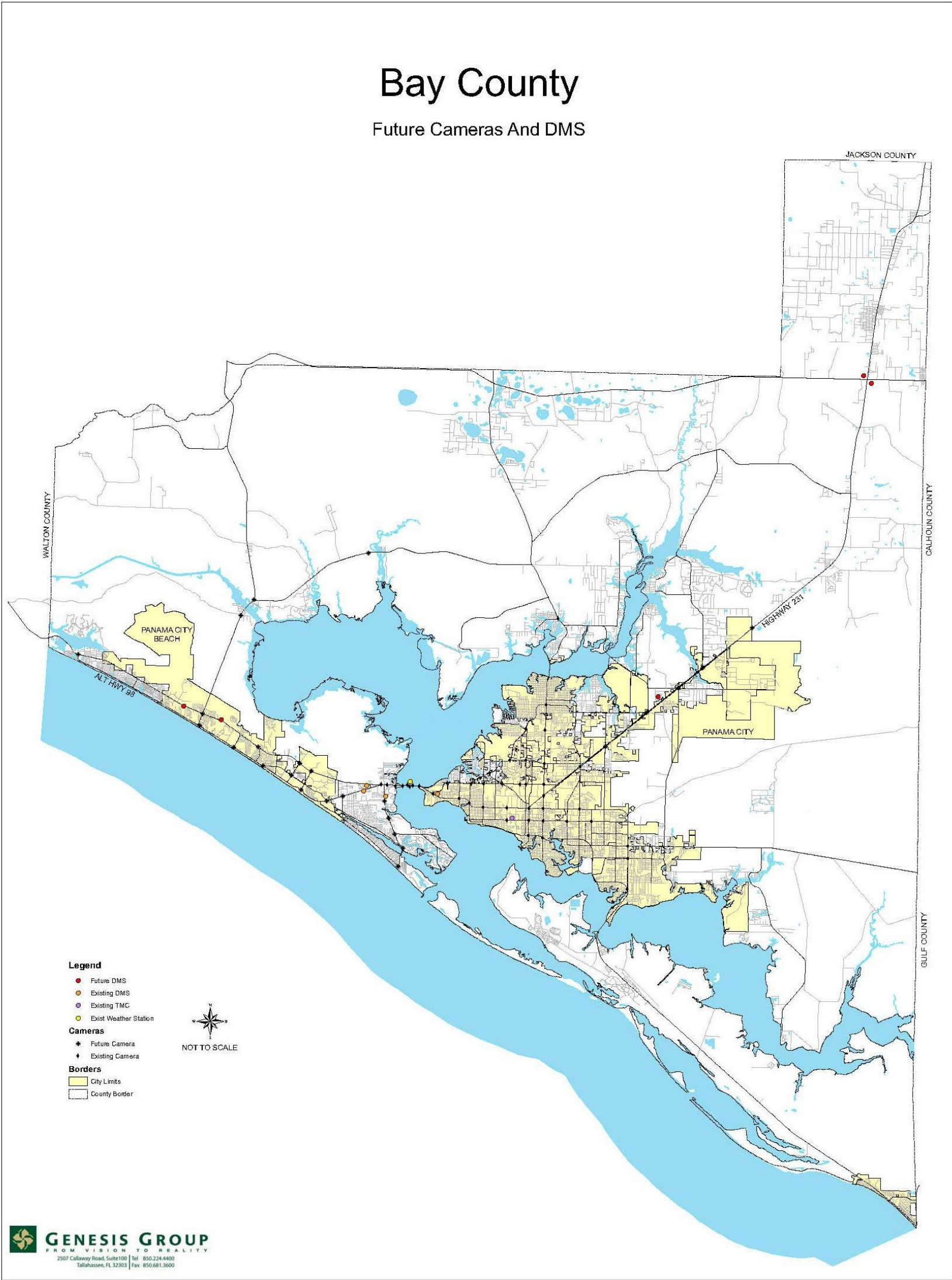


Figure 3.3.1.2 – Future cameras and DMS in Bay County, Florida

REGIONAL INTELLIGENT TRANSPORTATION SYSTEMS (ITS) PLAN

Spreadsheet 3.3.1.1 – Existing and future ITS components in Bay County

Existing Signalized Intersections

CONTROL_NO	CONTROL_TY	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
AFB-1	SIGNAL	Bay County	HIGHWAY 98	ILLINOIS AVE	390953.71	1623449.31
AFB-2	SIGNAL	Bay County	HIGHWAY 98	SABRE DR	397509.81	1617392.12
BC-1	SIGNAL	Bay County	23RD ST	HIGHWAY 231	434404.46	1608099.91
BC-10	SIGNAL	Bay County	LAIRD ST	THOMAS DR	430832.48	1570241.92
BC-11	SIGNAL	Bay County	JOAN AVE	THOMAS DR	427112.94	1560921.33
BC-12	SIGNAL	Bay County	BRISTOL ST	THOMAS DR	416538.63	1573227.12
BC-13	SIGNAL	Bay County	CAUSEWAY RD	MAGNOLIA BEACH RD	423620.85	1572455.81
BC-14	SIGNAL	Bay County	COASTAL PALMS BLVD	CRAG RD	429407.43	1570348.90
BC-15	SIGNAL	Bay County	BALDWIN RD	HIGHWAY 77	439072.81	1605323.64
BC-16	SIGNAL	Bay County	LISENBY AVE	SAINT ANDREWS BLVD	437760.16	1594682.63
BC-17	SIGNAL	Bay County	BALDWIN RD	JENKS AVE	439811.44	1601321.37
BC-18	SIGNAL	Bay County	AIRPORT RD	SAINT ANDREWS BLVD	436982.94	1593330.25
BC-19	SIGNAL	Bay County	FRANKFORD AVE	SAINT ANDREWS BLVD	436389.75	1591998.50
BC-2	SIGNAL	Bay County	23RD ST	BECK AVE	434642.94	1589165.75
BC-20	SIGNAL	Bay County	HIGHWAY 389	HIGHWAY 390	450241.16	1612248.88
BC-21	SIGNAL	Bay County	HIGHWAY 390	JENKS AVE	446671.50	1601262.13
BC-22	SIGNAL	Bay County	HIGHWAY 231	STAR AVE	455689.45	1634695.32
BC-22	SIGNAL	Bay County	HIGHWAY 22	STAR AVE	420846.16	1631621.00
BC-23	SIGNAL	Bay County	BALDWIN RD	HIGHWAY 390	439847.09	1597752.38
BC-25	SIGNAL	Bay County	LAGOON DR	THOMAS DR	420544.95	1574242.76
BC-26	SIGNAL	Bay County	BUSINESS HIGHWAY 98	HIGHWAY 98	411538.96	1623479.93
BC-27	SIGNAL	Bay County	FRONT BEACH RD	JOAN AVE	431889.91	1560984.40
BC-28	SIGNAL	Bay County	BALDWIN RD	STATE AVE	439825.50	1599998.25
BC-3	SIGNAL	Bay County	EAST AVE	HIGHWAY 231	438434.18	1613146.85
BC-30	SIGNAL	Bay County	HIGHWAY 2321	HIGHWAY 77	469352.88	1609600.75
BC-31	SIGNAL	Bay County	BALDWIN RD	EAST AVE	439027.41	1613167.75
BC-31	SIGNAL	Bay County	BAREFOOT PALMS LN	PATRONIS DR	427078.35	1571087.58
BC-33	SIGNAL	Bay County	JOAN AVE	LAGOON DR	428598.91	1560949.25
BC-34	SIGNAL	Bay County	CLARENCE ST	HUTCHISON BLVD	431918.41	1556625.55
BC-4	SIGNAL	Bay County	HIGHWAY 98	WOODLAWN DR	434367.35	1571402.84
BC-5	SIGNAL	Bay County	HIGHWAY 98	THOMAS DR	434433.03	1570150.42
BC-6	SIGNAL	Bay County	FRONT BEACH RD		433728.41	1567195.80
BC-8	SIGNAL	Bay County	FRONT BEACH RD	HUTCHISON BLVD	430867.98	1557524.72
BC-9	SIGNAL	Bay County	BEACH BLVD	FRONT BEACH RD	430743.91	1556062.75
C-56	SIGNAL	Bay County	CHERRY ST	HIGHWAY 22A	418299.69	1620970.87
CC-1	SIGNAL	Bay County	BOAT RACE RD	TYNDALL PKWY	412985.49	1623559.23
CC-2	SIGNAL	Bay County	CHERRY ST	TYNDALL PKWY	418282.68	1623616.15
CC-3	SIGNAL	Bay County	HIGHWAY 22	TYNDALL PKWY	420968.45	1623646.69
CC-4	SIGNAL	Bay County	3RD ST	HIGHWAY 22A	420996.62	1620997.50
CC-5	SIGNAL	Bay County	HICKORY ST	TYNDALL PKWY	415636.11	1623581.88
CC-6	SIGNAL	Bay County	BERTHE AVE	CHERRY ST	418151.22	1628926.00
CCG-1	SIGNAL	Bay County	15TH ST	EAST AVE	429021.27	1613019.58
CCG-2	SIGNAL	Bay County	15TH ST	SHERMAN AVE	429072.28	1610380.62
CLH-1	SIGNAL	Bay County	14TH ST	OHIO AVE	451908.72	1605751.87
CLH-2	SIGNAL	Bay County	9TH ST	OHIO AVE	454711.19	1605829.25
CLH-3	SIGNAL	Bay County	12TH ST	OHIO AVE	453032.66	1605777.50
CLH-4	SIGNAL	Bay County	HIGHWAY 77	MOWAT SCHOOL RD	448918.06	1605581.89
CLH-5	SIGNAL	Bay County	15TH ST	OHIO AVE	451341.91	1605736.50
CP-1	SIGNAL	Bay County	BUSINESS HIGHWAY 98	WEST ST	413042.81	1618283.00
CS-1	SIGNAL	Bay County	15TH ST	TRANSMITTER RD	428991.32	1618456.99
CS-2	SIGNAL	Bay County	11TH ST	TRANSMITTER RD	426338.62	1618427.25
CS-3	SIGNAL	Bay County	7TH ST	TRANSMITTER RD	423701.72	1618403.37
CS-4	SIGNAL	Bay County	3RD ST	BUSINESS HIGHWAY 98	421082.19	1615416.87
CS-5	SIGNAL	Bay County	7TH ST	SCHOOL AVE	423744.69	1615658.13
CS-7	SIGNAL	Bay County	11TH ST	SCHOOL AVE	426353.69	1615689.00
PC-1	SIGNAL	Panama City	HIGHWAY 98	MOODY AVE	433114.97	1579638.12
PC-10	SIGNAL	Panama City	11TH ST	SHERMAN AVE	426429.91	1610342.25
PC-11	SIGNAL	Panama City	11TH ST	EAST AVE	426382.91	1612975.87
PC-12	SIGNAL	Panama City	5TH ST	EAST AVE	422450.91	1612910.37
PC-13	SIGNAL	Panama City	3RD ST	EAST AVE	421114.84	1612894.88
PC-14	SIGNAL	Panama City	BUSINESS HIGHWAY 98	EVERITT AVE	422126.19	1614263.75
PC-15	SIGNAL	Panama City	BUSINESS HIGHWAY 98	COVE BLVD	422765.34	1604949.25
PC-16	SIGNAL	Panama City	4TH ST	COVE BLVD	421927.19	1604933.12
PC-17	SIGNAL	Panama City	HIGHWAY 231	MARTIN LUTHER KING JR BLVD	432039.01	1605132.37
PC-18	SIGNAL	Panama City	15TH ST	MARTIN LUTHER KING JR BLVD	429177.19	1605063.62

Spreadsheet 3.3.1.1 – Existing and future ITS components in Bay County

Existing Signalized Intersections (Continued)

CONTROL_NO	CONTROL_TY	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
PC-19	SIGNAL	Panama City	11TH ST	MARTIN LUTHER KING JR BLVD	426522.56	1605012.75
PC-2	SIGNAL	Panama City	HIGHWAY 98	MICHIGAN AVE	431425.44	1586603.50
PC-20	SIGNAL	Panama City	7TH ST	MARTIN LUTHER KING JR BLVD	423881.31	1604971.63
PC-21	SIGNAL	Panama City	CHERRY ST	COVE BLVD	418575.03	1604883.00
PC-23	SIGNAL	Panama City	6TH ST	JENKS AVE	423313.38	1601066.13
PC-24	SIGNAL	Panama City	6TH ST	GRACE AVE	423303.69	1601431.00
PC-25	SIGNAL	Panama City	6TH ST	HARRISON AVE	423296.19	1601793.25
PC-26	SIGNAL	Panama City	6TH ST	MAGNOLIA AVE	423287.88	1602237.00
PC-27	SIGNAL	Panama City	6TH ST	BUSINESS HIGHWAY 98	423130.28	1604291.25
PC-28	SIGNAL	Panama City	7TH ST	MAGNOLIA AVE	423949.25	1602249.25
PC-29	SIGNAL	Panama City	6TH ST	BEACH DR	423335.08	1599908.49
PC-29	SIGNAL	Panama City	7TH ST	HARRISON AVE	423959.88	1601806.87
PC-3	SIGNAL	Panama City	23RD ST	MICHIGAN AVE	434734.41	1586740.65
PC-30	SIGNAL	Panama City	11TH ST	HARRISON AVE	426576.19	1601862.38
PC-31	SIGNAL	Panama City	11TH ST	JENKS AVE	426591.28	1601135.75
PC-32	SIGNAL	Panama City	11TH ST	BALBOA AVE	426679.81	1597089.50
PC-33	SIGNAL	Panama City	11TH ST	LISENBY AVE	426728.66	1594419.25
PC-35	SIGNAL	Panama City	11TH ST	BECK AVE	426821.34	1588816.87
PC-37	SIGNAL	Panama City	15TH ST	FRANKFORD AVE	429421.41	1591809.62
PC-38	SIGNAL	Panama City	15TH ST	LISENBY AVE	429372.53	1594462.00
PC-39	SIGNAL	Panama City	15TH ST	BALBOA AVE	429321.84	1597099.88
PC-4	SIGNAL	Panama City	BECK AVE	HIGHWAY 98	430334.44	1588876.89
PC-40	SIGNAL	Panama City	15TH ST	FLORIDA AVE	429288.69	1599007.75
PC-41	SIGNAL	Panama City	15TH ST	JENKS AVE	429245.16	1601212.88
PC-42	SIGNAL	Panama City	AIRPORT RD	JENKS AVE	430452.06	1601245.88
PC-43	SIGNAL	Panama City	5TH ST	HARRISON AVE	422648.88	1601779.25
PC-44	SIGNAL	Panama City	15TH ST	HARRISON AVE	429230.34	1601915.50
PC-45	SIGNAL	Panama City	7TH ST	HAMILTON AVE	423905.50	1604307.88
PC-46	SIGNAL	Panama City	4TH ST	MAGNOLIA AVE	421987.50	1602209.88
PC-47	SIGNAL	Panama City	BEACH DR	HARRISON AVE	421439.38	1601191.75
PC-48	SIGNAL	Panama City	4TH ST	HARRISON AVE	421994.31	1601775.87
PC-49	SIGNAL	Panama City	5TH ST	JENKS AVE	422664.41	1601050.38
PC-5	SIGNAL	Panama City	23RD ST	FRANKFORD AVE	434694.28	1591949.25
PC-50	SIGNAL	Panama City	23RD ST	STANFORD RD	434610.03	1597055.87
PC-51	SIGNAL	Panama City	19TH ST	AIRPORT RD	431899.31	1599555.88
PC-52	SIGNAL	Panama City	19TH ST	JENKS AVE	431882.66	1601129.00
PC-53	SIGNAL	Panama City	AIRPORT RD	HARRISON AVE	430216.16	1601942.12
PC-54	SIGNAL	Panama City	11TH ST	FRANKFORD AVE	426793.87	1591785.67
PC-54	SIGNAL	Panama City	11TH ST	BAY AVE	426481.84	1607684.25
PC-55	SIGNAL	Panama City	23RD ST	STATE AVE	434544.62	1599899.38
PC-56	SIGNAL	Panama City	23RD ST	JENKS AVE	434512.03	1601212.88
PC-56	SIGNAL	Panama City	15TH ST	BECK AVE	429468.50	1588842.00
PC-57	SIGNAL	Panama City	23RD ST	HIGHWAY 77	434441.38	1605207.87
PC-58	SIGNAL	Panama City	23RD ST	HIGHWAY 98	432478.31	1580775.62
PC-59	SIGNAL	Panama City	22ND ST	23RD ST	434198.98	1583065.12
PC-6	SIGNAL	Panama City	23RD ST	LISENBY AVE	434643.56	1594593.50
PC-60	SIGNAL	Panama City	19TH ST	BECK AVE	432103.47	1588935.32
PC-61	SIGNAL	Panama City	23RD ST	HARRISON AVE	434484.37	1602545.00
PC-62	SIGNAL	Panama City	19TH ST	HARRISON AVE	431877.22	1601993.12
PC-63	SIGNAL	Panama City	23RD ST	BREEZY LN	434575.72	1598565.13
PC-64	SIGNAL	Panama City	AIRPORT RD	NORTHSIDE DR	434027.69	1597019.00
PC-65	SIGNAL	Panama City	HARRISON AVE	HIGHWAY 231	429438.19	1601920.25
PC-66	SIGNAL	Panama City	12TH ST	HARRISON AVE	427256.28	1601876.25
PC-68	SIGNAL	Panama City	BONITA AVE	BUSINESS HIGHWAY 98	422251.94	1605975.13
PC-7	SIGNAL	Panama City	23RD ST	AIRPORT RD	434628.16	1596041.25
PC-8	SIGNAL	Panama City	BEACH DR	GOVERNMENT ST	421842.00	1600853.25
PC-9	SIGNAL	Panama City	5TH ST	SHERMAN AVE	422481.78	1610278.37
PCB-1	SIGNAL	Bay County	ALF COLEMAN RD	HUTCHISON BLVD	436469.77	1549778.85
PCB-10	SIGNAL	Bay County	FRONT BEACH RD	PANAMA CITY BEACH PKWY	462995.97	1502854.74
PCB-11	SIGNAL	Bay County	FRONT BEACH RD	RICHARD JACKSON BLVD	433317.97	1551823.63
PCB-12	SIGNAL	Bay County	HUTCHISON BLVD	RICHARD JACKSON BLVD	434573.78	1552553.78
PCB-13	SIGNAL	Bay County	ARNOLD RD	PANAMA CITY BEACH PKWY	449995.76	1530229.58
PCB-3	SIGNAL	Bay County	CLARA AVE	FRONT BEACH RD	436802.47	1546063.63
PCB-4	SIGNAL	Bay County	FRONT BEACH RD	HUTCHISON BLVD	438612.87	1543538.07
PCB-5	SIGNAL	Bay County	ARGONAUT ST	FRONT BEACH RD	439512.03	1541893.25

Spreadsheet 3.3.1.1 – Existing and future ITS components in Bay County

Existing Signalized Intersections (Continued)

CONTROL_NO	CONTROL_TY	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
PCB-6	SIGNAL	Bay County	FRONT BEACH RD	HILL RD	442643.91	1537015.87
PCB-7	SIGNAL	Bay County	FRONT BEACH RD	PIER PARK DR	444813.82	1533553.63
PCB-8	SIGNAL	Bay County	ARNOLD RD	FRONT BEACH RD	447308.50	1529547.88
PCB-9	SIGNAL	Bay County	ALF COLEMAN RD	FRONT BEACH RD	434977.56	1548776.25
PCB-14	SIGNAL	Bay County	PANAMA CITY BEACH PKWY	RICHARD JACKSON BLVD	437367.70	1554029.72
PCB-15 PED	SIGNAL	Bay County	FRONT BEACH RD	GULF HIGHLANDS BLVD	432018.30	1553102.62
PCB-17	SIGNAL	Bay County	CLARA AVE	HUTCHISON BLVD	438378.00	1546389.75
PCB-2 PED	SIGNAL	Bay County	FRONT BEACH RD	COUNTY PIER	435439.27	1548101.84
	SIGNAL	Bay County	HIGHWAY 390	MAINE AVE	448045.56	1601696.25
	SIGNAL	Bay County	26TH ST	HIGHWAY 77	445008.74	1605463.61
	SIGNAL	Bay County	HIGHWAY 231	TRANSMITTER RD	442867.64	1618678.69
	SIGNAL	Bay County	HIGHWAY 77	MOSLEY DR	442361.13	1605394.61
	SIGNAL	Bay County	HIGHWAY 98	IVY RD	409685.33	1623164.50
	SIGNAL	Bay County	CHURCHWELL DR	GLADES TRL	432958.34	1555043.85
	SIGNAL	Bay County	7TH ST	TYNDALL PKWY	423530.81	1623684.93
	SIGNAL	Panama City	FRONT BEACH RD	SAND PIPER MOTEL	449164.77	1526359.72
	SIGNAL	Panama City	PANAMA CITY BEACH PKWY	PIER PARK DR	447754.38	1535426.02
	SIGNAL	Panama City	NAUTILUS ST	PANAMA CITY BEACH PKWY	442741.57	1542380.74
	SIGNAL	Panama City	ALF COLEMAN RD	PANAMA CITY BEACH PKWY	439125.05	1551549.45
	SIGNAL	Bay County	ALLISON AVE	FRONT BEACH RD	432193.79	1562021.52
	SIGNAL	Bay County	FRONT BEACH RD	LAURIE AVE	432585.60	1563333.94
	SIGNAL	Panama City	HUTCHISON BLVD	FIRE STATION	432132.45	1556437.57
	EMERGENCY	Bay County	THOMAS DRIVE	FIRE STATION	421166.19	1573733.76
	SIGNAL	Panama City	BALDWIN RD	HARRISON AVE	439768.94	1602648.75
	SIGNAL	Panama City	23RD ST	WILSON AVE	434459.41	1603862.38
	SIGNAL	Panama City	26TH ST	JENKS AVE	445082.22	1601453.12
	SIGNAL	Panama City	HIGHWAY 390	KENTUCKY AVE	448944.81	1603149.50
	SIGNAL	Panama City	14TH ST	TENNESSEE AVE	451964.63	1603579.75
	SIGNAL	Panama City	17TH ST	OHIO AVE	450224.47	1605684.75
	SIGNAL	Panama City	HIGHWAY 77	PEACHTREE DR	447713.52	1605546.41
	SIGNAL	Panama City	24TH ST	HIGHWAY 77	446327.62	1605506.98
	SIGNAL	Bay County	HIGHWAY 2302	HIGHWAY 77	470821.96	1608383.06
	SIGNAL	Bay County	EDWARDS RD	HIGHWAY 388	482689.87	1602596.91
	SIGNAL	Bay County	HIGHWAY 20	HIGHWAY 77	522499.72	1594129.45
	SIGNAL	Bay County	HIGHWAY 77	FIRE STATION	506108.66	1594912.29
	SIGNAL	Bay County	HIGHWAY 2321	FIRE STATION	469391.91	1609972.97
	SIGNAL	Panama City	HIGHWAY 390	TRANSMITTER RD	450202.56	1618876.12
	SIGNAL	Panama City	HAWKS LANDING BLVD	HIGHWAY 389	443291.94	1611908.47
	SIGNAL	Panama City	27TH ST	AVERY ST	437077.74	1605280.27
	SIGNAL	Panama City	BUSINESS HIGHWAY 98	CHERRY ST	418383.75	1615879.00
	SIGNAL	Panama City	3RD ST	TRANSMITTER RD	421040.00	1618371.50
	SIGNAL	Panama City	BERTHE AVE	HIGHWAY 22	420885.84	1628988.75
	SIGNAL	Panama City	HIGHWAY 231	HIGHWAY 390	450151.76	1627767.91
	SIGNAL	Panama City	CHEROKEE HEIGHTS RD	HIGHWAY 231	452975.59	1631303.22
	SIGNAL	Panama City	HIGHWAY 2301	HIGHWAY 231	460030.03	1640118.74
	SIGNAL	Bay County	HIGHWAY 2301	JAMMIE RD	479196.25	1637381.50
	SIGNAL	Bay County	HIGHWAY 231	FIRE STATION	495934.74	1672482.49
	SIGNAL	Bay County	HIGHWAY 20	HIGHWAY 231	523301.87	1676258.23
	SIGNAL	Bay County	HIGHWAY 98	CLARA AVE	440923.23	1546640.55
	SIGNAL	Bay County	HIGHWAY 98	ALLISON AVE	434875.93	1561972.11
	SIGNAL	Bay County	HIGHWAY 98	MOYLAN RD	435331.28	1560102.17

Total of 181 Signalized Intersections

Spreadsheet 3.3.1.1 – Existing and future ITS components in Bay County

Existing Cameras

CONTROL_NO	CONTROL_TY	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
	CAMERA 1	Bay County	HATHAWAY BRIDGE		434133.36	1577810.18
	CAMERA 2	Bay County	HATHAWAY BRIDGE		434290.01	1576445.15
	CAMERA 3	Bay County	HATHAWAY BRIDGE		434368.33	1575214.38
	CAMERA 4	Bay County	HATHAWAY BRIDGE		434469.03	1569396.21
	CAMERA 5	Bay County	HATHAWAY BRIDGE		434334.76	1570761.24
	CAMERA 6	Bay County	HATHAWAY BRIDGE		434133.36	1572652.15
	CAMERA 7	Bay County	HATHAWAY BRIDGE		434110.99	1574207.39
	CAMERA 8	Bay County	HATHAWAY BRIDGE		434043.85	1575807.39
PC-25	CAMERA 9	Bay County	6TH ST	HARRISON AVE	423296.19	1601793.25
PC-15	CAMERA 10	Bay County	BUSINESS HIGHWAY 98	COVE BLVD	422765.34	1604949.25
PC-32	CAMERA 11	Bay County	11TH ST	BALBOA AVE	426679.81	1597089.50
PC-30	CAMERA 12	Bay County	11TH ST	HARRISON AVE	426576.19	1601862.38
PC-19	CAMERA 13	Bay County	11TH ST	MARTIN LUTHER KING JR BLVD	426522.56	1605012.75
PC-10	CAMERA 14	Bay County	11TH ST	SHERMAN AVE	426429.91	1610342.25
CS-7	CAMERA 15	Bay County	11TH ST	SCHOOL AVE	426353.69	1615689.00
PC-4	CAMERA 16	Bay County	BECK AVE	HIGHWAY 98	430334.44	1588876.89
PC-37	CAMERA 17	Bay County	15TH ST	FRANKFORD AVE	429421.41	1591809.62
PC-39	CAMERA 18	Bay County	15TH ST	BALBOA AVE	429321.84	1597099.88
PC-44	CAMERA 19	Bay County	15TH ST	HARRISON AVE	429230.34	1601915.50
PC-18	CAMERA 20	Bay County	15TH ST	MARTIN LUTHER KING JR BLVD	429177.19	1605063.62
CCG-1	CAMERA 21	Bay County	15TH ST	EAST AVE	429021.27	1613019.58
PC-58	CAMERA 22	Bay County	23RD ST	HIGHWAY 98	432478.31	1580775.62
PC-17	CAMERA 23	Bay County	HIGHWAY 231	MARTIN LUTHER KING JR BLVD	432039.01	1605132.37
PC-2	CAMERA 24	Bay County	HIGHWAY 98	MICHIGAN AVE	431425.44	1586603.50
	CAMERA 25	Bay County	23RD	BRIDGE	434815.88	1583952.83
BC-2	CAMERA 26	Bay County	23RD ST	BECK AVE	434642.94	1589165.75
PC-5	CAMERA 27	Bay County	23RD ST	FRANKFORD AVE	434694.28	1591949.25
PC-7	CAMERA 28	Bay County	23RD ST	AIRPORT RD	434628.16	1596041.25
PC-55	CAMERA 29	Bay County	23RD ST	STATE AVE	434544.62	1599899.38
PC-56	CAMERA 30	Bay County	23RD ST	JENKS AVE	434512.03	1601212.88
PC-57	CAMERA 31	Bay County	23RD ST	HIGHWAY 77	434441.38	1605207.87
BC-18	CAMERA 32	Bay County	AIRPORT RD	SAINT ANDREWS BLVD	436982.94	1593330.25
BC-23	CAMERA 33	Bay County	BALDWIN RD	HIGHWAY 390	439847.09	1597752.38
BC-17	CAMERA 34	Bay County	BALDWIN RD	JENKS AVE	439811.44	1601321.37
BC-15	CAMERA 35	Bay County	BALDWIN RD	HIGHWAY 77	439072.81	1605323.64
BC-3	CAMERA 36	Bay County	EAST AVE	HIGHWAY 231	438434.18	1613146.85
	CAMERA 37	Bay County	24TH ST	HIGHWAY 77	446327.62	1605506.98
BC-21	CAMERA 38	Bay County	HIGHWAY 390	JENKS AVE	446671.50	1601262.13
CLH-1	CAMERA 39	Bay County	14TH ST	OHIO AVE	451908.72	1605751.87
CC-3	CAMERA 40	Bay County	HIGHWAY 22	TYNDALL PKWY	420968.45	1623646.69
CC-2	CAMERA 41	Bay County	CHERRY ST	TYNDALL PKWY	418282.68	1623616.15
BC-26	CAMERA 42	Bay County	BUSINESS HIGHWAY 98	HIGHWAY 98	411538.96	1623479.93
	CAMERA	Bay County	HIGHWAY 2302	HIGHWAY 77	470821.96	1608383.06

Total of 43 Existing Cameras

Existing DMS's

CONTROL_NO	CONTROL_TY	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
	DMS	Panama City	HIGHWAY 98	23RD ST	432346.93	1581842.86
	DMS	Bay County	PANAMA CITY BEACH	HERITAGE CIR	434263.20	1566252.12
	DMS	Bay County	FRONT BEACH RD	STERLING COVE BLVD	433017.76	1565609.65
	DMS	Bay County	PEACOCK DR	PIRATE PL	431846.93	1570459.61

Total of 4 Existing DMS's

Existing TMC

CONTROL_NO	CONTROL_TY	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
	DMS	Bay County	11TH ST	PARKER DR	427105.30	1598159.40

Total of 1 Existing TMC

Spreadsheet 3.3.1.1 – Existing and future ITS components in Bay County

Future Cameras

CONTROL_NO	CONTROL_TY	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
BC-10	CAMERA	COUNTY	LAIRD ST	THOMAS DR	430832.48	1570241.92
BC-12	CAMERA	COUNTY	BRISTOL ST	THOMAS DR	416538.63	1573227.12
BC-13	CAMERA	COUNTY	CAUSEWAY RD	MAGNOLIA BEACH RD	423620.85	1572455.81
BC-22	CAMERA	COUNTY	HIGHWAY 231	STAR AVE	455689.45	1634695.32
BC-25	CAMERA	COUNTY	LAGOON DR	THOMAS DR	420544.95	1574242.76
BC-27	CAMERA	COUNTY	FRONT BEACH RD	JOAN AVE	431889.91	1560984.40
BC-31	CAMERA	COUNTY	BAREFOOT PALMS LN	PATRONIS DR	427078.35	1571087.58
BC-8	CAMERA	COUNTY	FRONT BEACH RD	HUTCHISON BLVD	430867.98	1557524.72
PCB-1	CAMERA	COUNTY	ALF COLEMAN RD	HUTCHISON BLVD	436469.77	1549778.85
PCB-10	CAMERA	COUNTY	FRONT BEACH RD	PANAMA CITY BEACH PKWY	462995.97	1502854.74
PCB-11	CAMERA	COUNTY	FRONT BEACH RD	RICHARD JACKSON BLVD	433317.97	1551823.63
PCB-13	CAMERA	COUNTY	ARNOLD RD	PANAMA CITY BEACH PKWY	449995.76	1530229.58
PCB-14	CAMERA	COUNTY	PANAMA CITY BEACH PKWY	RICHARD JACKSON BLVD	437367.70	1554029.72
PCB-4	CAMERA	COUNTY	FRONT BEACH RD	HUTCHISON BLVD	438612.87	1543538.07
PCB-6	CAMERA	COUNTY	FRONT BEACH RD	HILL RD	442643.91	1537015.87
PCB-8	CAMERA	COUNTY	ARNOLD RD	FRONT BEACH RD	447308.50	1529547.88
	CAMERA	COUNTY	ALF COLEMAN RD	PANAMA CITY BEACH PKWY	439125.05	1551549.45
	CAMERA	COUNTY	HIGHWAY 2301	HIGHWAY 231	460030.03	1640118.74
	CAMERA	COUNTY	HIGHWAY 231	TRANSMITTER RD	442867.64	1618678.69
	CAMERA	COUNTY	HIGHWAY 231	HIGHWAY 390	450151.76	1627767.91
	CAMERA	COUNTY	HIGHWAY 231	PANAMA CITY LIMIT	468755.82	1650948.12
	CAMERA	COUNTY	HIGHWAY 388	UNPAVED	485262.08	1566577.68
	CAMERA	COUNTY	HIGHWAY 79	MEMORIAL DR	471468.55	1538576.81
	CAMERA	COUNTY	HIGHWAY 79	HIGHWAY 388	475008.89	1541473.45
	CAMERA	COUNTY	NAUTILUS ST	PANAMA CITY BEACH PKWY	442741.57	1542380.74

Total of 25 Future Cameras

Future DMS's

CONTROL_NO	CONTROL_TY	ADMIN	ST_MAJOR	ST_MINOR	NORTHING	EASTING
	DMS	Bay County	HIGHWAY 231	HIGHWAY 20	524112.03	1675379.58
	DMS	Bay County	HIGHWAY 231	HIGHWAY 20	522420.88	1677144.26
	DMS	Panama City	HIGHWAY 231	SHORES RD	453747.64	1630308.23
	DMS	Bay County	FRONT BEACH RD	HORIZON DR	451634.42	1526098.00
	DMS	Bay County	HIGHWAY 98		448656.25	1534343.00

Total of 5 Future DMS's

4. 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. A regional ITS network is necessary 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 proposed fiber running along US 98 to SR 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 4.1 maps the existing and future needed fiber optic cable. A preliminary cost for the additional fiber optic cable is calculated in Table 4.2. Cameras, DMS, MVDS, and a weather station exist along I-10 and I-110 to help with incident detection and motorist information. These cameras and DMS locations can be seen on Figure 4.1 and would be controlled by a FDOT Regional TMC (RTMC). The FDOT RTMC is already located in the City of Pensacola. The RTMC allows a centralized point of control over multiple areas for coordination between various agencies and also allow FDOT to monitor I-10 and I-110. This regional hub will allow for efficient exchange of information for incidents and hurricane evacuation to all agencies within the region.

The following tables identify the existing ITS inventory, future ITS needs, and preliminary costs for the entire region (FL-AL TPO, Okaloosa-Walton TPO and Bay County TPO).

Table 4.1 – Existing inventory and future needs of ITS components for Regional Network

Item	Unit	Existing	Future
Fiber Optic Cable	Linear Feet	126,971	822,935
Cameras	Each	38	0
DMS	Each	12	0
RTMC*	Each	1	0
MVDS	Each	81	0
Weather Station	Each	1	0

*RTMC also included as Escambia County RTMC

Table 4.2 – Preliminary costs for ITS components in Regional Network

Item	Unit	No. Units	Unit Cost	Total Cost
Fiber Optic Cable	Linear Feet	822,935	\$4	\$3,291,740
Total				\$3,291,740



Figure 4.1 – Regional Intelligent Transportation System Master Plan Map

5. Priorities

Every county throughout the region could benefit from ITS installation or expansion. However, some counties are not as developed and require less intensive ITS. Major corridors throughout the region should be considered first for ITS improvements to relieve traffic congestion. Installing ITS on I-10 and other major highways would allow for improved efficiency for movement of motorists as well as goods and services. Connecting fiber optic cable to create a ring would be second priority to allow connections between all TMC’s in the region. Table 5.1 lists the order of priorities throughout the region.



Table 5.1: ITS Priorities

1	Expansion or additions on major corridors
2	Connecting fiber optic cable to create ring throughout region
3	Expansion or additions in Bay County
4	Expansion or additions in Escambia County
5	Expansion or additions in City of Pensacola
6	Expansion or additions in Okaloosa County
7	Installation in City of Milton
8	Installation in City of Defuniak Springs
9	Installation in City of Gulf Breeze
10	Installation in Santa Rosa County
11	Installation in Walton County



6. Funding

The lessons learned on funding discuss approaches to sourcing of funds, including Federal, State, regional and local, private, funding source combinations, and innovative financing. Federal funding for highways and transit is established by the Safe, Accountable, Flexible, and Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). State and local agencies play a large role in financing, owning, and operating highway, and ITS systems and networks. Private financing refers to ways that State and local agencies can collaborate with the private sector to develop unique opportunities for funding ITS projects. Innovative financing for transportation is a broadly-defined term that encompasses a combination of specially designed techniques that supplement traditional highway financing methods. Key lessons learned are summarized below:

- Clarify Federal funding regulations for projects that are service-oriented and do not deliver tangible products.
- Distribute financial resources equitably according to agency capital cost shares. Leverage State assistance in the procurement and funding of ITS technologies for rural communities.
- Consider partnering with neighboring agencies, schools and non-traditional stakeholders.
- Consider public-private partnerships and unique financing methods as ways to cover costs for ITS projects.
- Examine multiple funding sources and anticipate unforeseen costs associated with deploying ITS.
- Consider development impact fees, special assessments, and other innovative mechanisms to help finance ITS projects, and management and operations strategies

Another innovative funding strategy is to use "impact fees" levied on land developers to fund operations equipment, such as monitoring cameras and signal timing improvements. The practice of requiring developers to fund transportation improvements as a way to mitigate the transportation impacts of their projects is well established, but relying on this as a source of O&M improvements is only a piece of the price. This funding opportunity may also prompt local governments to more thoroughly identify O&M needs so that individual funding sources can be used together to support an integrated operations approach. This is critical, since operations must typically be applied on a system-wide rather than localized basis.

Developer concessions can provide an important source of revenue and encourage more detailed planning for ITS programs. In order to require developer-funded improvements, local governments typically must demonstrate how the management strategies can mitigate transportation impacts, such as improvements in traffic flow on a particular corridor.

Effective design and implementation of ITS can lead to substantial benefits for local agencies. Even with limited resources, small to medium size agencies can successfully implement ITS systems by starting with a small pilot project to engage political and public support. A strategic ITS plan will allow for ease of expansion both technologically and geographically. If an agency does not have staff or the expertise with ITS, then they will need to build a team, providing training or supplement staff with outside expertise. With a clear vision, direction, and support any agency can implement the latest technology in an ITS system.



7. TPOs’ Adopted Resolutions

The Regional Intelligent Transportation Systems (ITS) Plan was adopted by resolution by the Florida-Alabama TPO, the Okaloosa-Walton TPO and the Bay County TPO.

RESOLUTION FL-AL 10-37

A RESOLUTION OF THE FLORIDA-ALABAMA TRANSPORTATION PLANNING ORGANIZATION ADOPTING THE REGIONAL INTELLIGENT TRANSPORTATION SYSTEMS PLAN

WHEREAS, the Florida-Alabama Transportation Planning Organization (TPO) is the organization designated by the Governors of Florida and Alabama as being responsible, together with the States of Florida and Alabama, for carrying out the continuing, cooperative and comprehensive transportation planning process for the Florida-Alabama TPO Planning Area; and

WHEREAS, the Florida-Alabama, Okaloosa-Walton and Bay County TPOs Unified Planning Work Programs include a task for development of a Regional Intelligent Transportation Systems Plan for the combined TPO Planning Areas with areas of emphasis for each TPO; and

WHEREAS, the Regional Intelligent Transportation Systems Plan will be incorporated into the Long Range Transportation Plan; and


WHEREAS, the Regional Intelligent Transportation Systems Plan has been developed in a planning partnership between the Florida-Alabama, Okaloosa-Walton and Bay County TPOs, and Stakeholders in each TPO Planning Area;


NOW, THEREFORE, BE IT RESOLVED BY THE FLORIDA-ALABAMA TRANSPORTATION PLANNING ORGANIZATION THAT:

The TPO adopts the Regional Intelligent Transportation Systems Plan and directs that it be incorporated into the Long Range Transportation Plan.

Passed and duly adopted by the Florida-Alabama Transportation Planning Organization on this 8th day of September 2010.

FLORIDA-ALABAMA TRANSPORTATION PLANNING ORGANIZATION

BY: 
Don Salter, Chairman

ATTEST: 

RESOLUTION O-W 10-27

A RESOLUTION OF THE OKALOOSA-WALTON TRANSPORTATION PLANNING ORGANIZATION ADOPTING THE REGIONAL INTELLIGENT TRANSPORTATION SYSTEMS PLAN

WHEREAS, the Okaloosa-Walton Transportation Planning Organization (TPO) is the organization designated by the Governor of Florida as being responsible, together with the State of Florida, for carrying out the continuing, cooperative and comprehensive transportation planning process for the Okaloosa-Walton TPO Planning Area; and

WHEREAS, the Florida-Alabama, Okaloosa-Walton and Bay County TPOs Unified Planning Work Programs include a task for development of a Regional Intelligent Transportation Systems Plan for the combined TPO Planning Areas with areas of emphasis for each TPO; and

WHEREAS, the Regional Intelligent Transportation Systems Plan will be incorporated into the Long Range Transportation Plan; and


WHEREAS, the Regional Intelligent Transportation Systems Plan has been developed in a planning partnership between the Florida-Alabama, Okaloosa-Walton and Bay County TPOs, and Stakeholders in each TPO Planning Area;


NOW, THEREFORE, BE IT RESOLVED BY THE OKALOOSA-WALTON TRANSPORTATION PLANNING ORGANIZATION THAT:

The TPO adopts the Regional Intelligent Transportation Systems Plan and directs that it be incorporated into the Long Range Transportation Plan.

Passed and duly adopted by the Okaloosa-Walton Transportation Planning Organization on this 16th day of September 2010.

OKALOOSA-WALTON TRANSPORTATION PLANNING ORGANIZATION

BY: 
Sara Comander, Chairman

ATTEST: 

RESOLUTION BAY 10-32

A RESOLUTION OF THE BAY COUNTY TRANSPORTATION PLANNING ORGANIZATION ADOPTING THE REGIONAL INTELLIGENT TRANSPORTATION SYSTEMS PLAN

WHEREAS, the Bay County Transportation Planning Organization (TPO) is the organization designated by the Governor of Florida as being responsible, together with the State of Florida, for carrying out the continuing, cooperative and comprehensive transportation planning process for the Bay County TPO Planning Area; and

WHEREAS, the Florida-Alabama, Okaloosa-Walton and Bay County TPOs Unified Planning Work Programs include a task for development of a Regional Intelligent Transportation Systems Plan for the combined TPO Planning Areas with areas of emphasis for each TPO; and

WHEREAS, the Regional Intelligent Transportation Systems Plan will be incorporated into the Long Range Transportation Plan; and

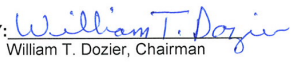
WHEREAS, the Regional Intelligent Transportation Systems Plan has been developed in a planning partnership between the Florida-Alabama, Okaloosa-Walton and Bay County TPOs, and Stakeholders in each TPO Planning Area;


NOW, THEREFORE, BE IT RESOLVED BY THE BAY COUNTY TRANSPORTATION PLANNING ORGANIZATION THAT:

The TPO adopts the Regional Intelligent Transportation Systems Plan and directs that it be incorporated into the Long Range Transportation Plan.

Passed and duly adopted by the Bay County Transportation Planning Organization on this 22nd day of September 2010.

BAY COUNTY TRANSPORTATION PLANNING ORGANIZATION

BY: 
William T. Dozier, Chairman

ATTEST: 

GLOSSARY

ATMS

Advanced Transportation Management System

CCTV

Closed-Circuit Television

Contractor

An individual, partnership, company, corporation, association or other service, having a contract with a buyer for the design, development, manufacture, maintenance, modification, or supply of items under the terms of a contract.

Design

Those characteristics of a system or components that are selected by the developer in response to the requirements.

Developer

An organization that develops products or housing. This may include new housing development, modification or reuse. Also commercial buildings for stores for itself or another organization.

DMS

Dynamic Message Sign. A large electric sign used for traveler information.

FHWA

Federal Highway Administration

ITS - Intelligent Transportation Systems

A broad range of diverse technologies which, when applied to our current transportation system, can help improve safety, reduce congestion, enhance mobility, minimize environmental impacts, save energy, and promote economic productivity. ITS technologies are varied and include information processing, communications, control, and electronics.

O&M

Operations & Maintenance

Project

An undertaking requiring concerted effort, which is focused on developing and/or maintaining a specific product. The product may include hardware, software, and other components. Typically, a project has its own funding, cost accounting, and delivery schedule with the acquirer [customer].

Regional ITS Architecture

A specific regional framework for ensuring institutional agreement and technical integration for the implementation of ITS projects in a particular region.

Stakeholders

The people for whom the system is being built, as well as anyone who will manage, develop, operate, maintain, use, benefit from, or otherwise be affected by the system.

TMC

Traffic Management Center



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