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Chapter 1 | Introduction

Background

The Marion/Ocala Transportation Planning Organization (TPO), with regional stakeholders including the Cities of Ocala, Belleview, Dunnellon, and Marion County, are seeking to continue to improve traffic flow and the reliability of their transportation systems through the application of Intelligent Transportation Systems (ITS). ITS technologies advance transportation safety and mobility and enhance productivity by integrating advanced communication technologies into transportation infrastructure and into vehicles. ITS technologies allow communities to use their roadway capacity to its fullest potential by actively monitoring and managing traffic signals on the regions roadways and responding to crashes and incidents more effectively. Additionally, ITS has the potential of extending the life of a roadway by delaying the need to widen roads and add lanes at intersections a few years more.

The purpose of this report is to document the development of a strategic plan to guide continuing updates of ITS in the study area, which encompasses the City of Ocala, City of Belleview, and Marion County region. This plan ultimately identifies specific projects to deploy ITS consistent with local, state and federal policies, regulations, standards, and guidelines.

This plan was preceded by the region's first ITS plan in 2008. That document laid the foundation for the region's ITS strategy. It inventoried the existing conditions of the region's traffic management equipment and made extensive recommendations about the ITS equipment necessary to improve the operations of the region's transportation network. Ten years later, many of these recommendations have been followed and there is far more ITS equipment in the field.

However, there is still needs to expand and enhance the ITS system in Marion County. Demands on the roadway system continues to increase with increasing freight and commuter traffic. In the next 10 years, disruptive technology such as rideshare, connected vehicles and autonomous vehicles have the potential to be more mainstream and will require a more robust sources of data and infrastructure, which will come from the ITS network.

There are as expected, there are costs associated with the ITS network expansion. Capital costs for new ITS technology, communication technology, and traffic signal equipment are expected. There will also be a need for additional staff to manage expanding network of ITS systems and devices. However, the cost of doing nothing will be greater in the long run. As congestion increases, loss of productivity due to delays moving good, services, and workers in the region are expected. Increases in crash rates and severity may results in a direct increase in insurance costs to vehicle owners.

This plan will document those new additions, identify new needs and improvements that can be made, and will identify additional strategies to improve the function of the existing ITS network.

Study Area

The study area, commonly referred to as north-central Florida, includes Marion County and the Cities of Ocala, Belleview, and Dunnellon. Major roadways through the area include I-75, US- 441, US-41, US-301 and US-27 in the north-south direction and SR-40, SR-464, and SR-200 in the east-west direction. These roadways form the major transportation network within the study area. The study area is shown in **Figure 1**.

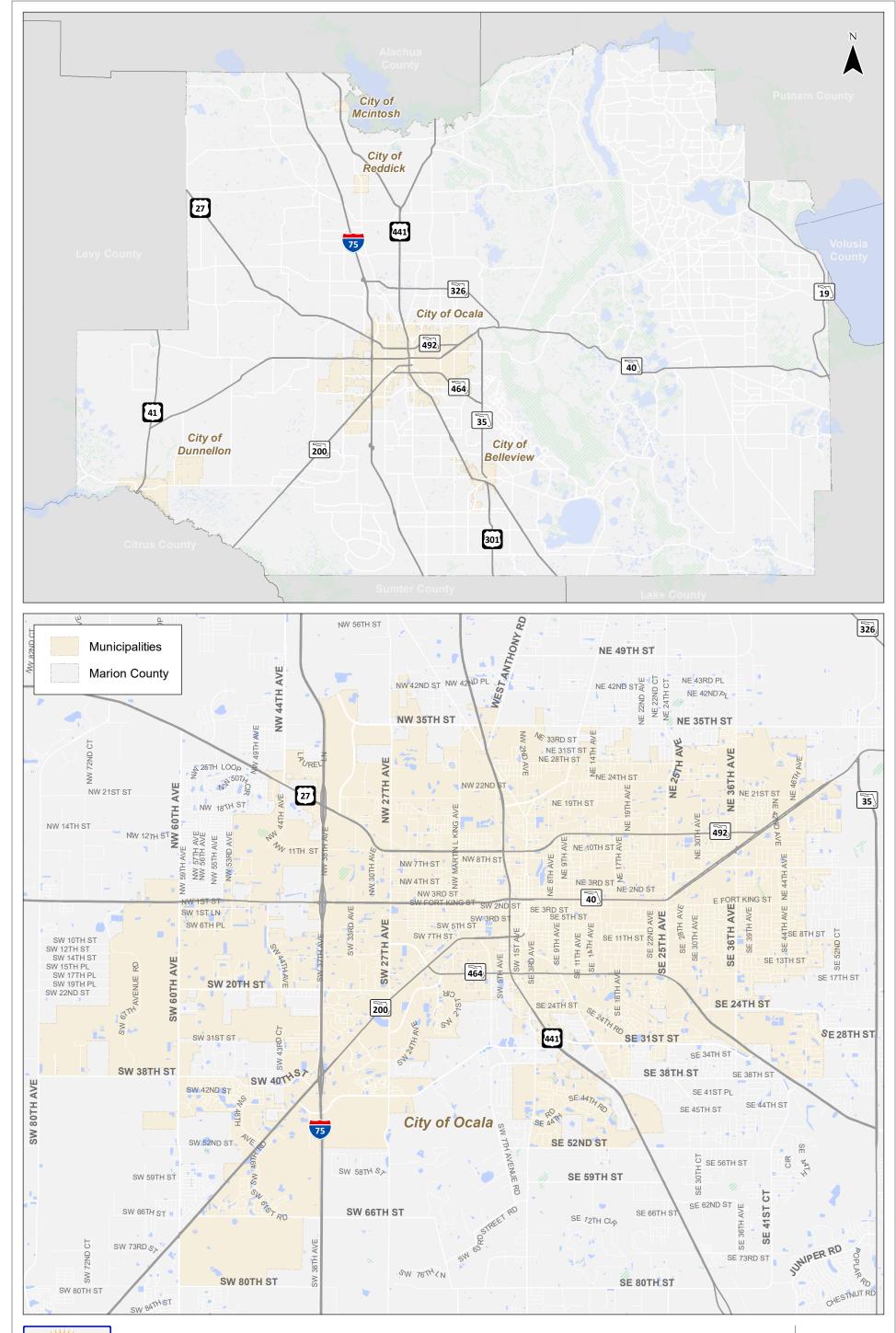
The Ocala-Marion County major road network includes 38 miles of freeway (I-75) with 228 lane-miles. The freeway system carries 2.54 million daily vehicle-miles of travel (VMT), with an average daily volume per lane of 11,384 vehicles. There are 210 additional miles of State roadways, with 880 lane-miles. The other State roadways carry 3.06 million daily VMT, with an average annual daily volume per lane of 5,337 vehicles. The non-State system of major County and City roadways include 742 miles with 1,784 lane-miles. The non-State system carries 3.18 million daily VMT, with an average annual daily volume per lane of 2,509 vehicles. The State system is more heavily traveled than the county and local network, accounting for 64 percent of the travel demand while representing only 38 percent of the available lane miles.

Stakeholders

A coalition of stakeholders and system users was created to ensure the successful development of the ITS Strategic Plan for Marion County. This coalition was used to gather input and build consensus in the development of the ITS Strategic Plan. The key stakeholders include the transportation and public safety agencies that own and operate transportation systems throughout Marion County. The following is a list of the key stakeholders involved with the development of the ITS Strategic Plan:

- Ocala/Marion County TPO
- City of Ocala
- · City of Belleview
- City of Dunnellon
- Florida Department of Transportation District V
- Marion County
- Ocala Fire Department
- Ocala Police Department
- Marion County Sheriff's Office
- Florida Highway Patrol

Personal interviews and workshops were held with key stakeholder representatives, focusing on understanding the existing system and identifying individual agency needs as they relate to overall regional ITS needs. The primary outcome of these discussions was the set of regional transportation needs and goals presented in Chapter 2.





Study Area Ocala / Marion County

Figure **1**

Chapter 2 | ITS Vision, Objectives, and Goals

ITS Vision

This ITS strategic plan is a successor and update to the original ITS plan Ocala/Marion TPO prepared in 2008. At that time, ITS was in its initial stages and local agencies were preparing for the installation of new ITS technology to improve the operation of the region's transportation network. Therefore, the 2008 plan focused on a comprehensive assessment of the existing transportation network and its shortcomings, then provided a variety of recommendations for improving the performance of the transportation network using ITS technology. The 2008 plan concentrated heavily on new ITS equipment that could be installed to improve the performance of the transportation network. Recommendations included establishing both the City of Ocala and Marion County Traffic Management Centers (TMC), upgrading traffic signal technology, adding ITS devices, expanding the fiber optic interconnect cable network, improving the communication hubs, and many other forms of equipment. **Table 1** summarizes the status of the short-term (0-5 year) and mid-term (6-10 years) ITS projects recommended in the 2008 ITS Strategic Plan.

Ten years later, many of those earlier recommendations were implemented. ITS technologies have advanced significantly over the past decade and the local agencies also operate at a much higher technical level. During stakeholder meetings over the past year, the needs identified included continuing to expand and enhance the current system, as well as needs that were more strategic in nature, such as improving upon the existing processes and improving interagency coordination. Those needs include:

- Improve interagency coordination, detour and traffic incident management
- Center-to-Center integration between City of Ocala, Marion County, and Florida Department of Transportation District 5 Traffic Management Centers
- Increase staff levels to appropriately operate and maintain the ITS system
- Education and training for staff
- Better information and data to identify when to updated signal timing plans
- Improve fire department response times
- System expansion
 - Communication
 - Advanced traffic signal controllers
 - o Cameras and data collection

Table 1 Status of Recommended Short-term 2008 ITS Projects

Project Title	Description	Status	
Short-term (0-5 years)			
Upgrade Ocala TMC	Remodel TMC to provide more space and capabilities to monitor and manage City Traffic Signal System	Complete	
Marion County TMC	Construct new TMC to monitor and manage County Traffic Signal System	Complete	
Incident Management and Operations	Improve multi-agency traffic- responsive corridor management.	Emergency Operations Center implemented. Daily coordination not formalized.	
Traffic Signal System Improvements	Improve traffic signals on key corridors	Complete	
Data Collection System	Streamline the process of managing traffic data and implement automation for collecting data	On-going	
Railroad Crossing Information System	Improve traffic management and reduce delays associated with atgrade railroad crossings.	No Progress Achieved	
	Mid-term (6-10 years)		
City of Ocala: Expand Traffic Signal System	Expand the implementation of new signal and detection technology to better respond to congestion and incidents	On-going	
Marion County: Expand Traffic Signal System	Expand the implementation of new signal and detection technology to better respond to congestion and incidents	On-going	
City of Ocala and Marion County TMC Center-to-Center Integration	Prepare software and hardware interface needed to share traffic data and video and provide redundant back-up operational capabilities	Not Complete	
TMC Center-to-Center Integration with FDOT	Interconnection between TMCs to share information locally and with FDOT Regional TMC in Orlando.	Not Complete	

Therefore, while this ITS plan will still recommend expansion of the ITS system with new technologies, the focus will be include addressing the strategic shortcomings of the region's ITS system highlighted during the stakeholder meetings.

It is crucial to the efficient function of a modern transportation network that ITS technologies be integrated into an overall transportation system and operations management (TSMO) strategic plan. While this plan will document the current state of the ITS network in the region and make recommendations for its continual improvement, it will also serve as a framework for how ITS decisions should be made in the region and what local jurisdictions value when it comes to the benefits that ITS technologies offer. There will be many new ITS technologies in the coming years. This document describes the range of available technologies as well as a methodology for determining what technologies are appropriate for deployment in the region.

Goals

The Ocala-Marion County ITS stakeholder group established the following set of goals to guide the ITS Strategic Plan:

- 1. Facilitate the efficient multimodal movement of goods and people. The transportation system represents a significant ITS investment. To realize the best return on this investment, it is necessary to have the right technology and actively manage the system to improve quantifiable and pre-established performance metrics such as travel time and travel time reliability. This is not just for vehicular transportation, but also other modes of transportation, such as transit, biking or walking. The transportation system will use ITS technology to improve the traveling experience for all modes of transportation.
- 2. Improve the safety and security of all network users. The safe movement of people and goods is of primary importance across all travel modes. The central goal of this ITS strategic plan is to improve safety. Among other things, appropriately deployed ITS technologies can help reduce the number and impact of nonrecurring incidents and enhance the real-time user awareness of the current state of the system, which in turn allows the public to make more informed decisions regarding both their time and path of travel.
- 3. Provide predictable transportation experience. Travel time unreliability results in a significant cost to all system users and particularly so for those involved in freight movement. Appropriately-deployed ITS technologies can help improve system reliability and thus the efficient and effective use of the available transportation network.

The overarching thread that ties all the goals together is to deploy and maintain an ITS system that enables a safer and more effective use of the multimodal transportation network for all users. The existing ITS system has changed significantly in the past 10 years, with a variety of new equipment having been installed in that period. New detection and roadway cameras, adaptive signal technology, fiber optic cable, dynamic messaging signs, and signal performance technology have all been installed in the past 10 years, greatly increasing the resources available to local authorities. The existing equipment in the field has improved as well, as new generations of technology have been installed, increasing the capabilities

and flexibility of the ITS system. Significant performance benefits will continue over the next decade as well. Therefore, the primary focus of this ITS plan is (1) expand the appropriate deployment of currently-available technologies; (2) introduce the appropriate deployment of newly-available and emerging technologies; and (3) recommend operational strategies to encourage a more efficient and effective use of the entire multimodal transportation system. To that end, four objectives emerged during stakeholder meetings held this year that are meant to achieve these outcomes. These objectives are discussed below.

Objectives

Multiple meetings and discussions were held over the course of this project with all known stakeholders to assess the region's current ITS network and to identify desired improvements to the network. These conversations ranged from an assessment of the successes and shortcomings of the current network to future capabilities that are desired for the ITS network to make the region's transportation network more safe, efficient, and effective. As these diverse thoughts coalesced, several objectives for this new ITS plan emerged. These objectives will be the foundation of this ITS plan and are discussed below.

- Reduce system-wide delay for cars, trucks, and transit
- Reduce corridor delay for cars, trucks, and transit
- Improve reliability and predictability of travel

Reduce system-wide delay for cars, trucks and transit

The performance measure for this objective is Vehicle Hours of Delay (VHD). VHD per person per day is used by the Florida Department of Transportation to report on statewide facility performance and is collected yearly and produced in the FDOT Source Book. This statistic should be used in Marion County because it can be used to measure the impact of current and future ITS deployments within the County. Also, looking at trends over multiple years can help identify with VHD increases, which can be used as an indicator that corridors may need future capacity or ITS improvements.

Reduce corridor delay for cars, trucks and transit

There are several performance measures that can be used to measure this objective. At an intersection level these could include, volume, approach delay, movement delay, and phase or cycle failures. At the corridor level, it could include volumes, flow, travel time and delay. Establishing production of regular reports summarizing intersection and corridor performance will allow for identification of changes in trends and the need to revisit the operations.

Improve reliability and predictability of travel

The reliability of a roadway is just as important as the amount of congestion or delay, as the public tend to be less tolerant of unexpected delays that have a more disruptive effect on timely destination arrivals than everyday congestion. Specific measures have been developed by FHWA and adopted by many traffic management agencies to measure travel time reliability. They include the following:

• 90th or 95th percentile travel time - indicates how much delay can be expected on the heaviest

- travel days. The 90th or 95th percentile travel times are reported in minutes and seconds and should be easily understood by commuters familiar with their trips.
- Buffer index represents the extra time (or time cushion) that travelers should consider adding to their average travel time when planning trips to ensure on-time arrival. This extra time is added to account for any unexpected delay.
- Planning time index represents the total travel time that should be planned when an adequate buffer time is included. The planning time index differs from the buffer index in that it includes typical delay as well as unexpected delay.
- Frequency that congestion exceeds some expected threshold typically expressed as the percent of days or time that travel times exceed, or travel speeds fall below established thresholds.

Stakeholders also identified additional outcomes that support the objectives. These include consistent coordination and communication between local authorities managing the transportation network. In the past, these were often inadequate.

- 1. Apply Quantifiable and Relevant Performance Measures. The County and City traffic departments and TPO all expressed a desire for better performance measures of the transportation network.
- 2. **Improve TMC Resource Sharing**. Multiple stakeholders communicated a desire to establish a physical connection and provide interoperability between the County and City Traffic Management Center (TMC).
- 3. **Improve First Responder Response Times**. City of Ocala Fire Department discussed their desire to reduce their current response times for traffic incidents and other emergencies.

The four themes support the primary objectives, which are described in detail below.

Improve Coordination

The first objective of this ITS plan emerged from conversations during the stakeholder meetings about an inconsistent level of coordination that exists between the different agencies and authorities in the region. Currently, portions of the regional ITS network are separately managed by (a) different law enforcement agencies; (b) Marion County's Traffic Operations Department; and (c) Ocala's Traffic Operations Department. No single agency has access to the entire ITS network and associated data stores. Additionally, the various jurisdictions have not developed a pre-established set of communication protocols for use in the event of minor or major roadway incidents. Such communication protocols have been established for use during major events when the Emergency Operations Center is activated, but not during normal operations. This has led to numerous situations where responsible traffic agencies have not been made aware of traffic incidents, road closures, and detours implemented by law enforcement in a timely manner. This, in turn, has led to delays in implementing traffic control plans, signed detours and active management of the various incidents, leaving the public agencies and roadway users feeling frustrated.

Therefore, the first objective of this ITS plan is to improve coordination between these agencies. This can be partially accomplished through the installation of better equipment, but the emphasis of this change

must be in creating better data sharing agreements and procedures between the different agencies with a stake in these ITS technologies.

The performance measures necessary to confirm whether this objective has been achieved are two-fold. First, an agreement will be developed and approved by all affected agencies defining the specific protocols and procedures necessary to produce better ITS coordination. Once this is achieved, the measure will be completed. Second, quarterly evaluation of the implementation and effectiveness of the coordination agreement will be needed to identify improvements to the procedures and to determine whether the objective is being met to expectations of all parties. Scheduled implementation goals can be created as part of this plan and these quarterly evaluations will measure whether these implementation goals have been achieved.

Apply Quantifiable and Relevant Performance Measures

The second objective of this ITS plan focuses on the need expressed by stakeholders to better understand how their transportation network functions. Throughout much of the region, there is little data describing the everyday adequacy of roadways, signals, and other transportation infrastructure. This makes it challenging to understand the health of the overall transportation network, as well as what locations are most in need of improvement. Also, federal requirements from MAP-21 and FAST Act mandate establishment of performance measures which include infrastructure condition, congestion reduction and system reliability.

The solution to this is performance measures that can be used to quickly evaluate how the transportation network is functioning and identify locations where resources should be focused. Therefore, the objective is to modify or add equipment to the region that can create performance measures that will provide quantifiable benchmarks for the function of the region's different infrastructure. The City of Ocala is already pursuing this objective, having installed many signals with new technology that can provide real time data on the multiple functions of an individual intersection. With this new technology, the City can accurately monitor its signals and determine which signals are not performing well. However, the City does not yet have the staff necessary to fully realize the benefits of this technology. Part of this goal will include providing the staff required to properly utilize this technology.

Improve TMC Resource Sharing

The third objective is centered on the function of the City and County TMCs. These TMCs operate as the nerve center of their respective traffic management systems, monitoring the function of the overall transportation network maintained by the County and the City. These facilities monitor system performance and collect data such as volumes, speeds, signal function and status, location/duration/severity/time of traffic incidents, and other important features of the transportation network to manage the transportation network from one central location. Both the County and the City have enjoyed the powerful management capabilities these facilities provide but have been frustrated by the limited access they have to one another's resources.

The original ITS plan recommended that a sharing interface be developed and maintained between the two TMC's; among other things, this would also provide redundant back-up operational capabilities for each TMC, especially in the event that one of the TMCs was rendered inoperable, like during a major storm. Since each TMC currently only has access to its own traffic data, each TMC is operating less effectively than originally planned. Determining how to best create this resource sharing agreement will be difficult, as the TMCs use different and highly complex traffic signal software platforms, which will not allow simple integration. This will be discussed further in this plan.

The measure of this objective is the successful coordination of the City of Ocala and Marion County TMCs. While these two TMCs would still function separately, the goal is that both TMCs receive information about relevant traffic conditions occurring in the other TMC's jurisdiction. Another measure of success can be seen in the time that City and County staff are overseeing each TMC for monitoring and roadway system management purposes.

Improve First Responder Response Times

The final objective is an important need highlighted by the City of Ocala Fire Department personnel in the stakeholder meetings. More specifically, Fire Department officials would like to evaluate the ITS system in accordance with its ability to reduce first responder response time to accidents and emergencies around the region. Achieving this objective will have real and consequential safety effects for all system users. This also has an economic impact, as reducing response time will allow fire and rescue personnel in each fire station to cover more distance, reducing the number of fire stations needed to serve the region.; quicker response times will also reduce the duration of any congestion that results from the incident, resulting in time savings for all system users. However, this will be a challenging goal to pursue as City and County traffic departments currently do not have enough funding or staff to support the installation of large numbers of emergency related equipment. This equipment, such as signal preemption technology, may also negatively affect traffic flow in the area.

This objective can be achieved using a variety of ITS technology, such as signal preemption technology, which will be discussed in Chapter 5. The measure for this objective is a reduction of emergency response time by at least 5% within the City of Ocala.

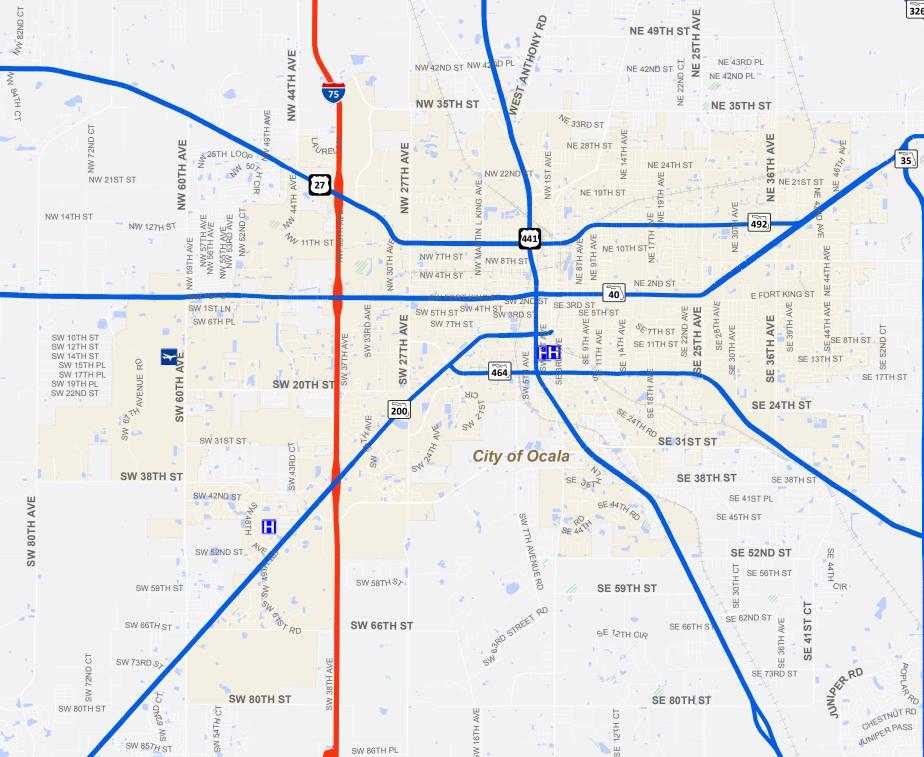
Chapter 3 | Existing Intelligent Transportation Systems and Operations

Transportation Network

The transportation network incorporates every form of transportation that residents and visitors use to travel throughout Marion County and the support structures used to ensure the safety, effectiveness, and efficiency of these modes of transportation. Therefore, the transportation network is a prerequisite of all ITS components and implementation strategies. This section summarizes the existing condition of the transportation network infrastructure supporting all travel modes.

Roads

The road network within Marion County centers around Interstate 75 (I-75), which is a north-south facility traversing through the center of the County. I-75 travels through the western part of the City of Ocala and is the major route for commercial, local and tourist traffic through both the County and the City. Additionally, State roads provide significant connections across the County. SR 40 is an east-west facility that traverses directly through the City of Ocala. US 301 is a north-south facility situated between the City of Ocala and the City of Belleview. US 441 provides an additional north-south facility connecting Ocala with Belleview. US 41 is a north-south facility located on the far western side of Marion County and passing through the City of Dunnellon. SR 200 provides a northeast-southwest facility, which mainly serves as a route into Ocala from outlying areas. SR 464 provides a similar northwest-southeast route into Ocala and also provides access to the Silver Springs Shores community. Finally, US 27 provides another northwest-southeast route, this time to the northwest of Ocala. Other state roads provide similarly important connections. The non-State system of major County and City roads connect the downtown areas of the three main cities of Marion County, Ocala, Belleview, and Dunnellon. Examples of these major City roads in Ocala include 60th Avenue, Fort King Street, 10th Street (US 27), 14th Street (SR 492), 25th Avenue, 36th Avenue, Martin Luther King Jr. Avenue, 27th Avenue, and 31st Street/42nd Street/43rd Street/43rd Street. The region's major roadways are illustrated in Figure 2 below.



Ocala-Marion County Hotels

Major Corridors and Key Facilities Ocala / Marion County Figure **2**

Bicycle Facilities

Throughout the country, the bicycle is more and more common as a form of transportation, both for pleasure and commute. There has been an increase in bicycle facilities within the region during the past decade, including bike paths, cycle tracks, dedicated bike lanes, and bike racks. Both Marion County and the City of Ocala have installed and maintain these bicycle facilities, with the most common type being traditional bike lanes on public roadways. Throughout Marion County, there are approximately 85 bicycle lane-miles. Most of these bike lanes are within the City of Ocala or the suburbs surrounding it, meaning that bicycle facilities are far less common in rural Marion County.

However, there are two major exceptions to this this rule. The Cross Florida Greenway is a current multiuse trail that runs throughout rural Marion County and the Silver Springs Bikeway is a planned multiuse trail that will do the same. While they are not intended as viable forms of commuter transportation, they provide excellent recreational bicycling activity and may help Marion County enhance tourism. The Cross Florida Greenway connects the City of Dunnellon the City of Ocala and ends near Silver Springs Park. The Silver Springs Bikeway will connect eastern Ocala with the Silver Springs Park, the Ocklawaha Prairie Restoration Area, and the Sunnyhills Restoration Area. Since Silver Springs is a large tourism attraction in Marion County, the access these trails provide to the springs means that they represent an important component of outdoor recreation and tourism opportunities within the area.

One final factor that should be considered when considering current bicycle facilities and future growth is the rise of electric assist bicycles and electric scooters, which have become increasingly common in downtown areas. These vehicles allow for both regular human propelled use and electric propelled use. They are increasingly becoming an attractive and flexible option for cities interested in providing a low cost and effective transit option, such as a bike share program. While research would be required to determine how they could be applied in Ocala, they are worth consideration moving forward.

Pedestrian Facilities

For many, walking may be the more convenient, healthier, and/or more affordable form of transportation. Therefore, pedestrian facilities are a critical part of the transportation system and especially so in urban areas. There are approximately 132 miles of sidewalks in Marion County, with most of these facilities being in the City of Ocala, although some are also located in the City of Dunnellon and the City of Belleview. In downtown Ocala, most of the road network is supported by sidewalks, providing continuous walkways to attractions and employment areas around the City. These sidewalks are often aid bicyclists as well and are used by those relying on transit services for transportation. Outside of the downtown Ocala, most of the remaining sidewalks are in suburban neighborhoods. Unlike downtown Ocala, these sidewalks often do not connect to a larger network of sidewalks, which makes walking as transportation less likely and the use of a vehicle more common.

There are also a variety of walking trails throughout Marion County. This includes the Cross Florida Greenway (and the Silver Springs Bikeway when it is completed), which were discussed in the previous section and provide access to pedestrians. However, there are many other pedestrian trails, such as the Marshall Swamp Trailhead, Pruitt Trailhead, and Baseline Road Trailhead. These are mostly used for recreational purposes.

Transit Facilities

Public transit systems are an important part of a healthy and prosperous metropolitan area. They provide convenient service to all citizens. The Ocala-Marion County TPO has been successfully operating a public transit system since 1983, when it inaugurated Marion Transit, providing all non-emergency medical transportation in the Ocala-Marion County area. In 1990, the program expanded to service all transportation-disadvantaged citizens in the County with door-to-door para transit services.

In 1998, the Ocala-Marion County TPO created SunTran, which operates a fixed-route transit system, six days per week. SunTran operates six routes, with service mostly focused in the City of Ocala. The Green Route serves northeast Ocala and Silver Springs, the Blue Route serves southeast Ocala, the Purple Route serves northeast Ocala, the Orange Route serves southwest Ocala, the Red Route serves Silver Springs Shores, and the Yellow Route serves southwest Ocala and north Ocala. An overview of the transit routes in Ocala and Marion County can be seen in **Figure 3**. Most of the routes run once every hour, while the Red and Yellow routes run once every two hours. These headways are constant throughout the day.

Freight Facilities

Due to Marion County's location along I-75, freight movement is an important role of the County's transportation network. I-75 alone carries an average of 13,500 trucks per day, with one segment near Ocala carrying over 18,000 trucks per day based on an average annual daily traffic (AADT) volume. US 441 and US 301 also serves as key secondary truck routes. In response to the major freight moving through the County, multiple companies have opened freight processing centers to support their distribution systems. Most of these freight distribution centers are in western Ocala along I-75 near US 27, SR 40, and SR 200. These locations provide thousands of jobs and ensure that the area continues to receive a steady stream of business. **Figure 4** shows the truck AADT throughout the County, as well as major truck routes.

Evacuation Routes

Given Florida's location between the Gulf of Mexico and the Atlantic Ocean, the risk of hurricanes makes evacuation routes a necessity. While it is important for Marion County to have the facilities to safely evacuate its own citizens in the event of an imminent threat such as a hurricane, its central location in the State of Florida reduces the storm surge risk posed by hurricanes, at least compared to coastal counties in the State. Instead, its major role in evacuation situations is as a through point on a major evacuation route. I-75, which extends the length of Marion County, is a critical interstate highway that, along with I-95, provides a significant and direct north-south route in and out of the State. While I-75 is overwhelmingly the most important evacuation route in Marion County, there are several other major roads designated as evacuation routes. US 27, US 441, US 301, SR 200, SR 19, SR 35, and SR 40 all function as primary evacuation routes, while SR 464, SR 492, and SR 326 all function as secondary evacuation routes. These evacuation routes are identified in **Figure 5**.



Existing Transit Service Ocala / Marion County

Truck Volume (AADT) and Designated Freight Corridors

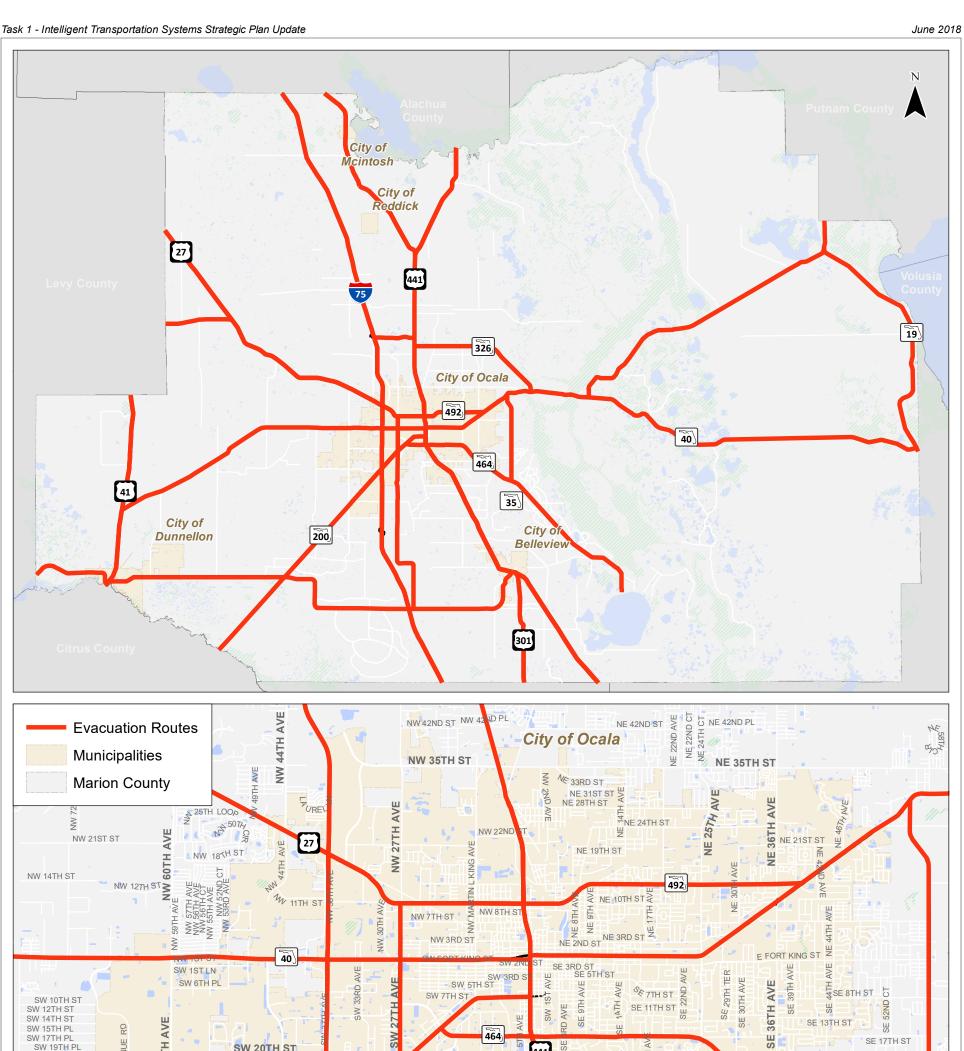
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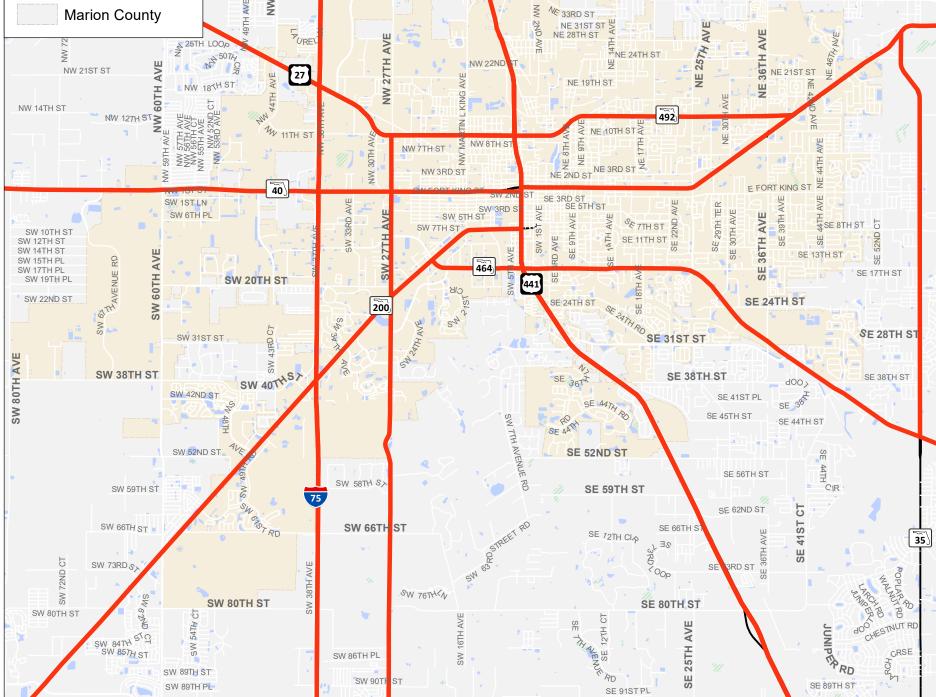
TPO

Ocala / Marion County

Figure

4







Evacuation Routes Ocala / Marion County Figure 5

Fire Stations

Fire stations are a critical part of the health and safety network serving the region, and their locations help define the effectiveness of the City and County emergency response systems. The City of Ocala currently operates seven stations, while Marion County operates 39 stations. **Figure 6** shows the locations of the current fire stations in the City of Ocala and Marion County.

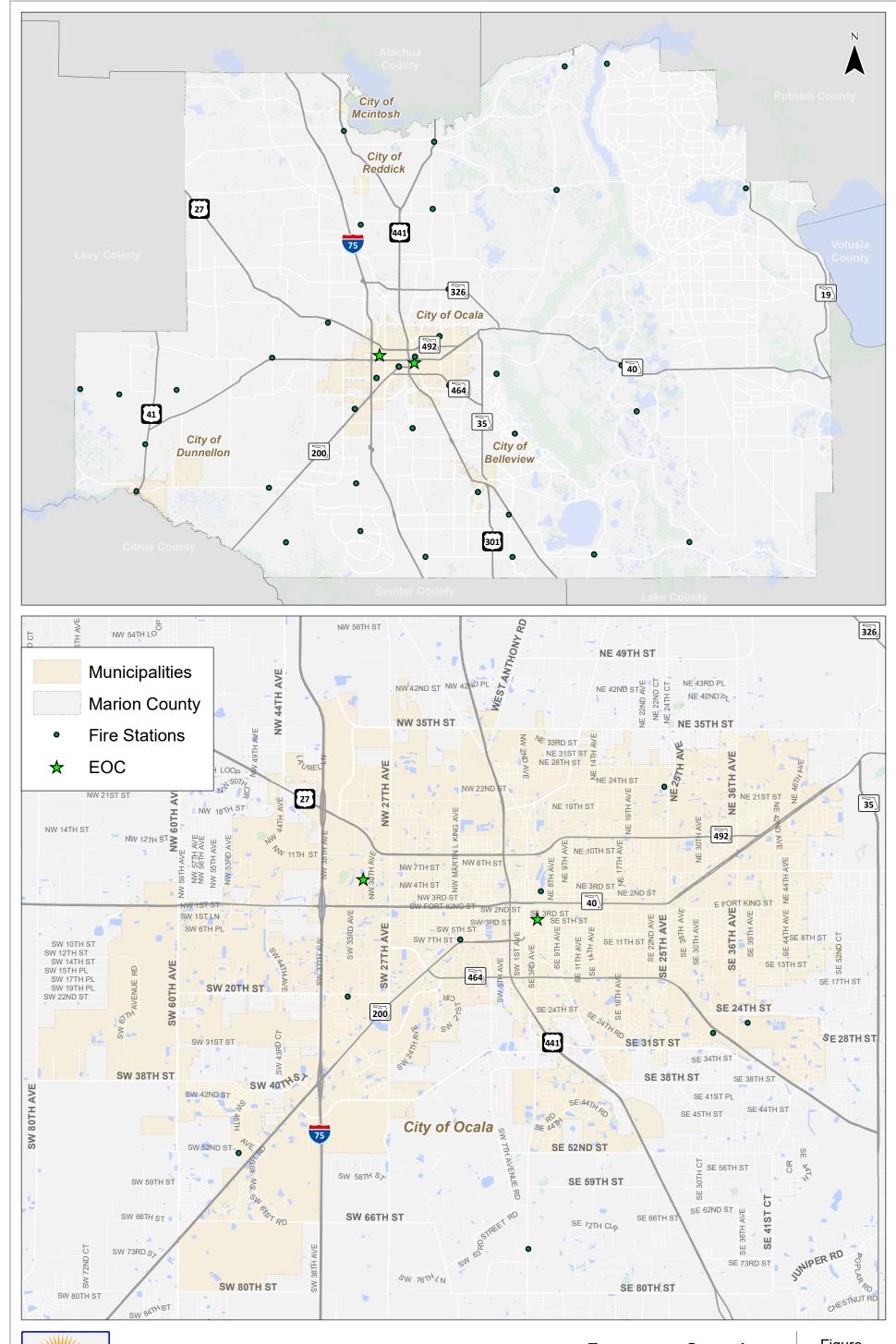
Emergency Operations Center

The Marion County Emergency Operations Center (EOC) was built in 2009 to serve as a central location for the region's emergency response resources. This facility, located in northwest Ocala, serves two major roles. First, it provides a staff location for everyday emergency response, like fire and rescue. However, it also serves a larger role when major statewide emergencies occur.

As mentioned earlier, hurricanes often pose a serious risk to the people of Marion County. When these storms threaten the State of Florida, Marion County and City of Ocala officials need a space to organize and prepare for the storm, then manage resources during the storm to ensure the safety of all their citizens. The Marion County EOC provides space for government agencies to coordinate resources during an emergency, efficiently funnel evacuees through the County, and respond to any life-threatening circumstances during a storm. The facility was used successfully in this manner during the preparations for Hurricane Matthew in 2016 and Hurricane Irma in 2017.

Parking Management

In early 2017, The City of Ocala installed approximately 140 smart parking meters in the downtown. The meters accept cash, credit card, and the PassportParking mobile app. The meters also provide the City real-time parking management analytics on parking utilization and financial performance.





Traffic Control and Management

Marion County and the City of Ocala employ several facilities, tools, and strategies to promote safe and reliable transportation along their roadways. The facilities, tools, and strategies discussed in the following sections include:

- Traffic Management Centers (TMC's)
- Traffic Signal Operations
- Adaptive Signal Control
- Remote Communication
- Portable Dynamic Message Signs
- ITS Devices

Traffic Management Centers

A traffic management center (TMC) acts as a command center for an ITS network, coordinating the traffic management system across its jurisdiction and responding to traffic incidents to quickly return the areas in question to normal traffic flow. TMCs form the heart of an efficient and effective traffic management system and are essential for the ITS strategies discussed in this plan. Both Marion County and the City of Ocala currently operate TMCs to manage and monitor the overall performance of their respective transportation networks. The City of Ocala operates *Trafficware's ATMS.now* central system and Marion County operates the *Siemens Tactics* system. Each of these signal controller systems allows for centralized monitoring of the traffic signal equipment and for adjusting signal timing plans and receiving performance reports from the field equipment.

Currently, the City and County TMCs are connected to each other though the City's fiber network that also connects the County's Emergency Operations Center. However, to date, the operators in each TMC have access only to the cameras and signal systems within their jurisdiction due to unresolved cyber security concerns. The inability of these facilities to share information with one another prevents City and County staff from supporting each other when operations need to be monitored and actively controlled on a corridor and/or regional basis.

Traffic Signal Operations

Traffic signals within the study area are currently operated and maintained by the City of Ocala and Marion County. Each jurisdiction manages, operates, and maintains the traffic signal equipment only within its own jurisdiction The City of Ocala is responsible for the operations and maintenance of most of the traffic signals within the Ocala Metropolitan Area. Marion County is primarily responsible for the operation and maintenance of traffic signals outside of the metropolitan area to the county lines.

The City of Ocala operates an advanced transportation management system, Trafficware ATMS.now, at the TMC. Local NEMA TS2 traffic signal controllers are located at each of the intersections and operate under time-of-day, actuated and coordinated timing plans. Recently, the City has begun an upgrade of their intersection equipment and have replaced 54 of their signal cabinets and signal controllers that meet the Institute of Transportation Engineer's Advanced Traffic Controller (ATC) standard.

Marion County signal system included NEMA TS2 traffic signal controllers and Siemens Tactics advanced transportation management system. A portion of the County's signals are located along arterials and corridors and operate under time-of-day, actuated and coordinated timing plans. Other remote intersections run fully-actuated and independent of other intersections. **Figure 7** shows the existing traffic signal locations within the Marion County region.



Existing Traffic Signal Locations Ocala / Marion County

Figure **7**

Adaptive Signal Control

As part of an initiative by the City of Ocala to modernize its transportation network, adaptive signals were installed on the SR 464 corridor in the City and County jurisdictions to facilitate better traffic flow, especially during peak hours. Adaptive signals work together along an urban arterial by adjusting the signal timing and the traffic progression characteristics on the arterial based on actual traffic demand. This typically results in a significant increase in the efficiency and capacity of the intersections and arterial sections that use such signal systems.

The City of Ocala has installed 14 adaptive signals on SR 464 and Marion County installed three adaptive signals on SR 464. These signals are using the Rhythm Engineering's InSync system. Unfortunately, the signals have not performed to expectations. The City and County are frustrated by poor operational performance and an inability to determine how the signals are adjusting signal timings (as these adjustments are not made known to traffic staff). Therefore, the system will be removed when the traffic signal cabinet assemblies are upgraded to the Type VI ATC format. It is likely that the County and the City will not be interested in further installation of adaptive signal technology.

ITS Communication

Communication is a critical component of a traffic control system. The specific communication media such as copper wire, wireless or fiber optic cable is often the limiting factor is an agency's ability to monitor, manage, and control traffic management in real time. The existing transportation related communication network within the study area is composed primarily of radio interconnect and fiber optic cable. Fiber optic cable interconnection locations are found mainly within the City of Ocala. Many Marion County intersections are connected to their TMC through radio interconnect technology. There are several intersections in region that currently have no communication capability.

Fiber optic cable is becoming more common across the country because of its reliability and its capacity to transmit high volumes of digital data at high speeds. It is being used in a variety of applications, but a major application is for traffic signal communication. Fiber optic cable also facilitates communication between traffic management systems.

A significant investment in fiber optic cables has occurred within the study area in the last 10 years. This is mostly occurring in the City of Ocala because there is a significant startup cost associated with this technology. The fiber optic cable in Ocala is owned by Ocala Fiber Network (OFN) and the Traffic Operations Department in the City of Ocala has an agreement to lease a portion for traffic operations use throughout the City of Ocala. **Figure 8** summarizes the location of the existing and planned ITS communication infrastructure in Marion County and the City of Ocala.

Portable Variable Message Signs

Both the City of Ocala and Marion County own a few portable variable message signs (PVMS). These signs display a simple message of at most about five words to alert drivers to temporary or changing conditions. Examples of such use include advising motorists of temporary traffic pattern changes due to events or roadway construction and permanent changes in downstream traffic control (e.g., changing from stop sign control to signalized control).

ITS Devices

Both the City of Ocala and Marion County have implemented ITS devices throughout the region, which include closed-circuit television (CCTV) cameras, Dynamic Message Signs (DMS), and Bluetooth® travel time devices.

Marion County currently operates a number of CCTV cameras on the regionally significant corridors including SR 464, SR 200, SR 484, US 27, SR 40 and US 441. The county also has a few DMS signs located on US 27, SR 200 and US 441. Bluetooth® devices are also located along key corridors in the County.

The City of Ocala is also operating CCTV cameras, DMS, and Bluetooth® devices within the City Limits. The locations of regions ITS devices including CCTV, DMS, and Bluetooth® can be seen in **Figure 9**.

Additionally, there are several permanent and portable traffic monitoring stations that are used by the City of Ocala, Marion County, and the FDOT District 5. Traffic reports prepared from the data include AADT, Vehicle Class, and K, D, and T Factors. The traffic reports are archived. **Figure 10** identifies the locations of the permanent and portable count stations.



SW 80TH ST

SW 84TH ST

Existing ITS Device Locations Ocala / Marion County

SE 80TH ST

Figure

9

SW 80TH ST



Available Traffic Monitoring Count Stations Ocala / Marion County

Figure **10**

SW 84TH ST

City and County Staffing

Stakeholder meetings conducted during the project consistently identified a lack of proper staffing as one of the major factors contributing to the ineffectiveness of the region's traffic management system. This is true for the traffic management centers (TMCs), but also for the City and County transportation departments themselves. Therefore, this section will provide a brief overview of the current staff levels in both transportation departments. Additionally, Chapter 6 will discuss this staffing issue again, proposing appropriate staff increases for each department, as well as cost estimates for such increases.

City of Ocala Staffing

The City of Ocala operates its transportation department with the staffing shown in **Table 2**. This table was created from data provided in FDOT's *District 5 Districtwide ITS Master Plan*, which provided tallies for existing staff, as well as recommending appropriate additions to the staff. These recommended staff increases will be discussed more in Chapter 6. Currently, the department operates with eight employees, which is a common size for a city of Ocala's size. Notably, the Ocala Traffic Management Center currently operates without any dedicated staff. Instead, the TMC is operated as needed by other Ocala staff shown below. This is not ideal, as it limits the effectiveness of the TMC and the equipment placed in the field to support the TMC. As several of the objectives and goals of this ITS plan focus on improving the potency of the local TMCs, this is a critical topic and it will be discussed further in Chapter 6.

Table 2 City of Ocala Staffing

City of Ocala			
Position	Existing Staff	Current Needed - Recommended Staff	Current Needed - Additional Staff
Traffic Engineering Operations Manager	1.0	1.0	0.0
Traffic Signal Engineer	0.0	0.0	0.0
Traffic Signal Analyst/Technician	0.5	1.0	0.5
Traffic Signal Maintenance / ITS Fiber Technician	4.0	4.0	0.0
Network Specialist	0.5	0.5	0.0
Electronic Specialist (L2 Network Tech)	1.0	1.0	0.0
TMC Manager	1.0	1.0	0.0
Supervisor	0.0	0.0	0.0
TMC Operators	0.0	1.0	1.0

Marion County Staffing

Marion County operates its transportation department with the staffing shown in **Table 3**. This table was created from data provided in FDOT's *District 5 Districtwide ITS Master Plan*, which provided tallies for existing staff, as well as recommending appropriate additions to the staff. These recommended staff increase will be discussed more in Chapter 6. Currently, the department operates with six employees, which is a common size for a county with Marion County's population. Notably, the Marion County Traffic Management Center currently operates without any dedicated staff. Instead, the TMC is operated as needed by other Marion County staff shown below. This is not ideal, as it limits the effectiveness of the TMC and the equipment placed in the field to support the TMC. As several of the objectives and goals of this ITS plan focus on improving the potency of the local TMCs, this is a critical topic and it will be discussed further in Chapter 6.

Table 3 Marion County Staffing

Marion County			
Position	Existing Staff	Current Needed - Recommended Staff	Current Needed - Additional Staff
Traffic Engineering Operations Manager	0.0	0.0	0.0
Traffic Signal Engineer	1.0	1.0	0.0
Traffic Signal Analyst/Technician	1.0	1.0	0.0
Traffic Signal Maintenance / ITS Fiber Technician	4.0	4.0	0.0
Network Specialist	0.0	0.5	0.5
Electronic Specialist (L2 Network Tech)	0.0	0.5	0.5
TMC Manager	0.0	0.0	0.0
Supervisor	0.0	0.0	0.0
TMC Operators	0.0	0.0	0.0

FDOT Initiatives

The Florida Department of Transportation is leading several major initiatives that Marion County and the City of Ocala can build upon. These initiatives are focused on embracing and integrating new technologies in the State of Florida's transportation network. Among these initiatives are the following:

- I-75 FRAME, a multimodal integrated corridor management (ICM) project that will help to manage traffic during incidents and improve safety and connectivity for all road users;
- Automated traffic signal performance measures (ATSPM), which provide continuous monitoring capability and high-resolution data to support objectives and performance-based maintenance and

- operations-based strategies;
- Regional Integrated Transportation Information System (RITIS), a big-data aggregation and dissemination platform;
- Freight Advanced Traveler Information System (FRATIS); and
- Pilot implementation of technology to prepare for future connected and autonomous vehicles, which
 is also part of the I-75 Frame project.

All these initiatives promise to add major benefits for Marion County and the City of Ocala and are discussed separately in the following sections.

I-75 FRAME

The I-75 Florida's Regional Advanced Mobility Elements (FRAME) project will implement multiple kinds of emerging technologies to "efficiently manage traffic during incidents and special/emergency events and improve safety and connectivity for all types of road users." ¹ The project will create a Multimodal Integrated Corridor Management (MMICM) plan for I-75, US 441 and US 301 and use connected vehicle (CV) technologies, advanced signal control, and multijurisdictional coordination to accomplish its goals of increasing the safety and reliability of the roadway for its users, while also decreasing delay, accommodating continued population growth, and enhancing emergency evacuation preparedness in the region. The project will take place in north central Florida, with the City of Gainesville and the City of Ocala being the two major focuses of the project.

Much of this project will hinge on emerging technologies that coincide with the ITS applications this plan discusses. These technologies include Emergency Vehicle Preemption (EVP), Automated Signal Traffic Performance Measures (ASTPMs), connected vehicle technologies like RoadSide Units (RSUs) and On-Board Units (OBU), which will support a Connected Vehicle Signal Phasing and Timing (CV SPaT) system, and Transit Signal Priority. In Marion County, the project will be installing devices on I-75 and US 441/US 301, and the roadways that connect them including SR 326, SR 500, SR 40, SR 200, and CR 484. Marion County and the City of Ocala will be heavily impacted by this project and it is recommended that the efforts pursued in this ITS plan coincide with the I-75 FRAME project. To use the Department server and

Automated Traffic Signal Performance Measures

Marion County and the City of Ocala operate hundreds of traffic signals in the region and sometimes these signals do not operate properly or efficiently. Typically, when this occurs, citizens complain to local agencies and a study must be done to determine the current operation of the signal and how it should be repaired or improved. This comes at great cost to the taxpayer and is inefficient.

Automated Traffic Signal Performance Measures (ATSPMs) provide detailed historical data about the operation of signalized intersections so that problems can be identified even before citizen complaints are received. Additionally, ATSPMs also allow traffic operations staff to quickly understand whether a citizen complaint is valid and how to repair the signal or improve the signal timing. This offers tremendous value as this drastically

¹ http://www.cflsmartroads.com/projects/design/future/I-75 Frame Application.pdf

reduces the manpower and resources needed to review the performance of local signals. FDOT is continuing to encourage local jurisdictions to implement this technology and Marion County and the City of Ocala could benefit greatly from this technology.

The City of Ocala has recently updated 58 of their traffic signals to incorporate ATSPM capabilities. The Trafficware signal controller that were installed can collect the high-definition data required to produce the ATSPMs. A network server is needed (and not yet available) to store the data and the software program needed to process the data and produce the individual performance measures. FDOT District 5 has developed a District version of the software program that is based on the Federal Highway Administration's software. This software was originally developed in cooperation with Utah Department of Transportation and available for free to all state DOT's. FDOT has indicated the City and County could use the District's server and software to process the high-definition data collected in their new controllers. For the City and the County to use the Department's servers and software, a network connection agreement with FDOT would need to be in place to bring the ATSPMs online.

RITIS

The Regional Integrated Transportation Information System (RITIS) is an automated data system which combines different datasets throughout any region and then disseminates that data in a coherent package to provide an overall view of the transportation network. Participating agencies can view multiple kinds of location-centric data to improve their traffic operations. For example, they can see emergency management information and use such data to improve their emergency preparedness or see accident data to improve response time to accidents. Third party clients can also access this data for use in a variety of different fields.

RITIS information is used statewide by the Florida Department of Transportation and their partners to evaluate performance on interstate and most highways. RITIS can be used to create roadway performance reports, showing travel times, reliability and congestion. Other tools allow for active monitoring of work zones and incidents. The most relevant application of RITIS in Marion County is in preparing travel time reliability performance measures at regular intervals and monitoring incidents, evacuations and work zones in real-time.

Freight Advanced Traveler Information System (FRATIS)

Freight is an important aspect of the American transportation network. Billions of tons of goods are moved by truck around the United States each year. Therefore, it is critical that the transportation network is utilized efficiently to enable the effective flow of freight goods around the country. To that end, the Federal Highway Administration (FHWA) is promoting a new initiative, the Freight Advanced Traveler Information System (FRATIS) to improve the performance of the freight system across the country. The goal of FRATIS is to provide data including real time incident information, congestion, and travel time to enable freight companies to better plan their freight shipments.

In the State of Florida, FDOT has pursued FRATIS rigorously, putting an emphasis on enhancing traveler information systems to address specific freight needs. This has included a specialized effort to include wait times at intermodal facilities like ports in more usual transportation network data to better equip freight users.

In Marion County, I-75 is a major statewide freight route, making freight an important part of the local economy, as shown by the new distribution centers built along I-75 near Ocala. Therefore, it is recommended that Marion County and the City of Ocala coordinate with FDOT as to the applicability of FRATIS in their jurisdiction. For example, Los Angeles region participated in a FRATIS project with the US Department of Transportation in 2014 and 2015 to improve intermodal truck utilization and enhance the performance of freight transfers between sea and freight travel. While Marion County won't need better sea transfer, they can still work with FDOT to determine the best application of FRATIS for their freight network.

Connected and Autonomous Vehicles

New technologies are constantly entering the field of transportation, many of which warrant inclusion in this ITS plan due to the influence they can and will have on transportation both now and in the future. Few technologies promise larger and more seismic changes than the effects that can be expected from connected and autonomous vehicles (CAVs). Both are revolutionary technologies that will soon be shaping our roadways in enormous ways. Connected vehicles are a first step toward automation, in which a communication infrastructure between other vehicles and sensors on the roadways or other transportation systems enables drivers to receive real time alerts for everything from the positions of other vehicles to when a signal will switch to yellow. Based on the I-75 FRAME project, connected vehicles are the main technology that Marion County and the City of Ocala may consider preparing for the near future. While connected vehicles are revolutionary themselves, autonomous vehicles go even further, potentially taking humans out of the driver seat altogether. It is currently projected that fully autonomous vehicles are still some years away from full-scale production and will probably be initially designed and used in the context of vehicle fleets. In the meantime, semi-autonomous vehicles can already be purchased and are already operating at various levels on the road system.

In Marion County and the City of Ocala, the question should be this: what, if anything, can and should these jurisdictions do to intentionally prepare for the advent of CAVs? The clearest answer right now lies with the I-75 FRAME project discussed earlier. This project has many major goals, but one of its goals is to implement connected vehicle technology on I-75 and roadways surrounding it. This entails the installation of roadside units (RSUs) and other devices that can communicate with connected vehicles. This will be a first step for Marion County and the City of Ocala with connected vehicle technology and will allow the jurisdictions to understand the benefits and pitfalls associated with the technology and determine how they want to utilize connected vehicle technology moving forward.

Capacity Improvement Projects

The Transportation Improvement Program (TIP) is a federally mandated list of all upcoming transportation projects that each metropolitan planning organization (MPO) must prepare as part of their charter. The Ocala-Marion County TPO has accordingly prepared a list of all transportation projects planned in the region. This is an important information source in discussing ITS allocations, as ITS resources should be utilized in conjunction with capacity projects so that ITS equipment is not placed where it isn't needed and so that congested corridors receive the most effective management. The Ocala-Marion County TIP shows capacity improvements, which consist mostly of lane additions, and node improvements, which consist mostly of interchange and bridge

improvements. There are capacity improvement projects planned on major roadways, such as I-75, Us 41, SR 40, and 35 th Street, while node improvements are planned at intersections like I-75 and SR 40, I-75 and 35 th Street, and I-75 and I-75 and CR 484. All of these projects are shown in Figure 11 below.						



Transportation Improvement Program (TIP) Projects
Ocala / Marion County

Figure **11**

Chapter 4 | Traffic Operations Analysis

Segment Scoring Methodology

As part of the analysis for this ITS plan, a methodology was developed to score every roadway segment in Marion County. This was done to determine which roadway segments could benefit most from ITS improvements. This process involved compiling the final results, reviewing the high-ranking segments, and combining the adjacent segments to identify corridors that are strong candidates for future ITS projects. The scoring process accounts for several important characteristics of each roadway segments and assigns a score for each category. The following factors were considered and are integral to the scoring methodology:

- Roadway classification
- Maximum acceptable volume (MAV) ratio
- Existing volume
- Safety significance
- Freight, significance
- Evacuation significance
- Existing ITS infrastructure

Each of these factors is described in greater detail in the following paragraphs.

Roadway Classification

Each roadway analyzed for the segment rankings was classified as either a Strategic Intermodal System (SIS), regional, non-regional, or local roadway. A list of the classifications and the characteristics that categorize them follows and is displayed in **Figure 12**:

- SIS or SIS Connector These roadways are given the highest priority for their role in connecting Marion
 County with intermodal hubs while aiding in the statewide movement of goods and people. These
 roadways include US 301, SR 40, and SR 326, and US 27.²
- Regional Roadway These roadways serve inter-county travel or travel between major population
 centers within Marion County. For this analysis they include all National Highway System facilities that
 are not already included in the SIS classification.
- Non-Regional Roadway These roadways serve intra-county travel but generally do not connect major
 population centers. They roadways classified as local urban and local rural and any remaining roadways
 that are not included in the other three categories.
- Collectors These roadways include those Major Collector Rural, Minor Collector Rural, Major
 Collector Urban, Minor Collector Urban as defined by the FDOT Functional Classification.

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² Note: I-75 was removed from the analysis because it has already received significant ITS attention and its major importance in the region would skew results, thus making the needs of other roadways difficult to see.

Maximum Acceptable Volume (MAV) Ratio

The existing volume to maximum acceptable volume (MAV) ratio (also known as the v/c ratio) is an indicator that helps identify locations of recurring congestion. MAV is given the highest weight in the scoring system. This performance measure score is calculated by multiplying the corridor's v/c ratio by 30 points. For corridors where the v/c ratio is greater than 1.0, the score will still be calculated out of 30 points but the maximum score for the measure is 40 (equates to a v/c ratio of 1.33). The scoring criteria are shown below:

- MAV * 30 points
- Limit to maximum of 40 points (v/c = 1.33)

Existing year AADT volumes and capacities were obtained from the following sources:

- 2016 AADT volumes and capacities for Marion County roads obtained from Transportation Inventory
 Management and Analysis System provided by the Ocala Marion County TPO;
- Capacities for Marion County roads obtained from the LOS tables from the FDOT Quality LOS Handbook.

Note that in some cases a roadway did not have a current 2016 or 2017 AADT, thus the most recent historical data was utilized for the analysis. **Figure 13** displays the v/c ratios for the segments analyzed.

Existing Volume

Improvements on high volume segments will benefit a larger number of motorists; therefore, an existing volume category was developed to favor such segments. Two sets of volume ranges, one for two lane rural facilities and one for all other facilities, were used in the calculation of the score for this category. The criteria are shown below:

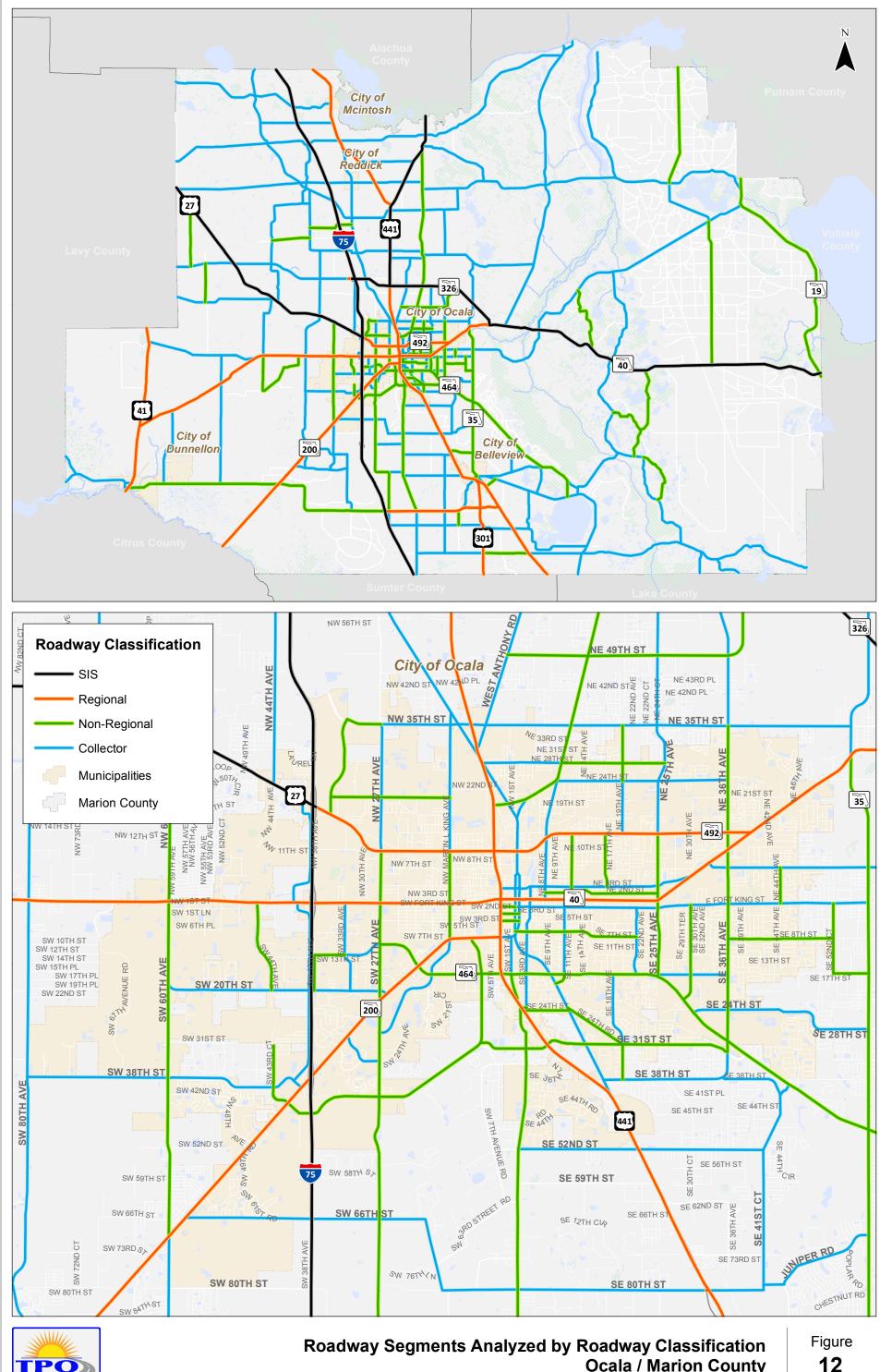
Two Lane Rural Facilities

- 4,999 or less = 0.0
- 5,000 to 5,999 = 2.5
- 6,000 to 6,999 = 5.0
- 7,000 to 7,999 = 7.5
- 8,000 or greater = 10.0

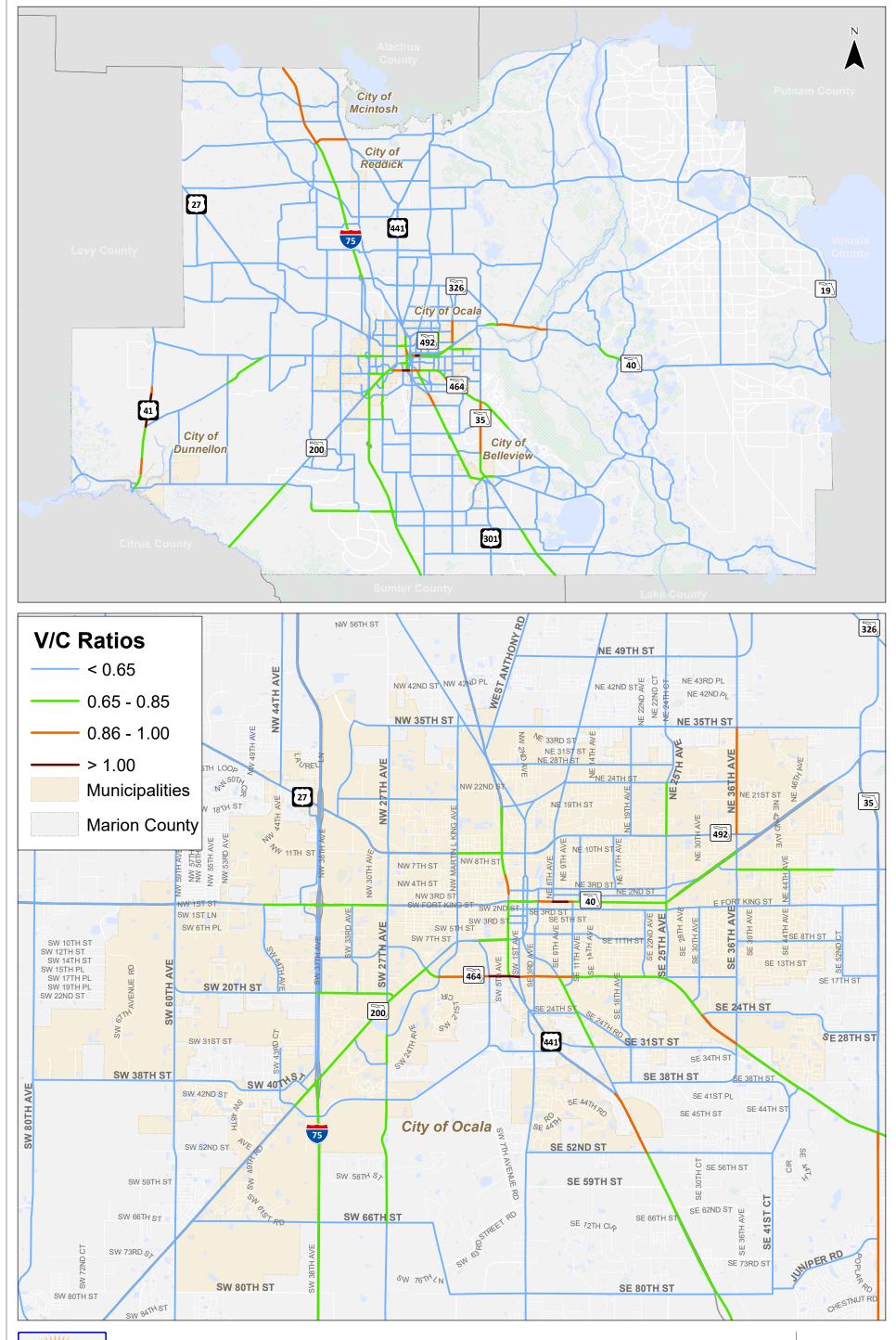
All Other Facilities

- 9,999 or less = 0.0
- 10,000 to 19,999 = 2.5
- 20,000 to 29,999 = 5.0
- 30,000 to 39,999 = 7.5
- 40,000 or greater = 10.0

See **Table 4** for a summary of the existing volume breakdown and scoring. AADT values were obtained from the sources noted in the MAV section. **Figure 14** and **Figure 15** display the existing volumes for the rural two-lane and urban/four+-lane rural segments analyzed.





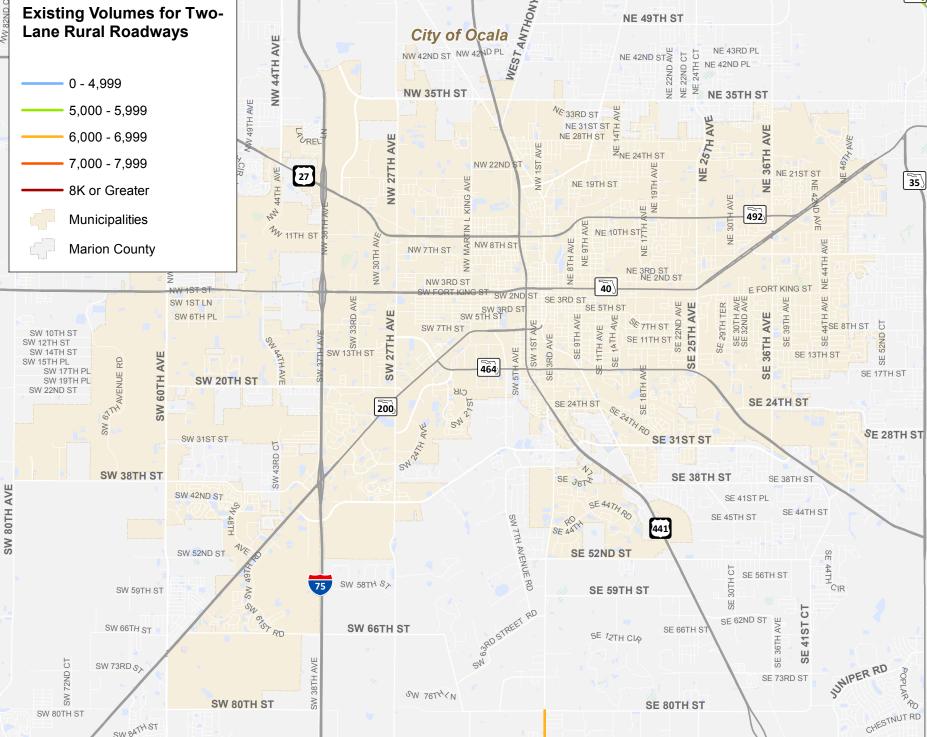




& ASSOCIATES

V/C Ratios for Roadway Segments Analyzed
Ocala / Marion County

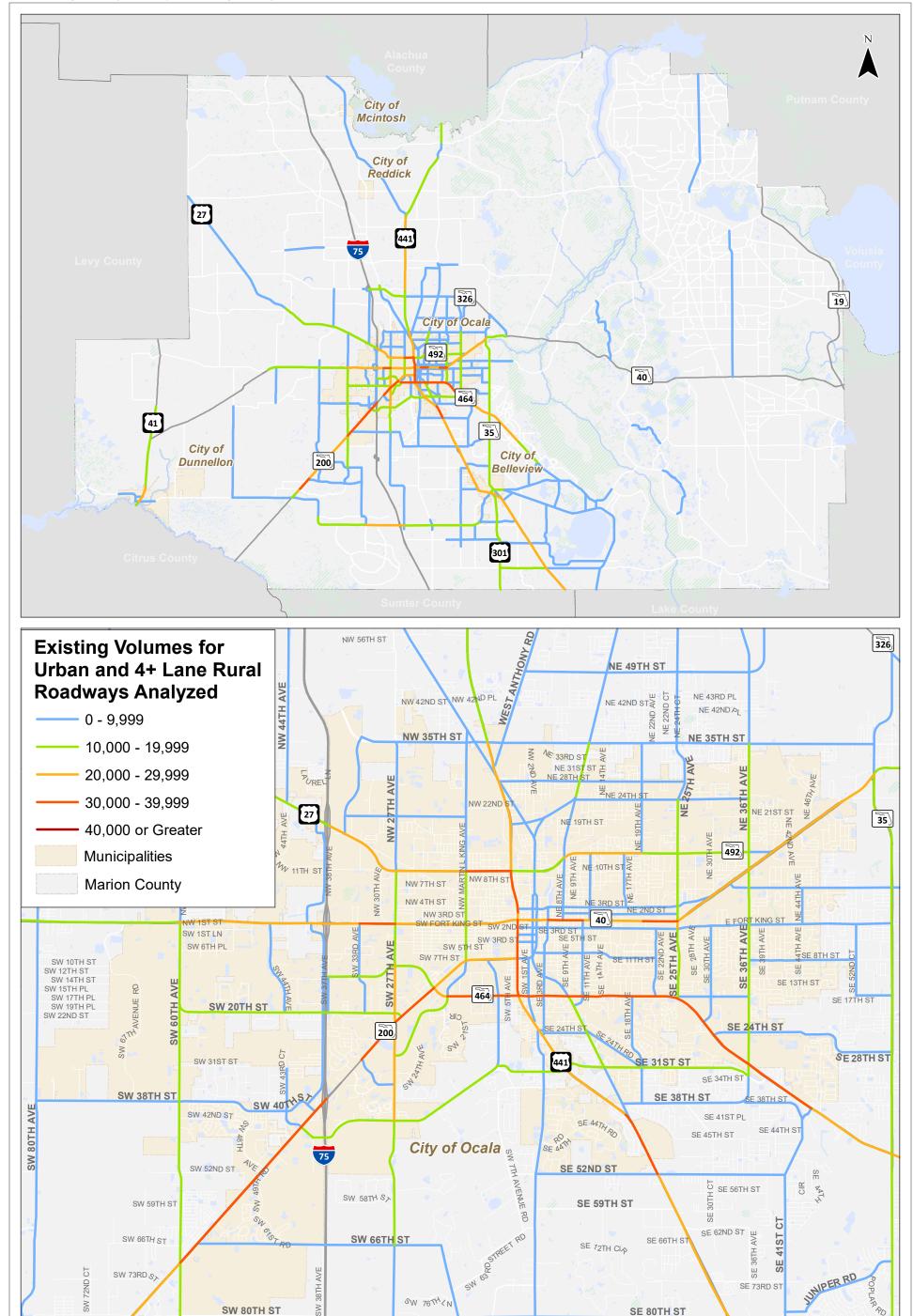
Figure 13





Existing Volumes for Two-Lane Rural Roadways Analyzed
Ocala / Marion County

Figure **14**





SW 80TH ST

Existing Volumes for Urban and 4+ Lane Rural Roadways Analyzed **Ocala / Marion County**

SW 76TH (N

SW 80TH ST

Figure 15

CHESTNUT RD



SE 80TH ST

Safety Significance

The MAV ratio and existing volume sections directly relate to recurring congestion while the safety portion of the segment scoring correlates with non-recurring congestion. ITS technology has historically demonstrated its ability to help alleviate congestion caused by the incident. Better incident detection systems can facilitate local emergency response to the incident site and more efficiently clear the incident. Dynamic Message Signs (DMS) and other points of information dissemination provide advanced notice to travelers to influence their choice on potential alternate routes, minimizing congestion at the crash site.

Crash data was obtained from the University of Florida's Signal Four Analytics Database for the most recent five calendar years (2013 through 2017) and mapped using GIS. Segment length was obtained from GIS, and traffic volumes were obtained from the sources noted above.

The safety scoring procedure takes into consideration two different elements:

Crashes per year per mile (Total Crash Rate)

- 0 to 15 = 0.0
- 15 to 45 = 2.5
- 45 to 90 = 5.0
- 90 to 175 = 7.5
- 175 to 375 = 10.0

Fatal and incapacitating injury crashes per year per mile (Crash Rate)

- 0 to 0.3 = 0.0
- 0.3 to 1.1 = 5.0
- 1.1 to 2.5 = 10.0
- 2.5 to 4.5 = 15.0
- 4.5 to 8.0 = 20.0

As can be seen, the first crash rate category is assigned a maximum of 10 points and the second crash rate category is assigned a maximum of 20 points. The scores of these three elements are added together to obtain a final score for the Safety Significance factor. Thus, for example, if both elements are assigned the maximum possible score then the segment would receive a total of 30 points for the Safety Significance factor.

Figure 16 and **Figure 17** display the total and fatal and incapacitating injury crash rate in crashes/year/mile that received scoring.

TPO

16

Ocala / Marion County



TPO

17

Freight Significance

As discussed earlier, Marion County experiences a large amount of truck volume due to its location along I-75. Congestion experience on roadway segments could be exacerbated by higher volumes of trucks, and therefore truck volumes and the presence of truck routes were included as a criteria category for the analysis. The following criteria was used and represents annual average daily traffic (AADT) traffic volumes for freight vehicles:

- High Volumes (4,275 to 18,320) = 10.0
- Medium Volumes (1,079 to 4,274) = 5.0
- Low Volumes (0 to 1,079) =0.0
- Designated Truck Route = 10.0

See **Table 4** for a summary of the existing truck volume breakdown and scoring. Truck AADT values were obtained from the sources noted in the MAV section. **Figure 18** displays the truck volumes and truck routes throughout the region.

Evacuation Significance

ITS strategies can help better manage congestion and traffic during times of emergency and help direct travelers to identify hurricane evacuation routes and inform travelers of changes to travel routes. Segments having been identified by FDOT and Marion County were mapped and given points based on the following:

- A primary hurricane evacuation route was given 10 points;
- A secondary hurricane evacuation route was given 5 points; and
- A segment not designated as a hurricane evacuation route was given 0 points.

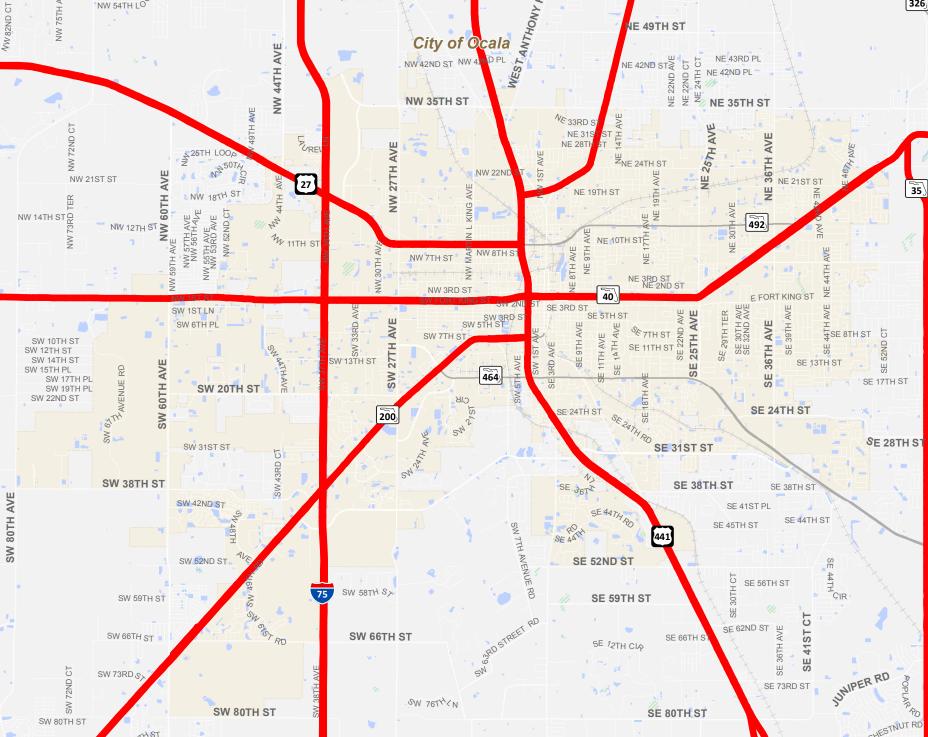
Figure 19 displays the hurricane evacuation routes within the planning area and was used for this evaluation.

I-75 was classified as primary hurricane evacuation routes due to its Statewide importance to overall hurricane evacuation route procedures. If a major arterial connected to this facility, served a major population center, or was the primary parallel route, it was also classified as a primary hurricane evacuation route. Examples of primary hurricane evacuation routes include US 441, US 301, SR 40, SR 200, US 41, SR 19, and SR 27. Secondary hurricane evacuation routes are any designated hurricane evacuation routes that are not otherwise classified as a primary route.

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TPO

Truck Volume (AADT) and Designated Freight Corridors



Ocala Marion County Maria

Evacuation Routes Ocala / Marion County

Figure **19**

Existing ITS

A significant capital investment has already been made in Marion County to provide existing CCTVs and trunk fiber lines. To further identify roadways where ITS strategies could be implemented while also seeing where there are gaps in the existing network, the following scoring procedure was used:

- Existing Fiber Roadway segments with an existing fiber network in place are given 7.5 points;
- Intersecting Fiber –Roadway segments that intersect another roadway with existing fiber are given 5 points;
- Within ¼ Mile of Fiber Roadway segments that do not intersect a roadway with existing fiber but are within ¼ of a roadway with fiber are given 2.5 points; and
- Existing CCTVs Roadway segments that have a CCTV located within a ¼ mile are given 2.5 points.
- Bluetooth® Roadway segments that have Bluetooth® devices are given 2.5 points.

The rationale underlying this scoring procedure is that roadways with existing fiber, intersecting existing fiber, or are within ¼ mile of fiber may have a much lower cost to implement TSM&O strategies than roadways with no fiber and also further than ¼ mile away from existing fiber. A roadway with existing fiber and CCTV, can receive a maximum of 10 points. Roadways with intersecting segments can receive a maximum of 7.5 points and segments within ¼ miles can receive a maximum of 5 points. This scoring methodology will identify roadway segments that are most suited to further ITS projects given their existing capabilities.

Figure 20 displays the existing ITS network within the study area.

Scoring Methodology Matrix

This scoring methodology was developed to quantitatively measure the need for ITS infrastructure throughout the region. All the factors discussed above are criteria that local authorities deem important for determining the need for ITS support. Some of these factors are more important than others so they are weighted more heavily. In this scoring, the volume and capacity measures had the highest weighting, safety had the next highest weighting, and roadway classification, truck volumes, evacuation significance and existing ITS infrastructure all had equal weighting. The detailed scoring criteria is shown below. **Table 4** outlines the method and values used for segment scoring for each of the previously described categories.



ITS Significance Results for Fiber Optic Scoring Ocala / Marion County

CT

12TH

SE 80TH ST

Figure 20.a

JUNIPERPASS

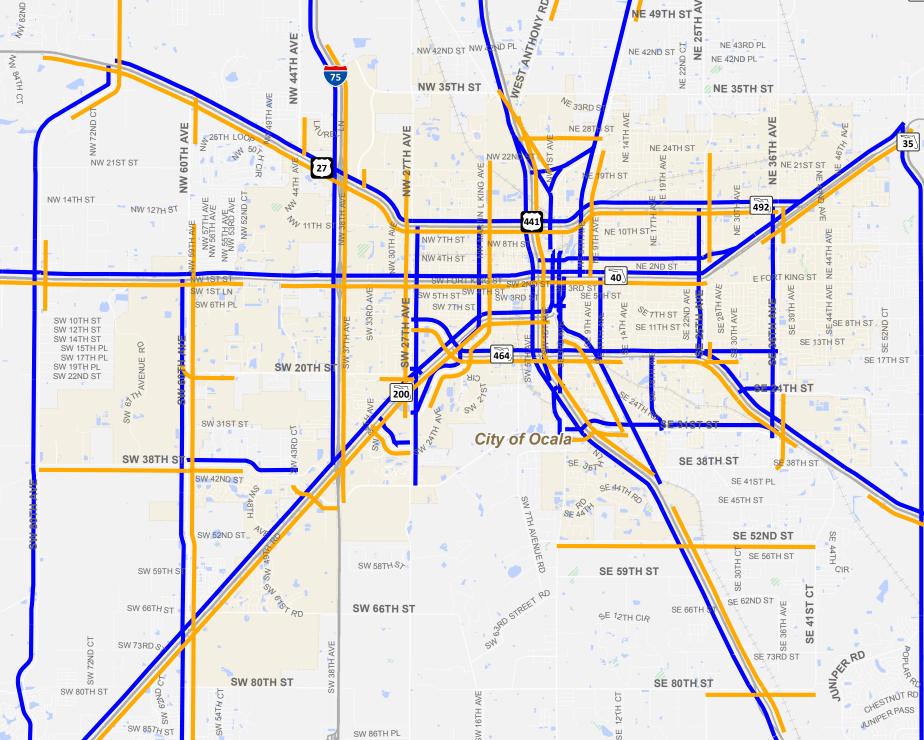
SW 80TH ST

SW 80TH ST

SW 86TH PL

SW 54TH CT

SW 85TH ST



Ocala-Marion County Hotox

ITS Significance Results for CCTV and Bluetooth Scoring
Ocala / Marion County

Figure **20.b**

Table 4 Scoring Methodology Matrix

Prioritization Category	Description	Data Inputs	Scoring Methodology				
Maximum Acceptable Volume (MAV) Ratio	A measure of existing congestion severity	2016 and 2017 Volumes and Capacities from Various Sources	MAV * 30 points Limit to maximum of 40 points (v/c = 1.33)				
Existing Volume	A measure of the number of vehicles along roadway segments	2016 and 2017 Volumes from Various Sources	Two Lane Rural Facilities 4,999 or less = 0.0 5,000 to 5,999 = 2.5 6,000 to 6,999 = 5.0 7,000 to 7,999 = 7.5 8,000 or greater = 10.0	All Other Facilities 9,999 or less = 0.0 10,000 to 19,999 = 2.5 20,000 to 29,999 = 5.0 30,000 to 39,999 = 7.5 40,000 or greater = 10.0			
Safety	A measure incorporating corridor crash density and crash severity	Signal 4 Analytics (annual average of 2013-2017 data)	Total Crash Rate 0 to 15 = 0.0 15 to 45 = 2.5 45 to 90 = 5.0 90 to 175 = 7.5 175 to 375 = 10.0	Fatal and Incapacitating Injury Crash Rate 0.0 to 0.3 = 0.0 0.3 to 1.1 = 5.0 1.1 to 2.5 = 10.0 2.5 to 4.5 = 15.0 4.5 to 8.0 = 20.0			
Freight Significance	A measure of the number of trucks along roadway segments	2016 and 2017 Volumes from Various Sources	High Volumes (4,275 to 2 Medium Volumes (1,079 Low Volumes (0 to 1,079 Designated Truck Route	to 4,274) = 5.0 0) =0.0			
Evacuation Significance	Designation as an evacuation route	FDOT Evacuation Routes Map	Primary evacuation route = 10 points Secondary Evacuation Route = 5 points Not a designated Evacuation Route = 0 points				
Existing ITS Infrastructure	A measure of existing facilities in place and opportunities for expansion	Ocala-Marion County TPO	Existing fiber – 7.5 points Intersecting fiber – 5 points Within ¼ mile of fiber – 2.5 points Existing CCTV – 2.5 points Existing Bluetooth® – 2.5 points				

Scores are assigned to each segment based on the scoring matrix shown above, the scores are added, and final scores are calculated. A potential scoring example is shown below.

Potential Total Scoring: 30 (Safety) + 10 (Existing Volume) + 40 (MAV) + 20 (Truck Significance) + 10 (Evacuation) + 12.5 (ITS Significance) = **122.5 PTS.**

The segments were ranked after being scored. The top 25 ranked segments are discussed below.

Top 25 Ranked Analysis Segments

Table 5 through **Table 8** summarize the Top 25 scoring roadway segments for SIS, Regional, Non-Regional, and Collector roadways when using the scoring methodology described in the Segment Scoring Methodology section above. A full listing of all Marion County roadway segment rankings, in alphabetical order, is provided in **Appendix A**.

Figure 21 provides a graphical representation of the Top 25 scoring roadway segments for the various roadway classifications and the overall top 25 roadway segments. These segments were reviewed and combined to establish the locations where the deployment of ITS strategies is expected to provide the optimum return on investment in improving the Marion County's roadway network. Specific ITS projects recommended for the region's roadways are summarized in Chapter 6.

Table 5 Top 25 Ranked SIS Segments

Priority Rank	Road Name	From	70	MAV Ratio	Existing Volume	Safety	Truck	Evacuation Route	ITS	Total Score
1	US 27	NW 38 th Ave.	I-75 West Ramp	12.9	2.5	27.5	10.0	10.0	12.5	75.4
2	SR 40	CR 315	CR 314	29.4	10.0	0.0	15.0	10.0	7.5	71.9
3	US 27	I-75 West Ramp	I-75 East Ramp	14.1	2.5	7.5	20.0	10.0	12.5	66.6
4	SR 40	NE 10 th St. Rd.	NE 145 th Ave.	18.1	10.0	5.0	15.0	10.0	7.5	65.6
5	SR 40	NE 125 th Ter. Rd.	NE 10 th St. Rd.	18.1	10.0	5.0	15.0	10.0	7.5	65.6
6	SR 40	SR 326	CR 315	27.7	10.0	0.0	10.0	10.0	7.5	65.2
7	US 27	NW 60 th Ave.	NW 49 th Ave.	12.5	2.5	17.5	10.0	10.0	12.5	64.9
8	US 27	NW 49 th Ave.	NW 44 th Ave.	12.9	2.5	15.0	10.0	10.0	12.5	62.9
9	US 27	I-75 West Ramp	I-75 East Ramp	14.1	2.5	7.5	20.0	10.0	7.5	61.6
10	SR 40	CR 314	NE 117 th Ct.	18.1	10.0	0.0	15.0	10.0	7.5	60.6
11	SR 40	NE 117 th Ct.	NE 125 th Ter. Rd.	18.1	10.0	0.0	15.0	10.0	7.5	60.6
12	US 441	CR 329	US 301	16.9	5.0	12.5	10.0	10.0	5.0	59.4
13	SR 326	CR 200A	NE 25 th Ave.	17.4	0.0	12.5	15.0	5.0	7.5	57.4
14	SR 40	NE 145 th Ave.	CR 314A	20.9	10.0	0.0	15.0	10.0	0.0	55.9
15	US 27	NW 44 th Ave.	NW 38 th Ave.	12.9	2.5	7.5	10.0	10.0	12.5	55.4
16	US 27	CR 225A	NW 60 th Ave	12.1	2.5	7.5	10.0	10.0	12.5	54.6
17	SR 326	US 441	NW 12 th Ave.	17.0	0.0	12.5	15.0	5.0	5.0	54.5
18	SR 40	CR 314A	SE 183rd Ave.	16.8	7.5	5.0	15.0	10.0	0.0	54.3
19	US 27	CR 225A	NW 60 th Ave.	12.1	2.5	5.0	10.0	10.0	12.5	52.1
20	US 441	SR 326	NW 77 th St.	13.2	2.5	12.5	10.0	10.0	2.5	50.7
21	SR 326	NE 25 th Ave.	NE 36 th Ave.	17.0	0.0	10.0	15.0	5.0	2.5	49.5
22	SR 40	CR 314A	SE 183 rd Ave.	16.8	7.5	0.0	15.0	10.0	0.0	49.3
23	US 441	NW 77 th St.	NW 117 th St.	17.6	5.0	5.0	10.0	10.0	0.0	47.6
24	US 27	NW 60 th Ave.	NW 55 th Ave.	12.5	2.5	0.0	10.0	10.0	12.5	47.5
25	US 27	NW 55 th Ave.	NW 49 th Ave.	12.5	2.5	0.0	10.0	10.0	12.5	47.5

Table 6 Top 25 Ranked Regional Segments

Priority	Road Name	From	70	MAV Ratio	Existing Volume	Safety	Truck	Evacuation Route	ITS	Total Score
1	SR 200	I-75 West Ramp	I-75 East Ramp	19.8	7.5	30.0	10.0	10.0	12.5	89.8
2	US 441	SR 464	SW 10 th St.	21.7	7.5	25.0	10.0	10.0	10.0	84.2
3	US 441	NW 6 th St.	US 27	22.9	7.5	22.5	10.0	10.0	10.0	82.9
4	SR 40	I-75 East Ramp	SW 33th Ave.	21.2	5.0	22.5	10.0	10.0	12.5	81.3
5	US 441	SW 10 th St.	SW 5 th St.	23.3	7.5	17.5	10.0	10.0	12.5	80.8
6	SR 200	SW 38 th Ct.	I-75 West Ramp	19.8	7.5	30.0	0.0	10.0	12.5	79.8
7	SR 200	SW 27 th Ave.	SW 20 th St.	19.8	7.5	30.0	0.0	10.0	12.5	79.8
8	SR 200	SW 20 th St.	SW 17 th Rd.	19.7	7.5	30.0	0.0	10.0	12.5	79.7
9	SR 200	SW 36 th Ave.	SW 34 th Ave.	22.0	10.0	25.0	0.0	10.0	12.5	79.5
10	SR 40	US 441	NW 2 nd Ave.	21.2	5.0	30.0	0.0	10.0	12.5	78.7
11	SR 40	I-75 West Ramp	I-75 East Ramp	20.9	5.0	10.0	20.0	10.0	12.5	78.4
12	SR 40	SW 33 rd Ave.	SW 27 th Ave.	22.9	7.5	15.0	10.0	10.0	12.5	77.9
13	SR 40	NE 11 th Ave.	SE 14 th Ave.	21.3	5.0	27.5	0.0	10.0	12.5	76.3
14	US 441	CR 484	SE 110 th St.	21.2	5.0	22.5	10.0	10.0	7.5	76.1
15	SR 40	NE 19 th Ct.	NE 25 th Ave.	23.6	7.5	22.5	0.0	10.0	12.5	76.1
16	US 441	SW 5 th St.	SR 40	23.3	7.5	7.5	15.0	10.0	12.5	75.8
17	SR 200	SW 32 nd Ave.	SW 26 th St.	20.0	7.5	25.0	0.0	10.0	12.5	74.9
18	US 441	Sumter County Line	SE 178 th Pl.	22.4	5.0	25.0	10.0	10.0	2.5	74.9
19	SR 40	NE 11 th Ave.	SE 14 th Ave.	21.3	5.0	25.0	0.0	10.0	12.5	73.8
20	US 441	SE 102 nd Pl.	SE 100 th St.	20.2	5.0	20.0	10.0	10.0	7.5	72.7
21	US 441	SE 95 th St.	SE 92 nd Pl. Rd.	20.2	5.0	20.0	10.0	10.0	7.5	72.7
22	US 441	SE 52 nd St.	SE 40 th Cir.	27.2	7.5	5.0	10.0	10.0	12.5	72.2
23	SR 200	SW 34 th Ave.	SW 32 nd Ave.	22.0	10.0	17.5	0.0	10.0	12.5	72.0
24	US 441	SW 5 th St.	SR 40	23.3	7.5	7.5	10.0	10.0	12.5	70.8
25	US 27	NW MLK Ave.	US 441	23.2	7.5	10.0	10.0	10.0	10.0	70.7

Table 7 Top 25 Ranked Non-Regional Segments

Priority Rank	Road Name	From	70	MAV Ratio	Existing Volume	Safety	Truck	Evacuation Route	ITS	Total Score
1	SR 464	SW 5 th Ave.	US 441	38.0	7.5	27.5	0.0	5.0	12.5	90.5
2	SR 464	SE 3 rd Ave.	CR 464A	29.0	7.5	17.5	5.0	5.0	12.5	76.5
3	SR 464	SW 1 st Ave.	SE 3 rd Ave.	29.0	7.5	17.5	5.0	5.0	12.5	76.5
4	SR 464	SE 22 nd Ave.	SE 25 th Ave.	24.4	7.5	25.0	0.0	5.0	12.5	74.4
5	SR 464	US 441	SW 1 st Ave.	34.1	7.5	10.0	5.0	5.0	12.5	74.1
6	CR 464	Midway Rd.	Bahia Rd.	23.0	5.0	22.5	5.0	5.0	12.5	73.0
7	CR 464	SE 64 th Ave.	SE Pine Rd.	23.0	5.0	22.5	5.0	5.0	12.5	73.0
8	SR 464	SE 36 th Ave.	SE 44 th Ave.	24.4	7.5	22.5	0.0	5.0	12.5	71.9
9	SR 35	SE Juniper Cir.	Laurel Rd.	27.3	2.5	15.0	5.0	10.0	10.0	69.8
10	SR 35	SE 92 nd PI.	SE Juniper Cir.	27.3	2.5	12.5	5.0	10.0	12.5	69.8
11	SW 27 th Ave.	SW 19 th Ave.	SR 200	17.3	5.0	25.0	5.0	5.0	12.5	69.8
12	SR 464	SE 18 th Ave.	SE 22 nd Ave.	24.4	7.5	20.0	0.0	5.0	12.5	69.4
13	SR 464	SW 7 th Ave.	SW 5 th Ave.	38.0	7.5	5.0	0.0	5.0	12.5	68.0
14	SR 35	Laurel Rd.	SR 464	30.0	2.5	7.5	5.0	10.0	12.5	67.5
15	SR 464	SE 49 th Ter.	SR 35	21.7	5.0	22.5	0.0	5.0	12.5	66.7
16	SR 464	SE 13 th Ave.	SE 18 th Ave.	24.0	7.5	17.5	0.0	5.0	10.0	64.0
17	SR 464	SW 19 th Ave.	SW 12 th Ave.	28.0	7.5	10.0	0.0	5.0	12.5	63.1
18	SR 464	SR 200	SW 19 th Ave.	20.5	5.0	20.0	0.0	5.0	12.5	63.0
19	CR 464	SE Pine Rd.	Midway Rd.	23.0	5.0	12.5	5.0	5.0	12.5	63.0
20	SR 464	CR 464A	SE 11 th Ave.	29.3	7.5	7.5	0.0	5.0	12.5	61.8
21	SR 464	SE 11 th Ave.	SE 13 th Ave.	24.0	7.5	12.5	0.0	5.0	12.5	61.5
22	CR 484	Marion Oaks Blvd.	SW 135 th Pl.	20.9	5.0	15.0	5.0	10.0	5.0	60.9
23	CR 484	SW 45 th Ave.	Marion Oaks Blvd.	18.0	5.0	12.5	5.0	10.0	10.0	60.5
24	SR 35	SE Robinson Rd.	SE 92 nd Pl.	25.3	2.5	10.0	0.0	10.0	12.5	60.3
25	SR 464	SE 25 th Ave.	SE 24 th St.	25.1	7.5	10.0	0.0	5.0	12.5	60.1

Table 8 Top 25 Ranked Collector Segments

Priority Rank	Road Name	From	٤	MAV Ratio	Existing Volume	Safety	Truck	Evacuation Route	ITS	Total Score
1	CR 318	I-75	NW 60 th Ave.	28.7	0.0	12.5	5.0	10.0	0.0	56.1
2	SW 19 th Ave.	SW 27 th Ave.	SW 24 th Ave.	16.7	2.5	20.0	5.0	0.0	10.0	54.2
3	SW 40 th St.	SW 38 th Ave.	SR 200	16.4	0.0	25.0	5.0	0.0	7.5	53.9
4	SE 1 st Ave.	SE Broadway St.	SR 40	0.0	0.0	27.5	5.0	10.0	10.0	52.5
5	SW 20 th St.	SW 31 st Ave.	SW 27 th Ave.	19.9	2.5	20.0	0.0	0.0	10.0	52.4
6	SW 19 th Ave.	SW 24 th Ave.	SR 464	16.7	2.5	15.0	5.0	0.0	12.5	51.7
7	CR 318	NW 60 th Ave.	US 441	28.7	0.0	7.5	5.0	10.0	0.0	51.2
8	CR 25	SE 110 th St.	SE 65 th Ct.	25.4	2.5	10.0	5.0	0.0	7.5	50.4
9	NE 35 th St.	NE 33 rd Ave.	NE 36 th Ave.	15.3	0.0	22.5	5.0	0.0	7.5	50.3
10	NE 25 th Ave	SR 492	NE 24 th St.	24.8	2.5	7.5	5.0	0.0	10.0	49.8
11	NE 1 st Ave.	SR 40	NE 1 st St.	3.9	0.0	30.0	5.0	0.0	10.0	48.9
12	SE 19 th Ave.	SE 31 st St.	SE 28 th PI.	15.0	0.0	20.0	5.0	0.0	7.5	47.5
13	CR 464A	SE 17 th St.	SE 3 rd Ave.	16.9	0.0	12.5	5.0	0.0	12.5	46.9
14	SW 10 th St.	US 441	SE 1 st Ave.	0.0	0.0	27.5	5.0	0.0	12.5	45.0
15	CR 314	NE 36 th Ave.	NE 51 st Ave.	21.4	0.0	10.0	5.0	0.0	7.5	43.9
16	CR 318	I-75	NQ 60 th Ave.	28.7	0.0	0.0	5.0	10.0	0.0	43.7
17	CR 25	SE 65 th Ct.	SR 35	25.4	2.5	0.0	5.0	0.0	10.0	42.9
18	SW 20 th St.	SW 27 th Ave.	SR 200	20.2	2.5	7.5	0.0	0.0	12.5	43.7
19	SE 1 st Ave.	E Fort King St.	SE Broadway St.	0.0	0.0	27.5	5.0	0.0	10.0	42.5
20	NW 35 th St.	NE 2 nd Ave.	NE 33 rd St.	14.3	0.0	15.0	5.0	0.0	7.5	41.8
21	E Fort King St.	NE 25 th Ave.	SE 28 th Ave.	16.5	0.0	12.5	5.0	0.0	7.5	41.5
22	CR 42	US 441	SE 130 th Ave.	13.9	0.0	12.5	5.0	0.0	10.0	41.2
23	S Magnolia Ave.	SR 40	W Broadway St.	5.3	0.0	10.0	5.0	10.0	10.0	40.3
24	CR 464A	SE 31 st St.	SE 17 th St.	19.4	2.5	0.0	5.0	0.0	12.5	39.4
25	CR 25A	City of Ocala Boundary	CR 329	16.7	10.0	0.0	5.0	0.0	7.5	39.2

SW 76TH N

SW 80TH ST



SW 80TH ST

Top 25 Segments by Roadway Classification Ocala / Marion County

SE 80TH ST

Figure 21

Chapter 5 | Regional Opportunities and Potential ITS Strategies and Technologies

Regional Opportunities

The analysis summarized in the previous chapter reveals that there are opportunities for ITS applications to improve the function of the local transportation network. The subsets of this analysis reveal several areas of need for the region, which will be discussed in this section. Additionally, the stakeholder meetings also exposed areas where the region can improve its transportation network through organizational changes and additional ITS investment the analysis didn't reveal. A summary of the regional needs is listed in **Table 9** below.

Table 9 Summary of ITS Needs

Traffic Operations and Management	Communication
TMC Center-to-Center integration	Utilize existing communication infrastructure
Regional signal coordination	Expand existing communication for traffic
	operations
Emergency Vehicle Preemption	Traveler Information
Expansion of roadway video surveillance	DMS installation
Regular traffic signal retiming	Dynamic detour route development and
	management
Enhanced traffic signal functionality	Information Management
Performance measures	Expanded interagency data sharing
Active arterial management	Incident Management
Emergency Management	Interagency incident response
Remote monitoring and information sharing	Performance measures
Improved coordination with EOC and police	Maintenance and Construction
Improved incident detection	Work zone management
Improved coordinated incident response	Performance measures

The summary above shows a list of needs for the region and are not prioritized in any order. In the next sections, some of the needs will be discussed in further detail.

Traffic Operations and Management

A robust ITS network is vital for creating a strong transportation network. While ITS equipment has been installed throughout the region over the past 10 years, there are still areas throughout the region that can benefit greatly from installing new equipment.

The analysis completed in Chapter 4 revealed a need to continue to expand, enhance, and fill gaps associated with the communication network, the appropriate use of state-of-the-art ITS devices, and the information communicated to traffic management staff.

Technologies

Performance Measures

Targeted and quantifiable performance measures are recommended to better monitor the transportation system. Traffic operations staff in both the County and the City will benefit from the ability to accurately monitor the performance of the roadway and signal infrastructure. More specifically, Automated Traffic Signal Performance Measures (ATSPMs) are recommended for use at signalized intersections. The City of Ocala has already begun installing Advanced Traffic Controllers (ATC) at intersections at key locations, which will also facilitate the use of ATSPMs. As of the date of this report, Marion County has not started any program to replace their traffic controllers with ATCs but have indicated ATSPMs are a desirable feature in the near future.

Traffic Management Center Integration

Stakeholder meetings revealed a major need for better information, more staff communication between the State, County and City TMCs, and more staff in general. These TMCs are unable to share traffic information with one another, limiting the effectiveness of their overall operational capabilities, particularly with respect to traffic incidents and special events that affect traffic conditions in overlapping geographic/jurisdictional areas. However, the greatest need is more staff to operate these TMCs properly.

Emergency Management

Better emergency management practices will benefit safety and mobility within the study area. The safety analysis revealed several corridors with high rates of fatal and incapacitating crashes. Stretches of SR 200 and SR 464 are particularly prone to these kinds of incidents. While the analysis revealed that there is some CCTV coverage within these areas, expansion of this coverage will enable authorities to respond more quickly and effectively to incidents when they occur.

Potential Solutions

Significant hardware improvements have already been made in Marion County and the City of Ocala with respect to ITS technology. Since the last ITS plan was produced in 2008, technology such as Bluetooth® data collection devices, CCTV cameras fiber optic interconnect and more advanced signal controllers have been installed across the region. More effective use of the technology already in place will help to achieve the goals of improved operations and safety of the system. Additionally, expansion of the ITS system capabilities will provide additional benefits. Finally, local authorities have communicated that the most pressing need is more staff to effectively utilize deployed and proposed technologies. In the rest of this chapter, both topics will be discussed. First, recommendations will be made about strategic solutions that can be implemented to increase the effectiveness and efficiency of the existing ITS system in Marion County and the City of Ocala. Second, a variety of potential technical solutions will be discussed, all of which may be implemented to provide a stronger ITS network to be utilized by all relevant jurisdictions in the area.

Strategic Solutions

While the first ITS plan for the region in 2008 focused on installing new equipment to build a functioning ITS network, this plan relies more on strategic solutions that aim to optimize the use of the existing equipment

through improved processes and through partnering and staff resource sharing. Strategic solutions are key to minimizing the operational challenges of the current ITS system. The most simple and effective solution is to increase staff size, but other solutions will be discussed when this is not possible. New technology can be used to increase the capabilities of the ITS system but effectively applying the information produced through these enhanced capabilities will require strategic solutions.

The following paragraphs address two relevant objectives presented in Chapter 2:

- Improved agency coordination; and
- Improved TMC resource sharing

Achieving these objectives will require institutional and business process modifications in addition to technology upgrades. Recommended solutions to these challenges are discussed below.

Interagency Coordination

It is recommended that interagency coordination activities be increased across agencies and across departments within each agency. New ITS technologies produce large amounts of data that must be properly organized, archived, and made accessible to the staff and departments that can benefit from it. Stakeholders who can potentially make effective use of such information include the traffic departments of Marion County and the City of Ocala, the Ocala-Marion County TPO, FDOT, law enforcement agencies, and fire and rescue agencies.

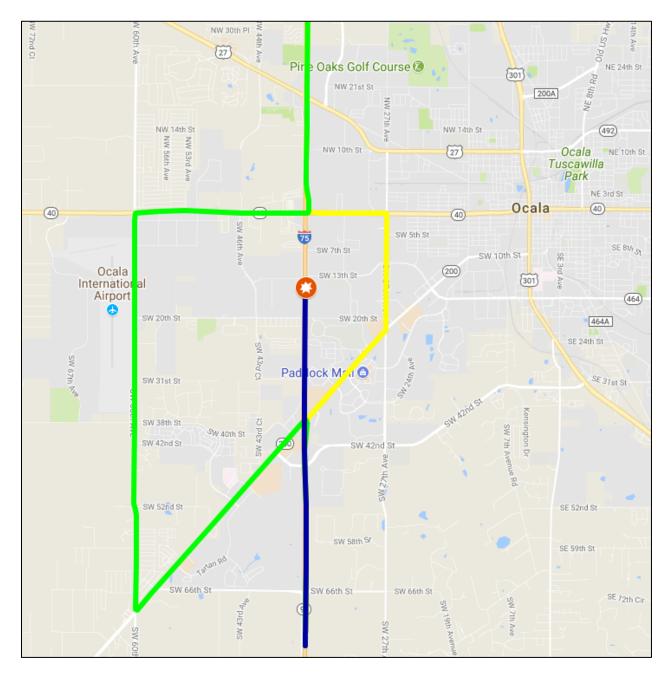
Under current institutional relationships and procedures, it is typical that each agency and/or department has access to some but not all regionally-available and potentially useful information. For example, a law enforcement agency like the Florida Highway Patrol may have immediate knowledge of an incident on I-75 but no insight into the scale of the upstream traffic queues and delays to other essential services that are building as a result. At the same time, the TMC staff may know the length and growth rate of the traffic queue but might not have a good estimate of when the downstream crash will be cleared from the roadway.

In the case of a closure on northbound I-75 located between SR-200 and SR-40, interagency coordination will aid in managing the traffic incident. **Figure 22** illustrates the location of an incident that closes northbound I-75. Two potential detours are identified, the shortest detour is east on SR-200 to SW 27th Avenue and the second is west to SW 60th Avenue. **Figure 23** summarizes the coordination and communication protocol that could be implemented, summarizing the activities for Fire Department (FD), Law Enforcement Officers (LEO), Emergency Medical Services (EMS), and TMC staff.

In this scenario, 911 is notified of a crash and they dispatch the crash to FD, LEO, and EMS personnel. Immediately afterward, they notify the City of Ocala and Marion County TMC staff of the crash and the extent of expected lane closures or full facility closure. TMC staff will identify a preplanned alternative Traffic Management Plan (TMP) and begin the implementation of the plan. This plan may include selecting appropriate detour routes, locations of portable DMS signs guiding the detour, signal timing plans, and traffic control personnel. As the incident continues to be worked by FD, LEO, and EMS personnel, they provide

updates to TMC staff where changes are made as needed, additional detour routes activated and adjusted as needed until the crash is cleared.

Figure 22 Example Detour for Northbound I-75 Closure



Updates 911 contacted TMC notified Crash dispatched Identify alt. TMP LEO, FD, EMS arrive Implement TMP **Updates** Feedback **Detour activated** Monitor and **Updates** manage detour Feedback Work crash site Complete alt. **TMP** Clear crash Normal operations

Figure 23 Example Coordination Process During I-75 Incident

Better access by all agency staff to relevant information before, during, and after such events will reduce the duration and severity of the impact of such events on the safety and operating characteristics of the transportation system. The following recommendations are made to improve the amount of information sharing among agencies within the region:

- Staff the TMC's so that the traffic data being collected by the signal system and ITS equipment can
 processed, analyzed and system changes made as incidents and transportation network demands
 require. This is absolutely essential to the establishment of a robust and responsive TMC. Additional
 discussion on staffing needs are in Chapter 6.
- Establish robust lines of communication between agencies, including but not limited to the following:
 - Provide for real-time representation and/or communication links among all agencies at each TMC;
 - Establish standard protocols that each TMC will follow for information sharing among agencies

- for each event type;
- Conduct regular after-the-fact de-brief sessions with representatives from all agencies to memorialize lessons learned and identify future procedural updates to be implemented.
- Fuse individual databases to the degree possible and, where separate databases must continue to be maintained, provide easy and reliable access portals/protocols to other agencies.
- Establish specific agency/staff responsibilities for ingesting, organizing, and archiving/maintaining each data set.

The TMC interoperability also enhances staff coverage between the City and County's TMCs, as highlighted above. A power outage at one TMC would prevent their staff from managing the roadway effectively. In this case, having a fused or shared database will allow the other agency to manage those roads from their TMC.

Taken together, these recommendations will enhance the level of cooperation and awareness that agency staff have with respect to both the existing state of the transportation system and the activities either underway or planned by peer agencies. The result will be a transportation system that performs more efficiently and safely.

Performance Measures

Some specific performance measure recommendations are provided in Chapter 2, which also includes discussion on Automated Traffic Signal Performance Measures (ATSPMs), Freight Advanced Traveler Information System (FRATIS) and Regional Integrated Transportation Information System (RITIS) for travel time reliability. These technologies and systems will provide local authorities with valuable performance measures that enable sound decision making. Certain performance measures should be adopted to ensure the transportation network operates in way that aligns with the objectives for the ITS system discussed in Chapter 2. These performance metrics could include:

- Approach volume
- Approach speed
- Approach delay
- Arrivals on red
- Travel time
- Travel time reliability

ATSPM equipment can provide local authorities with metrics like those above. This valuable information can be used to improve the performance of individual intersections but can also be collected to understand the function of the overall transportation network and determine areas where targeted ITS projects could be effective.

Technological Solutions

While the focus of this section is on strategic solutions to ITS shortcomings due to the ITS equipment already in the field and the stakeholders' acknowledgement of strategic shortcomings, there is still a significant role for technical solutions in improving the ITS system in this region. While many potential technologies are presented, it is important to remember that these are secondary solutions that defer to the strategic solutions offered above. Nevertheless, the technical solutions all offer the potential to improve the ITS system in the region. Not

all these solutions need to or ought to be implemented, but by choosing the right equipment to implement, the region can significantly enhance its ITS infrastructure.

Advanced Traffic Controller

The Institute of Transportation Engineers (ITE) Advanced Transportation Controller (ATC) Family of Standards are intended to provide open-architecture hardware and software platforms to support a wide range of Intelligent Transportation Systems (ITS) applications requiring a field-implementable controller. The initial standards in this family focus on traffic control applications of traffic signal control, ramp control, traffic monitoring (including ATSPMs), lane use signals, field masters, general ITS beacons, lane control, and access control. The modularity provided in the current standards will support the expansion to cover additional ITS functions in the future.

The City of Ocala has started the migration from the NEMA standard to the ATC standard with the recent replacement of 54 intersections with ATC controllers and cabinets. Marion County has not started any controller replacement to the ATC.

Vehicle Speed and Volumes

To maintain a transportation network properly, it is important understand how local roadways are being utilized. Some of the simplest but most important data available is speed and volume data. With basic speed and volume data, engineers can extrapolate a variety of other information about the roadway. With real time sensors, they can also use this data to understand how the roadway is operating in real time, allowing engineers to advise drivers of potential slow or busy spots. These measurements can be determined by a variety of sensors. Loop detectors in the pavement are a traditional and reliable way to measure these data but are expensive to install and maintain. Alternatively, a Microwave Vehicle Detection System (MVDS) can be used, which are roadside mounted units that use microwave radiation to determine volume, speed, vehicle classification, and occupancy data. Another method of collecting this data is the use video image processors, which are cameras with the programming to calculate a variety of traffic parameters.

Closed Circuit Television (CCTVs)

Closed Circuit Television (CCTV) cameras are not a new technology, but they continue to offer significant benefits in traffic management. They are most useful on major roadways, where quick and deliberate traffic management is crucial to ensuring the steady flow of traffic on critical thoroughfares. These cameras offer local Traffic Management Centers the ability to make real time decisions about how traffic should flow on these roadways, responding to accidents and congestion appropriately. It is recommended that local authorities continue to employ this technology.

Bluetooth® Travel Time Devices

Travel time is an important performance measure in road operation and can help road users make informed trip decisions based on the current state of the system and thus optimize the road network utilization. Traffic operators can also take advantage of the real-time data to identify and respond to bottlenecks as they develop.

Bluetooth® based travel time estimation systems are non-invasive, cost-effective and relatively easy to install. Travel times are determined from the Bluetooth®-enabled devices passengers carry with them in vehicles. In addition to travel times, some systems can also provide origin-destination information.

Traveler Information Dissemination

When travelers know the current state of the transportation system they can make better decisions about when, where, and how they travel. Advance traveler information systems (ATIS) are therefore of great value both to system users and to ensure the efficient performance of the system itself. In Florida, three methods are most commonly used to provide advance traveler information:

- <u>Dynamic Message Signs (DMS)</u> are a common and effective tool. They are large, permanent signs
 usually hung above major roadways. These signs operate on a continuous basis and are typically used
 to inform drivers of downstream travel times, incidents, lane closures, etc.
- <u>Portable Variable Message Signs (PVMS)</u> are programmable roadside message signs that can be moved to any location according to need. Typically, these signs are used to display information about temporary traffic pattern changes associated with work zones, construction activity, special events, etc.
- <u>Florida 511</u> is a service provided by FDOT which provides traffic incident information by phone and text message. The service notifies drivers of incidents ahead like crashes that are slowing traffic. The service can also be tied to the dynamic messaging signs, as the signs can be programmed to instruct drivers to call 511 for important traffic information.

Adaptive Traffic Control Systems

Adaptive Traffic Control Systems (ATCS) are traffic signals that communicate with one another and can adapt to changing traffic patterns by adjusting signal timing parameters such as green splits and offsets. An ATCS system is therefore able to reallocate green time among intersection approaches in response to short-term demand fluctuations; it is also able to anticipate the arrival time of vehicle platoons at downstream intersections and adjust the start of the green time accordingly. Some challenges must be overcome in the implementation of ATCS systems but the benefits of such systems to overall network performance can be significant.

Emergency Vehicle Preemption

Emergency signal preemption is an important capability that is employed to facilitate the movement of first responders (ambulances, fire trucks, and police) to their destinations. Emergency signal preemption can be achieved by either equipping the signals to recognize an emergency vehicle in transit or equipping emergency vehicles with a communication device that overrides the signal's normal operation. This is an important component of most emergency preparedness plans. It is recommended that preemption technology be implemented on important emergency corridors, such as SR 200, which serves multiple hospitals.

Transit Signal Priority

Transit Signal Priority (TSP) is a technology that reduces travel time and increases travel time reliability for transit riders. This technology works primarily by changing the signal timing at an intersection where an

approaching public transit vehicle is detected. It is similar to the preemption technology described above but works within a defined signal timing plan and either elongates a green interval or shortens a red interval to minimize the amount of delay the transit vehicle will experience at the intersection. The system does not cause the corridor to go out of coordination and it does not guarantee that an approaching transit vehicle will receive an extended green interval or a shortened red interval all the time.

Many TSP systems use the same technology as emergency vehicle preemption and so the implementation of TSP may be particularly opportunistic on corridors where emergency vehicle preemption has already been installed. As Ocala's transit network continues to grow, this technology is worth studying, especially if emergency preemption technology is installed in the region.

Roadside Units/DSRC

Roadside Units (RSUs) are essentially communication equipment that is placed alongside the roadside and housed in cabinets, which facilitates communication between nearby connected vehicles and the roadway infrastructure. RSUs are an important part of a national initiative to develop connected vehicle technology. Accordingly, they are part of the I-75 FRAME initiative to place emerging technologies on and around I-75 in Marion and Alachua Counties. As discussed earlier, connected vehicles are a growing phenomenon and will potentially serve as a stepping stone to fully automated vehicles. RSUs allow connected vehicles to communicate with roadway infrastructure such as traffic signals. Thus, for example, RSU's can allow a connected vehicle to know how many seconds remain until a downstream signal indication will turn from red to green.

Roadside Units (RSUs) form an important part of the vehicle to infrastructure (V2I) communication discussed above. The RSUs will communicate with On Board Units (OBUs), which are the receivers that all connected vehicles will be equipped with. These RSUs will communicate using either Dedicated Short-Range Communications (DSRC) technology (which operates at a 5.9 GHz frequency band) or via 5G cellular technology. In either case, the RSUs will receive data such as the speed, location, heading, and acceleration of the connected vehicle. It is important to note that the RSU only facilitates communication between vehicle and traffic infrastructure like traffic signals. Once it receives data from the traffic infrastructure, the RSU will then broadcast this information to all connected vehicles in its range.

RSUs are likely to play a major role in the continual development of connected vehicle technology. However, all future technology has risk. Local jurisdictions should be careful about committing to a technology before it is an established standard wherever possible. Thus, for example, the question of whether DSRC or 5G technology will become the de facto communication standard is still an open one. It is therefore recommended that local authorities closely follow the progress of the I-75 FRAME project and the establishment of technology standards.

Technologies

Traffic Signal Detection

Traffic detection capabilities are critical to ensuring the efficient operation of a transportation network. When they are installed on the approaches to signalized intersections, for example, these detectors can help ensure that the traffic signal indications will be more responsive to vehicle arrivals.

The most common kind of traffic signal detection is an inductive loop. This technology can detect the arrival and presence of vehicles on an intersection approach and then communicate this information to the signal controller. Newer signal detection technology uses video cameras mounted above an intersection to perform the same function.

These detectors are also critical for implementing the ATSPM technology across the region, which will provide crucial performance measures for local authorities. The type of specific measures available for use is highly dependent on the quality and configuration of the detection technology. For example, some performance measures such as Purdue Coordination and Arrivals on Red require the use of advanced detection and stop bar detection is needed to collect turning movement counts. However, other ATSPMs such as Split Monitor and Purdue Phase Termination does not need any detection.

Individual traffic signal detectors can also be quite useful in managing a large network of signalized intersections because the vehicle demand information they provide at the individual intersection level helps inform the overall management of the network. Therefore, it is recommended that the region continue to invest in the installation and maintenance of efficient and effective vehicle detection technologies throughout the region.

Active Arterial Management

Active Arterial Management (AAM) is the ability to actively manage congestion on an urban street or arterial based on current and predicted traffic conditions. Focusing on travel time reliability, it maximizes the effectiveness and efficiency of the facility. It increases throughput and safety through the use of integrated systems with new technology, including the dynamic deployment of operational strategies to optimize system performance quickly and without the delay that occurs when operators must deploy operational strategies manually.

Many transportation agencies in Florida are beginning to implement AAM programs, including the metropolitan areas of Orlando, Miami-Dade County, Palm Beach County and Broward County. Marion County region's ITS infrastructure is well enough in place for it to start taking advantages of arterial management based on AAM approach of a continuously monitored system.

Traffic Incident Management Program)

Traffic incidents are disruptive events that result in unexpected delay and degrade travel time reliability. Because of their unexpected nature, they can also have an adverse effect on safety by causing secondary crashes. Therefore, it is important that local authorities have a clear plan for responding to such incidents. This is the purpose of the Traffic Incident Management (TIM) Program. The TIM Program is a product of the Federal

Highway Administration (FHWA) and is applicable in most every local context. TIM is a "planned multidisciplinary process to detect, respond to, and clear traffic incidents so that traffic flow may be restored as safely and quickly as possible."3

The basic strategy the TIM employs is identifying all relevant partners in this incident response process and codifying the responsibilities of each partner. Partners include law enforcement, fire and rescue, emergency medical services, transportation agencies, public safety communications, emergency management, towing and recovery services, hazardous materials contractors, and traffic information media. The FHWA describes a myriad of responsibilities that each stakeholder has in responding to a traffic incident, which offer a strong framework that local authorities can use to apply to their unique context. While Marion County and the City of Ocala already use some of these strategies, it is recommended that local authorities specifically refer to the TIM Program and review their current response plans for traffic incidents to determine if there are ways to improve.

Active Incident Management

The previous section discussed the Traffic Incident Management (TIM) Program, which mainly describes the responsibilities and procedures recommended for responding to a traffic incident. However, there is also another important way to prepare for traffic incidents. Active incident management focuses on using ITS systems to respond to traffic incidents in real time. With ITS technology like CCTV cameras and DMS, traffic incidents can be quickly identified, activating the TIM program discussed earlier, and relayed to the travelling public. Using an active incident management program, local authorities can increase safety and decrease the disruption caused by a traffic incident. While Marion County and the City of Ocala have much of the technology necessary for an active incident management system, it is recommended that these jurisdictions formalize such a system and integrate it into the improved interagency coordination process. Also, this process will also require greater staff size to manage properly.

Emergency Preparation, Security, Response, and Recovery

Marion County's Emergency Operations Center (EOC) serves as the nerve center for the region's emergency response apparatus. It was primarily designed to coordinate the region's response to hurricanes passing through the State of Florida. These storms create chaos, flooding roads with evacuations and requiring County and City staff to complete extensive procedures to prepare the area for the storm. This response is coordinated by the emergency management branch of the Marion County Sheriff's Office. However, the emergency management department does more than just prepare for hurricanes: it also responds to all other weather emergencies, as well as other hazards like a hazardous material incident or terrorist attack.

The effectiveness and timeliness of these responses depends at least in part upon the ITS equipment deployed throughout the region. DMS signs and the Highway Advisory Radio are used to communicate important messages to drivers. CCTV cameras give EOC staff a clear picture of what is happening across the region. Detour

³ https://ops.fhwa.dot.gov/eto_tim_pse/about/tim.htm

routes are created with ITS information and evacuation routes are supported by ITS equipment. Overall, Marion County and the City of Ocala have prepared well for emergencies with the creation of the Emergency Operations Center. Therefore, it is recommended that local authorities continue supporting the EOC and continuously monitor how new ITS technology can be used to enhance the EOC's abilities.

Traffic and Weather Information Systems

Severe weather is a constant threat to the safe and effective function of a transportation network. Therefore, developing a weather information system for a region's transportation network can be a valuable investment. To respond to this need, authorities around the country have developed a Road Weather Information System (RWIS). RWIS uses a variety of sensors to detect dangerous driving conditions and immediately relay that information to drivers. These sensors include thermometers for measuring temperature, anemometers for measuring wind speed, wind vanes for measuring wind direction, visibility sensors for detecting fog and smoke, and rain gauges for measuring precipitation. These sensors can be used to detect adverse weather conditions like freezing roads, high winds, low visibility conditions, flash flooding and severe thunderstorms. With this system, these conditions can be directly communicated to drivers in real time.

In Marion County, the main weather threats are the occasional fog, smoke from forest fires and rain and wind from severe thunderstorms or hurricanes. During the dry season, forest fires sometimes grow large enough to threaten major roadways, requiring a way to communicate the danger to drivers. However, severe thunderstorms are by far the most common threat Floridian drivers face. Storms can arrive in an instant, bringing dangerous winds, lightning and blinding rain. As these cells can move quickly, it is important to alert drivers to their presence. Therefore, it is recommended that local authorities assess the viability of beginning an RWIS in the region, given its relatively low operational costs and its significant ability to inform drivers of potentially dangerous conditions.

Work Zone Management

Work zone management is an important component of a successful traffic management system. As areas grow roadwork is nearly constant, creating work zones that must be managed properly to ensure the workers' safety and the continued effectiveness of local roadways. This process can be assisted using ITS technology. ITS technology can provide traffic monitoring and management, information to travelers, incident management, and increased safety in work zone areas. Technology like messaging signs can be used to alert drivers to work zones ahead, portable speed sensors can warn drivers to slow down in work zones, and roadway sensors can be used to warn workers when a vehicle is entering the work zone. All these tools can provide major improvements in the process of work zone management.

For Marion County and the City of Ocala, work zone management using ITS technology will not require new technology, but an organized strategy for the proper utilization of the ITS and tools already in the field and performance measures produced by those devices or systems. Therefore, it is recommended that local authorities develop a set of standards that define when and how ITS should be used to support work zone management. Doing so will increase worker safety and reduce the traffic impacts of such construction.

Technologies

Variable Speed Limits

Speed limits are a simple but important tool for managing the speed on local roadways. While most locations only need a static sign to set the speed limit, some major roadways experience large fluctuations in their average speed throughout the day and can cause stop-and-go conditions that reduce a roadway's efficiency. As well, the region can also experience weather conditions that dictate slower-than-normal speed limits. In these cases, variable speed limits can be used to ensure that a reasonable speed limit is imposed on the roadway at all times of the day. These signs change the speed limit based on traffic volumes, congestion levels, and/or weather conditions. They can restore the credibility of speed limits for the driver and improve safety by reducing speed differential and providing a smoother rate of traffic flow. They usually resemble a regular speed limit sign, but with a digital display in the center that updates the speed limit as needed.

Variable speed limits are not currently used in Marion County and the City of Ocala. While these signs will not revolutionize a transportation network, they have the possibility of increasing safety and improving the function of local roadways. A before-and-after study in the Portland, OR metropolitan area, for example, reported an 11 percent reduction in crashes after installing variable speed limit signs on a busy corridor. As this region's population continues to grow and congestion increases, these signs may prove to be an affordable and effective option in improving the function of the local transportation network.

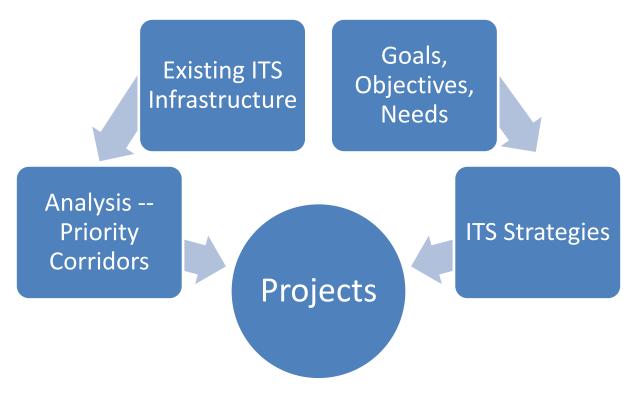
Chapter 6 | Proposed ITS Projects

This chapter will summarize a variety of ITS projects identified for implementation throughout the region. In support of the recommendations presented in Chapter 5, this chapter will present a specific list of corridors that will benefit from ITS device installation, identify the specific ITS elements recommended for each project, and summarize cost estimates for construction, maintenance and operations for the life cycle of the devices. This chapter will also discuss staffing needs for both the City of Ocala and Marion County to meet current and future needs.

Methodology to Identify Projects

The methodology used in the identification of the proposed ITS project corridors that support the Goals and Objectives are presented in this section. **Figure 24** illustrates the elements used to identify the projects.

Figure 24 ITS Project Selection Elements



The first set of key components of the process are the goals and objectives presented in Chapter 2 and the relationship of the needs and potential ITS strategies and technologies presented in Chapter 5. The goals and objectives are important to the region (and therefore the recommendations presented) and the projects and the technology recommended for each project below were selected to meet those regional goals and objectives. The results of the Traffic Operations Analysis in Chapter 4, and the identification of the Top 25 Priority Corridors were used to identify the specific roadways where continued investment in ITS has the potential to provide operational benefit.

The Top 25 segments overall, and Top 25 segments categorized by roadway classification, were reviewed and roadway facilities which presented multiple segments which scored in the top 25 of the lists were grouped into initial potential projects. The existing ITS infrastructure was then used to screen the initial projects to determine opportunities to expand remote communication (fiber or radio), CCTV cameras and Bluetooth® travel time devices. Identification of intersecting facilities that are also in the Top 25 lists were also identified and used to determine starting and ending points of a projects.

With the project limits defined, the existing ITS infrastructure was once again referenced and used to identify appropriate locations to expand the communication infrastructure, locations of CCTV cameras and Bluetooth® travel time devices.

Additionally, locations for Advanced Traffic Controller (ATC) upgrades were identified along these corridors. As mentioned previously, the City of Ocala has already upgraded about half of the signalized intersections with the new standard of traffic signal controllers. However, Marion County has not begun this process to date. The recommended location for ATC upgrades are on both City and County roadways. Even though the County currently does not use the technology, there is a likelihood in the next 10 years for the County to begin upgrading for strategic operational needs. Some of those needs include Automated Traffic Signal Performance Measures and future Connected Vehicle deployments discussed in Chapter 5.

In addition to the ITS Project Corridors, this report presents a separate standalone project recommendation. Based on the need to improve First Responder response times, implementation of an Emergency Vehicle Preemption (EVP) system is recommended. The decision to establish this as a separate project is based on how similar projects are implemented. The routes identified to provide the EVP are traffic signals on roadways that lead from fire stations, connect to roadways that typically experience congested operations throughout the day and are likely the sources of delay for emergency vehicles, and lead to hospitals with emergency room services. Other agencies who have implemented this regionally, typically do not select one or two corridors for initial implementation. Rather, they create a network of roadways to cover the various routes their personnel and equipment would be dispatched to. The process to determine recommended EVP corridors presented below followed this methodology. The routes from the fire stations along the major corridors which experience congestion to hospitals were identified and presented in the recommendations.

Recommended Projects

This section presents the recommend ITS Project Corridors and the recommended Emergency Vehicle Preemption.

Table 10 summarizes the Proposed Project Corridors the limits, and the recommended devices. The table also includes a cost estimate which includes capital costs, maintenance and operations cost and life-cycle replacement costs. **Appendix B** contains the detailed summary of the cost breakdown and **Figure 25** illustrates the location of the project corridors and the recommend ITS devices.

Table 10 Proposed Project Corridors

Project Number	Road Name	From	70	ATC Controllers	CCTV Devices	Radio Devices	Bluetooth [®] Devices	Capital Cost Estimate
1	US 27	NW 70 th Ave.	I-75	4	0	2	3	\$161,370
2	SR 40	SR 35	CR 314A	4	1	0	2	\$171,600
3	SR 326	I-75	SR 200A	6	1	5	2	\$279,870
4	SR 200	SR 484	SR 464	15	6	0	1	\$671,360
5	US 301/US 441	SE 165 th St.	SR 464	19	0	0	3	\$549,570
6	US 301	NW 35 th St.	SR 326	0	1	1	0	\$52,640
7	SR 40	Hwy 328	SW 27 th Ave.	3	1	3	1	\$166,260
8	SR 40	NE 1 st Ave.	SE 25 th Ave.	0	4	0	0	\$167,650
9	E Magnolia Ave/E 1 st Ave.	NE 20 th St.	SR 200A	18	6	0	0	\$743,070
10	SR 464	SR 200	Oak Rd.	24	2	0	0	\$739,280
11	SE 36 th St.	SR 464	SR 40	5	3	0	0	\$262,290
12	NW 35 th St.	NW 35 th Ave. Rd.	NE 36 th Ave.	5	0	4	0	\$179,470
13	SR 200A	US 301	NE 49 th St.	4	3	0	1	\$245,210
14	SW 42 nd St.	SR 200	SR 464	6	2	0	1	\$257,910
15	SR 484	Marion Oaks Course	US 441	11	0	0	2	\$320,860
16	Hwy 42	US 301	US 441	4	0	5	1	\$173,120
17	SW 27 th Ave/SW 19 th Ave Road	SW 42 nd St.	SR 464	4	0	0	0	\$109,240
18	SW 20 th St.	NW 60 th Ave.	SR 200	5	0	0	1	\$146,780



Proposed ITS Devices Expansion Ocala / Marion County

Figure **25**

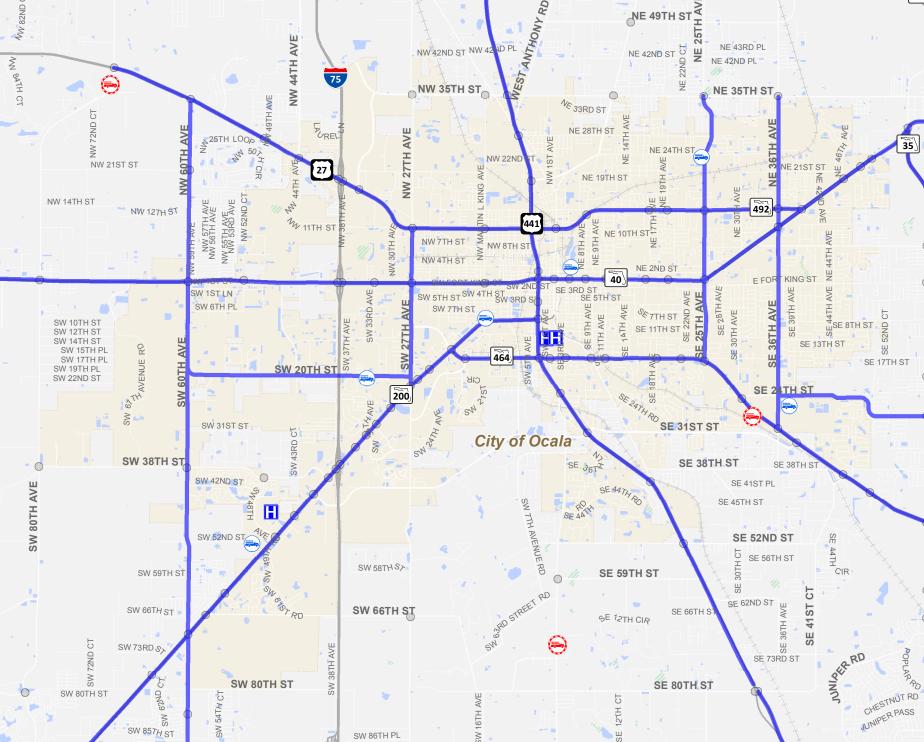
Figure 26 illustrates the location of the proposed Emergency Preemption Corridors, associated with the installation of Emergency Vehicle Preemption for City and County Fire and Rescue vehicles. The system that is most well-known for the past 15 years in North America is the Opticom GPS system manufactured by Global Traffic Technologies (GTT). While there are other systems that could be selected and installed, for the purpose of this discussion, Opticom will be used to develop the cost estimate.

The Opticom GPS technology consists to two components; a vehicle unit that is permanently installed on each vehicle that will require preemption service, and an intersection unit installed at a traffic signal. The role of the vehicle unit is to communicate a request for preemption as a fire truck or ambulance on route to a call approaches a traffic signal. The intersection unit receives the message from the vehicle as triggers an input in the traffic signal controller to start the preemption routine. The preemption routine is normally part of a standard signal controller function, so no upgrades are necessary. Additionally, if the signalized intersections are connected through ethernet to the TMC, GTT offers a management system called the Opticom Centralized Management System (CMS). The CMS allows for remote monitoring of the preemption in real time, and it also provides upload of settings downloading of activity logs. The CMS platform is usually installed on a separate server and the size of the server is dependent on the number of intersections operating the Opticom and are on the system.

Costs of the Opticom vehicle unit is approximately \$7,000 per vehicle, the cost of the intersection unit is approximately \$9,000 per location. The CMS platform for up to 75 intersections is approximately \$30,000 and a dedicated server to install the CMS on is approximately \$16,000. See **Table 11** below for a detailed cost estimation to install the system on both City of Ocala and Marion County vehicles and intersections.

Table 11 Cost Estimate for Emergency Vehicle Preemption System

		Cit	ty of Ocala	Mari	on County
	Unit Cost	Number	Total	Number	Total
Intersection Units	\$9,000.00	69	\$621,000.00	79	\$711,000.00
Vehicle Units	\$7,000.00	15	\$105,000.00	109	\$763,000.00
Central Management System	\$30,000.00	1	\$30,000.00	1	\$30,000.00
Dedicated Server	\$16,000.00	1	\$16,000.00	1	\$16,000.00
Total			\$772,000.00		\$1,520,000.00



Ocala-Marion County Hotels

Proposed Emergency Vehicle Preemption
Ocala / Marion County

Figure **26**

Staffing Needs and Estimates

As discussed throughout this ITS plan, stakeholders repeatedly listed staffing as one of the major needs for a more effective ITS network. This section will discuss the existing traffic staff in the region, as well as discussing criteria for increasing staff and estimates for those increases. Chapter 3 described the existing staff levels for traffic divisions of the City of Ocala and Marion County, with **Table 2** and **Table 3** showing each jurisdiction's respective staff level.

Current Staff Levels

The City of Ocala operates its traffic division with eight employees, with most serving as signal technicians. The budget has not allowed for a dedicated staff member for the operation of the Ocala Traffic Management Center, so the signal technicians typically manage it in addition to their other duties. However, this is only done in times of emergency or when the technicians' other responsibilities do not interfere. This fact was repeatedly discussed in the stakeholder meetings as a major hindrance to the effective function of the TMC, as it means that the TMC is not regularly utilized effectively.

Marion County faces many of the same challenges in their traffic management strategies. They operate their traffic division with six employees and most serve as signal technicians, like the City of Ocala. Just as with the City of Ocala, the budget has not allowed for a dedicated staff member for the operation of the Marion County Traffic Management Center, so the signal technicians typically manage it in addition to their other duties. This poses the same problems as the City of Ocala has experienced, as it prevents the TMC from being used effectively.

Criteria for Staff Increases

The stakeholder meetings discussed earlier clearly identified a need for staff increases in the traffic divisions for the City of Ocala and Marion County, especially in TMC positions. To provide guidelines for this expansion of traffic management staffs, this plan will reference the recommendations of FDOT's *District 5 Districtwide ITS Master Plan*. This FDOT plan provided criteria for agencies operating both traffic signals and ITS devices with a TMC. The criteria recommended staff levels for each position based on the combined number of the signals and ITS devices. These criteria are shown in **Table 12** below.

Table 12 Summary of ITS Needs

Docition	N	umber of	Signals + I	ΓS End Dev	vices
Position	<100	<200	<350	<700	<1400
Traffic Engineering Operations Manager	0	0-1	1	1	1
Traffic Signal Engineer	0-1	0-1	1-2	2-3	2-5
Traffic Signal Analysts/Technician	1-3	3-5	4-10	8-16	15-30
Traffic Signal Maintenance/ITS Fiber Technician	*	0-1	1	1-2	2-3
Network Specialist	*	0-1	1	1-2	2-3
Electronics Specialist (L2 Network Tech)	0-1	0-1	1	1-3	2-7
TMC Manager	*	0-1	1	1	1-2
Supervisor**	*	0-1	1	1-2	2-3
TMC Operators**	0-1	1	1	2-4	4-6

^{*} This position is desirable, but not required

Both the City of Ocala and Marion County operate enough signals and devices to be in the <200 level, so these staffing recommendations will be used for the cost estimates provided below, although local staffing realities will also be considered in these recommendations.

Cost Estimates for Staff Increases

The recommendations above form the basis of cost estimates for increasing the staff of the traffic divisions for the City of Ocala and Marion County. These cost estimates will begin by comparing the current staff level of each department with the recommended staff levels shown above. It is worth noting that the staff levels shown below represent information provided by the City and County and may not completely align with the older FDOT report referenced in Chapter 3. Then, the average salary (with a 2.15 multiplier to accurately reflect the true cost of each employee) of each employee will be computed for each recommended addition to the staff.

With these criteria, this report recommends several TMC staff to be added. Also, these existing staff and, as a result, the recommendations are slightly different from the recommendation presented in **Table 2** and **Table 3**. The City of Ocala should add a TMC manager and TMC operator. The total costs of these staff increases will be about \$226,000 per year. Likewise, recommendations for Marion County staff are also presented. Marion County should add a TMC manager and TMC operator. These staff increases will also cost about \$226,000 per year. The recommended staff increases are detailed in **Table 13** and **Table 14**.

^{**} This position is required 14 hours a day (Weekdays Only). Note that FDOT and the City of Orlando are 24 hours a day/7 days a week/365 days a year.

Table 13 City of Ocala Staffing

		City of Ocala	Staffing				
Position	Existing Staff	Current Needed - Recommended Staff	Current Needed - Additional Staff	(Inclu	rage Pay ides 2.15 iplier) **	Tota Propos Cos	sed
Traffic Engineering Operations Manager	1.0	1.0	0.0	\$	268,750	\$	1
Traffic Signal Engineer	0.0	0.0	0.0	\$	201,240	\$	-
Traffic Signal Analyst/Technician	0.0	0.0	0.0	\$	134,160	\$	-
Traffic Signal Maintenance / ITS Fiber Technician	5.0	5.0	0.0	\$	112,226	\$	-
Network Specialist	0.0	0.0	0.0	\$	182,750	\$	-
Electronic Specialist (L2 Network Tech)	1.0*	1.0	0.0	\$	115,581	\$	1
TMC Manager	0.0	1.0	1.0	\$	172,000	\$ 172,	.000
TMC Supervisor	0.0	0.0	0.0	\$	80,625	\$	-
TMC Operator	0.0	1.0	1.0	\$	53,750	\$ 53,	750
				Т	OTAL	\$ 225,7	750

^{*} This staff person is maintained by the Ocala Fiber Network

^{**} This pay multiplier is the same as used the Space Coast TPO ITS Master Plan. Original source is Palm Beach County MPO.

Table 14 Marion County Staffing

		Marion County	y Staffing				
Position	Existing Staff	Current Needed - Recommended Staff	Current Needed - Additional Staff	(Includ	age Pay des 2.15 tiplier)	Tota Propo Cos	sed
Traffic Engineering Operations Manager	0.0	0.0	0.0	\$	268,750	\$	-
Traffic Signal Engineer	0.0	0.0	0.0	\$	201,240	\$	-
Traffic Signal Analyst/Technician	1.0	1.0	0.0	\$	134,160	\$	-
Traffic Signal Maintenance / ITS Fiber Technician	3.0	3.0	0.0	\$	112,226	\$	-
Network Specialist	0.0	0.0	0.0	\$	182,750	\$	-
Electronic Specialist (L2 Network Tech)	0.0	0.0	0.0	\$	115,581	\$	-
TMC Manager	0.0	1.0	1.0	\$	172,000	\$ 172	,000
TMC Supervisor	0.0	0.0	0.0	\$	80,625	\$	-
TMC Operator	0.0	1.0	1.0	\$	53,750	\$ 53	,750
				TOTAL		\$ 225,	750

Chapter 7 | Regional ITS Architecture Compliance

Code of Federal Regulations Part 940 (23 CFR 940) defines Intelligent Transportation System (ITS) Architecture and Standards and requires that ITS projects must conform to a regional Intelligent Transportation System Architecture and should be consistent with the transportation planning process for Statewide and Metropolitan Transportation Planning. 23 CFR 940 applies to all ITS Projects receiving any federal funding on all roadways. The policy states that all ITS Projects shall conform to the National ITS Architecture and standards and it requires that all states and region within those states have an ITS Architecture. The policy continues that all ITS Projects must follow those statewide and Regional ITS Architectures and should be on the scale commensurate with the scope of the local ITS investment. The Regional ITS Architecture should include some of the following elements:

- 1. A description of the region;
- 2. Identification of participating agencies and other stakeholders;
- An operational concept that identifies the roles and responsibilities of participating agencies and stakeholders in the operation and implementation of the systems included in the regional ITS architecture;
- 4. Any agreements (existing or new) required for operations, including at a minimum those affecting ITS project interoperability, utilization of ITS related standards, and the operation of the projects identified in the regional ITS architecture;
- 5. System functional requirements;
- 6. Interface requirements and information exchanges with planned and existing systems and subsystems (for example, subsystems and architecture flows as defined in the National ITS Architecture);
- 7. Identification of ITS standards supporting regional and national interoperability; and
- 8. The sequence of projects required for implementation.

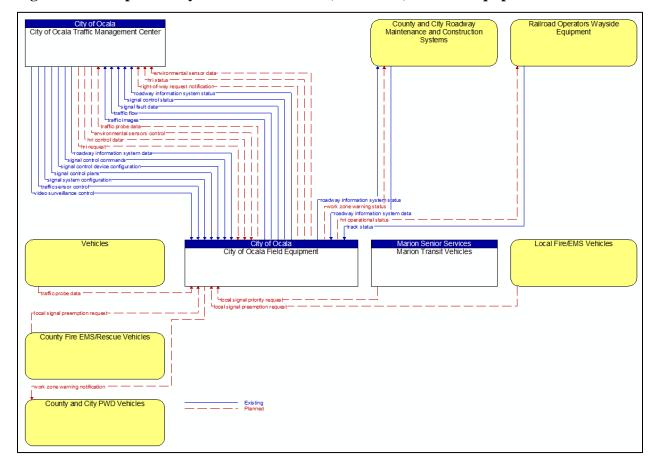
Each stakeholder has their own portion of the Regional ITS Architecture with their own Service Packages and data flows showing how they receive and provide information and/or data to the other agencies. FDOT - District 5 manages the Regional ITS Architecture update on January 18, 2016:

http://www.consystec.com/florida/d5/web/index.htm

Regional ITS Architecture was reviewed and compared against the recommended project summarized in Chapter 6. All the proposed projects are reflected in the Regional ITS Architecture in terms of market packages, data flows and stakeholders. However, as the ITS projects are implemented, the TPO would need to work with FDOT D5 to ensure connects are updated from *planned* to *existing*.

Figure 27 and Figure 28 illustrate example diagrams from the Regional ITS Architecture.

Figure 27 Example of City of Ocala Interface (data flows) to Field Equipment



ATMS03 - Traffic Signal Control City of Ocala signal control commands signal control device configuration Traffic Management signal control plans Roadway City of Ocala Traffic Management Center signal system configuration City of Ocala Field Equipment traffic sensor control video surveillance control signal control status signal fault data traffic flow + traffic images right-of-way request notification LEGEND planned and future flow existing flow

Figure 28 Example of Service Package for Traffic Signal Control, City of Ocala (ATMS03)

user defined flow

Kittelson & Associates, Inc.	Page 82	Ocala/Marion County ITS Strategic	Plan
Appendix A – Rankings			

Roadway	From	То	Roadway Classification Rural 2-Lane Facility	Fatal Crash Rate	Fatal & Incapacitating Injury Crash Rate	Total Crash Rate	Total Crash Ranking	Total Fatal Ranking	Fatal and Incapacitating Injury Ranking	Safety Significance	V/C Ratio	MAV Ranking (V/C*30)	Existing Volume Ranking	Truck Volume Ranking	Truck Route Ranking Evac Route Ranking	Fiber Connection Ranking	CCTV Ranking	Bluetooth Ranking	ITS Significance	Total Scoring	Ranked Top 25 Segments (I- 75 removed)	Segments Segments	Regional Segments	IS Emergenc C	roposed ommuni aTC Signal controller
SR 464 SR 200 US 441	SW 5TH AVE I-75 RAMP (WEST) SR 464	US 441 I-75 RAMP (EAST) SW 10 ST	Non-Regional Regional Regional	0.00 0.00 0.00	4.69 5.78 3.03	121.96 182.13 209.88	7.5 10 10	0 0	20 20 15	27.5 30.0 25.0	1.26 0.66 0.72	37.95 19.83 21.72	7.5 7.5 7.5	0 10 0	0 5 0 10 10 10	7.5 7.5 5	2.5 2.5 2.5	2.5 2.5 2.5	12.5 12.5 10	90.45 89.83 84.22	YES YES YES	YES	YES YES	YES YES YES	YES YES
I-75 US 441 SR 40	CR 484 NW 6TH ST I-75 RAMP (EAST)	SR 200 US 27 SW 33 AV	SIS Regional Regional	0.00 0.00 0.00	1.16 2.52 3.69	55.70 95.94 144.65	5 7.5 7.5	0	10 15 15	15.0 22.5 22.5	0.71 0.76 0.71	21.21 22.92 21.27	10 7.5 5	10 0 0	10 10 10 10 10 10	5 5 7.5	2.5 2.5 2.5	0 2.5 2.5	7.5 10 12.5	83.71 82.92 81.27	YES YES		YES YES	YES YES	YES
US 441 SR 200	SW 10 ST SW 38TH CT	SW 5 ST I-75 RAMP (WEST)	Regional Regional	0.00	1.72 4.69	117.60 295.68	7.5	0	10 20	17.5 30.0	0.78	23.31 19.83	7.5 7.5	0	10 10 0 10	7.5 7.5	2.5 2.5	2.5	12.5 12.5	80.81 79.83	YES YES		YES YES	YES YES YES	YES
SR 200 SR 200 SR 200	SW 27 AV SW 20 ST SW 36 AV	SW 20 ST SW 17 RD SW 34 AV	Regional Regional	0.00 1.90 0.00	6.49 4.74 3.65	232.11 182.17 375.08	10 10 10	0 10 0	20 20 15	30.0 30.0 25.0	0.66 0.66 0.73	19.8 19.68 21.96	7.5 7.5 10	0 0	0 10 0 10 0 10	7.5 7.5 7.5	2.5 2.5 2.5	2.5 2.5 2.5	12.5 12.5 12.5	79.8 79.68 79.46	YES YES YES		YES YES YES	YES	
SR 40 SR 40	US 441 I-75 RAMP (WEST)	NW 2 AV I-75 RAMP (EAST)	Regional Regional	0.00	5.59 0.00	180.67 212.47	10 10	0	20	30.0 10.0	0.71 0.69	21.18 20.85	5	0 10	0 10 10 10	7.5 7.5	2.5 2.5	2.5 2.5	12.5 12.5	78.68 78.35	YES YES		YES YES	YES YES YES	YES
I-75 I-75	SW 33 AV URBAN AREA BOUNDARY SR 40	SW 27 AV CR 318 US 27	Regional SIS SIS	0.00 0.83 0.00	2.40 1.67 0.72	82.13 22.49 45.94	2.5 5	7.5 0	10 10 5	15.0 12.5 10.0	0.76 0.84 0.58	22.86 25.11 17.37	7.5 10 10	10 10	10 10 10 10 10 10 10 10	7.5 0 5	0 2.5	0 2.5	12.5 0 10	77.86 77.61 77.37	YES		YES	YES	
SR 464 SR 464 I-75	SE 3 AV SW 1 AV SR 200	CR 464A SE 3 AV SR 40	Non-Regional Non-Regional SIS	0.00 0.00 0.16	1.75 1.87 0.65	94.58 102.95 43.73	7.5 7.5 2.5	0 0 2.5	10 10 5	17.5 17.5 7.5	0.97 0.97 0.63	28.98 28.98 18.9	7.5 7.5 10	5 5 10	0 5 0 5	7.5 7.5 5	2.5 2.5 2.5	2.5 2.5 2.5	12.5 12.5 10	76.48 76.48 76.4	YES YES	YES YES		YES YES	YES YES
SR 40 I-75	NE 11 AV CR 484	SE 14 AV SR 200	Regional SIS	0.00 0.31	6.48 1.33	92.86 36.41	7.5 2.5	5	20 10	27.5 12.5	0.71 0.71	21.33 21.21	5 10	0 10	0 10 10 10	7.5	2.5 2.5	2.5	12.5 2.5	76.33 76.21 76.12	YES		YES	YES	
US 441 SR 40 US 441	CR 484 NE 19 CT SW 5 ST	SE 110 ST NE 25 AV SR 40	Regional Regional	0.00 0.00 0.00	2.97 2.88 0.00	99.74 119.76 145.30	7.5 7.5 7.5	0 0	15 15 0	22.5 22.5 7.5	0.70 0.79 0.78	21.12 23.61 23.31	5 7.5 7.5	0 0 5	10 10 0 10 10 10	2.5 7.5 7.5	2.5 2.5 2.5	2.5 2.5 2.5	7.5 12.5 12.5	76.12 76.11 75.81	YES YES YES		YES YES YES	YES YES YES	YES
US 27 I-75	NW 38 AV SR 326	I-75 RAMP (WEST) URBAN AREA BOUNDARY	SIS SIS	0.00	6.75 0.67	138.34 31.30	7.5 2.5	0	20 5	27.5 7.5	0.43	12.93 25.11	2.5	10	10 10 10 10	7.5	2.5 2.5	2.5	12.5 2.5	75.43 75.11	YES		YES	YES	YES
SR 200 US 441	URBAN AREA BOUNDARY SW 32 AV COUNTY LINE (S)	CR 318 SW 26 ST SE 178 PL	Regional Regional	0.22 0.00 0.00	0.88 2.69 3.75	26.25 280.72 178.85	10 10	0	15 15	25.0 25.0	0.84 0.66 0.75	25.11 19.92 22.38	7.5 5	0 0	0 10 10 10	7.5	2.5 2.5 2.5	2.5	2.5 12.5 2.5	75.11 74.92 74.88	YES YES		YES YES	YES YES YES	
SR 464 1-75	SE 22 AV US 27 US 441	SE 25 AV SR 326 SW 1 AV	Non-Regional SIS Non-Regional	1.26 0.00 0.00	6.30 0.44 0.00	59.83 32.10 221.66	5 2.5	10 0	5	25.0 7.5 10.0	0.81 0.56 1.14	24.36 16.83 34.14	7.5 10	0 10	0 5 10 10	7.5 5 7.5	2.5 2.5	2.5 2.5	12.5 10 12.5	74.36 74.33 74.14	YES	YES		YES	YES
SR 464 1-75 1-75	CR 318	COUNTY LINE (N) COUNTY LINE (N)	SIS SIS	0.00	0.67 0.51	14.95 11.29	0	0 2.5	5	5.0 5.0	0.96	28.92 28.92	10 10	10 10	10 10 10 10	0 0	0 0	0 0	0	73.92 73.92 73.83		1 1.0			113
SR 40 I-75 CR 464	NE 11 AV CR 484 MIDWAY RD	SE 14 AV SR 200 BAHIA RD	Regional SIS Non-Regional	0.00 0.00 0.00	7.06 0.99 4.43	80.28 29.67 94.77	5 2.5 7.5	0	20 5 15	25.0 7.5 22.5	0.71 0.71 0.77	21.33 21.21 22.98	5 10 5	0 10 5	0 10 10 10 0 5	7.5 5 7.5	2.5 0 2.5	2.5 0 2.5	12.5 5 12.5	73.71	YES	YES	YES	YES	YES
CR 464 US 441	SE 64 AV SE 102 PL	SE PINE RD SE 100 ST	Non-Regional Regional	0.28	3.70 2.70	92.95 75.61	7.5 5	2.5 0	15 15	22.5 20.0	0.77 0.67	22.98 20.16	5	5	0 5 10 10	7.5 2.5	2.5 2.5	2.5 2.5	12.5 7.5	72.98 72.98 72.66		YES	YES	YES YES	YES YES YES YES
US 441 I-75 I-75	SE 95 ST URBAN AREA BOUNDARY URBAN AREA BOUNDARY	SE 92 PL RD CR 318 CR 318	Regional SIS SIS	0.00 0.21 0.35	2.59 1.04 0.71	61.48 18.16 18.41	2.5 2.5	2.5 5	5 5	7.5 7.5	0.67 0.84 0.84	20.16 25.11 25.11	10 10	10 10	10 10 10 10 10 10 10 10	0	0	0 0	0 0	72.66 72.61 72.61			YES	YES	AFZ
I-75 US 441 SR 200	URBAN AREA BOUNDARY SE 52 ST SW 34 AV	CR 318 SE 40 CIR SW 32 AV	SIS Regional	0.49	0.98 0.83 1.96	26.33 8.72 155.79	2.5 0	5 7.5	5	7.5 5.0 17.5	0.84 0.91 0.73	25.11 27.15	10 7.5	0	10 10 10 10	7.5 7.5	2.5	2.5	0 12.5 12.5	72.61 72.15			YES YES	YES YES	YES
SR 464 SR 40	SE 36 AV CR 315	SE 44 AV CR 314	Regional Non-Regional SIS Yes	0.00 0.00 0.00	3.77 0.08	101.77 5.61	7.5 0	0	15 0	22.5 0.0	0.81	21.96 24.42 29.37	7.5 10	0 5	0 5 10 10	7.5 7.5	2.5	2.5	12.5 12.5 7.5	71.96 71.92 71.87		YES	YES	YES	YES
I-75 US 441 US 27	CR 318 SW 5 ST NW MARTIN L KING AV	SR 40 US 441	SIS Regional Regional	0.00 0.00 0.00	0.23 0.00 0.63	20.98 148.74 69.44	2.5 7.5 5	0 0	0 0 5	2.5 7.5 10.0	0.96 0.78 0.77	28.92 23.31 23.22	7.5 7.5	0 0	10 10 10 10 10 10 10 10 10 10	7.5 5	2.5 2.5	2.5 2.5	0 12.5 10	71.42 70.81 70.72			YES YES	YES YES	
US 441 SR 40	NW 2 ST NE 8 AV	NW 6TH ST NE 10TH ST	Regional Regional	0.00	0.00	52.89 122.21	5 7.5	0	0	5.0 7.5	0.94 1.09	28.17 32.61	7.5 7.5	0	10 10 0 10	5 7.5	2.5 2.5	2.5 2.5	10 12.5	70.67 70.11				YES YES	
US 441 SR 35	URBAN AREA BOUNDARY SE 178 PL SE JUNIPER CIR	CR 318 SE 176 ST LAUREL RD	Regional Non-Regional	0.23 0.00 0.00	2.15 1.91	12.38 93.52 69.79	7.5 5	0 0	10 10	17.5 15.0	0.84 0.75 0.91	25.11 22.38 27.33	5 2.5	0 5	10 10 10 10 0 10 0 10	0 7.5	2.5 0	2.5 2.5	5 10	70.11 69.88 69.83		YES		YES	
SR 35 SW 27 AV	SE 92ND PL SW 19 AV RD SE 18 AV	SE JUNIPER CIR SR 200 SE 22 AV	Non-Regional Non-Regional Non-Regional	0.00	1.84 3.01 3.70	28.14 240.15 54.87	2.5 10	5	10 15	12.5 25.0	0.91 0.58 0.81	27.33 17.25 24.36	2.5 5	5	0 10 5	7.5 7.5 7.5	2.5 2.5	2.5 2.5	12.5 12.5 12.5	69.83 69.75 69.36		YES YES YES		YES	YES
SR 464 1-75 1-75	US 27 CR 484	SR 326 SR 200	SIS SIS	0.00 0.00 0.00	0.78 0.12	18.10 18.80	2.5 2.5	0	5 0	7.5 2.5	0.56 0.71	16.83 21.21	10 10	10 10	10 10 10 10	2.5	0	2.5 0	5 5	69.33 68.71		1.5		163	11:3
I-75 US 441 SR 464	CR 484 SW 5 ST SW 7 AV	SR 200 SR 40 SW 5TH AVE	SIS Regional Non-Regional	0.00 0.00 0.00	0.91 0.00 0.00	22.89 78.00 77.31	2.5 5	0	5 0	7.5 5.0 5.0	0.71 0.78 1.26	21.21 23.31 37.95	10 7.5 7.5	10 0	10 10 10 10 0 5	7.5 7.5	0 2.5 2.5	0 2.5 2.5	0 12.5 12.5	68.71 68.31 67.95		YES		YES YES	YES
US 441 US 441	SE 100 ST SE 47 AV	SE 95 ST SE 102 PL	Regional Regional	0.00	1.46 1.69	16.81 50.02	2.5 5	0	10 10	12.5 15.0	0.67 0.67	20.16 20.16	5	0	10 10 10 10	5 2.5	2.5 2.5	2.5 2.5	10 7.5	67.66 67.66				YES YES	YES YES YES
SR 35 SR 40 US 441	SE 16 AV SE 52 ST	SR 464 NE 19 CT SE 40 CIR	Non-Regional Regional Regional	0.00 0.00 0.00	0.31 1.94 0.00	31.71 160.05 31.00	2.5 7.5 2.5	0 0	5 10 0	7.5 17.5 2.5	1.00 0.74 0.91	30 22.32 27.15	2.5 5 7.5	5 0 0	0 10 0 10 10 10	7.5 7.5 7.5	2.5 2.5 0	2.5 2.5 2.5	12.5 12.5 10	67.5 67.32 67.15		YES		YES YES	YES
SR 40 1-75	SW 46 AV US 27	I-75 RAMP (WEST) SR 326	Regional SIS	0.00	0.54	50.06 27.27	5 2.5	0	5	10.0 2.5	0.65 0.56	19.62 16.83	5 10	0 10	10 10 10 10	7.5 2.5	2.5 2.5	2.5 2.5	12.5 7.5	67.12 66.83				YES	
US 41 SR 464 US 27	SR 40 SE 49 TER I-75 RAMP (WEST)	SR 35 I-75 RAMP (EAST)	Regional Non-Regional SIS	0.00 0.47 0.00	1.37 4.70 0.00	24.18 40.19 115.52	2.5 2.5 7.5	5	20	22.5 7.5	1.23 0.72 0.47	36.78 21.66 14.1	5 2.5	0 10	0 5 10 10	7.5 7.5	2.5 2.5	2.5 2.5	12.5 12.5	66.78 66.66 66.6		YES	YES	YES YES	YES
US 441 US 441 SR 40	NW 20 ST US 27 CR 314	NE 28 ST NW 20 ST NE 145 AV	Regional Regional SIS Yes	0.00 0.00 0.00	1.59 0.61 0.42	32.85 53.29 5.09	2.5 5	0	10 5	12.5 10.0 5.0	0.62 0.70 0.60	18.57 20.94 18.12	5 5	0	10 10 10 10	5 5 7.5	2.5 2.5	2.5 2.5	10 10 7.5	66.07 65.94 65.62			VES	YES	
SR 40 SR 40	CR 314 SR 326	NE 145 AV CR 315	SIS Yes SIS Yes	0.00	0.30 0.00	7.06 6.90	0	0	5	5.0 0.0	0.60	18.12 27.72	10 10	5 0	10 10 10 10	7.5 7.5	0	0	7.5 7.5	65.62 65.22			YES YES		
US 441 1-75 1-75	SE 110 ST URBAN AREA BOUNDARY URBAN AREA BOUNDARY	SE 47 AV CR 318 CR 318	Regional SIS SIS	0.00 0.00 0.00	0.00 0.00	50.39 14.78 8.07	0	0 0	0 0	0.0 0.0	0.67 0.84 0.84	20.16 25.11 25.11	5 10 10	0 10 10	10 10 10 10 10 10	0 0	0 0	0 0	0 0	65.16 65.11 65.11				YES	YES
I-75 US 27 SR 200	URBAN AREA BOUNDARY NW 60 AV SW 26 ST	CR 318 NW 49 AV SW 27 AV	SIS SIS	0.00 0.95 0.00	0.00 2.84	12.00 36.39 122.49	0 2.5	0 7.5	0 15	0.0 17.5	0.84 0.42	25.11 12.48 19.92	10 2.5	10 0	10 10 10 10	7.5	2.5	0 2.5	0 12.5	65.11 64.98 64.92			YES	YES YES	YES
US 441 SR 40	SE 176 ST NE 25 AV	CR 42 NE 36 AV	Regional Regional Regional	0.00	0.84 1.22	36.64 109.78	2.5 7.5	0	5 10	7.5 17.5	0.66 0.75 0.65	22.38 19.62	5	0	10 10 10 0 10	5 7.5	2.5 2.5	2.5 2.5	10 12.5	64.88 64.62				YES	
US 441 SR 40 SR 464	SE 73 ST NE WATULA AV SE 13TH AVE	SE 52 ST NE 8 AV SE 18 AV	Regional Regional Non-Regional	0.00 0.00 0.00	0.36 0.00 1.67	28.96 64.97 99.96	2.5 5 7.5	0	5 0	7.5 5.0 17.5	0.65 0.98 0.80	19.53 29.46 23.97	5 7.5 7.5	0	10 10 0 10 0 5	7.5 7.5 7.5	2.5 2.5	2.5 2.5 2.5	12.5 12.5	64.53 64.46 63.97		YES		YES YES YES	YES
SR 40 SR 200	SE 14 AV SW 48TH AVE	SE 16 AV SW 44 CT	Regional Regional	0.00	1.87 1.16	55.04 62.52	5	0	10 10	15.0 15.0	0.71 0.63	21.33 18.78	5 7.5	0	0 10 0 10	7.5 7.5	2.5 2.5	2.5 2.5	12.5 12.5	63.83 63.78				YES YES	
I-75 SR 200 US 441	CR 484 SW MARTIN L KING AV CR 475	SR 200 SW 7 RD SR 464	SIS Regional Regional	0.00 0.00	0.00 3.74 0.72	29.47 55.54 126.65	2.5 5 7.5	0 0	0 15 5	2.5 20.0 12.5	0.71 0.45 0.52	21.21 13.41 15.6	10 5 5	10 5 0	10 10 10 10 10 10 10 10 10	5 5	2.5 2.5	2.5 2.5	0 10 10	63.71 63.41 63.1				YES YES	
SR 464	SW 19 AV RD SR 200	SW 12TH AVE SW 19 AV RD MIDWAY RD	Non-Regional Non-Regional	0.00	0.75 1.71 1.78	47.14 179.01 44.47	5 10	0	5 10	10.0 20.0 12.5	0.94 0.68	28.05 20.49	7.5 5	0	0 5	7.5 7.5	2.5 2.5	2.5 2.5	12.5 12.5	63.05 62.99		YES YES YES		YES YES YES YES	YES YES
CR 464 SR 40 US 441	SR 492 SR 40	NE 46 AV NW 2 ST	Non-Regional Regional Regional	0.00 0.00 0.00	3.53 0.00	65.34 243.64	5 10	0	15 0	20.0 10.0	0.77 0.52 0.52	22.98 15.45 15.45	5	0	0 10 10 10	7.5 7.5 7.5	2.5 2.5 2.5	2.5 2.5 2.5	12.5 12.5 12.5	62.98 62.95 62.95		1153		YES	YES
US 27 SR 40 SR 200	NW 49 AV NE 49 TER 1/4 MI SW OF CR 484	NW 44 AV SR 35 CR 484	SIS Regional Regional Yes	0.00	1.49 1.19 0.00	46.57 55.85 57.89	5 5	0	10 10	15.0 15.0 5.0	0.43 0.51 0.76	12.93 15.36 22.65	2.5 5 10	0 5	10 10 0 10 0 10	7.5 7.5 7.5	2.5 2.5 2.5	2.5 2.5 0	12.5 12.5 10	62.93 62.86 62.65			YES	YES	YES YES
SR 40 US 441	NE 1 AV CR 42	NE WATULA AV SE 147 PL	Regional Regional	0.00	0.00 0.77	192.90 27.75	10 2.5	0	0 5	10.0 7.5	0.83	25.02 19.98	5	0	0 10 10 10	7.5 5	2.5	2.5	12.5 10	62.52 62.48				YES YES	YES YES
US 27 SR 40 SR 40	NW 27 AV NE 25 AV NE 25 AV	NW MARTIN L KING AV NE 36 AV NE 36 AV	Regional Regional	0.00 0.00 0.00	0.41 2.41 1.24	23.53 122.44 103.31	2.5 7.5 7.5	0	5 10 10	7.5 17.5 17.5	0.58 0.65 0.65	17.31 19.62 19.62	5 5 5	0 0	10 10 10 0 10 0 10 10 10	7.5 7.5 7.5	0 0	2.5 2.5 2.5	12.5 10 10	62.31 62.12 62.12				YES YES YES	
SR 326 SR 200 SR 464	I-75 RAMP (EAST) I-75 RAMP (EAST) CR 464A	CR 25A SW 36 AV SE 11 AV	SIS Regional Non-Regional	0.00 0.00 0.00	1.39 0.00 0.00	87.05 169.14 95.54	5 7.5 7.5	0	0 0	15.0 7.5 7.5	0.48 0.73 0.98	14.46 21.96 29.31	2.5 10 7.5	5 0	10 5 0 10	5 7.5	2.5 2.5 2.5	2.5 2.5 2.5	10 12.5	61.96 61.96 61.81		Akc	YES	YES YES YES YES YES YES YES	YES YES YES YES
SR 464	NE 10TH ST SE 11 AV	NE 11 AV SE 13TH AVE	Regional Non-Regional	0.00	0.00 1.83	51.13 38.43	7.5 5 2.5	0	0 10	7.5 5.0 12.5	0.89	26.55 23.97	7.5 7.5	0	0 10 0 5	7.5 7.5 7.5	2.5 2.5 2.5	2.5 2.5 2.5	12.5 12.5 12.5	61.55 61.47		YES		TES	
US 441 US 441 CR 484	SE 115 PL CR 25A MARION OAKS BLVD	US 301 SE 115 PL SW 135 PL	Regional Regional Non-Regional	0.00 0.00 0.00	0.63 0.00 1.81	9.70 15.07 79.18	0 2.5 S	0 0	5 0 10	5.0 2.5 15.0	0.54 0.53 0.70	16.08 15.96 20.91	5 5 5	5 5 5	10 10 10 10 0 10	5 7.5 0	2.5 2.5 2.5	2.5 2.5 2.5	10 12.5 5	61.08 60.96 60.91		YES		YES YES YES	YES YES YES
SR 40 SR 40	CR 314 CR 314	NE 145 AV NE 145 AV	SIS Yes SIS Yes	0.00	0.00 0.00	12.02 6.20	0	0	0	0.0	0.60	18.12 18.12	10 10	5	10 10 10 10	7.5 7.5	0	0	7.5 7.5	60.62 60.62			YES		
US 441 CR 484 SR 40	US 301 SW 45 AV NE 46 AV	CR 484 MARION OAKS BLVD NE 49 CT	Regional Non-Regional Regional	0.00 0.00 0.00	1.01 1.85 1.35	146.26 40.46 172.03	7.5 2.5 7.5	0 0	5 10 10	12.5 12.5 17.5	0.52 0.60 0.52	15.6 17.97 15.45	5 5 5	5 0	10 10 10 0 10 0 10 10 10 10 10 10	2.5 5 7.5	2.5 2.5 2.5	2.5 2.5 2.5	7.5 10 12.5	60.6 60.47 60.45		YES		YES YES YES	YES YES
US 27 SR 35 US 441	I-75 RAMP (EAST) SE ROBINSON RD	NW 27 AV SE 92ND PL	Regional Non-Regional	0.00	0.65 0.52 0.00	22.40 60.82 97.72	2.5 S	7.5	5	7.5 10.0	0.51 0.84 0.59	15.3 25.26	5 2.5	0	10 10 0 10	7.5 7.5	2.5 2.5	2.5 2.5	12.5 12.5	60.3 60.26 60.17		YES		YES	
SR 464 SR 40	SE 31 ST SE 25 AV N MAGNOLIA AV	SE 30 ST SE 24 ST NE 1 AV	Regional Non-Regional Regional	0.00 0.00 0.00	0.82 0.00	82.99 116.54	7.5 5 7.5	0	5	7.5 10.0 7.5	0.84	17.67 25.11 25.02	7.5 5	0	0 5 0 10	7.5 7.5	2.5 2.5 2.5	2.5 2.5 2.5	10 12.5 12.5	60.11 60.02		YES		YES YES	YES YES
SR 200 SR 40 SR 200	SE 95 TH CIR SW 60 AV SW 17 RD	SW 110 ST SW 52 AV SR 464	Regional Regional	1.42 0.00 0.00	1.42 0.52 1.01	46.71 33.17 87.67	5 2.5 5	0 0	10 5 5	15.0 7.5 10.0	0.41 0.57 0.66	12.36 17.19 19.68	5 5 7.5	5 0 0	0 10 10 10 0 10	7.5 5 7.5	2.5 2.5 2.5	2.5 2.5 2.5	12.5 10 12.5	59.86 59.69 59.68				YES YES YES	YES
US 441 US 441	CR 329 SE 92 PL RD	US 301 US 441 (NB/SB) (S)	SIS Regional	0.00	1.96 1.69	39.12 10.70	2.5	0	10	12.5 10.0	0.56 0.65	16.92 19.41	5	0	10 10 10 10	5 2.5	0	0 2.5	5	59.42 59.41				YES	YES
SR 200 US 441 I-75	SW 60 ST NE 28 ST URBAN AREA BOUNDARY	SW 48TH AVE CR 25A (S) 4400 FT N OF UAB	Regional Regional SIS	0.19 0.00 0.00	0.38 0.00 0.77	52.19 76.36 32.77	5 5 2.5	2.5 0 0	5 0 5	10.0 5.0 7.5	0.63 0.54 0.71	18.9 16.23 21.21	7.5 5 10	0 0	0 10 10 10 10 10	7.5 7.5 0	2.5 2.5 0	2.5 2.5 0	12.5 12.5 0	58.9 58.73 58.71				YES	
I-75 SR 40 SR 40	COUNTY LINE (S) NW 2 AV SW 52 AV	URBAN AREA BOUNDARY NW 1 AV SW 46 AV	SIS Regional	0.00 0.00 0.00	0.45 0.00 0.00	16.47 181.27 79.23	2.5 10 c	0	5 0	7.5 10.0 5.0	0.71 0.71 0.62	21.21 21.18 18.57	10 5 c	0	10 10 0 10	7.5	0 2.5	0 2.5 2.5	0 12.5	58.71 58.68 58.57				YES YES	YES
SR 40 CR 484	SW 27 AV SW 135 PL	SW MARTIN L KING AVE I-75 RAMP (W)	Regional Regional Non-Regional	0.41	2.03 0.53	88.87 106.15	5 7.5	5 2.5	10	15.0 12.5	0.62 0.70	18.45 20.91	5	0 5	0 10 0 10	5 0	2.5 2.5	2.5 2.5	10 10 5	58.45 58.41				YES	YES
SR 200 SR 464 CR 464	SR 464 SE 24 ST SR 35	SW MARTIN L KING AV SE 36 AV SE 64 AV	Regional Non-Regional Non-Regional	0.00 0.00 0.00	0.69 0.95 0.68	93.62 33.17 43.43	7.5 2.5 2.5	0 0	5 5 5	12.5 7.5 7.5	0.44 0.85 0.77	13.29 25.53 22.98	5 7.5 5	5 0 5	0 10 0 5 0 5	7.5 7.5 7.5	2.5 2.5 2.5	2.5 2.5 2.5	12.5 12.5 12.5	58.29 58.03 57.98				YES YES YES	YES YES
US 27 SR 326	I-75 RAMP (EAST) CR 200A	NW 27 AV NE 25 AV	Regional SIS	0.00	0.00 1.26	75.59 24.79	5 2.5	0	0 10	5.0 12.5	0.51 0.58	15.3 17.4	5	0 5	10 10 10 5	7.5 5	2.5 2.5	2.5	12.5 7.5	57.8 57.4			YES	YES	
SR 200 SR 40	SW 42 ST SW 7 AV	SW 38TH CT US 441	Regional Regional	0.00	0.00 2.08	121.60 56.81	7.5 5	0	10	7.5 15.0	0.66 0.56	19.83 16.92	7.5 5	0	0 10	7.5 5	2.5 2.5	2.5 2.5	12.5 10	57.33 56.92				YES	

Roadway From	То	Roadway Classification Rural 2	-Lane Fatal Crash Rate	Fatal & Incapacitating Injury Crash Rate	Total Crash Rate	Total Crash Ranking	Total Fatal Ranking	Fatal and Incapacitating Injury Ranking	Safety Significance	V/C Ratio	MAV Ranking (V/C*30)	Existing Volume Ranking	Truck Volume Ranking	Truck Route Ranking Evac Route Ranking	Fiber Connection Ranking	CCTV Ranking	Bluetooth Ranking	ITS Significance	Total Scoring	Ranked Top 25 Segments 75 removed)	II- Top 25 Top 25 Non- T Colletor Regional R Segments Segments Se	mente	y venicie cut	July July 1
US 441 US 441 (NB/SB) (S)	SE 80 ST	Regional	0.00	0.89	26.24	2.5	0	5	7.5	0.65	19.41	5	0	10 10	0	2.5	2.5	5	56.91		Segments Segments Se		Preempti Expa YES	nsion Controller YES
US 441 CR 25A (S) US 441 CR 25A (S)	NW 35 ST NW 35 ST	Regional Regional	0.00	0.00	57.70 16.06	5 2.5	0	0	5.0 2.5	0.56 0.56	16.86 16.86	5 5	0	10 10 10 10	7.5 7.5	0 2.5	2.5 2.5	10 12.5	56.86 56.86				YES YES	
NE 25 AV SR 40 US 41 SR 40	NE 3 ST URBAN AREA BOUNDARY	Non-Regional Regional	0.00	5.64 0.23	89.34 24.97	5 2.5	0	20 0	25.0 2.5	0.48 1.23	14.31 36.78	2.5	5	0 0	7.5 0	0	2.5 0	10 0	56.81 56.78				YES	YES
SR 200 SW 65 AV SR 200 SW 60 AV	SW 60 AV SW 60 ST	Regional Regional	0.00	1.64 0.53	46.09 21.23	2.5	0	5	15.0 7.5	0.47	14.19 19.17	7.5	0	0 10	7.5	2.5	2.5	12.5 12.5	56.69 56.67				YES	YES YES YES
NE 36 AV SR 40 I-75 4400 FT N OF UAB	NE 14 ST CR 484	Non-Regional SIS	0.00	4.84 0.20	198.54 23.66	2.5	0	0	30.0 2.5	0.38 0.71	11.28 21.21	2.5	0	10 10	7.5	2.5	0	12.5 2.5	56.28 56.21		WCC .		YES	YES
CR 318 I-75 SR 40 NE 145 AV	NW 60 AVE CR 314A	Collector Ye	s 0.00	0.00	20.31	0	0	0	0.0	0.95	28.65 20.91	10	5	10 10	0	0	0	0	56.15 55.91		YES	YES		
US 27 NW 44 AV SR 200 SW 7 RD	NW 38 AV US 441	SIS Regional	0.00	0.84	28.68 55.46	2.5 5	0	0	7.5 5.0	0.43 0.68	12.93 20.37	2.5 5	5	10 10 0 10	7.5 5	2.5 2.5	2.5 2.5	12.5 10	55.43 55.37			YES	YES	YES
SR 35 SE ROBINSON RD SW 27 AV SW 20 ST	SE 92ND PL SR 464	Non-Regional Non-Regional	0.00	0.79 1.19	12.16 60.94	5	0	10	5.0 15.0	0.84	25.26 17.67	2.5 5	0	0 10 5	7.5 7.5	2.5 2.5	2.5 2.5	12.5 12.5	55.26 55.17				YES	YES
US 441 SE 30 ST US 441 SE 40 CIR	CR 475 SE 31 ST	Regional Regional	0.00	0.00	24.63 13.97	2.5 0	0	0	2.5 0.0	0.59 0.59	17.67 17.67	5	0	10 10 10 10	7.5	2.5 2.5	2.5 2.5	10 12.5	55.17 55.17				YES YES	
SR 200 SW 103 ST SR 200 SW 84TH CIR	SW 84TH CIR SW 99 ST	Regional Regional	0.00	1.76 1.98	59.19 56.34	5 5	0	10 10	15.0 15.0	0.41	12.39 12.39	5 5	0	0 10 0 10	7.5 7.5	2.5 2.5	2.5 2.5	12.5 12.5	54.89 54.89				YES YES	YES
US 27 CR 225A CR 484 MARION OAKS TRL	NW 60 AV SW 45 AV	SIS Non-Regional	0.00 0.44	0.86 0.87	25.51 15.61	2.5 2.5	5	5 5	7.5 7.5	0.40	12.06 19.5	2.5 2.5	5	10 10 0 10	7.5 5	2.5 2.5	2.5 2.5	12.5 10	54.56 54.5				YES Y	ES YES
SR 326 US 441 SR 40 SW MARTIN L KING AVE	NW 12TH AVE SW 7 AV	SIS Regional	0.00	2.26 1.14	42.13 29.73	2.5 2.5	0	10 10	12.5 12.5	0.56 0.56	16.95 16.92	0 5	5	10 5 0 10	5	2.5 2.5	2.5 2.5	5 10	54.45 54.42			YES	YES	5 YES
SR 25 US 441 SR 40 CR 314A	BASELINE RD SE 183 AV	Non-Regional SIS Ye	0.00	0.00	52.81 14.74	5	0	0 5	5.0 5.0	0.73	21.9 16.83	2.5 7.5	5	0 10 10 10	5	2.5	2.5	10 0	54.4 54.33			YES		_
US 41 SR 40 US 41 SR 40	URBAN AREA BOUNDARY URBAN AREA BOUNDARY	Regional Regional	0.00	0.00	7.36 3.42	0	0	0	0.0	1.23 1.23	36.78 36.78	2.5 2.5	5	0 10 0 10	0	0	0	0	54.28 54.28					_
US 41 POWELL RD SR 200 CR 484	SW ROBINSON RD SE 95 TH CIR	Regional Regional	0.00	4.29 1.78	21.45 80.38	2.5 5	5	15 10	17.5 15.0	0.72	21.72 9.18	5 2.5	0 5	0 10	0 7.5	0 2.5	0 2.5	0 12.5	54.22 54.18				YES	YES
SR 200 SW 60 AV SW 19 AV RD SW 27 AV	SW 60 ST SW 24TH AVE	Regional Collector	0.00	0.00 1.42	46.63 228.64	5 10	0	0 10	5.0 20.0	0.64 0.56	19.17 16.65	7.5 2.5	0 5	0 10 0	7.5 7.5	2.5	2.5 2.5	12.5 10	54.17 54.15		YES		YES	YES
SW 40 ST SW 38 AV NE 36 AV NE 21 ST	SR 200 NE 35 ST	Collector Non-Regional	0.00	2.71 1.18	236.14 20.14	10 2.5	0	15 10	25.0 12.5	0.55 0.88	16.41 26.37	0 2.5	5	0 0	7.5 7.5	0	0	7.5 7.5	53.91 53.87		YES		YES	
SR 200 SW 44 CT SR 40 NW 1 AV	SW 42 ST N MAGNOLIA AV	Regional Regional	0.00	0.00	79.77 81.60	5 5	0	0	5.0 5.0	0.63 0.71	18.78 21.18	7.5 5	0	0 10	7.5 7.5	2.5 2.5	2.5 2.5	12.5 12.5	53.78 53.68				YES YES YES	YES
NE 36 AV NE 14 ST CR 464 BAHIA RD	NE 21 ST WATER RD	Non-Regional Non-Regional	0.00 0.48	1.20 2.16	34.79 33.39	2.5 2.5	0 5	10 10	12.5 12.5	0.87 0.53	26.01 15.84	2.5 2.5	5 5	0 0	7.5 7.5	0 2.5	0 2.5	7.5 12.5	53.51 53.34				YES YES YES YES	YES
SR 200 SW 110 ST SR 200 SW 88 TER	SW 88 TER SW 103 ST	Regional Regional	0.00	0.53	30.10 108.00	2.5	0	5 0	7.5 7.5	0.52 0.52	15.57 15.57	7.5 7.5	0	0 10 0 10	7.5 7.5	2.5 2.5	2.5	12.5 12.5	53.07 53.07				YES	YES YES YES YES YES YES YES
SR 464 SW 12TH AVE SR 492 US 441	SW 7 AV N MAGNOLIA AV	Non-Regional Regional	0.00	0.00	13.31 80.84	0	0	0 10	0.0 15.0	0.94	28.05	7.5 2.5	0	0 5	7.5 7.5	2.5 2.5	2.5 2.5	12.5 12.5	53.05 52.76				YES YES	YES
SR 35 SR 25 SR 200 COUNTY LINE	SE ROBINSON RD 1/4 MI SW OF CR 484	Non-Regional	0.00 s 0.00	0.00	34.28 1.53	2.5 0	0	0	2.5	0.84	17.76 25.26 22.65	2.5 10	0 5	0 10	7.5 2.5	2.5 2.5	2.5	12.5	52.76 52.65					\blacksquare
SR 200 COUNTY LINE SR 200 COUNTY LINE SR 200 COUNTY LINE	1/4 MI SW OF CR 484 1/4 MI SW OF CR 484	Regional Ye	s 0.18 s 0.00	0.90 0.44	5.37 7.32	0	2.5	5	5.0 5.0	0.76 0.76	22.65 22.65	10 10	5	0 10	0	0	0	0	52.65 52.65					#
\$ 1 AV	SR 40 SW 27 AV	Collector Collector	0.00	7.87	98.42 49.28	7.5 5	0	20	27.5 20.0	0.13 0.66	0 19.86	0 2.5	5	0 10	7.5 7.5	0 2.5	2.5	10	52.5 52.36		YES YES			YES YES
SR 40 SW 140 AV US 27 CR 225A	CR 328 NW 60 AV	Regional Ye	s 0.00 0.00	0.49	7.28 3.56	0	0	5	5.0 5.0	0.65 0.40	19.59 12.06	10	5	0 10	0 7.5	2.5	0	2.5	52.09 52.06			YES	YES Y	ES YES
CR 484 MARION OAKS TRL US 441 SE 80 ST	SW 45 AV US 441 (NB/SB) (N)	Non-Regional Regional	0.00	1.75 0.00	16.33 17.00	2.5	0	10	12.5	0.65 0.65	19.5 19.41	2.5	5	0 10	0	0	2.5	2.5	52 51.91					YES
US 441 SE 8U SI US 441 (NB/SB) (N) SW 19 AV RD SW 24TH AVE	SE 73 ST SR 464	Regional Collector	0.00	0.00 0.00 1.45	20.76 55.35	2.5	0	0	2.5	0.65 0.56	19.41 19.41 16.65	5 25	0	10 10	0 75	2.5	2.5	5	51.91 51.65		YES		YES	YES YES
SR 40 SW 80 AV CR 318 NW 60 AVE	SW 60 AV US 441	Regional Ye	0.00	0.56 0.65	11.48 15.33	0	0	5	5.0	0.47 0.95	14.07 28.65	2.5	0	10 10	5	2.5	2.5	10	51.57 51.15		VES		YES Y	ES YES
CR 464 WATER RD US 441 NW 35 ST	EMERALD RD (N) NW 57 ST	Non-Regional Regional	0.00	1.47	37.57 21.91	2.5	0	10	12.5	0.53 0.44	15.84 13.32	2.5	5	0 5	7.5	0	2.5	10	50.84 50.82		1.0		YES	YES
US 441 DEL WEBB BLVD	CR 25A	Regional Regional	0.00	0.24	16.73 39.99	2.5 2.5	0	0	2.5	0.44 0.53 0.44	15.75	5	0	10 10	2.5	2.5	2.5	7.5 7.5	50.75				YES Y YES YES	YES
US 441 SR 326 US 301 CR 42 US 441 SE 147 PL	NW 77 ST SE 147 ST	Regional Desired	0.00	0.54	10.90 28.28	0	0	5	5.0	0.60	13.17	2.5	0	10 10	0	2.5	2.5	5	50.67 50.5				YES	wee
CR 25 SE 110 ST	DEL WEBB BLVD SE 65TH CT	Regional Collector	0.00	0.00 2.36	14.13	0	0	10	10.0	0.60	17.88 25.35	2.5	5	0 0	2.5	2.5	2.5	7.5	50.38 50.35		YES		YES	YES
SW 27 AV SW 34 ST SR 492 NE 8 AV	SW 19 AV RD NE 17 AV	Non-Regional Regional	0.00	0.00 1.17	55.26 20.58	2.5	0	10	5.0 12.5	0.68 0.51	20.34 15.3	5	0	0 5	7.5	2.5	2.5	10	50.34 50.3				YES	YES
NE 35 ST NE 33 AV SR 35 SR 464	NE 36 AV SE 28 ST	Collector Non-Regional	0.00	5.70 1.26	24.92 22.22	2.5 2.5	0	20 10	22.5 12.5	0.51 0.42	15.3 12.6	2.5	5	0 0	7.5 7.5	2.5	0 2.5	7.5 12.5	50.3 50.1		YES		Y	
SR 200 SW 99 ST NE 25 AV SR 492	SW 80 AV NE 24 ST	Regional Collector	0.42	0.84 1.06	62.45 19.95	5 2.5	0	5	10.0 7.5	0.41	12.39 24.81	5 2.5	5	0 10 0	7.5 7.5	2.5 2.5	2.5 0	12.5 10	49.89 49.81		YES		YES YES	YES
SR 40 SW 140 AV SR 40 SW 140 AV	CR 328	Regional Ye Regional Ye	s 0.00 s 0.00	0.34 0.74	5.46 4.24	0	0	S S	5.0 5.0	0.65	19.59 19.59	10 10	5	0 10 0 10	0	0	0	0	49.59 49.59					
SR 326 NE 25 AV SR 464 SE 36 AV	NE 36 AV SE 44 AV	SIS Non-Regional	0.72 0.00	1.44 0.00	12.92 43.88	0 2.5	7.5 0	10 0	10.0 2.5	0.56 0.81	16.95 24.42	7.5	5	10 5 0 5	2.5 7.5	0	0 2.5	2.5 10	49.45 49.42			YES	YES	YES
SR 40 CR 314A SR 200 SW 93 ST RD	SE 183 AV SW 65 AV	Regional	s 0.00 0.00	0.00 1.06	9.79 27.44	0 2.5	0	5	7.5	0.56 0.47	16.83 14.19	7.5 5	5	10 10 0 10	7.5	2.5	0 2.5	0 12.5	49.33 49.19			YES	YES	YES
NE 1 AV SR 40 NW 27 AV SR 40	NE 1 ST US 27	Collector Non-Regional	0.00	7.05 0.00	257.41 39.77	10 2.5	0	0	30.0 2.5	0.13 0.54	3.93 16.29	2.5	5	10 5	7.5 7.5	2.5	2.5 2.5	10 12.5	48.93 48.79		YES		YES	YES
SW 27 AV SW 42 ST US 41 URBAN AREA BOUNDARY	SW 34 ST SW 36 ST		0.00 s 0.00	0.00	53.49 4.55	5 0	0	0	5.0 0.0	0.62 0.87	18.69 26.04	5 7.5	5 5	0 5 10	7.5 0	0	2.5 0	10 0	48.69 48.54					YES
US 441 DEL WEBB BLVD CR 475 N OF SW 29TH ST RD	CR 25A US 441	Regional Non-Regional	0.00	0.00 1.62	30.10 75.44	2.5 5	0	0 10	2.5 15.0	0.53 0.60	15.75 18.09	5	0 5	10 10 0 0	7.5	2.5 0	2.5 2.5	5 10	48.25 48.09				YES	YES
SR 40 NE 49 CT US 441 NW 77 ST	NE 49 TER NW 117 ST	Regional SIS	0.00 0.27	0.00	46.18 12.22	5 0	0 2.5	0 5	5.0 5.0	0.52 0.59	15.45 17.64	5	0	0 10 10 10	7.5 0	2.5 0	2.5 0	12.5 0	47.95 47.64			YES	YES YES	
US 441 NW 57 ST SR 40 NE 60TH CT	SR 326 SR 326	Regional Regional	0.00	0.44	16.18 11.59	2.5 0	0	S S	7.5 5.0	0.42 0.75	12.6 22.59	2.5 2.5	0	10 10 0 10	7.5	2.5 0	2.5 0	5 7.5	47.6 47.59				YES Y	Ś
SR 492 NE 19 AV SE 19 AV SE 31 ST	NE 25 AV SE 19 AV	Regional Collector	0.00	2.37 5.97	35.10 1.49	2.5 0	0	10 20	12.5 20.0	0.50 0.50	15.06 15.03	2.5 0	0 5	0 5	7.5 5	2.5 0	2.5 2.5	12.5 7.5	47.56 47.53		YES		YES	
US 27 NW 60 AV US 27 NW 60 AV	NW 49 AV NW 49 AV	SIS SIS	0.00	0.00	5.07 5.34	0	0	0	0.0	0.42	12.48 12.48	2.5 2.5	0	10 10 10 10	7.5 7.5	2.5 2.5	2.5 2.5	12.5 12.5	47.48 47.48			YES YES	YES	YES YES YES
CR 200A / JACKSONVILLE RD NE 8 AV CR 475A S OF SW 53RD ST	NE 28 ST 1800 FT S OF SW 42ND ST	Non-Regional Non-Regional	0.00	1.84 0.77	13.81 5.79	0	0	10 S	10.0 5.0	0.33 0.74	9.84 22.32	2.5 2.5	5 5	0 10 0 5	7.5 7.5	0	2.5 0	10 7.5	47.34 47.32					YES
US 441 NW 117 ST CR 464A SE 17TH ST	CR 329 SE 3 AV	SIS Collector	0.00	0.00 2.21	14.61 26.10	0 2.5	0	0 10	0.0 12.5	0.56 0.56	16.92 16.89	5	0 5	10 10 0 0	5 7.5	0 2.5	0 2.5	5 12.5	46.92 46.89		YES		YES	YES
CR 484 I-75 RAMP (E) SR 464 SE 44 AV	CR 475A SE 49 TER	Regional Non-Regional	0.00	0.00	96.90 71.30	7.5 5	0	0	7.5 5.0	0.65 0.73	19.35 21.81	5	0	0 10 0 S	7.5	2.5 0	2.5 2.5	5 10	46.85 46.81				YES	YES
SR 326 W ANTHONY RD SR 200 SW 80 AV	CR 200A SW 93 ST RD	SIS Regional	0.00	0.00 1.31	9.53 26.89	2.5	0	0 10	0.0 12.5	0.56 0.31	16.74 9.21	0 2.5	5	10 5 0 10	5 7.5	2.5 2.5	2.5	10 12.5	46.74 46.71				YES	ES YES YES
SR 200 SW 93 ST RD SR 40 SW 80 AV	SW 65 AV SW 60 AV	Regional Regional	0.00	0.00	14.93 4.33	0	0	5	5.0 0.0	0.47	14.19 14.07	5 2.5	0	0 10	7.5	2.5 2.5	2.5 2.5	12.5	46.69 46.57				YES Y	YES ES YES
SE 36 AV SR 464 SR 40 NE 36 AV	SE 24 ST SR 492	Non-Regional Regional	0.00	0.00	43.02 54.12	2.5 5	0	10 0	12.5 5.0	0.45	13.59 15.84	2.5 5	5	0 0	7.5	2.5	2.5	12.5	46.09 45.84				YES	YES
SW MARTIN L KING AVE SR 200 US 41 SW 99 PL	SR 40 SW 80 PL	Non-Regional Regional	0.00	1.56 1.18	34.30 14.12	2.5 0	0	10	12.5	0.44	13.11 23.04	2.5 2.5	0	0 0	7.5 0	0	2.5 0	12.5	45.61 45.54		WEG .			
SW 10 ST US 441 SW 27 AV SR 200	SE 1 AV SW 20 ST	Collector Non-Regional	0.00	6.35 0.00	95.26 69.47	7.5	0	0	27.5 5.0	0.00	17.43	5	0	0 5	7.5	2.5	2.5	12.5 12.5	45 44.93		YES		YES	YES
CR 475A 1800 FT S OF SW 42ND ST SR 40 SE 183 AV	CR 475C SR 19		0.00 s 0.00	0.00 1.44	16.91 2.88	2.5	0	10	2.5	0.74	9.72	2.5	5	0 5	7.5	0	0	7.5	44.82 44.72					\pm
CR 484 MARION OAKS TRL US 41 SW 110 ST	SW 45 AV SW 99 PL	Non-Regional Regional	0.00	0.43 0.00	8.53 24.52	0 2.5	0	5	5.0 2.5	0.65 0.98	19.5 29.46	2.5 2.5	5	0 10 0 10	0	0	2.5 0	2.5 0	44.5 44.46					\pm
US 27 NW 80 AV US 301 COUNTY LINE (S)	CR 225A SHADY ACRES	SIS Regional	0.00	0.00 0.34	3.71 7.67	0	0	0 5	0.0 5.0	0.40	11.91 14.34	2.5 2.5	0	10 10 10 10	7.5	2.5 2.5	0	10 2.5	44.41 44.34					\pm
SE 31 ST CR 464A CR 314 NE 36 AV	SE 19 AV NE 51 AV	Non-Regional Collector	0.00	0.38 1.29	17.49 11.28	2.5 0	0	5 10	7.5 10.0	0.63 0.71	18.96 21.42	2.5 0	5	0 0	7.5 7.5	0	2.5 0	10 7.5	43.96 43.92		YES			YES
US 301 SE 147 ST CR 318 I-75	143 PL NW 60 AVE	Regional Ye		0.00	29.59 1.83	2.5 0	0	0	2.5 0.0	0.54 0.95	16.32 28.65	2.5 0	5	10 10 0 10	0	0	2.5 0	2.5 0	43.82 43.65		YES			
US 27 CR 464B US 27 CR 464B	NW 80 AV NW 80 AV	SIS SIS	0.17 0.00	0.52 0.41	4.81 7.73	0	2.5 0	5 5	5.0 5.0	0.29 0.29	8.58 8.58	2.5 2.5	0	10 10 10 10	7.5 7.5	0	0	7.5 7.5	43.58 43.58					
CR 484 E OF HENDRIX DR CR 484 E OF HENDRIX DR	SW 180 AVE RD SW 180 AVE RD	Non-Regional Ye	s 0.00 s 0.00	0.00	4.82 2.15	0	0	0	0.0	0.60	17.97 17.97	10 10	5	0 10 0 10	0	0	0	0	42.97 42.97					
CR 25 SE 65TH CT SR 326 CR 25A	SR 35 US 441	Collector SIS	0.00 0.11	0.00	13.88 17.53	0 2.5	0 2.5	0 5	0.0 7.5	0.85 0.26	25.35 7.77	2.5 2.5	5	0 0 10 5	5	2.5 2.5	2.5 2.5	10 10	42.85 42.77		YES		Y	ES YES
SW 20 ST SW 27 AV US 441 NW 77 ST	SR 200 NW 117 ST	Collector SIS	0.00	0.00 0.23	159.50 3.17	7.5	0	0	7.5 0.0	0.67	20.19 17.64	2.5 5	0	0 0 10 10	7.5 0	2.5	2.5	12.5 0	42.69 42.64		YES		YES	
US 441 NW 77 ST CR 484 I-75 RAMP (W)	NW 117 ST I-75 RAMP (E)	SIS Non-Regional	0.00	0.00	5.94 13.75	0	0	0	0.0	0.59 0.67	17.64 20.13	5	5	10 10 0 10	0	0 2.5	0	0 2.5	42.64 42.63				YES	YES
\$R 35	CHERRY RD SE E BROADWAY ST	Non-Regional Collector	0.00	1.01 6.82	33.79 98.96	2.5 7.5	0	5 20	7.5 27.5	0.42 0.13	12.57	2.5	0 5	0 10 0	7.5 7.5	0	2.5 2.5	10 10	42.57 42.5		YES		YES	YES
US 41 SW 111 PL LN US 301 143 PL	SW 110 ST US 441	Regional Regional	0.00	1.11	15.57 16.29	2.5 2.5	0	10	12.5 2.5	0.50 0.33	14.97 9.93	5 2.5	0	0 10 10 10	0 2.5	0 2.5	0 2.5	0 7.5	42.47 42.43					##
SR 35 NE 13 ST CR 475A SW 66 ST	SR 40 S OF SW 53RD ST	Non-Regional Non-Regional	0.00	0.34	5.00 10.85	0	0	5	5.0	0.33 0.74	9.84 22.32	2.5 2.5	5	0 10 0 5	7.5 7.5	0	2.5	10 7.5	42.34 42.32				YES	4
US 41 CR 484 SE 25 AV SR 464	POWELL RD SE 14 ST	Regional Non-Regional	0.00	0.48 1.73	21.21 38.85	2.5 2.5	0	5	7.5 12.5	0.66	19.74 14.7	5 2.5	0	0 10	0 7.5	0 2.5	0 2.5	0 12.5	42.24 42.2				YES	YES
SR 25 AV SR 404 SR 400 SW 110 AV US 41 SW 110 ST	SW 85 AV SW 99 PL	Regional	0.00	1.73 1.65 0.00	4.67 8.55	0	0	10	10.0	0.49 0.49 0.98	14.7 14.67 29.46	2.5 2.5	0	0 10	0	2.5	2.5	5	42.17 41.96				YES Y	ES YES
US 41 SW 11051 SR 326 NW 12TH AVE US 301 SHADY ACRES	W ANTHONY RD CR 42	Regional SIS Regional	0.00	0.00	6.12 23.41	0	0	0	0.0	0.56 0.48	16.95 14.34	0 25	5	10 5	0	2.5	2.5	5	41.95 41.84				Y	ES YES
NW 35 ST NE 2ND AVE	NE 33 ST	Regional Collector	0.00	3.76	12.23	0 7.5	0	15	2.5 15.0	0.48	14.28	0	5	10 10 0 0	7.5	0	0	7.5 7.5	41.78		YES		Y	
SR 326 I-75 RAMP (WEST) SR 40 URBAN AREA BOUNDARY SR 40 URBAN AREA BOUNDARY	I-75 RAMP (EAST) SW 140 AV	SIS Regional Ye		0.00 0.71	159.84 8.27 7.95	7.5	2.5	5	7.5 5.0	0.31 0.47	9.24 14.19	2.5 7.5	5	10 5 0 10	0	0	0	0	41.74 41.69					YES
SR 40 URBAN AREA BOUNDARY SR 40 URBAN AREA BOUNDARY CONTROL OF CON	SW 140 AV SW 140 AV	Regional Ye	s 0.00 s 0.00	0.49	4.78	0	0	5	5.0	0.47 0.47	14.19 14.19	7.5 7.5	5	0 10	0	0	0	0	41.69 41.69		WEG .			
E FORT KING ST SW 25 AV CR 42 US 441	SE 28 AV SE 130 AVE	Collector Collector	0.00	2.03 2.01	40.00 31.25	2.5	0	10	12.5	0.55 0.46	16.5 13.89	0	5	0 0	7.5	2.5	0	10	41.69 41.5 41.39		YES YES		YES	YES
NW MARTIN L KING AV NW 4 ST US 41 SW 36 ST	US 27 COUNTY LINE (N)	Non-Regional Ye	0.00 s 0.00	0.81 1.80	40.29 4.81	2.5 0	0	5 10	7.5 10.0	0.43 0.51	12.93 15.3	2.5 0	5	0 0	7.5 0	2.5 0	Z.5 0	12.5 0	40.43 40.3					YES

Roadway	From	То	Roadway Classification Rt	ral 2-Lane Facility Fatal Cras	h Rate Fatal & Incapacitating Injury Crash Rate	Total Crash Rate	Total Crash Ranking	Total Fatal Ranking	Fatal and Incapacitating Injury Ranking	Safety Significance	V/C Ratio	MAV Ranking (V/C*30)	Existing Volume Ranking	Truck Volume Ranking	Truck Route Ranking Evac Route Ranking	Fiber Connection Ranking	CCTV Ranking	Bluetooth Ranking	ITS Significance	Total Scoring	Ranked Top 25 Segments (I-75 removed)	Top 25 Top 25 Non- Colletor Regional Segments Segments	Sagmente	y vennere cur	July Signal
S MAGNOLIA AV	SR 40	W BROADWAY ST	Collector	0.0	0.00	211.35	10	0	0	10.0	0.18	5.25	0	5	0 10	7.5	0	2.5	10	40.25		YES		Preempti Expa	ansion Controller YES
US 301 CR 200A	143 PL US 441	N MAGNOLIA AV	Regional Non-Regional	0.0	0.97	21.98 22.31	2.5 2.5	0	5	7.5	0.33	9.93 9.87	2.5 0	5	0 10	5	0	2.5	7.5	39.93 39.87					
SR 40 SR 326	SE 183 AV NE 36 AV	SR 19 NE 40 AV	SIS	Yes 0.0 Yes 0.0	0.00	3.49 2.25	0	0	0	0.0	0.32 0.32	9.72 9.66	2.5	5	10 10	7.5	0	0	7.5	39.72 39.66					
SR 326 SE 31 ST	NE 40 AV CR 475	CR 35 US 441	SIS Non-Regional	Yes 0.0		3.28 34.15	2.5	0	10	0.0 12.5	0.32 0.41	9.66 12.15	2.5 2.5	5	0 0	7.5 7.5	2.5	2.5	7.5 12.5	39.66 39.65					YES YES
SE 25 AV CR 464A	E FORT KING SE 31 ST	SR 40 SE 17TH ST	Non-Regional Collector	0.0	0.00	23.06 13.31	2.5	0	0 0	2.5 0.0	0.74 0.65	22.14 19.38	5 2.5	0 5	0 0	7.5 7.5	0 2.5	2.5 2.5	10 12.5	39.64 39.38		YES		YES	YES YES
US 41 NE 25 AV	BROOKS ST NE 3 ST	SW 111 PL LN SR 492	Regional Non-Regional	0.0	0.00	55.92 36.84	5 25	0	0	5.0	0.64	19.32 11.79	5	0	0 10	0 75	0 25	0 25	0 12.5	39.32 39.29				VES	
CR 25A	URBAN AREA BOUNDARY	CR 329	Collector	Yes 0.0	0.00	4.26	0	0	0	0.0	0.56	16.74	10	5	0 0	7.5	0	0	7.5	39.24		YES		103	
CR 328 SR 40	SW 140 AV SW 80 AV	E OF NW 125 AV SW 60 AV	Regional	Yes 0.0	0.43	8.65 8.95	0	0	5	10.0 5.0	0.47	14.13 14.07	2.5	0	0 10	2.5	2.5	2.5	7.5	39.13 39.07				YES Y	YES YES
SW 1 AV CR 484	SR 464 SW 180 AVE RD	SW 10 ST SW 140 AVE	Collector Non-Regional	9.0 Yes 0.0		59.43 2.72	5	0	15 0	20.0 0.0	0.30 0.55	8.97 16.38	0 7.5	5	0 0	7.5	0	2.5	10 0	38.97 38.88					_
CR 484 SW 60 AV	SW 180 AVE RD SW 20 ST	SW 140 AVE SR 40	Non-Regional Non-Regional	Yes 0.0		1.61 22.94	0 2.5	0	0 5	0.0 7.5	0.55 0.38	16.38 11.37	7.5 2.5	5	0 10 0	0 7.5	0 2.5	0 2.5	0 12.5	38.88 38.87				YES	YES
NE 1 AV NE 8 AV	NE 2 ST NE 3 ST	NE 3 ST SR 492	Collector Collector	0.0		55.67 35.51	5 25	0	15 10	20.0 12.5	0.13 0.29	3.84 8.79	0	5	0 0	7.5 7.5	0 25	2.5	10 12.5	38.84 38.79					YES YES
CR 318	COUNTY LINE SR 464	1-75	Collector	Yes 0.2	0.59	2.84	0	2.5	5	5.0	0.62	18.72	0	5	0 10	0	0	0	0	38.72				YES	WEE
SW 27 AV CR 475	SE 90 ST	SR 40 URBAN AREA BOUNDARY	Non-Regional Non-Regional	Ves 0.0	1.39	34.75 13.91	0	0	10	10.0	0.53 0.36	15.84 10.8	5	5	0 0	7.5	0	0	7.5	38.34 38.3				YES	YES
N MAGNOLIA AV	N MAGNOLIA AV NW 14 ST	NE JACKSONVILLE RD NE JACKSONVILLE RD	Non-Regional Collector	0.0	1.79	50.17 18.77	5 2.5	0	10	5.0 12.5	0.35 0.35	10.62 10.62	0	5	0 10	7.5	0	2.5	7.5 10	38.12 38.12					YES YES
N MAGNOLIA AV NE 36 AV	SR 492 CR 314	NW 14 ST SR 40	Collector Non-Regional	0.0	0 1.55	24.10 107.76	2.5 7.5	0	10	12.5 7.5	0.35 0.52	10.62 15.57	0 2.5	5 0	0 0	7.5 7.5	2.5	2.5 2.5	10 12.5	38.12 38.07				YES	YES YES
CR 200A / JACKSONVILLE RD CR 200A / JACKSONVILLE RD	URBAN AREA BOUNDARY NE 100 ST	NE 100 ST NE 101 ST	Non-Regional Non-Regional	Yes 0.0 Yes 0.0	0.00	8.61 0.00	0	0	0	0.0	0.35 0.35	10.5 10.5	10 10	0	0 10	7.5 7.5	0	0	7.5 7.5	38					+
SR 492 CR 484	NE 36 AV LAKESHORE DR	SR 40 E OF HENDRIX DR	Regional Non-Regional	0.0	1.22	24.49 7.87	2.5	0	10	12.5 5.0	0.18 0.60	5.49 17.97	0	5	0 5	7.5	0	2.5	10	37.99 37.97				YES	
SR 492	NE 17 AV	NE 19 AV	Regional	0.0	0.00	12.43	0	0	0	0.0	0.51	15.27	5	0	0 5	7.5	2.5	2.5	12.5	37.77				YES	
SW 17 ST	CR 314 SW 27 AV	NE 13 ST SR 200	Non-Regional Non-Regional	0.0	0.87	2.39 28.03	2.5	0	5	7.5	0.33 0.33	9.84 9.78	2.5 2.5	5	0 0	7.5 7.5	2.5	2.5	10 12.5	37.34 37.28				YES	YES
CR 42 US 301	SE 86 CT NE JACKSONVILLE RD	SE 89 TER CR 318	Non-Regional SIS	0.0	0.65	46.03 16.73	2.5	2.5	5	15.0 7.5	0.32 0.32	9.75 9.72	2.5 0	0	0 0 10 10	0	0	0	0	37.25 37.22				YES Y	YES YES
NE 35 ST NE 8 AV	CR 200A SR 492	NE 25 AV CR 200A	Collector Collector	0.0	0.46	18.28 20.57	2.5 2.5	0	5 5	7.5 7.5	0.57 0.41	17.22 12.21	0	5 5	0 0	7.5 7.5	0 2.5	2.5	7.5 12.5	37.22 37.21				Y	65
SR 492 CR 200A / JACKSONVILLE RD	NE 25 AV NE 28 ST	NE 36 AV NE 35 ST	Regional Non-Regional	0.0	1.00	42.46 14.47	2.5	0	5 0	7.5 0.0	0.32 0.32	9.6 9.48	2.5 2.5	0 5	0 5 0 10	7.5 7.5	2.5	2.5	12.5 10	37.1 36.98		 		YES	YES
US 41 US 301	SW ROBINSON RD US 441	BROOKS ST NE JACKSONVILLE RD	Regional SIS	0.0	0.00	25.54 5.14	2.5	0	0 5	2.5	0.64 0.31	19.32 9.3	5 25	0	0 10	0	0	0	0	36.82 36.8					
SE 3 AV	S MAGNOLIA AV	SE 8 ST	Collector	0.0	1.20	4.82	0	0	10	10.0	0.39	11.76	0	5	0 0	7.5	0	2.5	10	36.76					YES
CR 25A SR 40	URBAN AREA BOUNDARY US 41	CR 329 URBAN AREA BOUNDARY	Regional	Yes 0.0 Yes 0.0	0.00	2.61 12.48	0	0	0	0.0	0.56	16.74 14.19	7.5	5	0 10	0	0	0	0	36.74 36.69					$\Rightarrow =$
SR 40	URBAN AREA BOUNDARY URBAN AREA BOUNDARY	SW 140 AV SW 140 AV	Regional	Yes 0.0 Yes 0.0	0.00	12.10 3.27	0	0	0	0.0	0.47 0.47	14.19 14.19	7.5 7.5	5 5	0 10 0 10	0	0	0	0	36.69 36.69					\pm
SR 40 SR 492	URBAN AREA BOUNDARY N MAGNOLIA AV	SW 140 AV NE 8 AV	Regional Regional	Yes 0.0	0.00	8.83 13.58	0	0	0 5	0.0 5.0	0.47 0.47	14.19 14.1	7.5 2.5	5	0 10 0 5	0 5	0 2.5	0 2.5	0 10	36.69 36.6				YES	
CR 464 CR 464	OAK RD EMERALD RD (N)	EMERALD RD (S) OAK RD	Non-Regional Non-Regional	0.4	1.46	15.09 27.38	2.5	5	10	12.5 7.5	0.22	6.48 8.94	0 2.5	5	0 5	7.5 7.5	0	0	7.5 7.5	36.48 36.44	-			YES YES	YES YES
CR 42 SW 32 AV/SW 34 ST	SE 89 TER SR 200	US 441 SW 27 AV	Non-Regional Collector	0.0	0.59	18.56 72.39	2.5	0	5	7.5	0.38 0.29	11.4 8.76	2.5	5	0 0	5 75	2.5	2.5	10	36.4 36.26				YES Y	YES YES
CR 484	SR 200	MARION OAKS TRL SW 43 ST RD	Non-Regional	0.0	0.00	8.41	0	0	0	0.0	0.29 0.37 0.37	11.25	0	5	0 10	5	2.5	2.5	10	36.25				YES Y	VES.
SW 60 AV SR 35	SR 200 E FORT KING ST	CR 314	Non-Regional Non-Regional	0.2	0.00	24.12 17.99	2.5	0	0	2.5	0.37	11.22 11.19	2.5	0	0 10	7.5	0	2.5	10	36.22 36.19				YES Y	23
NE 3 ST US 441	NE 25 AV AVENUE I	SR 40 CR 320	Collector Regional	0.0	2.20	20.69	2.5	0	10 10	12.5 10.0	0.20 0.20	6.12	0	5	0 5 10 10	5	0	2.5	7.5 0	36.12 36.03					
US 41 US 41	SW 80 PL SW 99 PL	SR 40 SW 80 PL	Regional Regional	0.0	0.00	9.89 12.45	0	0	0	0.0	0.77 0.77	23.04 23.04	2.5 2.5	0	0 10	0	0	0	0	35.54 35.54					
US 41 SE 80 ST	SW 99 PL US 441 (W)	SW 80 PL US 441 (E)	Regional Regional	0.2	0.28	10.03 223.50	0	2.5	0	0.0	0.77 0.27	23.04 8.01	2.5	0	0 10	0	0	0	0	35.54 35.51					
CR 200A / JACKSONVILLE RD	SR 326	NE 77 ST	Non-Regional	0.0	0.77	13.17	0	0	5	5.0	0.35	10.5	0	0	0 10	7.5	2.5	0	10	35.5					
US 41	SR 40 SW 36 ST	NW 4 ST COUNTY LINE (N)	Non-Regional Regional	Ves 0.0	0.40	26.62 3.63	0	0	5	5.0	0.43 0.51	12.93 15.3	0	5	0 0	0	0	0	12.5 0	35.43 35.3					YES
US 41 US 41	SW 36 ST SW 36 ST	COUNTY LINE (N) COUNTY LINE (N)	Regional	Yes 0.0 Yes 0.0	0.56	7.84 1.86	0	0	5 5	5.0 5.0	0.51 0.51	15.3 15.3	0	5	0 10	0	0	0	0	35.3 35.3					-
CR 35 US 441	SR 40 AVENUE B	NE 35 ST COUNTY LINE (N)	Collector Regional	0.0 1.2		25.14 2.99	2.5	10	5 10	7.5 10.0	0.51 0.17	15.24 5.22	0	5	0 0	7.5	0	0	7.5	35.24 35.22					
SR 35 SE 36 AV	CHERRY RD SE 24 ST	E FORT KING ST SE 17 ST	Non-Regional Non-Regional	0.0	0.00	9.90 15.18	0 25	0	0	0.0 2.5	0.42 0.50	12.63 15.03	2.5	0	0 10	7.5 7.5	0	2.5	10	35.13 35.03				YES YES	YES
CR 475 SW 60 AV	SE 52 ST SW 43 ST RD	SE 35 ST	Non-Regional	0.3	1.31	8.49	0	5	10	10.0	0.42 0.41	12.45	0	5	0 0	7.5	0	0	7.5	34.95				YES Y	VCC .
CR 484	SW 110 AV	SW 38 ST SW 105 AV	Non-Regional Non-Regional	0.0	2.37	6.51 9.87	0	0	10	10.0	0.33	12.42 9.87	0	5	0 10	0	0	0	0	34.92 34.87				163 1	
SE 36 AV SR 40	SE 31 ST SR 35	SR 464 NE 60TH CT	Non-Regional Regional	0.0	0.00	60.40 11.88	0	0	0	0.0	0.33 0.32	9.78 9.75	2.5	5	0 10	7.5	0	0	7.5	34.78 34.75				YES	YES
SR 40 SR 40	SR 19 SE 183 AV	COUNTY LINE (E) SR 19	SIS SIS	Yes 0.0 Yes 0.0	0.00	0.00 5.12	0	0	0	0.0	0.32 0.32	9.72 9.72	0	5 5	10 10 10 10	0	0	0	0	34.72 34.72					
SR 40 SR 40	SE 183 AV SE 183 AV	SR 19 SR 19	SIS SIS	Yes 0.0 Yes 0.0	0.00	5.53 1.01	0	0	0	0.0	0.32 0.32	9.72 9.72	0	5	10 10 10 10	0	0	0	0	34.72 34.72					
SR 40 SR 40	SE 183 AV SE 183 AV	SR 19 SR 19		Yes 0.0 Yes 0.0	0.10	0.68 5.27	0	0	0	0.0	0.32 0.32	9.72 9.72	0	5	10 10	0	0	0	0	34.72 34.72					
SR 40 SR 40	SE 183 AV SE 183 AV	SR 19 SR 19	SIS	Yes 0.0 Yes 0.0	0.00	0.32	0	0	0	0.0	0.32	9.72 9.72	0	5	10 10	0	0	0	0	34.72 34.72					
SR 40	SW 110 AV	SW 85 AV	Regional	0.0	0.00	9.46	0	0	0	0.0	0.49	14.67	2.5	5	0 10	0	0	2.5	2.5	34.67				YES Y	YES YES
CR 475A SR 40	SW 87 PL CR 328	SW 66 ST SW 110 AV	Non-Regional Regional	0.0	0.00	4.02 7.03	0	0	0	0.0	0.57 0.40	17.1 12.06	2.5	5	0 5	0	2.5	2.5	5	34.6 34.56				Y	YES YES
SE 31 ST US 301	US 441 US 441	CR 464A NE JACKSONVILLE RD	Non-Regional SIS	0.0		16.04 2.43	2.5 0	0	0	2.5 0.0	0.39	9.3	2.5	5	0 0 10 10	7.5 2.5	2.5 0	2.5 0	12.5 2.5	34.32 34.3					YES
CR 25A E FORT KING ST	SR 326 SE 16 AV	URBAN AREA BOUNDARY SE 22 AV	Collector Collector	0.0 0.0	0.00	26.22 22.07	2.5 2.5	0	5	2.5 7.5	0.56 0.47	16.74 14.22	2.5	5 5	0 0	7.5 7.5	0	0	7.5 7.5	34.24 34.22					YES YES
CR 464A CR 475	SE 3 AV SE 35 ST	SW 10TH ST SE 31 ST	Collector Non-Regional	0.0	0.00	8.36 29.17	0 2.5	0	0 5	0.0 7.5	0.64	14.22 19.17 14.13	0	5	0 0	7.5 7.5	0	2.5	10 7.5	34.17 34.13					YES
SW 80 AV	SW 22 ST US 441	SR 40 NE 2ND AVE	Collector Collector	0.0	1.79 1.45	39.94 78.63	2.5	0	10 10	12.5 15.0	0.39 0.22	11.61 6.6	0	5 5	0 0	0 7.5	2.5	2.5	5 7.5	34.11 34.1	-				YES
SW 66 ST CR 314	SR 200 NE 36 AV	I-75 NE 51 AV	Collector Collector	0.4 0.0	1.11	12.26 13.87	0	5	10	10.0	0.38 0.71	11.43 21.42	0	5	0 0	7.5 7.5	0	0	7.5 7.5	33.93					=
SW 66 ST	SW 27 AV	SW 19 AV NE 4TH CT	Collector	0.0	0.91	12.39	0	0	5	5.0	0.63	18.9	0	5	0 0	5	0	0	5	33.92 33.9					Vec
CR 200A CR 200A	NE 20 ST NE 4TH CT	NE 8 AV	Non-Regional Non-Regional	0.0	0.00	15.61 7.01	0	0	0	0.0	0.38	11.37	0	5	0 10	2.5	0	2.5	7.5	33.87 33.87					YES YES
CR 484	NW 35 ST SR 200	NE 49 ST MARION OAKS TRL	Non-Regional Non-Regional	0.0	0.55	9.79 9.28	0	0	5	5.0	0.29	8.79 11.25	0	5	0 10	7.5	0	2.5	2.5	33.79 33.75					YES
SE 17 ST CR 318	SE 30 AV COUNTY LINE	SE 36 AV I-75	Collector Collector	9.0 Yes 0.1	0.14	14.24 0.72	0	2.5	0	0.0	0.62 0.62	18.72 18.72	0	5 5	0 0 0 10	7.5 0	0	2.5 0	10 0	33.72 33.72					\pm
CR 318 CR 318	COUNTY LINE COUNTY LINE	I-75 I-75	Collector	Yes 0.0 Yes 0.0	0.00	9.49 1.34	0	0	0 0	0.0	0.62 0.62	18.72 18.72	0	5	0 10	0	0	0	0	33.72 33.72					\pm
CR 318 CR 318	COUNTY LINE COUNTY LINE	I-75 I-75	Collector	Yes 0.0 Yes 0.0	0.00	1.32 0.52	0	0	0	0.0	0.62	18.72 18.72	0	5 5	0 10 0 10	0	0	0	0	33.72 33.72	-				+
SW 42 ST SW 42 ST	SR 200 SR 200	SW 27 AV SW 27 AV	Non-Regional Non-Regional	0.0	0.76	20.24 40.50	2.5	0	5	7.5 7.5	0.36 0.36	10.89 10.89	2.5	5	0 0	7.5	0	0	7.5 7.5	33.39 33.39					YES
CR 314	SR 40 (W)	NE 36 AV	Collector	0.0	0.68	23.67	2.5	0	5	7.5	0.44	13.29	0	5	0 0	7.5	0	0	7.5	33.29					wee
	SW 38 AV SW 80 ST	SW 31 AV SR 200	Collector Collector	0.0	0.00	25.33 30.48	2.5 2.5	0	0	2.5 2.5	0.69	20.67 13.17	2.5 2.5	5	0 0	7.5 5	2.5	2.5	7.5 10	33.17 33.17				YES Y	YES YES
CR 475 CR 200A / JACKSONVILLE RD	SE 31 ST NE 77 ST	N OF SW 29TH ST RD URBAN AREA BOUNDARY	Non-Regional Non-Regional	0.0	1.08	13.07 8.63	0	0	0 5	0.0 5.0	0.60 0.35	18.09 10.5	0	5	0 0	7.5 7.5	0	2.5 0	10 7.5	33.09 33					
CR 484 NE 35 ST	CR 475A NE 25 AV	CR 475 NE 33 AV	Regional Collector	0.0	0.00	9.53 11.72	0	0	0 5	0.0 5.0	0.52 0.52	15.48 15.48	2.5	5	0 10 0	7.5	2.5	2.5	5 7.5	32.98 32.98				YES	YES
SE WATULA AVE NW 35 ST	SE 8 ST NW MARTIN L KING AV	E FORT KING ST US 441	Collector Collector	0.0	0.55	31.44 22.88	2.5 2.5	0	5	7.5 2.5	0.34	10.2 7.53	0	5	0 0	7.5 7.5	0	2.5	10 7.5	32.7 32.53		+			YES
SW 103 ST RD	SR 200	SW 49 AV	Collector	0.5	0.55	18.50	2.5	7.5	5	7.5	0.33	9.9	0	5	0 0	5	2.5	2.5	10	32.4					=
CR 484 US 27	SW 105 AV COUNTY LINE (W)	SR 200 CR 464B	Non-Regional SIS	0.0	0.00	26.08 0.94	0	0	0	0.0	0.33 0.16	9.87 4.8	0	0	10 10	2.5 7.5	0	0	7.5	32.37 32.3					=
US 27 US 27	COUNTY LINE (W)	CR 464B CR 464B	SIS SIS	0.0	0.00	10.66 2.03	0	0	0	0.0	0.16 0.16	4.8	0	0	10 10 10 10	7.5 7.5	0	0	7.5 7.5	32.3 32.3					\pm
N MAGNOLIA AV CR 475A	CR 200A SW 128 LN	NW 28 ST CR 484	Collector Non-Regional	0.0	1.18	6.76 14.69	0	0	10	10.0 10.0	0.16 0.32	4.74 9.72	0	5	0 0	7.5	2.5 2.5	2.5 0	12.5 2.5	32.24 32.22					
SR 326 SR 40	NE 64 AV SW 85 AV	SR 40 SW 80 AV	SIS Regional	0.0	0.00	1.25 12.49	0	0	0	0.0	0.16 0.49	4.71 14.67	0 2.5	5	10 5 0 10	7.5 0	0 2.5	0 2.5	7.5 5	32.21 32.17		+		YES V	YES YES
US 301 CR 25A	US 441 URBAN AREA BOUNDARY	NE JACKSONVILLE RD CR 329	SIS	0.2 Yes 0.0	0.24	1.93 3.20	0	2.5	0	0.0	0.31	9.3 16.74	2.5	0	10 10	0	0	0	0	31.8 31.74					
CR 328	E OF NW 125 AV	SR 40	Collector	Yes 0.0	0.00	3.29	0	0	0	0.0	0.56 0.47	14.13	0	5	0 10	0	2.5	0	2.5	31.63					=
SW 19 AV	CR 467 SW 80 ST	US 441 SW 66 ST	Collector Collector	0.0	0.00	14.93 1.93	0	0	5 0	5.0 0.0	0.47 0.63	14.04 18.96	0	5 5	0 0	5 7.5	2.5 0	0	7.5 7.5	31.54 31.46					
CR 326 CR 42	CR 225A US 441	NW 49TH AVE SE 130 AVE	Collector	Yes 0.0	0.93	5.67 6.42	0	0	5 5	5.0 5.0	0.63 0.46	18.93 13.89	2.5 0	5 5	0 0	7.5	0	0	0 7.5	31.43 31.39				YES	\pm
N MAGNOLIA AV	NW 2 ST SE 17 ST	NW 1 ST SE 6 ST	Collector Non-Regional	0.0	0.00	203.55 15.47	10 2.5	0	0	10.0 2.5	0.21 0.54	6.33 16.23	0 2.5	5	0 0	7.5 7.5	0	2.5 2.5	10 10	31.33 31.23				YES	YES YES
CR 318 CR 42	US 441 CR 25	NE 10 AVE URBAN AREA BOUNDARY	Collector	Yes 0.3	0.36	2.00 17.30	0 2.5	5	5	5.0 12.5	0.37	11.19 8.64	0 5	5	0 10	0	0	0	0	31.19		+			
SE 36 AV NE 25 AV	SE 6 ST NE 24 ST	E FORT KING ST NE 35 ST	Non-Regional	0.0	0.00	16.62 16.95	2.5	0	0	2.5	0.54	16.05	2.5	0	0 0	7.5	0	2.5	10	31.14 31.05				YES	YES
S MAGNOLIA AV	W BROADWAY ST	W FT KING ST	Collector Collector	0.0 0.0 0.2	0.00	123.55	7.5	0	0	7.5	0.62 0.28	18.45 8.43	0	5	0 0	7.5	0	2.5	10	30.95 30.93 30.92				YES	YES
SW 60 AV SE 18 AV	SW 38 ST SE 19 AV	SW 20 ST SR 464	Non-Regional Collector	0.0	0.00	5.89 13.56	0	2.5	0	0.0	0.36 0.53	10.92 15.87	2.5 0	5	0 0	7.5 7.5	0	2.5	12.5 10	30.87				TES	=
US 301	CR 318	COUNTY LINE (N)	SIS	0.0	0.00	1.36	1 0	0	. 0	0.0	0.28	8.34	2.5	0	10 10	0	0	0	0	30.84	1	1 1	1	1 1	

Roadway	From	То	Roadway Classification	Rural 2-Lane Facility	Fatal Crash Rate	Fatal & Incapacitating Injury Crash Rate	Total Crash Rate	Total Crash Ranking	Total Fatal Ranking	Fatal and Incapacitating Injury Ranking	Safety Significance	V/C Ratio	MAV Ranking (V/C*30)	Existing Volume Ranking	Truck Volume Ranking	Truck Route Ranking Evac Route Ranking	Fiber Connection Ranking	CCTV Ranking	Bluetooth Ranking	ITS Significance	Total Scoring	Ranked Top 25 Segments (I- 75 removed)	Top 25 Top 25 Non- Top 25 Non- Regional Re Segments Segments Segments	gional Segments	Emergenc (roposed Proposommuni ATC cation Signa spansion Control
US 301 US 301 CR 475	CR 318 CR 318 URBAN AREA BOUNDARY	COUNTY LINE (N) COUNTY LINE (N) SE 80 ST	SIS SIS Non-Regional	Yes	0.00 0.00 0.00	0.00 0.00 0.00	5.95 4.28 15.80	0 0 2.5	0	0 0	0.0 0.0 2.5	0.28 0.28 0.36	8.34 8.34 10.8	2.5 2.5 5	0 0 5	10 10 10 10 0 0	0 0 7.5	0 0	0 0	0 0 7.5	30.84 30.84 30.8					
US 441 US 441 SW 13 ST	CR 318 CR 318 SW 33 AV	AVENUE I SW 27 AV	Regional Regional Collector		0.00 0.33 0.00	0.33 0.33 0.00	2.83 10.29 3.22	0	5	5	5.0 5.0	0.19 0.19 0.52	5.73 5.73 15.66	0	0	10 10 10 10	0 0 7.5	0	0	0 0 7.5	30.73 30.73 30.66					
NE 25 AV CR 484	NE 35 ST CR 475	NE 49 ST SE 25 AV	Collector Regional		0.00	0.40 0.00	6.24 4.17	0	0	5	5.0	0.44	13.11 13.08	0 2.5	5	0 0	7.5	0 2.5	0 2.5	7.5 5	30.61 30.58				YES	YES
SW 1 AV US 41	US 441 SW 36 ST	SR 464 COUNTY LINE (N)	Non-Regional (Unclassified) Regional	Yes	0.00	0.00 0.00	47.30 2.25	5 0	0	0	5.0 0.0	0.52 0.51	15.54 15.3	0	0 5	0 0 0	7.5 0	0	2.5 0	10 0	30.54 30.3					
US 41 US 441	AVENUE B	CR 484 COUNTY LINE (N) NE 110TH AVE RD	Regional Regional	Vac	0.00 0.00 0.14	0.00 0.32	13.48 4.44	0	0	5	0.0 5.0	0.59 0.17 0.09	17.76 5.22	2.5	0	0 10 10 10	0	0	0	0	30.26 30.22					
US 441 CR 475	JACKSONVILLE RD US 301 CR 484	CR 25A (N) URBAN AREA BOUNDARY	Collector Regional Non-Regional	Yes	0.14 0.21 0.00	0.70 0.63 1.45	0.98 2.96 47.38	0	2.5	5	5.0 5.0	0.17 0.26	5.19 7.65	0	0	10 10	0	0	0	0 25	30.19 30.15					
CR 200A / JACKSONVILLE RD SE 1 AV	NE 49 ST SE 8 ST	SR 326 SW 5 ST	Non-Regional Collector		0.00	0.26 2.52	47.38 7.45 27.75	0 2.5	0	0	0.0	0.25 0.00	7.59 0	0	0 5	0 10 0 0	7.5	2.5	2.5 2.5	12.5 7.5	30.09 30					YES
SW 49 AV CR 484	CR 484 SW 140 AVE	SW 48 TER SW 110 AV	Collector Non-Regional		0.00	0.48 0.46	17.49 7.43	2.5 0	0	5 5	7.5 5.0	0.25 0.33	7.38 9.87	0	5 5	0 0 0	5	2.5 0	2.5 0	10 0	29.88 29.87				YES	
SW 31 AV US 27	SW 20 ST COUNTY LINE (W)	SW 13 ST CR 464B	Collector SIS		0.00	2.20 0.79	13.58 7.74	0	0	10 5	10.0 5.0	0.33	9.81	0	5	0 0	5	0	0	5	29.81 29.8					
CR 42 SE 3 AV US 301	SE 77 AV US 441 NE JACKSONVILLE RD	SE 83 AV SR 464 CR 318	Non-Regional Collector SIS		0.00 0.35 0.00	0.38 0.35 0.00	28.46 5.66 14.99	0	5	5	5.0	0.32 0.33 0.32	9.75 9.75 9.72	0	5	0 0	7.5	0	2.5	10	29.75 29.75 29.72				TES	YES YES
SE 25 AV SW MARTIN L KING AVE	SE 14 ST SR 464	E FORT KING SR 200	Non-Regional Collector		0.00	0.00 0.34	17.49 11.61	2.5	0	0 5	2.5 5.0	0.49	14.7 7.2	2.5	0 5	0 0	7.5 7.5	0 2.5	2.5 2.5	10 12.5	29.7 29.7				YES	YES
SR 40 CR 484	SW 110 AV SE 25 AV	SW 85 AV CR 467	Regional Regional		0.00	0.00	4.91 5.37	0	0	0	0.0	0.49	14.67 12.15	2.5 2.5	0	0 10 0 10	0	0 2.5	2.5 2.5	2.5 5	29.67 29.65				YES	YES YES
E FORT KING ST SE 31 ST SE 31 ST	SE 30TH AVE W OF SE 22ND AVE SE 19 AV	SE 36 AV SE 36 AV W OF SE 22ND AVE	Collector Non-Regional Non-Regional		0.00 0.00 0.00	0.76 0.00 0.00	15.17 5.79 1.47	0	0	0	7.5	0.32 0.40 0.40	9.63 12.12 12.12	2.5	5	0 0	7.5	0	2.5	7.5	29.63 29.62 29.62					YES YES
CR 25 CR 484	SE 100 AV US 41	SE 110 ST LAKESHORE DR	Collector Non-Regional		0.00	0.56 0.00	9.74 29.26	0 2.5	0	5	5.0 2.5	0.49	14.61 11.76	0	5	0 0	0	2.5	2.5	5 0	29.61 29.26					11.5
CR 475 CR 328	URBAN AREA BOUNDARY SW 140 AV	SE 90 ST E OF NW 125 AV	Non-Regional Collector	Yes Yes	0.00	0.40 0.00	2.96 6.33	0	0	5 0	5.0 0.0	0.31 0.47	9.18 14.13	2.5 0	5 5	0 0 0 10	7.5 0	0	0	7.5 0	29.18 29.13					
CR 484 S MAGNOLIA AV	CR 467 SW 8 ST	SE 1 AV	Regional Collector		0.00	0.60	7.97 86.10	0 5	0	5	5.0 5.0	0.22	9.03	2.5	5	0 10	7.5	2.5	2.5 2.5	5 10	29.1 29.03				YES	YES YES
NW 60 AV SW 40 ST SW 40 ST	NW 17 ST SW 43 CT SW 51 TER	US 27 SW 38 AV SW 43 CT	Non-Regional Collector		0.00	0.32 0.00 0.00	15.50 8.36	0	0	0	0.0	0.21 0.55	6.45 16.41	0	5	0 0	7.5 7.5	0	0	7.5	28.95 28.91				YES	
CR 326 CR 464A	NW 49TH AVE SE 38 ST	NW 44 AV SE 31 ST	Collector Regional Collector		0.00 0.00 0.00	0.00	12.78 50.69 21.42	5 2.5	0	0 0	5.0	0.55 0.63 0.37	16.41 18.75 11.22	0 0	5 5	0 0	0 7.5	0 0	0 2.5	0 10	28.91 28.75 28.72					YES YES
CR 464A SE 8 ST	US 441 S MAGNOLIA AV	SE 38 ST SE 1 AV	Collector Non-Regional (Local)		0.00	0.00	15.57 23.07	2.5 2.5	0	0	2.5 2.5	0.37	11.22 11.16	0	5	0 0	7.5 7.5	0	2.5 2.5	10 10	28.72 28.66					YES
CR 314 CR 314	SR 40 (E) SR 40 (E)	NE 138 AV NE 138 AV	Collector Collector	Yes Yes	0.00	0.67 0.84	12.66 7.14	0	0	5 5	5.0	0.20 0.20	6	0	5	0 5	7.5 7.5	0	0	7.5 7.5	28.5 28.5					
NE 28 ST NE 3 ST SW 42 ST	US 441 NE 8 AV SW 27 AV	CR 200A NE 25 AV SW 7 AV	Collector Collector Non-Regional		0.00 0.00 0.00	1.06 0.00 0.12	26.29 7.85 12.51	2.5 0	0	5 0	7.5 0.0	0.28 0.28 0.45	8.49 8.43 13.38	0 0 25	5 5	0 5	5 7.5 7.5	2.5 0	2.5 0	7.5 10 7.5	28.49 28.43 28.38					YES YES
CR 475A BASELINE RD EXT	SW 107 PL US 441	SW 87 PL SR 25	Non-Regional Collector		0.00	0.12 0.00 0.00	6.86 14.77	0	0	0	0.0	0.45	13.35 13.8 10.8	0	5	0 5	7.5 5 7.5	0 2.5	0 2.5	7.5 5 12.5	28.35 28.3					
CR 464 NE 36 AV	EMERALD RD (S) E FORT KING ST	SE 110 ST CR 314	Non-Regional Non-Regional		0.00	0.67 0.00	6.57 13.20	0	0	5 0	5.0 0.0	0.19 0.52	5.73 15.72	0 2.5	5	0 5	7.5 7.5	0	0 2.5	7.5 10	28.23 28.22				YES YES	YES YES
CR 475 CR 200A / JACKSONVILLE RD	SE 80 ST NE 77 ST	SE 52 ST URBAN AREA BOUNDARY	Non-Regional Non-Regional		0.00	0.40 0.13	5.91 8.91	0	0	5	5.0 0.0	0.36	10.65 10.5	0	5	0 0	7.5	0	0	7.5 7.5	28.15 28					
SE 52 ST CR 328	US 441 US 41	SE 44 AV RD SW 140 AV	Collector Collector	Yes	0.00	0.68	4.84 1.39	0	0	5	5.0	0.35 0.26	10.47 7.89	0	5	0 0	0	0	0	7.5	27.97 27.89					
SW 38 ST NE 8 AV US 441	SW 60 AV NE 2 ST US 301	SW 51 TER NE 3 ST CR 25A (N)	Collector Collector Regional		0.00 0.00 0.18	0.00 0.00 0.18	20.06 32.47 4.22	2.5 0	0 2.5	0	2.5 2.5 0.0	0.35 0.26 0.17	10.38 7.74 5.19	0	5	0 0	7.5	2.5	2.5 2.5 0	10 12.5 2.5	27.88 27.74 27.69					YES
SW 66 ST CR 318	I-75 NE 10 AVE	SW 27 AV US 301	Collector Collector	Yes	0.00	0.00 0.67	3.12 2.34	0	0	0 5	0.0 5.0	0.51 0.25	15.18 7.56	0	5	0 0 0	7.5	0	0	7.5 0	27.68 27.56					
SW 38 ST W FORT KING ST	SW 80 AV US 441	SW 60 AV SW 2 AV	Collector Non-Regional (Local)		0.00	0.20 1.75	10.10 50.84	0 5	0	0 10	0.0 15.0	0.42	12.54	0	5	0 0	7.5 7.5	2.5 0	0	10 7.5	27.54 27.5					YES
SW 3 ST SR 19 CR 25	US 441 COUNTY LINE (S) CR 42	S MAGNOLIA AV SR 40 SE 128 PL RD	Non-Regional (Unclassified) Non-Regional Collector	Yes	0.00	3.81 1.64	61.88 5.75	0	0	15 10	20.0 10.0	0.00 0.08 0.41	2.4 12.3	0	5	0 0 10	7.5	0	0	7.5	27.5 27.4					
NE 36 AV SE SUNSET HARBOR RD	NE 35 ST US 441	NE 49 ST SE 99TH AVE	Collector Collector		0.00 0.00 0.00	0.00	4.11 10.10 24.70	0	0	0	0.0	0.49 0.41	14.79 12.21	0	5	0 0	7.5	0	0	7.5	27.3 27.29 27.21					
SR 326 SE 31 ST	CR 35 SW 7 AV	NE 64 AV CR 475	SIS Non-Regional		0.00	0.00 0.59	1.77 14.12	0	0	0 5	0.0 5.0	0.16 0.41	4.71 12.15	0 2.5	0	10 S 0 0	7.5 7.5	0	0	7.5 7.5	27.21 27.15					YES
E FORT KING ST	SE 100 AV SE WATULA AVE	SE 110 ST SE 11 AV	Collector Collector		0.00	0.00	6.93 18.28	2.5	0	0	0.0 2.5	0.49 0.40	14.61 12	0	5	0 0	2.5 7.5	2.5	2.5	7.5 7.5	27.11 27					YES
CR 326 SW 80 AV CR 225A	NW 44 AV SR 200 NW 21 ST	I-7S RAMP (WEST) SW 90 ST US 27	Collector Collector	Vac	0.00 0.00 0.00	0.00 0.68 0.00	57.32 31.77 3.44	2.5	0	5	7.5 0.0	0.15 0.23 0.39	4.41 6.81 11.79	0	5	0 0	5	0	2.5	7.5	26.91 26.81 26.79				YES	
NW 35 ST NW 3 ST	NE 33 ST US 441	CR 200A N MAGNOLIA AV	Collector Collector	Yes	0.00	0.00	10.92 16.88	0 2.5	0	0	0.0	0.48 0.14	14.28 4.26	0	5	0 0	7.5 7.5	0	0 2.5	7.5 10	26.78 26.76					YES
E FORT KING ST NW 35 ST	SE 22 AV NW 27 AV	SW 25 AV NW MARTIN L KING AV	Collector Collector		0.00	0.00	6.57 2.04	0	0	0	0.0	0.47 0.14	14.22 4.17	0	5 5	0 0 10 0	7.5 7.5	0	0	7.5 7.5	26.72 26.67					YES YES
CR 315 CR 315	SR 40 CR 316	NE 90 ST CR 318	Collector Collector	Yes Yes	0.00	0.00	0.45 1.73	0	0	0	0.0	0.14 0.14	4.11 4.11	0	5	0 10	7.5	0	0	7.5 7.5	26.61 26.61					
CR 484 CR 316 SE 36 AV	SE 47 AV E OF NE 116TH CT SE 38 ST	SE 132 ST RD NE 203 AV SE 31 ST	Regional Collector Collector	Yes	0.00 0.00 0.00	0.00 0.38 0.00	35.08 2.08 28.59	0 2.5	0	5	5.0 2.5	0.22 0.14 0.39	6.6 4.08 11.55	0	5	0 10 0 10	2.5	0 2.5	0	2.5	26.6 26.58 26.55				YES	YES
SE 3 AV NW 60 AV	SR 464 SR 40	S MAGNOLIA AV NW 17 ST	Collector Non-Regional		0.00	0.00 0.53	10.40 5.34	0	0	0 5	0.0	0.39	11.55	0	5	0 0	7.5 7.5	0 2.5	2.5	10	26.55 26.45				YES	YES
CR 316 E FORT KING ST	US 441 SE 28 AV	JACKSONVILLE RD SE 30TH AVE	Collector Collector	Yes	0.00	0.30 0.00	1.51 7.71	0	0	5	5.0 0.0	0.21 0.46	6.36 13.71	0	5 5	0 10 0	7.5	0	0	0 7.5	26.36 26.21					
CR 318 CR 318 CR 318	US 441 US 441 US 441	NE 10 AVE NE 10 AVE NE 10 AVE	Collector Collector	Yes Yes	0.00	0.12 0.00 0.00	3.62 1.06	0	0	0	0.0	0.37 0.37 0.37	11.19 11.19	0	5	0 10	0	0	0	0	26.19 26.19 26.19					
CR 318 CR 329	1 MI E OF US 301 NW 21 CT	NE 199 ST US 441	Collector Collector Collector	Yes Yes Yes	0.00 0.00 0.39	0.62 0.77	2.00 2.48 17.58	0	0	5	5.0	0.20 0.20	11.19 6.15 6.09	0	5	0 10	0 7.5	0	0	0 7.5	26.15 26.09					
CR 25A US 441	NW 46 ST CR 25A (N)	NW 63 ST CR 318	Collector Regional		0.15 0.00	0.90 0.00	7.04 10.48	0	2.5	5	5.0 0.0	0.29 0.20	8.55 5.97	0	5	0 0 10 10	7.5 0	0	0	7.5 0	26.05 25.97 25.97					
CR 475 S MAGNOLIA AV	URBAN AREA BOUNDARY W FT KING ST	CR 484 SW 3 ST	Collector Collector		0.00	1.24 0.00	22.91 28.55	2.5 2.5	0	0	12.5 2.5	0.20	5.97 8.43	0	5	0 0	7.5	2.5	2.5	2.5	25.93					YES
S MAGNOLIA AV SE 17 ST SW 80 ST	SW 3 ST SE 25 AV SW 19 AV	SW 5 ST SE 30 AV CR 475	Collector Collector		0.00 0.00 0.00	0.00 0.00 0.00	17.34 5.20 1.31	0 0	0	0	0.0 0.0	0.28 0.28 0.45	8.43 8.43 13.38	0	5	0 0 0	7.5 7.5 7.5	2.5 0	2.5 2.5	10 12.5 7.5	25.93 25.93 25.88					YES
N MAGNOLIA AV US 441	NE 1 AV CR 318	SR 492 AVENUE I	Collector Regional		0.00	0.00	14.36 6.61	0	0	0	0.0	0.36 0.19	10.83 5.73	0	5 0	0 0 10 10	7.5 0	0	2.5 0	10 0	25.83 25.73					YES
NE 35 ST E FORT KING ST	NE 36 AV SE 11 AV	CR 35 SE 16 AV	Collector Collector		0.00	0.23 0.00	6.85 7.13	0	0	0	0.0	0.44 0.44	13.2 13.2	0	5	0 0	7.5 7.5	0	0	7.5 7.5	25.7 25.7				- I	YES
SW 60 AV SW 60 AV SW 38 AV	SW 90 ST SW 95 ST RD SW 40 AV	SW 90 ST SW 90 ST SW 20 ST	Collector Collector		0.00 0.00 0.15	0.00 0.00 0.44	12.43 0.40 12.49	0	0 0 2.5	0	0.0 0.0 5.0	0.44 0.44 0.27	13.17 13.17 8.16	2.5 2.5 0	5 5 5	0 0	0 0 7.5	2.5 2.5 0	2.5 2.5 0	5 5 7.5	25.67 25.67 25.66				YES	YES
CR 42 CR 314	SE 130 AVE NE 51 AV	CR 25 SR 35	Collector Collector		0.15 0.00 0.00	0.00	8.06 3.82	0	0 0	0 0	0.0	0.44	13.11 13.02	0 0	5 5	0 0	7.5 7.5	0 0	0 0	7.5 7.5	25.61 25.52				YES	
SW 80 AV CR 42	SW 90 ST URBAN AREA BOUNDARY	SW 38 ST SE 190TH AVE RD	Collector Collector	Yes	0.00	0.09 1.09	3.81 17.50	0 2.5	0	0 5	0.0 7.5	0.43 0.27	13.02 8.01	0 5	5	0 0	5 0	0	2.5 0	7.5 0	25.52 25.51					
SR 19 US 441	CR 314 CR 320	COUNTY LINE (N) AVENUE B	Non-Regional Regional	Yes	0.00	0.91	3.08 2.23	0	0	5 0	5.0 0.0	0.18 0.18	5.49 5.49	0	5 0	0 10 10 10	0	0	0	0	25.49 25.49					
CR 316 NE 8 AV US 441	NE 110TH AVE RD SR 40 AVENUE B	CR 315 NE 2 ST COUNTY LINE (N)	Collector Collector Regional	Yes	0.00 0.00 0.00	0.00 0.00 0.00	0.81 8.32 1.93	0	0	0	0.0	0.09 0.26 0.17	2.76 7.74 5.22	0	5 0	0 10 0 0 10 10	7.5 7.5 0	2.5 0	2.5 0	7.5 12.5 0	25.26 25.24 25.22					YES
NE 19 AV CR 316	SR 492 JACKSONVILLE RD	NE 35 ST NE 110TH AVE RD	Non-Regional (Local) Collector	Yes	0.00	0.74 0.00	2.59 2.42	0	0	5	5.0 0.0	0.26 0.09	7.71 2.7	0	5	0 0 0 10	7.5 7.5	0	0	7.5 7.5	25.21 25.2					
CR 316 CR 316	JACKSONVILLE RD JACKSONVILLE RD	NE 110TH AVE RD NE 110TH AVE RD	Collector Collector	Yes Yes	0.00	0.00	0.88 0.89	0	0	0	0.0	0.09	2.7	0	5	0 10 0 10	7.5 7.5	0	0	7.5 7.5	25.2 25.2					
US 441 CR 25 SW 80 AV	US 301 CR 464 SW 38 ST	CR 25A (N) SE 100 AV SW 22 ST	Regional Collector Collector		0.00 0.33 0.00	0.00 0.98 0.00	2.44 22.58 4.88	0 2.5	0 5	5	7.5 0.0	0.17 0.34 0.42	5.19 10.17 12.54	0 0	5	10 10 0 0	0	0 2.5 0	0 0 25	0 2.5 7.5	25.19 25.17 25.04				H	
SE 19 AV CR 484	SE 38 ST SW 140 AVE	SE 31 ST SW 110 AV	Non-Regional (Local) Non-Regional		0.00	0.39 0.00	4.34 5.64	0	0	5 0	5.0	0.50 0.33	15.03 9.87	0 0	0 5	0 0	5 0	0 0	0	5 0	25.03 24.87					
CR 484 SW 33 AV	SE 132 ST RD SW 7TH ST	US 441 SR 40	Collector Collector		0.00	0.17 0.00	11.08 23.93	0 2.5	0	0	0.0 2.5	0.25 0.33	7.35 9.81	0	0 5	0 10 0	5 7.5	2.5 0	0	7.5 7.5	24.85 24.81				YES	
US 27 US 27	COUNTY LINE (W) COUNTY LINE (W)	CR 464B CR 464B	SIS SIS		0.00	0.00	2.72 1.57	0	0	0	0.0	0.16 0.16	4.8 4.8	0	0	10 10 10 10	0	0	0	0	24.8 24.8					
US 27 CR 314 CR 42	COUNTY LINE (W) SR 35 SE 83 AV	CR 464B NE 73 AV SE 86 CT	SIS Collector Non-Regional		0.00 0.00 0.00	0.16 1.09 0.00	0.98 19.28 24.67	0 2.5 2.5	0 0	5	7.5 2.5	0.16 0.16 0.32	4.8 4.77 9.75	0 0 2.5	5 5	10 10 0 0 0 0	7.5 0	0 25	0 25	7.5 5	24.8 24.77 24.75				VEC	YES YES
E FORT KING ST N MAGNOLIA AV	SE 36 AV NE 1 AV	SR 35 NE 3 ST	Collector Collector		0.00 0.00 0.00	0.00	2.41 13.36	0	0	0	0.0	0.40	12.09 9.54	0	5	0 0	7.5 7.5	0	0 2.5	7.5 10	24.59 24.54					YES
E FORT KING ST E FORT KING ST	S MAGNOLIA AV NE 1 AV	NE 1 AV SE WATULA AVE	Collector Collector		0.00	0.00	13.67 12.96	0	0	0	0.0	0.40	12	0	5	0 0	7.5 7.5	0	0	7.5 7.5	24.5 24.5				H	YES YES
SW 20 ST CR 225A CR 215	CARLTON ARMS NW 6 ST	SW 38 AV NW 21 ST CR 316	Collector Collector	Yes	0.00 0.00 0.47	0.32 0.41	12.36 2.46	0	0	5 5	5.0 5.0	0.32	9.48 11.79	2.5 0	5	0 0	7.5	0	2.5	7.5 2.5	24.48 24.29 24.11					YES
CR 315 CR 315 CR 315	NE 90 ST NE 90 ST CR 316	CR 316 CR 316 CR 318	Collector Collector	Yes Yes Yes	0.00	0.47 0.00 0.00	2.13 2.07 0.08	0	0	0	0.0	0.14 0.14 0.14	4.11 4.11 4.11	0	5	0 10 0 10	5	0	0	5	24.11 24.11 24.11					
CR 315 CR 316	NE 90 ST CR 315	CR 316 E OF NE 116TH CT	Collector Collector	Yes Yes	0.20	0.70 0.00	3.11 1.24	0	2.5 0	5	5.0 0.0	0.14 0.14	4.11 4.08	0	5	0 10 0 10	0 5	0	0	0 5	24.11 24.11 24.08					
CR 316	E OF NE 116TH CT	NE 203 AV	Collector	Yes	0.00	1.03	4.62	0	0	5	5.0	0.14	4.08	0	5	0 10	0	0	0	0	24.08					

Roadway	From	То	Roadway Classification Rural 2-Lan Facility	Fatal Crash Rate	Fatal & Incapacitating Injury Crash Rate	Total Crash Rate	Total Crash Ranking	Total Fatal Ranking	Fatal and Incapacitating Injury Ranking	Safety Significance		MAV Ranking (V/C*30)	Existing Volume Ranking	Truck Volume Ranking	Truck Route Ranking Evac Route Ranking	Fiber Connection Ranking	CCTV Ranking	Bluetooth Ranking	ITS Significance	Total Scoring	Ranked Top 25 Segments (I- 75 removed)	Top 25 Top 25 Non-Colletor Regional Segments Segments Segments		Proposed Pro Emergenc Cor y Vehicle ca Preempti Exp	nsion Controller
S MAGNOLIA AV CR 25A CR 25A	SW 5 ST US 441 (S) US 441 (S)	SW 8 ST NW 46 ST NW 46 ST	Collector Collector Collector	0.00 0.25 0.00	0.00 0.25 0.35	23.12 15.15 6.24	2.5 2.5 0	0 2.5 0	0 0 5	2.5 2.5 5.0	0.30 0.30 0.30	9.03 8.94 8.94	0 0 0	5 5 0	0 0 0 0 0 0	5 7.5 7.5	0 0 2.5	2.5 0 0	7.5 7.5 10	24.03 23.94 23.94					YES
NE 1 AV SW 46 AV SE 11 AV	NE 1 ST SW 13 ST SR 464	NE 2 ST SR 40 E FT KING ST	Collector Non-Regional (Unclassified) Collector	0.00 0.00 0.00	0.00 0.48 0.42	49.62 1.21 8.57	5 0 0	0 0	5 5	5.0 5.0 5.0	0.13 0.38 0.21	3.84 11.34 6.27	0 0	5 0 5	0 0 0	7.5 7.5 5	0 0	2.5 0 2.5	7.5 7.5	23.84 23.84 23.77					YES
NE 25 AV SW 37 AV CR 314	NE 49 ST SW 20 ST SR 40 (E)	SR 326 SW 13 ST NE 138 AV	Collector Non-Regional (Unclassified) Collector Yes	0.00	0.40 0.00 0.00	2.38 5.93 2.07	0	0	5 0	5.0 0.0	0.21 0.21 0.20	6.24 6.18 6	0	5 10 5	0 0 0	7.5 7.5 7.5	0	0	7.5 7.5 7.5	23.74 23.68 23.5					#
CR 314 CR 315	SR 40 (E) CR 21	NE 138 AV COUNTY LINE	Collector Yes Collector Yes	0.00	0.00 0.57	2.09 8.85	0	0	0 5	0.0 5.0	0.20 0.11	6 3.45	0	5	0 5 0 10	7.5	0	0	7.5 0	23.5 23.45					
NE 3 ST CR 200A / JACKSONVILLE RD SE 80 ST	N MAGNOLIA AV NE 101 ST CR 475	NE 1 AV US 301 SE 25 AV	Collector Yes Collector	0.00 0.00 0.20	0.00 0.00 0.40	0.00 2.52 10.21	0	0 0 2.5	0 0 5	0.0 0.0 5.0	0.11 0.19 0.27	3.39 5.85 8.22	0	5 0 5	0 5 0 10 0 0	7.5 7.5 5	0	0 0	7.5 5	23.39 23.35 23.22					#
CR 329 CR 42 N MAGNOLIA AV	US 441 URBAN AREA BOUNDARY NW 1 ST	JACKSONVILLE RD SE 190TH AVE RD SR 40	Collector Yes Collector Yes Collector	0.00	0.34 0.50 0.00	6.80 11.43 35.59	0 0 2.5	2.5 0 0	5 5 0	5.0 5.0 2.5	0.19 0.27 0.18	5.64 8.01 5.4	0 5 0	5 5	0 0 0	7.5 0 7.5	0	0 0 2.5	7.5 0	23.14 23.01 22.9					YES
CR 328 CR 328	US 41 US 41	SW 140 AV SW 140 AV	Collector Yes Collector Yes	0.00	0.00 0.00	2.24 0.71	0	0	0	0.0	0.26 0.26	7.89 7.89	0	5	0 10 0 10	0	0	0	0	22.89 22.89					
CR 328 NW MARTIN L KING AV NE 3 ST	US 41 US 27 NE 1 AV	SW 140 AV NW 22 ST NE 8 AV	Collector Yes Collector Collector	0.00	0.00 0.90 0.00	1.74 14.88 10.67	0	0	5 0	5.0 0.0	0.26 0.09 0.09	7.89 2.79 2.7	0	5 5	0 0 0	7.5 7.5	2.5	0 2.5	10 10	22.89 22.79 22.7					
CR 316 SE 11 AV CR 318	JACKSONVILLE RD CR 464A US 301	NE 110TH AVE RD SR 464 1 MI E OF US 301	Collector Yes Non-Regional (Local) Collector Yes	0.00	0.00 0.00 0.24	0.71 9.81 2.44	0 0 0	0 0	0 0	0.0 0.0 0.0	0.09 0.25 0.25	7.62 7.56	0 0	5 5 5	0 10 0 0 0 10	7.5 0	0 0	0 2.5 0	5 10 0	22.7 22.62 22.56					YES
CR 318 CR 25 CR 316	NE 10 AVE COUNTY LINE CR 25A	US 301 CR 42 NW 38TH AVE	Collector Yes Collector Collector Yes	0.00	0.00 0.51 0.00	2.30 13.08 2.74	0	0	0 5	0.0 5.0	0.25 0.50 0.25	7.56 15.03 7.5	0	5 0 5	0 10 0 0	0 2.5	0	0	0 2.5	22.56 22.53 22.5					#
SE 1 AV NE 24 ST	SW 10 ST NE 25 AV	SE 8 ST NE 36 AV	Collector Collector	0.00	0.00 0.40	106.41 9.06	7.5	0	0 5	7.5	0.00	0 4.98 9.84	0	5	0 0	7.5 7.5	0	2.5	10 7.5	22.5 22.48				vec	YES YES
CR 42 CR 316 CR 316	US 301 I-75 NW 48TH AVE	SE 77 AV NW 48TH AVE CR 25A	Non-Regional Collector Yes Collector Yes	0.00	0.00 0.29 0.00	12.30 0.58 0.56	0	0	0	0.0	0.33 0.24 0.24	7.32 7.32	0 0	5 5	0 10 0 10	0	0 0	0 0	0	22.34 22.32 22.32				TES	3 YES
CR 316 SW 33 AV CR 25	E OF CR 225 SW 13 ST SE 128 PL RD	I-75 SW 7TH ST SE 136TH TER	Collector Yes Collector Collector	0.00 0.00 0.00	0.15 0.00 0.36	0.92 8.24 7.65	0 0 0	0 0	0 0 5	0.0 0.0 5.0	0.24 0.33 0.41	7.32 9.81 12.3	0 0	5 5 5	0 10 0 0 0 0	7.5 0	0 0	0 0 0	7.5 0	22.32 22.31 22.3					#
CR 25 CR 25 CR 25A	CR 42 CR 42 CR 329	SE 128 PL RD SE 128 PL RD CR 316	Collector Collector	0.00	0.30 0.89 0.00	5.61 6.98 0.72	0	0	5	5.0	0.41 0.41 0.40	12.3 12.3 12.12	0 0	5	0 0	0	0	0	0	22.3 22.3 22.12					
E FORT KING ST E FORT KING ST	SE 36 AV SE 36 AV	SR 35 SR 35	Collector Collector	0.00	0.00	4.50 4.43	0	0	0	0.0	0.40 0.40	12.09 12.09	0	5	0 0	5 5	0	0	5	22.09 22.09					
CR 40 SW 20 ST CR 225A	CEDAR ST SW 60 AV SR 40	US 41 SW 53RD AVE NW 6 ST	Collector Collector Collector	0.00 0.00 0.00	0.00 0.00 0.00	4.11 2.86 3.12	0	0	0	0.0	0.24 0.32 0.39	7.05 9.48 11.79	2.5 0	5 0 5	0 0	7.5 0	2.5 2.5	0 2.5	10 5	22.05 21.98 21.79					YES
NW 27 AV SE WATULA AVE CR 475	US 27 E FORT KING ST URBAN AREA BOUNDARY	NW 21 ST SR 40 SE 90 ST	Collector Collector Non-Regional Yes	0.00 0.00 0.00	0.00 0.00 0.36	9.23 1.63	2.5 0 0	0 0	0 0 5	2.5 0.0 5.0	0.31 0.22 0.31	9.27 6.69 9.18	0 0 2.5	0 5 5	0 0 0 0 0 0	7.5 7.5 0	2.5 0 0	0 2.5 0	10 10 0	21.77 21.69 21.68					#
N MAGNOLIA AV CR 316 CR 316	NE JACKSONVILLE RD NW 38TH AVE US 441	US 441 JACKSONVILLE RD	Collector Yes Collector Yes	0.00	0.00 0.00 0.00	0.84 1.05 1.44	0	0	0	0.0	0.22 0.21 0.21	6.6 6.36 6.36	0	5	0 0 0 10	7.5 0	0	2.5 0	10 0	21.6 21.36 21.36					YES
W ANTHONY RD W ANTHONY RD	NW 35 ST NW 35 ST	SR 326 SR 326	Collector Collector	0.00	0.00 0.64	2.86 2.94	0	0 2.5	0 5	0.0 5.0	0.29	8.85 8.85	0 0	5	0 0	7.5	0 2.5	0	7.5 2.5	21.35 21.35					#
SW 60 AV N MAGNOLIA AV SE 44 AV	N OF SW 98TH ST RD NE 3 ST SE 52 ST	SW 95 ST RD NW 2 ST SE 38 ST	Collector Collector Collector	0.00 0.00 0.00	0.00 0.00 0.00	33.48 7.81 7.86	0 0	0	0	0.0 0.0	0.38 0.21 0.46	11.34 6.33 13.8	0	5 5 5	0 0	7.5 2.5	0 0	2.5 0	10 2.5	21.34 21.33 21.3					YES
SE 44 AV CR 316 CR 316	SE 52 ST CR 329 US 27	SE 38 ST E OF CR 225 CR 329	Collector Yes Collector Yes Collector Yes	0.00 0.00 0.00	0.00 0.00 0.00	6.99 0.59 1.16	0 0	0	0	0.0 0.0 0.0	0.46 0.21 0.21	13.8 6.18 6.18	0 0	5 5 5	0 0 0 10 0 10	2.5 0 0	0	0 0	2.5 0 0	21.3 21.18 21.18					#
CR 316 CR 316 CR 316	US 27 US 27 US 27	CR 329 CR 329 CR 329	Collector Yes Collector Yes Collector Yes Collector Yes	0.00	0.09 0.10 0.00	0.82 0.87 0.85	0	0	0	0.0	0.21 0.21 0.21	6.18 6.18 6.18	0	5	0 10 0 10	0	0	0	0	21.18 21.18 21.18					=
SE 8 ST CR 318	SE 1 AV NE 199 ST	SE WATULA AVE CR 315	Non-Regional (Local) Collector Yes	0.00	0.00 0.14	0.00 1.23	0	0	0	0.0	0.37	11.16 6.15	0	0 5	0 0	7.5 0	0	2.5	10	21.16 21.15					YES
CR 318 CR 318 CR 318	1 MI E OF US 301 1 MI E OF US 301	CR 315 NE 199 ST NE 199 ST	Collector Yes Collector Yes Collector Yes	0.00	0.00 0.00 0.00	1.92 2.39 1.37	0 0	0 0	0 0	0.0 0.0 0.0	0.20 0.20 0.20	6.15 6.15 6.15	0 0	5 5	0 10 0 10 0 10	0 0	0 0	0 0	0 0	21.15 21.15 21.15					#
CR 318 CR 318 CR 25A	NE 199 ST NE 199 ST NW 63 ST	CR 315 CR 315 SR 326	Collector Yes Collector Yes Collector	0.00	0.00 0.00 0.00	0.60 1.41 3.59	0	0	0	0.0	0.20 0.20 0.29	6.15 6.15 8.55	0	5 5	0 10 0 10	0 0 7.5	0	0	0 0 75	21.15 21.15 21.05					
POWELL RD SE 95 ST	CR 40 CR 467 JACKSONVILLE RD	US 41 US 441 (N)	Collector Collector	0.00	0.82 0.00	8.18 21.58	0 2.5	0	5	5.0	0.37 0.20	11.01 6	0	5	0 0	0 7.5	0	0	0 7.5	21.01 21					
CR 200A / JACKSONVILLE RD	NE 101 ST NE 101 ST	NE 47 AV US 301 US 301	Collector Yes Non-Regional Yes Non-Regional Yes	0.38 0.14	1.05 0.38 0.14	4.48 6.05 2.58	0	7.5 5 2.5	5	5.0 5.0 0.0	0.12 0.19 0.19	3.48 5.85 5.85	0	0	0 10 0 10	0 5	0	0	0 5	20.98 20.85 20.85					#
CR 42 OAK RD NE 24 ST	SE 190TH AVE RD ELM RD CR 200A	CR 450 EMERALD RD NE 25 AV	Collector Yes Collector Collector	0.40 0.00 0.00	0.48 0.00	9.07 9.00	0 0 0	5 0 0	10 5 0	5.0 0.0	0.19 0.19 0.27	5.82 5.7 8.19	0 0	5 5 5	0 0 0 0	5 7.5	0 0	0 0 0	0 5 7.5	20.82 20.7 20.69					#
NE 24 ST SE 38 ST SE 11 AV	CR 200A CR 464A E FT KING ST	NE 25 AV SE 36 AV SR 40	Collector Collector Collector	0.00 0.00 0.00	0.00 0.23 0.00	5.91 6.68 33.14	0 0 25	0	0	0.0 0.0 2.5	0.27 0.36 0.10	8.19 10.68 3.15	0	5	0 0	7.5 5 7.5	0	0 0 25	7.5 5	20.69 20.68 20.65					
SW 95 ST SW 80 AV	SW 80 AV SW 90 ST	SR 200 SW 38 ST	Collector Collector	0.00	0.00 0.21	20.11 7.04	2.5	0	0	2.5 0.0	0.10 0.43	3.09 13.02 7.77	0	5	0 0	5 0	2.5	2.5 2.5	10 2.5	20.59 20.52				YES	=
NW 27 AV NE 19 AV NE 19 AV	NW 21 ST SR 492 SR 492	NW 35 ST NE 35 ST NE 35 ST	Collector Collector Non-Regional (Local)	0.00 0.00 0.00	0.00 0.27 0.00	1.34 4.54 1.57	0	0	0	0.0	0.26 0.26 0.26	7.71 7.71	0	5	0 0	7.5 7.5 7.5	0	0	7.5 7.5	20.27 20.21 20.21					#
CR 467 CR 467 CR 35	CR 484 CR 484 NE 58 AV AT NE 53 AV	SE 95 ST SE 95 ST SR 326	Collector Collector Collector	0.00 0.00 0.00	0.27 0.16 0.00	4.14 6.39 1.95	0	0	0	0.0	0.26 0.26 0.25	7.68 7.68 7.5	0	5 5 5	0 0	7.5 5 7.5	2.5 0	0	7.5 7.5 7.5	20.18 20.18 20					
NW 35 AV SE 1 AV SE 28 ST	US 27 SW 5 ST SE 24 ST	NW 21 ST SW 3 ST SR 35	Non-Regional (Unclassified) Collector Collector	0.00 0.00 0.00	0.00 0.00 0.48	13.41 67.89 23.36	0 5 2.5	0 0	0 0 5	0.0 5.0 7.5	0.00 0.00 0.00	0	0 0	0 5 5	10 0 0 0 0 0	7.5 7.5 7.5	2.5 0 0	0 2.5 0	10 10 7.5	20 20 20				YES	YES
SW 38 AV SW 38 AV	SW 20 ST SW 13TH ST	SW 13TH ST SW 40 ST	Collector Collector	0.00	0.00 0.00	14.46 4.21	0	0	0	0.0	0.24 0.24	7.35 7.35	0	5	0 0	7.5 7.5	0	0	7.5 7.5	19.85 19.85					=
CR 25	NE 14 ST SE 136TH TER CR 42	SR 40 (E) SE 135 AV SE 128 PL RD	Collector Yes Collector Collector	0.00	0.41 0.00 0.00	1.84 21.79 16.71	2.5 2.5	0	0	2.5 2.5	0.08 0.41 0.41	2.31 12.3 12.3	0	5 5	0 0	0 0	0	0	0 0	19.81 19.8 19.8					#
CR 314A SE 100 AV CR 475A	CR 42 CR 25 CR 475B	SE 183 AV RD SE 136TH LN SW 128 LN	Collector Yes Collector Non-Regional	0.14 0.12 0.00	0.49 0.09	3.15 7.71 5.05	0 0	2.5 2.5 0	5 0	10.0 5.0 0.0	0.16 0.24 0.32	4.77 7.23 9.72	0 0	5 5 5	0 0 0 0 0 5	0 0	0 2.5 0	0 0	0 2.5 0	19.77 19.73 19.72					#
CR 475A SW 20 ST SW 43 CT	CR 475B SW 53 AV SW 42 ST	SW 27 AV CARLTON ARMS SW 32 ST	Non-Regional Collector Non-Regional (Unclassified)	0.00 0.00 0.00	0.21 0.00 0.00	5.53 0.00 5.76	0 0	0 0	0	0.0 0.0 0.0	0.32 0.32 0.40	9.6 9.48 11.94	0 2.5 0	5 0 0	0 5 0 0 0 0	7.5 7.5	0	0 0	7.5 7.5	19.6 19.48 19.44					YES
SW 42 ST SW 43 CT CR 225A	SW 43 CT SW 42 ST NW 21 ST	SR 200 SW 32 ST US 27	Non-Regional (Unclassified) Non-Regional (Unclassified)	0.00	0.00	11.15 1.81 1.12	0	0	0	0.0	0.40 0.40 0.39	11.94 11.94 11.79	0	0	0 0	5 7.5 0	2.5 0	0 0 2.5	7.5 7.5 2.5	19.44 19.44 19.29					=
SE 92 PL RD SW 140 AV	US 441 CR 484	SR 35 SW 41 PL	Collector Yes Non-Regional Collector	0.00	0.00 0.00 1.42	3.09 7.83	0	0	0	0.0 10.0	0.31 0.14	9.24 4.23	0	0 5	0 0	5 0	2.5	2.5 0	10 0	19.24 19.23					#
SW 140 AV CR 314A SE 52 ST	CR 484 SE 180 AV CR 475	SW 41 PL SE 9 ST US 441	Collector Yes Collector Yes		1.58 0.50 0.00	2.63 5.62 4.55	0 0 0	10 0 0	10 5 0	10.0 5.0 0.0	0.14 0.22 0.14	4.23 6.69 4.17	0 2.5 0	5 5 5	0 0 0 0 0 0	0 0 7.5	0 0 2.5	0 0 0	0 0 10	19.23 19.19 19.17					#
CR 225 SW 80 AV CR 315	US 27 SW 22 ST SR 40	NW 83RD PL SR 40 NE 90 ST	Collector Yes Collector Yes Collector Yes	0.00	0.18 0.00 0.00	5.72 4.74 0.72	0	0	0	0.0 0.0 0.0	0.22 0.39 0.14	6.63 11.61 4.11	0	5 5	0 0 0 0 0 10	7.5 0	0	0 2.5	7.5 2.5	19.13 19.11 19.11					#
CR 315	CR 316 CR 316	CR 318	Collector Yes Collector Yes	0.00	0.00 0.19	1.39 2.24	0	0	0	0.0	0.14 0.14	4.11 4.11	0	5	0 10 0 10	0	0	0	0	19.11 19.11					#
	CR 316 NE 90 ST E OF NE 116TH CT	CR 318 CR 316 NE 203 AV	Collector Yes Collector Yes Collector Yes	0.00	0.00 0.00 0.00	1.31 1.73 1.28	0	0 0	0	0.0 0.0 0.0	0.14 0.14 0.14	4.11 4.11 4.08	0	5 5 5	0 10 0 10 0 10	0 0	0	0	0	19.11 19.11 19.08					
CR 316 CR 25	E OF NE 116TH CT E OF NE 116TH CT SE 132ND TERR	NE 203 AV NE 203 AV CR 464	Collector Yes Collector Yes Collector	0.00	0.00 0.19 0.36	0.45 0.95 6.82	0 0 0	0 2.5 0	0 0 5	0.0 0.0 5.0	0.14 0.14 0.46	4.08 4.08 13.95	0 0	5 5 0	0 10 0 10 0 0	0 0	0 0 0	0 0 0	0 0	19.08 19.08 18.95					#
NW 60 AV NW 60 AV CR 475	NW 17 ST SR 40 COUNTY LINE	US 27 NW 17 ST CR 475A	Non-Regional Non-Regional Collector Yes	0.00	0.00 0.00 0.00	5.09 4.52 6.09	0	0	0	0.0	0.21 0.21 0.30	6.45 6.45 8.91	0	5 5	0 0	7.5 7.5	0	0	7.5 7.5	18.95 18.95 18.91				YES	#
CR 475 CR 475	COUNTY LINE COUNTY LINE	CR 475A CR 475A	Collector Yes Collector Yes	0.00	0.00 0.16	2.40 3.61	0	0	0	0.0	0.30	8.91 8.91	5 5	5 5	0 0	0	0	0	0	18.91 18.91					
CR 42 CR 42 NE 1 AV	CR 475 CR 475 NE 3 ST	SE 58 AV SE 58 AV N MAGNOLIA AV	Collector Yes Collector Yes Collector	0.54 0.12 0.00	0.54 0.37 0.00	3.23 4.40 5.18	0	7.5 2.5 0	5 5 0	5.0 5.0 0.0	0.30 0.30 0.13	8.88 8.88 3.84	0	5 5 5	0 0 0	0 0 7.5	0 0	0 0 2.5	0 0 10	18.88 18.88 18.84					ES YES
SW 60 AV CR 314A	SW 103 ST SR 40 CR 318	N OF SW 98TH ST RD CR 314 CR 21	Collector Yes Collector Yes Collector Yes	0.00	0.00 1.17 0.00	5.52 4.10 0.59	0 0	0 0	0 10 0	0.0 10.0 0.0	0.38 0.12 0.12	11.34 3.6 3.54	0 0	5 5 5	0 0 0 0 0 10	0 0	2.5 0 0	0 0	2.5 0 0	18.84 18.6 18.54					#
CR 314 CR 40 CR 40	SR 40 (E) COUNTY LINE (W) 700 FT SW OF SW 114TH PL RD	NE 138 AV 700 FT SW OF SW 114TH PL RD CR 336	Collector Yes Collector Yes	0.00	0.00 0.00 0.00	2.41 1.73 0.29	0	0	0	0.0	0.20 0.11 0.11	6 3.45 3.45	0	5 5	0 5	2.5	0	0	2.5	18.5 18.45 18.45					1
CR 326 CR 40	SW ROLLING HILLS RD	CR 225A PENNSYLVANIA AV	Collector Yes Collector	0.00	0.51 0.00	1.87 5.55	0	0	5	5.0 0.0	0.28 0.10	8.34 3.12	0	5	0 0	0	0	0	0	18.34 18.12					#
CR 40 SE SUNSET HARBOR RD SE SUNSET HARBOR RD	SW ROLLING HILLS RD SE 150 LN SE 99TH AVE	PENNSYLVANIA AV SE 105 AV SE 150 LN	Collector Collector Collector	0.00 0.00 0.00	0.00 0.16 0.00	1.94 5.07 9.97	0 0 0	0 0	0 0 0	0.0 0.0 0.0	0.10 0.27 0.35	3.12 8.07 10.56	0 0	5 5 5	0 10 0 0 0 0	0 5 2.5	0 0	0 0 0	0 5 2.5	18.12 18.07 18.06					#
CR 42 CR 42 CR 42	URBAN AREA BOUNDARY URBAN AREA BOUNDARY URBAN AREA BOUNDARY	SE 190TH AVE RD SE 190TH AVE RD SE 190TH AVE RD	Collector Yes Collector Yes Collector Yes	0.00	0.00 0.00 0.00	5.53 5.31 1.68	0 0	0 0	0 0 0	0.0 0.0 0.0	0.27 0.27 0.27	8.01 8.01 8.01	5 5 5	5 5 5	0 0 0 0 0 0	0 0	0 0	0 0	0 0	18.01 18.01 18.01			$+ \Box$		#=
CR 42 SR 19	URBAN AREA BOUNDARY NE 77 ST	SE 190TH AVE RD CR 314	Collector Yes Non-Regional Yes	0.00	0.00	2.72 0.28	0	0	0	0.0	0.27 0.10	8.01 2.88	5	5	0 0	0	0	0	0	18.01 17.88					\pm

Roadway	From	То	Roadway Classification	Rural 2-Lane Facility Fatal	Crash Rate Fatal	al & Incapacitating Injury Crash Rate	Total Crash Rate	Total Crash Ranking	Total Fatal Ranking	Fatal and Incapacitating Injury Ranking	Safety Significance	V/C Ratio	MAV Ranking (V/C*30)	Existing Volume Ranking	Truck Volume Ranking Truc	k Route Ranking Evac Route Ranking	Fiber Connection Ranking	CCTV Ranking	Bluetooth Ranking	ITS Significance	Total Scoring	Ranked Top 25 Segments (I- 75 removed)	Top 25 Top 25 Non- Colletor Regional Segments Segments		Proposed Pr Emergenc Co y Vehicle	oposed Proposed ATC action Signal Controller
SR 19 SR 19 SR 19	NE 77 ST NE 77 ST NE 77 ST	CR 314 CR 314 CR 314	Non-Regional Non-Regional Non-Regional	Yes Yes	0.00 0.15 0.00	0.00 0.15 0.00	0.09 0.60 1.17	0 0 0	0 2.5 0	0 0 0	0.0 0.0 0.0	0.10 0.10 0.10	2.88 2.88 2.88	0	S S S	0 10 0 10 0 10	0 0	0 0 0	0 0	0 0	17.88 17.88 17.88				Treempu Cx	
CR 40 CR 40 CR 40	URBAN AREA BOUNDRY CR 336 CR 336	URBAN AREA BOUNDRY URBAN AREA BOUNDRY	Collector Collector	Yes	0.00 0.00 0.00	0.00 0.00 0.00	1.09 0.55 1.33	0	0	0	0.0	0.09 0.09 0.09	2.85 2.85 2.85	0	5 5	0 10 0 10	0	0	0	0	17.85 17.85 17.85					
CR 40 CR 40	CR 336 CR 336	URBAN AREA BOUNDRY URBAN AREA BOUNDRY	Collector Collector	Yes	0.00	0.00	4.03 1.83	0	0	0	0.0	0.09	2.85 2.85	0	5	0 10 0 10	0	0	0	0	17.85 17.85					
SW 13 ST NW 44 AV	SW 37 AV US 27	SW 33 AV NW 30 PL	Non-Regional (Unclassified) Collector		0.00	0.00	3.71 7.34	0	0	0	0.0	0.34	10.32 2.79	2.5 0	0 5	0 0	5 7.5	0 2.5	0	5 10	17.82 17.79					
CR 40 SW 40 AV	KENNESAW RD SW 38 AV	SW ROLLING HILLS RD SR 40	Collector Collector		0.00	0.00	0.65 3.04	0	0	0	0.0	0.09	2.73	0	5	0 10 0	2.5	0	0	2.5	17.73 17.67					
SE 38 ST CR 320 CR 225A	SE 36 AV COUNTY LINE CR 326	SE 44 AV CR 329 CR 329	Collector Collector	Yes	0.00 1.30 0.47	0.59 1.30 0.94	3.26 1.30 1.64	0	10	10	10.0	0.17 0.09 0.25	5.13 2.61 7.56	0	5	0 0	0	0	0	0	17.63 17.61					
SE 132 ST RD SE 1 AV	CR 484 SW 3 ST	US 301 E FORT KING ST	Regional Collector		0.00	0.16 0.00	10.85	0 2.5	0	0	0.0 2.5	0.25 0.25 0.13	7.53 0	0	5 5	0 0	0 7.5	2.5	2.5 2.5	5	17.56 17.53 17.5				YES	YES YES
SW 10 ST NW 35 ST	SE 1 AV NW 35 AVE	S MAGNOLIA AV NW 27 AVE	Collector Non-Regional (Unclassified)		0.00	0.00	35.39 6.84	2.5 0	0	0	2.5 0.0	0.00	0	0	5	0 0 10 0	7.5 7.5	0	2.5 0	10 7.5	17.5 17.5					YES
NW 35 AV SE 24 ST	NW 21 ST SR 464	NW 35 ST SE 36 AV	Non-Regional (Unclassified) Collector		0.00	0.00	1.19 34.94	0 2.5	0	0	0.0 2.5	0.00	0	0	5	0 0	7.5 7.5	0	2.5	7.5	17.5 17.5					
SW 103 ST RD SW 103 ST RD SR 19	SR 200 SR 200 SR 40	SW 49 AV SW 49 AV	Collector Collector		0.00	0.00 0.17 0.00	6.77 6.86 0.51	0	2.5	0	0.0	0.33 0.33 0.08	9.9 9.9 2.4	0	5	0 0	0	0	2.5	2.5 2.5	17.4 17.4					
SR 19 SR 19	SR 40 SR 40	NE 77 ST NE 77 ST NE 77 ST	Non-Regional Non-Regional	Yes	0.00 0.00 0.00	0.00	0.48 0.19	0	0	0	0.0	0.08	2.4	0	5	0 10	0	0	0	0	17.4 17.4 17.4					
SR 19 CR 35	SR 40 NE 35 ST	NE 77 ST NE 58 AV AT NE 53 AV	Non-Regional Collector	Yes	0.00	0.00	0.64 9.03	0	0	0	0.0	0.08 0.24	2.4 7.29	0	5	0 10 0	5	0	0	0 5	17.4 17.29					
SW 7 AV CR 314	SW 23 ST SR 35	SR 464 NE 73 AV	Non-Regional (Local) Collector		0.00	0.00 0.29	3.17 6.02	0	0 2.5	0	0.0	0.16 0.16	4.77	0	5 5	0 0	7.5 7.5	0	0	7.5 7.5	17.27 17.27					
CR 475A CR 475A	CR 484 URBAN AREA BOUNDARY	URBAN AREA BOUNDARY CR 475	Collector Collector	Yes	0.00	0.00	6.18 1.49	0	0	0	0.0	0.32	9.72 9.72	2.5	5	0 0	0	0	0	0	17.22 17.22					
CR 336 CR 336 CR 336	COUNTY LINE COUNTY LINE COUNTY LINE	CR 40 CR 40 CR 40	Collector Collector	Yes	0.00 0.00 0.00	0.00 0.00 0.00	0.46 10.52 0.00	0	0	0	0.0	0.07 0.07 0.07	2.22 2.22 2.22	0	5	0 10	0	0	0	0	17.22 17.22 17.22					
SW 95 ST NE 49 ST	SW 60 AV CR 200A	SW 49 AV NE 25 AV	Collector Non-Regional (Unclassified)		0.00	0.00	4.40 3.64	0	0	0	0.0	0.24 0.32	7.17 9.66	0	5	0 0	0 7.5	2.5	2.5	5 7.5	17.17 17.16				YES	YES
NE 49 ST SW 44 AV	W ANTHONY RD SW 20 ST	CR 200A SW 13 ST	Non-Regional (Unclassified) Non-Regional (Unclassified)		0.00	0.00 0.85	1.57 6.81	0	0	0 5	0.0 5.0	0.32 0.15	9.66 4.44	0	0	0 0	7.5 7.5	0	0	7.5 7.5	17.16 16.94					
CR 35 CR 316	SR 326 NE 152 LN	NE 97TH ST RD SR 19	Collector Collector	Yes	0.00	0.13	1.02 0.95	0	0	0	0.0	0.14 0.06	4.32 1.71	0	5	0 0 10	7.5	0	0	7.5	16.82 16.71					
CR 316 CR 316	NE 203 AV NE 203 AV	NE 152 LN NE 152 LN SE ON ST	Collector Collector Non-Regional	Yes Yes	0.00	0.00	0.49 0.53	0	0	0	0.0	0.06 0.06	1.71 1.71	0	5 5	0 10 0 10	0	0	0	0	16.71 16.71					
CR 475 NW MARTIN L KING AV NW MARTIN L KING AV	NW 31 ST NW 35 ST	SE 90 ST NW 35 ST CR 25A	Non-Regional Collector Collector		0.00 0.00 0.00	0.00 0.00 0.00	3.47 2.09 1.22	0	0	0	0.0	0.31 0.14 0.14	9.18 4.17 4.17	0 0	5 5	0 0	7.5 7.5	0	0	7.5 7.5	16.68 16.67 16.67					
NW MARTIN L KING AV NW MARTIN L KING AV SE 132 ST RD	NW 22 ST US 301	NW 31 ST US 441	Collector Regional		0.00	0.00	3.13 14.84	0 0	0 2.5	0 0	0.0	0.14 0.14 0.22	4.17 4.17 6.63	0	5 5	0 0	7.5 7.5 0	0 2.5	0 2.5	7.5	16.67 16.63				YES	YES
CR 464B CR 314A	COUNTY LINE SE 180 AV RD	US 27 CR 464C	Collector Collector	Yes Yes	0.00	0.37 0.68	2.21 3.91	0	0 5	5	5.0 5.0	0.22	6.63 6.57	0	5 5	0 0	0	0	0	0	16.63 16.57					
SE 41 CT CR 25A	SE 79 ST US 441 (S)	SE 52 ST NW 46 ST	Collector Collector		0.00	0.41	5.70 2.01	0	0	5 0	5.0 0.0	0.22	6.48 8.94	0	5	0 0	0 7.5	0	0	0 7.5	16.48 16.44					
CR 225A CR 42	US 27 SE 58 AV	CR 326 US 301	Collector Collector	Yes	0.00	0.00	4.59 5.63	0	0	0	0.0	0.30	8.94 8.88	0	5	0 0	5 0	2.5 2.5	0	7.5 2.5	16.44 16.38					YES
NE 28 ST NE 17 AV	CR 200A NE 3 ST	NE 25 AV NE 14 ST	Non-Regional (Local) Non-Regional (Unclassified)		0.00	0.00	7.48 8.40	0	0	0	0.0	0.13	3.87 8.73	0	0	0 0	7.5	0	0	7.5 7.5	16.37 16.23					
CR 329 SE 95 ST SE 95 ST	CR 25A W OF 7TH AVE RD URBAN AREA BOUNDARY	NW 21 CT URBAN AREA BOUNDARY CR 467	Collector Collector Collector	Yes	0.00 0.00 0.00	0.00 0.00 0.00	2.28 9.15 2.52	0	0	0	0.0	0.20 0.12 0.12	6.09 3.48 3.48	0	5	0 0	7.5	0	0	7.5	16.09 15.98 15.98					
CR 329 SE 8 ST	JACKSONVILLE RD SE WATULA AVE	NE 47 AV SE 22 AV	Collector Non-Regional (Local)	Yes	0.00	0.00	1.22 11.55	0	0	0 5	0.0	0.12 0.12	3.48 3.48	0	5	0 0	7.5 7.5	0	0	7.5 7.5	15.98 15.98					
SE 22 AV CR 200A / JACKSONVILLE RD	SR 464 NE 101 ST	E FORT KING ST US 301	Collector Non-Regional		0.00	0.00	4.40 2.79	0	0	0	0.0	0.12 0.19	3.45 5.85	0	5	0 0 0	7.5	0	0	7.5 0	15.95 15.85					
NE JACKSONVILLE RD CR 42	N MAGNOLIA AV SE 190TH AVE RD	CR 200A CR 450	Collector Collector		0.00	0.00 0.57	1.28 3.11	0	0	0 5	0.0 5.0	0.11 0.19	3.33 5.82	0	5 5	0 0	5	0	2.5	7.5 0	15.83 15.82					
CR 42 CR 464	SE 190TH AVE RD LOCUST PL	CR 450 CR 464C	Collector Non-Regional	Yes	0.00	0.56 0.17	9.05 4.70	0	0	5	5.0 0.0	0.19	5.82 5.73	0	5	0 0	0	0	0	0	15.82 15.73					
OAK RD CR 464	EMERALD RD CR 464C	CR 464 CR 25	Collector Non-Regional		0.00	0.00	2.19 4.42	0	0	0	0.0	0.19	5.7 5.64	0	5	0 0 5	0	0	0	0	15.7 15.64					
NE WATULA AVE SE SUNSET HARBOR RD SE SUNSET HARBOR RD	SR 40 SE 105 AV SE 105 AV	NE 3 ST CR 25 CR 25	Collector Collector Collector		0.00 0.00 0.00	0.00 0.00 0.21	12.08 0.82 0.85	0	0	0	0.0	0.10 0.27 0.27	3.09 8.07 8.07	0	5	0 0	7.5 2.5 2.5	0	0	2.5	15.59 15.57 15.57					
SE 80 ST NE 36 AV	SE 25 AV NE 49 ST	US 441 (W) SR 326	Collector Collector		0.00	0.00	14.10 1.53	0	0	0	0.0	0.27 0.26	8.01 7.89	0	5 5	0 0	0 2.5	2.5	0	2.5	15.51 15.39					
CR 312 NW 44 AV	CR 475A NW 30 PL	CR 475 NW 63RD ST	Collector Collector	Yes	0.00	0.00	1.91 7.36	0	0	0	0.0	0.10 0.09	2.88	0	5 5	0 0	7.5 7.5	0	0	7.5 7.5	15.38 15.29					
CR 314 CR 314	NE 138 AV NE 138 AV	CR 314A CR 314A	Collector Collector	Yes	0.00	0.00	1.65	0	0	0	0.0	0.17	5.22 5.22	0	5	0 5	0	0	0	0	15.22 15.22					
CR 25 SW 180 AV RD SW 180 AV RD	CR 464 SW 177 AVE CR 484	SE 100 AV SW 180 AV SW 177 AVE	Collector Collector Collector	Yes	0.00 0.00 0.00	0.26 0.60 0.46	5.29 1.20 5.01	0	0	5	5.0	0.34 0.17 0.17	10.17 5.1	0	5	0 0	0	0	0	0	15.17 15.1 15.1					
SE 80 ST SE JUNIPER CIR	US 441 (E) SE 41 CT	SE 41 CT SE 58 AV	Collector Collector		0.00	0.00	14.11 9.14	0	0	0 5	0.0	0.25	5.1 7.53	0	5	0 0	0 5	2.5	0	2.5	15.03 15					
W FORT KING ST SE 44 AV RD	SW 2 AV SE 44 AV	S MAGNOLIA AV SR 464	Non-Regional (Local) Collector		0.00	0.00	27.39 66.92	2.5 5	0	0	2.5 5.0	0.00	0	0	5	0 0	7.5 5	0	0	7.5 S	15 15					
CR 464 CR 464	SE 110 ST SE 112TH TERRACE	SE 112TH TERRACE LOCUST PL	Non-Regional Non-Regional		0.00	0.00	4.07 7.41	0	0	0	0.0	0.16 0.16	4.83 4.83	0	5	0 5	0	0	0	0	14.83 14.83					
SW 49 AV CR 314	SW 48 TER CR 314A CR 314A	SW 95 ST SR 19 SR 19	Collector Collector	Yes	0.00	0.00	7.96 2.44	0	0	0	0.0	0.24 0.16	7.32 4.77 4.77	0	5	0 0	0	0	0	0 0	14.82 14.77 14.77				YES	YES
CR 314 CR 314 CR 314	CR 314A CR 314A CR 314A	SR 19 SR 19 SR 19	Collector Collector Collector	Yes	0.23 0.00 0.00	0.23 0.00 0.00	1.01 0.10 1.03	0	0	0	0.0	0.16 0.16 0.16	4.77	0	5	0 5	0	0	0	0	14.77 14.77					
CR 314 SE 95 ST	CR 314A CR 475	SR 19 W OF 7TH AVE RD	Collector Collector	Yes Yes	0.09	0.09	0.09 9.61	0	2.5	0	0.0	0.16	4.77 2.25	0	5 5	0 5	7.5	0	0	0 7.5	14.77 14.75					
W ANTHONY RD SE 95 ST	SR 326 SE 182 AV (S)	NE 83 ST SE 182 AV RD (W)	Collector Non-Regional (Unclassified)		0.00	0.39 1.34	1.57 1.45	0	7.5	5 10	5.0 10.0	0.07 0.16	2.19 4.65	0	5	0 0	0	2.5	0	2.5 0	14.69 14.65					
SW 95 ST CR 314A	SR 200 SE 9 ST	SW 60 AV SR 40	Collector Collector	Yes	0.00	0.00	2.00 7.08	0	0	0	0.0	0.07	1.98 6.69	0 2.5	5	0 0	2.5	2.5	2.5	7.5	14.48 14.19					
CR 314A CR 314A CR 464B	SE 180 AV SE 180 AV	SE 9 ST SE 9 ST US 27	Collector Collector Collector	Yes	0.00	0.13 0.15	3.77 3.40	0	2.5	0	0.0 0.0 0.0	0.22 0.22	6.69 6.69	2.5 2.5	5 5	0 0	0	0	0	0	14.19 14.19					
CR 464B NE 49 ST W ANTHONY RD	NE 25 AV US 441	NE 36 AV NW 35 ST	Collector Non-Regional (Unclassified) Collector	Yes	0.00	0.00 0.00 0.00	1.10 8.55 2.82	0	0 0	0	0.0	0.22 0.22 0.14	6.63 6.6 4.08	0	0 5	0 0 0 0	2.5 7.5 5	0	0	2.5 7.5 5	14.13 14.1 14.08					
SE 30 AV CR 475A	SE 17 ST SE 25 AV	E FORT KING ST SE 36 AV	Non-Regional (Unclassified) Collector		0.40	0.80 0.40	4.43 3.64	0	5	5	5.0 5.0	0.05	1.53 4.02	0	0 5	0 0	7.5	0	0	7.5 0	14.03 14.02					
CR 25 CR 42	SE 135 AV CR 475	SE 132ND TERR SE 58 AV	Collector Collector	Yes	0.00	0.00	9.64 4.12	0	0	0	0.0	0.46	13.95 8.88	0	0 5	0 0	0	0	0	0	13.95 13.88					YES
CR 42 SE 147 PL	CR 475 E OF SE 73 AVE	SE 58 AV US 441	Collector Collector	Yes	0.00	0.00 0.25	6.67 4.70	0	0	0	0.0	0.30 0.21	8.88 6.36	0	5 5	0 0	2.5	0	0	0 2.5	13.88 13.86					YES
CR 42 CR 42 CR 42	CR 450 CR 450 CR 450	COUNTY LINE COUNTY LINE COUNTY LINE	Collector Collector Collector	res	0.47 0.77 0.72	0.47 0.77 0.72	4.65 3.49 3.79	0	7.5 7.5	5	5.0 5.0	0.13 0.13 0.13	3.84 3.84 3.84	0	5 5	0 0	0 0	0	0	0	13.84 13.84 13.84					
CR 42 CR 452	CR 450 COUNTY LINE	COUNTY LINE COUNTY LINE CR 42	Collector Collector	Yes	0.00	0.45 0.13	2.49 7.42	0	0	5 0	5.0 5.0	0.13 0.13 0.29	3.84 3.84 8.7	0	5 5	0 0	0	0	0	0	13.84 13.84 13.7					
NE 47 AV CR 475B	CR 329 CR 475A	CR 316 CR 475	Collector Collector	Yes Yes	0.00	0.00	1.60 0.74	0 0	0 0	0 5	0.0	0.25 0.03 0.11	0.99	0	5 5	0 0	7.5	0	0 0	7.5	13.49 13.39					
CR 326 CR 326	US 27 US 27	CR 225A CR 225A	Collector Collector	Yes Yes	0.00	0.15 0.00	6.33 1.69	0	0	0	0.0	0.28 0.28	8.34 8.34	0	5 5	0 0	0	0	0	0	13.34 13.34					
NW 38 AV SW 140 AV	NW 3 ST SW 41 PL	US 27 SR 40	Collector Collector	Yes	0.00	0.00 0.52	6.12 2.85	0	0	5	0.0 5.0	0.11 0.11	3.24 3.24	0	5	0 0	5 0	0	0	5	13.24 13.24					
NE 12 AV OAK RD NE 70 AV	SR 40 SE 110 ST NF 175 ST	NE 14 ST ELM RD CR 316	Non-Regional (Local) Collector Collector		0.00	0.00	6.19 1.75 0.65	0	0	0	0.0	0.02 0.19 0.10	0.72 5.7 3.15	0	5 5	0 0	7.5 2.5	0	0	7.5 2.5 5	13.22 13.2 13.15					
SE SUNSET HARBOR RD CR 326	NE 175 ST SE 105 AV COUNTY LINE	CR 316 CR 25 US 27	Collector Collector Collector	Yes	0.00 0.00 0.18	0.00 0.00 0.18	0.65 1.68 2.70	0	0 2.5	0	0.0	0.10 0.27 0.27	8.07 8.01	0	5 5	0 0	0	0	0	0	13.15 13.07 13.01					
CR 326 CR 326	COUNTY LINE COUNTY LINE	US 27 US 27	Collector Collector	Yes Yes	0.10	0.10	4.22 1.27	0	2.5 0	0	0.0	0.27	8.01 8.01	0	5	0 0	0	0	0	0	13.01 13.01					
CR 314 NE 97 ST	SE 1 ST CR 200A	NE 14 ST URBAN AREA BOUNDARY	Collector Collector	Yes	0.00	0.00	6.81 2.87	0	0	0	0.0	0.01 0.10	0.39 2.88	0	5 5	0 0	7.5	0	0	7.5 5	12.89 12.88					
CR 314 CR 314	NE 7 ST URBAN AREA BOUNDARY	SE 1 ST NE 7 ST	Collector Collector	Yes Yes	0.00	0.00	2.24 1.17	0	0	0	0.0	0.01	0.36 0.36	0	5 5	0 0	7.5 7.5	0	0	7.5 7.5	12.86 12.86					
CR 314	CR 35 NE 73 AV	1.5 MI E OF NE S8TH AVE URBAN AREA BOUNDARY	Collector Collector	Yes	0.00	0.76	2.27 4.29	0	2.5	5	5.0	0.09	2.76 0.24 7.74	0	5	0 0	7.5	0	0	7.5	12.76 12.74					
NW 110 AV NW 110 AV NW 110 AV	SR 40 SR 40 SR 40	NW 28TH PL NW 28TH PL NW 28TH PL	Collector Collector	Yes Yes Yes	0.00 0.00 0.00	0.28 0.00 0.00	13.06 7.91 5.53	0 0	0	0	0.0	0.26 0.26 0.26	7.74 7.74 7.74	0 0	5 5	0 0	0	0	0	0	12.74 12.74 12.74					
CR 225A CR 225A	CR 326 CR 326	CR 329 CR 329	Collector Collector	Yes	0.10	0.10	0.98 0.00	0	2.5	0	0.0	0.25 0.25	7.74 7.56 7.56	0	5 5	0 0	0	0	0	0	12.74 12.56 12.56					
CR 225A CR 225A	CR 326 CR 326	CR 329 CR 329	Collector Collector	Yes	0.00	0.00	0.84	0	0 0	0 0	0.0	0.25 0.25 0.25	7.56 7.56	0	5 5	0 0	0	0	0	0	12.56 12.56					
CR 225A SW 7 RD	CR 326 SR 464	CR 329 SW 10 ST	Collector Non-Regional (Local)	Yes	0.23	0.23 0.00	0.41 0.80 12.25 23.87	0	2.5	0	0.0	0.25 0.00	7.56 0	0	5	0 0	0 7.5	0	0	0 7.5	12.56 12.5					
SE 23 PL NE 145 AV	US 441 SR 40	SE 3 AV NE 46 ST	Non-Regional (Unclassified) Non-Regional (Unclassified)		0.00	0.00	2.12	2.5 0	0	5 -	2.5 5.0	0.00	0	0	0	0 0	7.5	0	2.5	10 7.5	12.5 12.5					
SE 24 ST	SE 36 AV	SE 28 ST	Collector		0.00	0.00	8.66	0	0	0	0.0	0.55	0	0	5	0 0	7.5	0	0	7.5	12.5	_	<u> </u>	1	YES	

Roadway	From	То	Roadway Classification Rural 2-Lt Facility	Tutul Ciu al Nutc	Fatal & Incapacitating Injury Crash Rate	Total Crash Rate	Total Crash Ranking	Total Fatal Ranking	Fatal and Incapacitating Injury Ranking	Safety Significance		MAV Ranking (V/C*30)	Existing Volume Ranking	Truck Volume Ranking Truck Route Ranking Evac Ro	Kaliking	CCTV Ranking	Bluetooth Ranking	ITS Significance	Total Scoring	Ranked Top 25 Segments (I- 75 removed)	gments y veni Preem	npti Expansion Controlle
SE 24 ST NW 40 AV CR 329 CR 329	SE 36 AV SR 40 COUNTY LINE COUNTY LINE	SE 28 ST NW 3 ST HWY 318 HWY 318	Collector Collector Collector Yes Collector Yes Collector Yes	0.00	0.00 0.00 0.00 0.00 0.00	4.74 3.74 1.36 0.74	0 0 0 0	0 0 0	0 0 0	0.0 0.0 0.0 0.0	0.55 0.08 0.25 0.25 0.25	0 2.49 7.44 7.44 7.44	0 0 0	5 0 5 0 5 0 5 0	0 7.5 0 5 0 0	0 0 0	0 0 0	7.5 5 0	12.5 12.49 12.44 12.44		YES	S
CR 329 CR 329 CR 329 CR 329	COUNTY LINE COUNTY LINE COUNTY LINE COUNTY LINE	HWY 318 HWY 318 HWY 318 HWY 318	Collector Yes Collector Yes Collector Yes Collector Yes	0.00	0.00 0.00 0.00	0.53 0.74 0.45 1.34	0	0	0	0.0	0.25 0.25 0.25	7.44 7.44 7.44	0	5 0 5 0	0 0 0	0	0	0	12.44 12.44 12.44 12.44			
NE 95 ST SW 49 AV SW 80 AV	W ANTHONY RD SW 48 TER SW 103 ST	CR 200A SW 95 ST SR 200	Collector Collector Collector	0.00 0.00 0.00	0.00 0.00 0.00	1.41 5.13 4.48	0 0	0 0	0 0	0.0 0.0 0.0	0.08 0.24 0.16	2.43 7.32 4.8	0	5 0 0 0 5 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0	0 5 0 2.5 0 2.5	0 0	0 2.5 0	5 5 2.5	12.43 12.32 12.3		YE:	S
SW 7 AV SE 110 ST SE 24 ST	SW 32 ST SE 25 AV SE 3 AV	SW 23 ST CR 467 CR 464A	Non-Regional (Local) Collector Yes Non-Regional (Unclassified)	0.00 0.00 0.00	0.00 0.19 0.00	0.66 5.03 1.64	0 0 0	0 0	0 0	0.0 0.0 0.0	0.16 0.08 0.24	4.77 2.25 7.17	0 0 0	0 0 5 0 0 0	0 7.5 0 5 0 5	0 0	0 0	7.5 5 5	12.27 12.25 12.17			
SE 108 TER RD SE 147 PL SW 110 AV	CR 25 US 301 SW 38 ST	SE 110 ST RD E OF SE 73 AVE SR 40	Collector Collector Non-Regional (Unclassified)	0.21 0.00 0.00	0.41 0.00 0.00	1.34 3.70 0.18	0 0 0	2.5 0 0	5 0 0	5.0 0.0 0.0	0.07 0.23 0.40	2.07 7.05 11.94 11.94	0	5 0 5 0 0 0	0 0 0 0 0 0	0 0	0 0	0 0	12.07 12.05 11.94			
SW 110 AV CR 467 SE 110 ST RD	SW 38 ST SE 150 ST W OF 83RD TER	SR 40 CR 475A OAK RD JACKSONVILLE RD	Non-Regional (Unclassified) Collector Collector	0.00 0.00 0.43	0.14 0.78 0.43	0.86 5.04 3.02	0	0 0 5	5 5	5.0 5.0	0.40 0.06 0.06	1.83 1.83	0	0 0 5 0 5 0 5 0 0 5 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0	0	0	11.94 11.83 11.83			
NW 100 ST SE 41 CT CR 464B CR 464B	NE 14 AV SE 80 ST COUNTY LINE COUNTY LINE	SE 79 ST US 27 US 27	Collector Yes Collector Yes Collector Yes Collector Yes	0.00	0.00 0.00 0.00 0.27	0.00 6.52 1.08 1.49	0	0 0 0 2.5	0 0	0.0 0.0 0.0	0.06 0.23 0.22 0.22	1.8 6.75 6.63 6.63	0	5 0 5 0 5 0	0 0 0 0 0 0 0	0 0	0	0	11.8 11.75 11.63 11.63			
NE 36 AV SE 100 AV CR 21	NE 101 ST SE 136TH LN CR 315	CR 329 SUNSET HARBOR RD COUNTY LINE	Collector Yes Collector Collector Yes	0.00 0.00 0.00	0.00 0.00 0.46	0.64 4.53 6.96	0 0	0	0 0 5	0.0 0.0 5.0	0.05 0.22 0.05	1.5 6.48 1.35	0 0	5 0 5 0 5 0	0 5 0 0 0 0	0 0	0 0	5 0 0	11.5 11.48 11.35			
CR 225 NW 100 ST NW 100 ST	NW 83RD PL HWY 225A HWY 225A	US 441 US 441	Collector Yes Collector Yes Collector Yes	0.00 0.00 0.00	0.00 0.00 0.00	1.30 1.01 0.64	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.21 0.04 0.04	6.18 1.17 1.17	0 0 0	5 0 5 0 5 0	0 0 0 5 0 5	0 0	0 0	0 5 5	11.18 11.17 11.17			
NW 44 AV CR 464C CR 475	NW 63RD ST CR 25 CR 475A	SR 326 SE 114TH ST RD URBAN AREA BOUNDARY	Collector Collector Collector Yes	0.00 0.00 0.00	0.00 0.00 0.00	5.56 6.57 1.15	0	0	0 0	0.0 0.0 0.0	0.20 0.20 0.20	6.09 6.06 5.97	0 0	5 0 5 0 5 0	0 0 0 0 0 0 0	0 0	0	0	11.09 11.06 10.97			
CR 467 SE 52 CT CR 42 CR 42	CR 475A SE 17 ST SE 190TH AVE RD SE 190TH AVE RD	CR 484 E FORT KING ST CR 450 CR 450	Collector Non-Regional (Local) Collector Yes Collector Yes	0.00 0.00 0.00 0.00	0.00 0.00 0.23 0.00	2.61 1.40 3.25 4.00	0	0	0 0	0.0	0.11 0.03 0.19 0.19	3.36 0.84 5.82 5.82	0	5 0 5 0 5 0	0 5	0 0	0	2.5 5 0	10.86 10.84 10.82 10.82			
CR 42 CR 42 CR 42	SE 190TH AVE RD SE 190TH AVE RD SE 190TH AVE RD	CR 450 CR 450 CR 450	Collector Yes Collector Yes	0.00	0.00 0.00 0.00	3.95 0.99 1.66	0	0	0	0.0 0.0 0.0	0.19 0.19 0.19	5.82 5.82 5.82	0	5 0 5 0 5 0	0 0 0	0	0	0	10.82 10.82 10.82			
NE 90 ST NW 3 ST SW 180 AV RD	1.5 MI E OF NE 58TH AVE NW 40 AV CR 484	CR 315 NW 38 AV SW 177 AVE	Collector Yes Collector Collector Yes	0.14 0.00 0.00	0.42 0.00 0.00	0.49 0.87 1.50	0 0	2.5 0 0	5 0 0	5.0 0.0 0.0	0.03 0.10 0.17	0.78 2.85 5.1	0 0	5 0 5 0 5 0	0 0 0 2.5 0 0	0 0	0 0	0 2.5 0	10.78 10.35 10.1			
SW 180 AV RD SW 3 ST SE 47 AV	CR 484 S MAGNOLIA AV CR 475A	SW 177 AVE SE 1 AV CR 484	Collector Yes Non-Regional (Unclassified) Non-Regional (Unclassified)	0.00 0.00 0.40	0.00 0.00 1.19	0.82 31.73 7.75	0 2.5 0	0 0 5	0 0 10	0.0 2.5 10.0	0.17 0.00 0.00	5.1 0 0	0 0	5 0 0 0 0 0	0 0 0 7.5 0 0	0 0	0 0 0	0 7.5 0	10.1 10 10			
SW 5 ST NE 44 AV SW 5 ST CR 464C	S MAGNOLIA AV E FORT KING ST US 441 URBAN AREA BOUNDARY	SE 1 AV CR 314 S MAGNOLIA AV CR 314A	Non-Regional (Unclassified) Non-Regional (Unclassified) Non-Regional (Unclassified) Collector Yes	0.00 0.00 0.00 0.23	0.00 0.79 0.00 0.23	23.82 4.34 43.98 4.53	2.5 0 2.5	0 0	0 5 0	2.5 5.0 2.5	0.00 0.00 0.00 0.17	0 0 0 4.95	0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 7.5 0 5 0 7.5	0 0	0	7.5 5 7.5	10 10 10 9.95			
CR 464C CR 464C CR 314A	SE 114TH ST RD SE 138TH TER CR 42	SE 138TH TER URBAN AREA BOUNDARY SE 183 AV RD	Collector Collector Collector Yes	0.00 0.00 0.00	0.00 0.00 0.00	4.53 2.41 4.74 1.59	0 0	0 0	0 0	0.0 0.0 0.0	0.17 0.17 0.17 0.16	4.95 4.95 4.95 4.77	0 0	5 0 5 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0	0 0	0 0	9.95 9.95 9.95 9.77			
CR 314A CR 314A CR 314A	CR 42 CR 42 CR 42	SE 183 AV RD SE 183 AV RD SE 183 AV RD	Collector Yes Collector Yes Collector Yes	0.00	0.00 0.27 0.00	1.00 4.48 0.16	0 0 0	0 0	0 0	0.0 0.0 0.0	0.16 0.16 0.16	4.77 4.77 4.77	0 0	5 0 5 0 5 0	0 0 0 0 0 0	0 0	0 0	0 0	9.77 9.77 9.77			
SE 8 ST SW 180 AV RD SW 180 AV RD	SE 36 AV SW 180 AV SW 180 AV	SE 52 CT SR 40 SR 40	Non-Regional (Local) Collector Yes Collector Yes	0.00 0.00 0.00	0.27 0.00 0.00	2.93 1.17 0.00	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.07 0.16 0.16	2.25 4.65 4.65	0 0 0	0 0 5 0 5 0	0 7.5 0 0 0 0	0 0	0 0	7.5 0 0	9.75 9.65 9.65			
SW 180 AV RD CR 329 CR 329	SW 180 AV HWY 318 HWY 318	SR 40 CR 316 CR 316	Collector Yes Collector Yes Collector Yes	0.00	0.00 0.00 0.00	0.00 0.84 0.95	0 0 0	0 0	0 0 0	0.0 0.0 0.0	0.16 0.15 0.15	4.65 4.62 4.62	0 0 0	5 0 5 0 5 0	0 0 0 0 0 0	0 0 0	0 0	0 0	9.65 9.62 9.62			
CR 329 CR 329 CR 329	HWY 318 CR 316 CR 316	CR 316 CR 25A CR 25A	Collector Yes Collector Yes Collector Yes	0.00	0.00 0.00 0.00	0.99 1.32 1.99	0 0	0 0 0	0 0	0.0 0.0 0.0	0.15 0.15 0.15	4.62 4.62 4.62	0 0	5 0 5 0 5 0	0 0 0 0 0 0 0 0	0 0	0 0	0	9.62 9.62 9.62			
CR 329 CR 329 CR 329 CR 329	CR 316 CR 316 CR 316 CR 316	CR 25A CR 25A CR 25A CR 25A	Collector Yes	0.00	0.00 0.00 0.00 0.00	0.54 2.43 0.67 0.87	0	0	0	0.0	0.15 0.15 0.15 0.15	4.62 4.62 4.62 4.62	0	5 0 5 0	0 0	0	0	0	9.62 9.62 9.62 9.62			
CR 329 SE 110 ST RD SE 110 ST RD	CR 316 SE 93RD CT OAK RD	CR 25A CR 464 SE 93RD CT	Collector Yes Collector Collector	0.00 0.00 0.00	0.00 0.00 0.00	0.00 1.36 3.60	0 0	0 0	0 0	0.0 0.0 0.0	0.15 0.15 0.15	4.62 4.53 4.53	0	5 0 5 0 5 0	0 0 0	0 0	0 0	0	9.62 9.53 9.53			
SW 140 AV NE 2 ST CR 475A	SR 40 NE 8 AV SE 36 AV	CR 328 NE 25 AV US 301	Collector Yes Non-Regional (Unclassified) Collector	0.00 0.00 0.00	0.00 0.25 0.00	24.00 8.61 2.54	2.5 0 0	0 0	0 0 0	2.5 0.0 0.0	0.06 0.06 0.14	1.92 1.89 4.26	0 0 0	5 0 0 0 5 0	0 0 0 7.5 0 0	0 0	0 0	7.5 0	9.42 9.39 9.26			
SW 140 AV SW 140 AV SW 140 AV	CR 484 CR 484 CR 484	SW 41 PL SW 41 PL SW 41 PL	Collector Collector Collector	0.00 0.00 0.00	0.00 0.00 0.00	1.64 0.31 0.00	0 0	0 0 0	0 0	0.0 0.0 0.0	0.14 0.14 0.14	4.23 4.23 4.23	0 0	5 0 5 0 5 0	0 0 0 0 0 0 0 0	0 0	0 0	0 0	9.23 9.23 9.23			
SW 140 AV SW 140 AV SW 140 AV SW 140 AV	CR 484 CR 484 CR 484 CR 484	SW 41 PL SW 41 PL SW 41 PL SW 41 PL	Collector Collector Collector Collector	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	3.10 2.48 0.68 0.52	0	0	0	0.0	0.14 0.14 0.14 0.14	4.23 4.23 4.23 4.23	0	5 0 5 0	0 0 0	0	0	0	9.23 9.23 9.23 9.23			
NW 21 ST NW 21 ST SE 30 AV	NW 35 AV NW 35 AV SR 464	MARTIN L KING AV MARTIN L KING AV SE 17 ST	Non-Regional (Unclassified) Non-Regional (Unclassified) Non-Regional (Local)	0.00 0.00	0.00 0.00 0.00	7.16 1.11 12.54	0 0	0 0	0 0	0.0 0.0 0.0	0.06 0.06 0.05	1.68 1.68 1.53	0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 7.5 0 7.5 0 7.5	0 0	0 0	7.5 7.5 7.5	9.18 9.18 9.03			
CR 475A SE 183 AV SE 183 AV	N OF SE 53RD PL N OF SE 44TH ST	SE 25 AV N OF SE 44TH ST SE 25TH PL	Collector Yes Non-Regional (Local) Yes Non-Regional (Local) Yes	0.00	0.00 0.43 0.34	0.40 4.69 2.19	0 0	0 0	0 5 5	0.0 5.0 5.0	0.13 0.13 0.13	4.02 4.02 4.02	0	5 0 0 0 0 0	0 0 0 0 0 0	0 0	0 0	0 0	9.02 9.02 9.02			
CR 225A CR 42 CR 42 SE 17 ST	US 27 CR 450 CR 450 SE 52 CT	CR 326 COUNTY LINE COUNTY LINE SE 58 AV	Collector Yes Collector Yes Collector Yes	0.00	0.29 0.20 0.00	5.13 3.48 4.89	0 0	0 0	0 0	0.0 0.0 0.0	0.30 0.13 0.13	8.94 3.84 3.84	0	0 0 5 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0	0	0 0	8.94 8.84 8.84			
NE 40 AV NE 40 AV CR 314A	NE 49 ST NE 36 AV SR 40	SR 326 NE 49 ST CR 314	Non-Regional (Local) Non-Regional (Unclassified) Non-Regional (Unclassified) Collector Yes	0.00	0.00 0.00 0.00 0.00	2.38 0.75 0.00 1.83	0	0	0	0.0	0.04 0.04 0.04 0.12	1.14 1.14 1.14 3.6	0	0 0 0	0 7.5 0 7.5 0 7.5	0	0	7.5 7.5	8.64 8.64 8.6			
CR 314A CR 320 CR 320	SR 40 NW 65TH AVE CR 329	CR 314 US 441 NW 65TH AVE	Collector Yes Collector Yes	0.00 0.00 0.00	0.00 0.00 0.00	0.51 2.47 0.69	0 0	0	0 0	0.0 0.0 0.0	0.12 0.11 0.11	3.6 3.3 3.3	0 0	5 0 5 0 5 0 5 0 0 5 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0	0 0	0 0	8.6 8.3 8.3			
CR 320 CR 320 CR 320	CR 329 CR 329 CR 329	NW 65TH AVE NW 65TH AVE NW 65TH AVE	Collector Yes Collector Yes Collector Yes	0.00 0.00 0.00	0.00 0.00 0.00	1.47 0.42 0.00	0 0 0	0 0	0 0	0.0 0.0 0.0	0.11 0.11 0.11	3.3 3.3 3.3	0 0	5 0 5 0 5 0	0 0 0 0 0 0	0 0	0 0	0 0	8.3 8.3 8.3			
CR 320 CR 320 CR 320	CR 329 CR 329 CR 329 CR 464C	NW 65TH AVE NW 65TH AVE NW 65TH AVE	Collector Yes Collector Yes	0.00	0.00 0.00 0.00	0.27 0.69 0.97	0 0	0 0	0 0 0	0.0 0.0 0.0	0.11 0.11 0.11	3.3 3.3 3.3	0 0	5 0 5 0 5 0 5 0 0 5 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0	0 0	0 0	8.3 8.3 8.3 8.3			
CR 314A CR 314A SE 114TH ST RD NE 175 ST	CR 464C CR 464 CR 200A	SE 180 AV SE 180 AV SE 135 AV NE 70 AV		0.00	0.00 0.00 0.00 0.00	3.40 1.73 4.39 1.96	0 0 0	0 0	0 0	0.0 0.0 0.0	0.11 0.11 0.11 0.10	3.3 3.3 3.15 3.15	0 0	5 0	0 0 0 0 0 0	0 0	0 0	0	8.3 8.3 8.15 8.15			
NE 175 ST NE 175 ST NE 175 ST	CR 200A CR 200A CR 200A	NE 70 AV NE 70 AV NE 70 AV	Collector Yes Collector Yes Collector Yes	0.00	0.00 0.00 0.00	0.69 2.89 13.24	0 0	0	0 0	0.0 0.0 0.0	0.10 0.10 0.10	3.15 3.15 3.15	0 0	5 0 5 0 5 0 5 0 0 5 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0	0 0	0 0	8.15 8.15 8.15			
NE 175 ST NE 175 ST NE 97 ST	CR 200A CR 200A URBAN AREA BOUNDARY	NE 70 AV NE 70 AV NE 36TH AVE	Collector Yes Collector Yes	0.00 0.00 0.00	0.00 0.00 0.00	3.22 0.75 2.64	0 0 0	0 0	0 0	0.0 0.0 0.0	0.10 0.10 0.10	3.15 3.15 2.88	0 0 0		0 0 0 0 0	0 0	0 0	0 0	8.15 8.15 7.88			
NE 97 ST SE 110 ST RD CR 320	NE 36TH AVE CR 25 COUNTY LINE	CR 35 W OF 83RD TER CR 329	Collector Yes Collector Collector Yes	0.00 0.14 0.00	0.00 0.14 0.00	1.61 3.76 2.09	0 0 0	0 2.5 0	0 0 0	0.0 0.0 0.0	0.10 0.09 0.09	2.88 2.67 2.61	0 0 0	5 0 5 0 5 0	0 0 0 0 0 0	0 0 0	0 0	0 0	7.88 7.67 7.61			
CR 320 CR 320 CR 320 CR 320	COUNTY LINE COUNTY LINE COUNTY LINE COUNTY LINE	CR 329 CR 329 CR 329 CR 329	Collector Yes	0.00	0.00 0.00 0.00 0.00	0.00 0.33 2.32 0.48	0	0 0 0	0 0	0.0 0.0 0.0	0.09 0.09 0.09 0.09	2.61 2.61 2.61 2.61	0 0 0	5 0 5 0 5 0	0 0 0 0 0 0	0 0 0	0	0 0 0	7.61 7.61 7.61 7.61			
CR 320 CR 320 CR 320	COUNTY LINE COUNTY LINE COUNTY LINE COUNTY LINE	CR 329 CR 329 CR 329 CR 329	Collector Yes Collector Yes Collector Yes	0.00 0.00 0.00 0.00	0.00 0.00 0.00	0.48 1.85 0.00 0.00	0 0	0 0	0 0	0.0 0.0 0.0	0.09 0.09 0.09	2.61 2.61 2.61 2.61	0 0	5 0 5 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0	0 0	0 0	0 0	7.61 7.61 7.61 7.61			
CR 320 NE 46 ST NW 110 AV	COUNTY LINE NE 145 AV NW 28TH PL	CR 329 NW 138 AV US 27	Non-Regional (Unclassified) Collector Yes	0.00	0.00 0.00 0.16	0.00 0.49 1.46	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.09 0.00 0.00	2.61 0 0	0 0 0	5 0 0 0 5 0	0 0 0 7.5 0 2.5	0 0	0 0 0	7.5 2.5	7.61 7.5 7.5			
SE 24 RD CR 450 SE 110 ST	CR 464A COUNTY LINE CR 475	SE 31 ST CR 42 SE 25 AV	Collector Yes Collector Yes	0.00	0.00 0.18 0.00	5.99 1.81 2.88	0 0 0	0 0	0 0 0	0.0 0.0 0.0	0.00 0.08 0.08	0 2.49 2.25	0 0	0 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0	0 7.5 0 0 0 0	0 0 0	0 0 0	7.5 0 0	7.5 7.49 7.25			
W ANTHONY RD SW 140 AV SW 140 AV SW 140 AV	NE 83 ST SR 40 SR 40 SR 40	NE 95 ST CR 328 CR 328 CR 328	Collector Yes Collector Yes	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	1.15 0.88 0.88 2.15	0 0 0	0 0 0	0 0	0.0 0.0 0.0	0.07 0.06 0.06 0.06	2.19 1.92 1.92 1.92	0 0 0		0 0 0 0 0 0	0	0	0 0 0	7.19 6.92 6.92 6.92			
CR 467 NE 36 AV NW 95 ST	CR 42 NE 97 ST US 441	SE 150 ST NE 101 ST W ANTHONY RD	Collector Yes Collector Yes Collector Yes	0.00	0.00 0.00 0.00	2.15 0.67 0.00 0.70	0 0	0 0	0	0.0 0.0 0.0	0.06 0.06 0.05	1.83 1.71 1.65	0	5 0 5 0 5 0 5 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0	0 0	0 0	0	6.83 6.71 6.65			
NE 203 AV NE 127 ST RD NE 127 ST RD	NE 127 ST CR 314 CR 314	CR 316 NE 203 AV NE 203 AV	Collector Yes Collector Yes Collector Yes	0.00 0.00 0.00	0.00 0.00 0.22	0.47 0.68 0.78	0 0 0	0 0 0	0 0 0	0.0 0.0 0.0	0.04 0.04 0.04	1.32 1.32 1.32	0 0 0		0 0 0 0 0 0	0 0 0	0 0 0	0 0	6.32 6.32 6.32			
NW 165 ST NW 165 ST NW 100 ST	US 441 US 441 HWY 225A	US 301 US 301 US 441	Collector Yes Collector Yes Collector Yes	0.00 0.28 0.00	0.22 0.28 0.00	1.12 1.22 0.31	0 0 0	0 2.5 0	0 0	0.0 0.0 0.0	0.04 0.04 0.04	1.29 1.29 1.17	0 0		0 0 0 0 0 0 0	0 0 0	0 0	0 0	6.29 6.29 6.17			
NW 100 ST SE 8 ST	US 441 SE WATULA AVE	NE 14 AV SE 22 AV	Collector Yes Non-Regional (Local)	0.00	0.00 0.00	2.62 7.65	0	0	0	0.0	0.04 0.12	1.17 3.48	0	5 0 0 0	0 0 0 2.5	0	0	0 2.5	6.17 5.98			

Roadway	From	То	Roadway Classification	Rural 2-Lane Facility	Fatai Crash Rate	Fatal & Incapacitating Injury Crash Rate	Total Crash Rate	Total Crash Ranking	Total Fatal Ranking	Fatal and Incapacitating Injury Ranking	Safety Significance	V/C Ratio	MAV Ranking (V/C*30)	Existing Volume Ranking	Truck Volume Rankin	ing Truck Route Ranking	Evac Route Ranking	Fiber Connection Ranking	CCTV Ranking	Bluetooth Ranking	ITS Significance	Total Scoring	Ranked Top 25 Segments (I- 75 removed)	Colletor	op 25 Non- Top 25 Regional Regional Regional Segments	Top 25 SIS Eme Segments y Ve	oposed Proposed Proposed ATC /ehicle cation Signal eempti Expansion Controller
NW 150 AV	CR 464B	SR 326	Non-Regional (Local)	Yes	0.00	0.00	0.21	0	0	0	0.0	0.03	0.9	0	5	0	0	0	0	0	0	5.9					
NW 193 ST	CR 329	US 441	Collector	Yes	0.00	0.08	0.62	0	0	0	0.0	0.03	0.84	0	5	0	0	0	0	0	0	5.84					-
NW 193 ST	CR 329	US 441	Collector	Yes	0.00	0.00	0.00	0	0	0	0.0	0.03	0.84	0	5	0	0	0	0	0	0	5.84					
NW 193 ST	CR 329	US 441	Collector	Yes	0.00	0.00	0.39	0	0	0	0.0	0.03	0.84	0	5	0	0	0	0	0	0	5.84					-
NW 135 ST	CR 225	CR 225A	Collector	Yes	0.00	0.00	0.00	0	0	0	0.0	0.01	0.39	00	5	0	0	0	0	0	0	5.39					\rightarrow
SW 85 AV	SW 9 ST	SR 40	Non-Regional (Local)	Yes	0.00	0.00	0.30	0	0	0	0.0	0.00	0	0	5	0	0	0	0	0	0	5					\longrightarrow
SE 183 AV	SE 180 AV	SE 53RD PL	Non-Regional (Local)	Yes	0.00	0.42	1.16	0	0	5	5.0	0.13	0	0	0	0	0	0	0	0	0	5					\longrightarrow
CR 225	CR 316	1 MILE S OF CR 318	Collector	Yes	0.00	0.00	0.12	0	0	0	0.0	0.00	0	0	5	0	0	0	0	0	0	5	_			+	-
SW 9 ST	SW 95 AV	SW 85 AVE	Non-Regional (Local)	Yes	0.19	0.19	1.15	0	2.5	0	0.0	0.00	0		5	0	0	0	0	0	0	5					\longrightarrow
CR 25A	US 441	CR 25	Non-Regional (Unclassified)		0.00	0.00	3.42	0	0	0	0.0	0.00	0		0	0	0	2.5	2.5	0	5	5					
NE 138 AV	NE 46 ST	CR 314	Non-Regional (Unclassified)		0.00	0.25	0.87	0	0	0	0.0	0.00	0		0	0	0	5	0	0	5	5					
CR 225	1 MILE S OF CR 318	CR 318	Collector	Yes	0.00	0.00	0.19	0	0	0	0.0	0.00	0	0	5	0	0	0	0	0	0	5	_			+	-
NE 160 AV RD	N OF 167TH LN	NE 145 AV	Collector	Yes	0.00	0.52	1.04	0	0	5	5.0	0.00	0		0	0	0	0	0	0	0	5	_			+	
SE 180 AV	CR 314A	SE 183 AV RD	Non-Regional (Local)	Yes	0.30	0.89	5.14	0	2.5	5	5.0	0.00	0	0	0	0	0	0	0	0	0	5	_			+	-
SW 38 ST	SW 110 AVE	SW 95 AV	Non-Regional (Local)	Yes	0.00	0.00	3.63	0	0	0	0.0	0.00	0		5	0	0	0	0	0	0	5					
CR 225	CR 326	CR 316	Collector	Yes	0.12	0.12	1.33	0	2.5	0	0.0	0.00	0		5	0	0	0	0	0	0	5					
CR 225	CR 326	CR 316	Collector	Yes	0.00	0.00	0.62	0	0	0	0.0	0.00	0	0	5	0	0	0	0	0	0	5	_			+	-
CR 225	CR 326	CR 316		Yes	0.00	0.00	0.60	0	0	0	0.0	0.00	0	0	5	0	0	0	0	0	0	5					-
CR 225	CR 326	CR 316	Collector	Yes	0.00	0.00	2.86	0	-	0	0.0	0.00	0	U	3	0	0	0	-								-
CR 225	CR 326	CR 316	Collector	Yes	0.00	0.00	0.33	0	0	0	0.0	0.00	0	0	5	0	0	0	0	0	0	5					-
SW 95 AV SW 95 AV	SW 38 ST SW 38 ST	SW 9 ST SW 9 ST	Non-Regional (Local)	Yes Yes	0.00	0.00	2.72 1.04	0	0	0	0.0	0.00	0	0	5	0	0	0	0	0	0	5	_			+	-
NE 160 AV RD	NE 145 AV	NE 245 ST RD	Non-Regional (Local)	Yes	0.13	0.40	1.04	0	2.5	5	5.0	0.00	0	0	0	0	0	0	0	0	0	5					-
NE 160 AV RD	NE 145 AV	NE 245 ST RD	Collector	Yes	0.13	0.40	0.92	0	2.5	5	5.0	0.00	0	0	0	0	0	0	0	0	0	5	_			+	-+
NE 160 AV RD	NE 145 AV	NE 245 ST RD	Collector	Yes	0.24	0.59	0.47	0	2.5	5	5.0	0.00	0	0	0	0	0	0	0	0	0						-
CR 314A	SE 183 AV RD		Collector		0.00	0.00	1.81	0	2.3	3	0.0		4.65		0	0	0	0	0	0	0	4.65					-
		SE 180 AV RD		Yes	0.00	0.00		0	0	0	0.0	0.16 0.16	4.65	0	0	0	0	0	0	0	0	4.65					-
SE 95 ST SE 183 AV	SE 182 AV (S) SE 25TH PL	SE 182 AV RD (W) SR 40	Non-Regional (Unclassified)	Yes	0.00	0.00	2.25 4.53	0	0	0	0.0	0.16	4.02	0	0	0	0	0	0	0	0	4.02				-	-
CR 25A	CR 316	NW 160TH ST	Non-Regional (Local) Collector	Yes	0.00	0.00	3.47	0	0	0	0.0	0.11	4.02	0	0	0	0	0	0	0	0	9.02					-
CR 25A	NW 160TH ST	US 441	Collector	Yes	0.00	0.00	2.25	0	0	0	0.0	0.09	2.67	0	0	0	0	0	0	0	0	3.3					-
NE NFR 88	SR 40	CR 314	Non-Regional (Unclassified)	ies	0.00	0.20	0.10	0	0	0	0.0	0.05	1.5	0	0	0	0	0	0	0	0	1.5					-
NE NFR 88	SR 40	CR 314			0.00	0.00	0.28	0	0	0	0.0	0.05	1.5	0	0	0	0	0	0	0	0	1.5				-	
NE NFR 88	SR 40	CR 314	Non-Regional (Unclassified) Non-Regional (Unclassified)		0.00	0.00	0.14	0	0	0	0.0	0.05	1.5	0	0	0	0	0	0	0	0	1.5					
NE NFR 88	SR 40	CR 314	Non-Regional (Unclassified)		0.00	0.00	0.00	0	0	0	0.0	0.05	1.5	0	0	0	0	0	0	0	0	1.5					
NE NFR 88	SB 40	CR 314	Non-Regional (Unclassified)		0.00	0.00	0.10	0	0	0	0.0	0.05	1.5	0	0	0	0	0	0	0	0	1.5				-	
NW 193 ST	CR 329	US 441	Collector	Yes	0.00	0.00	0.23	0	0	0	0.0	0.03	0.84	0	0	0	0	0	0	0	0	0.84				-	
NW 160 AV	SR 326	US 27	Non-Regional (Local)	Yes	0.00	0.00	0.39	0	0	0	0.0	0.02	0.69	0	0	0	0	0	0	0	0	0.69				-	
NW 160 AV	SR 326	US 27	Non-Regional (Local)	Yes	0.00	0.17	0.44	0	0	0	0.0	0.02	0.69	0	0	0	0	0	0	0	0	0.69					
NW 120 ST	NW 55 CT	CR 25A	Non-Regional (Local)	Yes	0.00	0.00	0.56	0	0	0	0.0	0.00	0.05	0	0	0	0	0	0	0	0	0.05					
SE 180 AV	HWY 314A	SE 183 AV RD	Non-Regional (Unclassified)	ies	0.00	0.14	1.25	0	0	0	0.0	0.00	0	0	0	0	0	0	0	0	0	0					
NE 160 AV RD	CR 316	N OF 167TH LN	Collector	Yes	0.00	0.00	0.50	0	0	0	0.0	0.00	0	0	0	0	0	0	0	0	0	0					
NW 110 ST	CR 225	CR 225A	Non-Regional (Unclassified)	103	0.00	0.00	0.15	0	0	i o	0.0	0.00	0	0	0	0	0	0	0	0	0	0	+			-	-
NW 118 ST	CR 225A	NW 55 CT	Non-Regional (Local)	Yes	0.00	0.00	0.19	0	0	0	0.0	0.00	0	0	0	0	0	0	0	0	0	0					
NE 203 AV	CR 316	NE 230 ST	Non-Regional (Unclassified)	103	0.00	0.15	0.15	0	0	0	0.0	0.00	0	0	0	0	0	0	0	0	0	0					
NE 203 AV	CR 316	NE 230 ST	Non-Regional (Unclassified)		0.00	0.00	0.07	0	0	0	0.0	0.00	0	0	0	0	0	0	0	0	0	0					
NE 203 AV	CR 316	NE 230 ST	Non-Regional (Unclassified)		0.00	0.00	0.33	0	0	0	0.0	0.00	0	0	0	0	0	0	0	0	0	0					
THE AUGUST	100.020	110 230 31	reon megiorial (difclassified)	1	3.00	3.00	1 3.33	1	1		0.0	0.00			1	1	1 0 1	3				0					

Kittelson & Associates, Inc.	Page 83	Ocala/Marion County ITS Strategic Plan
Appendix B – Cost Estimates		

Cost Estimate - US 27 from NW 70th Ave to I-75 Project 1 Project Length (mile) - 3.43 Number of CCTV Cameras - 0 Number of ATC Devices - 4 Number of Radio Devices - 2 Number of Bluetooth Devices - 3

Pay Item No.			vestment			
ray itelli ivo.	Description	Unit	Notes	Quantities	Unit Price	Total Price
		CCTV Equ	•			
30-2-11	CONDUIT , F&I, OPEN TRENCH	LF	2-1.25" and 1-2", 100 LF per device	0.00		\$0.00
33-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	0.00		\$0.00
35-2-11	ITS PULL AND JUNCTION BOX,F&I	LF	1 per each Pole	0.00		\$0.00
41-3-163	CONCRETE CCTV POLE, FURNISH & INSTALL WITH LOWERING DEVICE, 63'	EA	1 per each device as needed	0.00		\$0.00
82-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA	1 per location	0.00	\$6,400.00	\$0.00
84-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA	1 per 8 CCTV	0.00	\$4,000.00	\$0.00
		ATC Equ	·	1		
70-5-150	TRAFFIC CONTROLLER ASSEMBLY (CONTROLLER WITH CABINET)	EA	1 per location	4	\$18,835.00	\$75,340.00
			o Equipment			
84-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA	1 per location	2.00		\$7,000.00
84-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA	1 per location	2.00	\$3,900.00	\$7,800.00
		Bluetooth B	<u> </u>	1	4	4
33-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	300.00	\$3.95	\$1,185.00
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA	1 per location	3.00		\$2,640.00
60-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA	1 per location	3.00	\$5,775.00	\$17,325.00
					Total	\$111,290.00
					OT/Mobilization	\$11,129.00
				10	% Cost of Design	\$11,129.00
					15% Cost of CEI	\$16,693.50
				10% Cos	t of Contingency	\$11,129.00
					Grand Total	\$161,370.50
		Mainte				
	Description	Unit	Notes	Quantities		Total Price
	CCTV MAINTENANCE	EA	per year	0.00	\$1,500.00	\$0.00
	ATC MAINTENANCE	EA	per year	4.00	\$3,000.00	\$12,000.00
	WIRELESS RADIO MAINTENANCE	EA	per year	2.00		\$2,000.00
	BLUETOOTH MAINTENANCE	EA	per year	3.00	\$3,000.00	\$9,000.00
					Total	\$23,000.00
		Opera				
	Description	Unit	Notes	Quantities		Total Price
	DATA MANAGEMENT	Unit EA	Notes Per Center Mile * 1 Years	3.40	\$187.50	\$637.50
	DATA MANAGEMENT CCTV	Unit EA EA	Notes Per Center Mile * 1 Years per year	3.40 0.00	\$187.50 \$192.00	\$637.50 \$0.00
UTILITY	DATA MANAGEMENT CCTV ATC	Unit EA EA	Notes Per Center Mile * 1 Years per year per year	3.40 0.00 4.00	\$187.50 \$192.00 \$840.00	\$637.50 \$0.00 \$3,360.00
UTILITY	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA	Unit EA EA EA EA	Notes Per Center Mile * 1 Years per year per year per year	3.40 0.00 4.00 2.00	\$187.50 \$192.00 \$840.00 \$192.00	\$637.50 \$0.00 \$3,360.00 \$384.00
UTILITY	DATA MANAGEMENT CCTV ATC	Unit EA EA	Notes Per Center Mile * 1 Years per year per year	3.40 0.00 4.00	\$187.50 \$192.00 \$840.00 \$192.00 \$96.00	\$637.50 \$0.00 \$3,360.00 \$384.00 \$288.00
UTILITY	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA	Unit EA EA EA EA	Notes Per Center Mile * 1 Years per year per year per year	3.40 0.00 4.00 2.00	\$187.50 \$192.00 \$840.00 \$192.00	\$637.50 \$0.00 \$3,360.00 \$384.00 \$288.00
UTILITY	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA	Unit EA EA EA EA	Notes Per Center Mile * 1 Years per year per year per year	3.40 0.00 4.00 2.00 3.00	\$187.50 \$192.00 \$840.00 \$192.00 \$96.00 Total	\$637.50 \$0.00 \$3,360.00 \$384.00 \$288.00 \$4,669.50
UTILITY	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA	Unit EA EA EA EA	Notes Per Center Mile * 1 Years per year per year per year	3.40 0.00 4.00 2.00	\$187.50 \$192.00 \$840.00 \$192.00 \$96.00 Total	\$637.50 \$0.00 \$3,360.00 \$384.00 \$288.00 \$4,669.50
UTILITY	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA BLUETOOTH	Unit EA EA EA EA EA EA	Notes Per Center Mile * 1 Years per year per year per year per year per year	3.40 0.00 4.00 2.00 3.00	\$187.50 \$192.00 \$840.00 \$192.00 \$96.00 Total	\$637.50 \$0.00 \$3,360.00 \$384.00 \$288.00
	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA BLUETOOTH Life Cycle Replacer	Unit EA EA EA EA EA EA EA EA	Per Center Mile * 1 Years per year per year per year per year per year per year	3.40 0.00 4.00 2.000 3.00	\$187.50 \$192.00 \$840.00 \$192.00 \$96.00 Total	\$637.50 \$0.00 \$3,360.00 \$384.00 \$288.00 \$4,669.50
Pay Item No.	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA BLUETOOTH Life Cycle Replacer Description	Unit EA EA EA EA EA EA Unit EA Unit	Notes Per Center Mile * 1 Years per year per year per year per year per year	3.40 0.00 4.00 2.00 3.00 O&M (Per Year)	\$187.50 \$192.00 \$840.00 \$192.00 \$96.00 Total	\$637.50 \$0.00 \$3,360.00 \$384.00 \$288.00 \$4,669.50
ay Item No.	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA BLUETOOTH Life Cycle Replacer Description ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	Unit EA EA EA EA EA Unit EA	Per Center Mile * 1 Years per year per year per year per year per year per year	3.40 0.00 4.00 2.00 3.00 O&M (Per Year)	\$187.50 \$192.00 \$840.00 \$192.00 \$96.00 Total Total Unit Price \$880.00	\$637.50 \$0.00 \$3,360.00 \$384.00 \$288.00 \$4,669.50 \$27,669.50 Total Price \$2,640.00
Pay Item No. 160-6-121 160-6-122	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA BLUETOOTH Life Cycle Replacer Description ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP. ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	Unit EA EA EA EA EA Unit EA EA EA EA	Per Center Mile * 1 Years per year per year per year per year per year per year	3.40 0.00 4.00 2.00 3.00 O&M (Per Year)	\$187.50 \$192.00 \$840.00 \$192.00 \$96.00 Total Total Unit Price \$880.00 \$5,775.00	\$637.50 \$0.00 \$3,360.00 \$384.00 \$288.00 \$4,669.50 \$27,669.50 Total Price \$2,640.00 \$17,325.00
Pay Item No. 160-6-121 160-6-122 182-1-11	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA BLUETOOTH Life Cycle Replacer Description ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP. ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	Unit EA EA EA EA Unit EA	Per Center Mile * 1 Years per year per year per year per year per year per year	3.40 0.00 4.00 2.000 3.00 O&M (Per Year) Quantities 3.00 3.00	\$187.50 \$192.00 \$840.00 \$192.00 \$96.00 Total Total Unit Price \$880.00 \$5,775.00 \$6,400.00	\$637.50 \$0.00 \$3,360.00 \$288.00 \$4,669.50 \$27,669.50 Total Price \$2,640.00 \$17,325.00 \$0.00
Pay Item No. 160-6-121 160-6-122 182-1-11 184-4-11	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA BLUETOOTH Life Cycle Replacer Description ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP. ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP ITS CTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	Unit EA EA EA EA EA Unit EA	Per Center Mile * 1 Years per year per year per year per year per year per year	3.40 0.00 4.00 2.00 3.00 O&M (Per Year) Quantities 3.00 3.00 0.00	\$187.50 \$192.00 \$840.00 \$192.00 \$96.00 Total Total Unit Price \$880.00 \$5,775.00 \$6,400.00 \$4,000.00	\$637.50 \$0.00 \$3,360.00 \$384.00 \$4,669.50 \$27,669.50 Total Price \$2,640.00 \$17,325.00 \$0.00 \$0.00
Pay Item No. 560-6-121 560-6-122 582-1-11 584-4-11	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA BLUETOOTH Life Cycle Replacer Description ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP. ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	Unit EA	Per Center Mile * 1 Years per year per year per year per year per year per year	3.40 0.00 4.00 2.00 3.00 O&M (Per Year) Quantities 3.00 0.00 0.000 2.00	\$187.50 \$192.00 \$840.00 \$192.00 \$96.00 Total Total Unit Price \$880.00 \$5,775.00 \$6,400.00 \$4,000.00 \$3,900.00	\$637.50 \$0.00 \$3,360.00 \$384.00 \$288.00 \$4,669.50 \$27,669.50 Total Price \$2,640.00 \$17,325.00 \$0.00 \$7,800.00
Pay Item No. 560-6-121 560-6-122 582-1-11 584-4-11	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA BLUETOOTH Life Cycle Replacer Description ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP. ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP ITS CTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	Unit EA EA EA EA EA Unit EA	Per Center Mile * 1 Years per year per year per year per year per year per year	3.40 0.00 4.00 2.00 3.00 O&M (Per Year) Quantities 3.00 3.00 0.00	\$187.50 \$192.00 \$840.00 \$192.00 \$96.00 Total Total Unit Price \$880.00 \$5,775.00 \$6,400.00 \$4,000.00 \$3,900.00	\$637.50 \$0.00 \$3,360.00 \$288.00 \$4,669.50 \$27,669.50 Total Price \$2,640.00 \$17,325.00 \$0.00 \$7,800.00 \$7,000.00
UTILITY Pay Item No. 560-6-121 560-6-122 582-1-11 584-4-11 584-6-11 584-1-1	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA BLUETOOTH Life Cycle Replacer Description ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP. ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	Unit EA	Per Center Mile * 1 Years per year per year per year per year per year per year	3.40 0.00 4.00 2.00 3.00 O&M (Per Year) Quantities 3.00 0.00 0.000 2.00	\$187.50 \$192.00 \$840.00 \$192.00 \$96.00 Total Total Unit Price \$880.00 \$5,775.00 \$6,400.00 \$4,000.00 \$3,900.00	\$637.50 \$0.00 \$3,360.00 \$288.00 \$4,669.50 **Total Price \$2,640.00 \$17,325.00 \$0.00 \$7,800.00 \$7,000.00
Pay Item No. 560-6-121 560-6-122 582-1-11 584-4-11	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA BLUETOOTH Life Cycle Replacer Description ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP. ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	Unit EA	Per Center Mile * 1 Years per year per year per year per year per year per year	3.40 0.00 4.00 2.00 3.00 O&M (Per Year) Quantities 3.00 0.00 0.000 2.00	\$187.50 \$192.00 \$840.00 \$192.00 \$96.00 Total Total Unit Price \$880.00 \$5,775.00 \$6,400.00 \$4,000.00 \$3,500.00 \$3,500.00	\$637.50 \$0.00 \$3,360.00 \$288.00 \$4,669.50 **Total Price \$2,640.00 \$17,325.00 \$0.00 \$7,800.00 \$7,000.00
Pay Item No. 660-6-121 660-6-122 82-1-11 84-4-11	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA BLUETOOTH Life Cycle Replacer Description ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP. ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	Unit EA	Per Center Mile * 1 Years per year per year per year per year per year per year	3.40 0.00 4.00 2.00 3.00 O&M (Per Year) Quantities 3.00 3.00 0.00 0.00 2.00	\$187.50 \$192.00 \$840.00 \$192.00 \$96.00 Total Total Unit Price \$880.00 \$5,775.00 \$6,400.00 \$4,000.00 \$3,500.00 \$3,500.00	\$637.50 \$0.00 \$3,360.00 \$288.00 \$4,669.50 \$27,669.50 Total Price \$2,640.00 \$17,325.00 \$0.00 \$7,000.00 \$34,765.00
Pay Item No. 560-6-121 560-6-122 582-1-11 584-4-11	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA BLUETOOTH Life Cycle Replacer Description ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP. ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	Unit EA	Per Center Mile * 1 Years per year per year per year per year per year per year	3.40 0.00 4.00 2.00 3.00 O&M (Per Year) Quantities 3.00 3.00 0.00 0.00 2.00 2.00	\$187.50 \$192.00 \$840.00 \$192.00 \$96.00 Total Total Unit Price \$880.00 \$5,775.00 \$6,400.00 \$4,000.00 \$3,900.00 Total	\$637.50 \$0.00 \$3,360.00 \$288.00 \$4,669.50 \$27,669.50 Total Price \$2,640.00 \$17,325.00 \$0.00 \$7,800.00 \$7,000.00 \$34,765.00
Pay Item No. 560-6-121 560-6-122 582-1-11 584-4-11	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA BLUETOOTH Life Cycle Replacer Description ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP. ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	Unit EA	Per Center Mile * 1 Years per year per year per year per year per year per year	3.40 0.00 4.00 2.00 3.00 O&M (Per Year) Quantities 3.00 3.00 0.00 0.00 2.00 2.00	\$187.50 \$192.00 \$840.00 \$192.00 \$96.00 Total Total Unit Price \$880.00 \$5,775.00 \$6,400.00 \$3,900.00 \$3,500.00 Total OT/Mobilization	\$637.50 \$0.00 \$3,360.00 \$288.00 \$4,669.50 \$27,669.50 \$17,325.00 \$0.00 \$7,800.00 \$34,765.00 \$3,476.50 \$3,476.50
Pay Item No. 560-6-121 560-6-122 582-1-11 584-4-11	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA BLUETOOTH Life Cycle Replacer Description ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP. ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	Unit EA	Per Center Mile * 1 Years per year per year per year per year per year per year	3.40 0.00 4.00 2.00 3.00 O&M (Per Year) Quantities 3.00 0.00 0.00 2.00 10% Cost of M 10	\$187.50 \$192.00 \$840.00 \$192.00 \$96.00 Total Total Unit Price \$880.00 \$5,775.00 \$6,400.00 \$4,000.00 \$3,500.00 Total OT/Mobilization % Cost of Design	\$637.50 \$0.00 \$3,360.00 \$384.00 \$4,669.50 \$27,669.50 Total Price \$2,640.00 \$17,325.00 \$0.00 \$0.00

Cost Estimate - SR 40 from SR 35 to CR 314A Project 2

Project Length (mile) - 10.93

Number of CCTV Cameras - 1

Number of ATC Devices - 4

Number of Radio Devices - 0

Number of Bluetooth Devices - 2 Capital Investment
Unit Notes

CCTV Equipment

Unit Price

15% Cost of CEI

10% Cost of Contingency Grand Total

\$3,031.50

\$2,021.00 \$29,304.50

Pay Item No. Description

		CCTV Equ	ipment			
630-2-11	CONDUIT , F&I, OPEN TRENCH	LF	2-1.25" and 1-2", 100 LF per device	100.00	\$5.01	\$501.00
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	100.00	\$3.95	\$395.00
635-2-11	ITS PULL AND JUNCTION BOX,F&I	LF	1 per each Pole	1.00	\$501.84	\$501.84
641-3-163	CONCRETE CCTV POLE, FURNISH & INSTALL WITH LOWERING DEVICE, 63'	EA	1 per each device as needed	1.00	\$20,608.00	\$20,608.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA	1 per location	1.00	\$6,400.00	\$6,400.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA	1 per 8 CCTV	0.13	\$4,000.00	\$500.00
		ATC Equi	ipment			
670-5-150	TRAFFIC CONTROLLER ASSEMBLY (CONTROLLER WITH CABINET)	EA	1 per location	4	\$18,835.00	\$75,340.00
	V	Vireless Radi	o Equipment			
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA	1 per location	0.00	\$3,500.00	\$0.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA	1 per location	0.00	\$3,900.00	\$0.00
		Bluetooth E	quipment			
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	200.00	\$3.95	\$790.00
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA	1 per location	2.00	\$880.00	\$1,760.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA	1 per location	2.00	\$5,775.00	\$11,550.0
	·		•		Total	\$118,345.84
					-	
				10% Cost of N	1OT/Mobilization	\$11,834.58
				10	% Cost of Design	\$11,834.58
					15% Cost of CEI	\$17,751.88
				10% Co:	st of Contingency	\$11,834.58
				7,7 50.	Grand Total	\$171,601.47
						, ,
		Mainte	nance			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	CCTV MAINTENANCE	EA	per year	1.00	\$1,500.00	\$1,500.00
	ATC MAINTENANCE	EA	per year	4.00		\$12,000.00
	WIRELESS RADIO MAINTENANCE	EA	per year	0.00		\$0.00
	BLUETOOTH MAINTENANCE	EA	per year	2.00		\$6,000.00
			1	II.	Total	\$19,500.00
		Opera	tions			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	DATA MANAGEMENT	EA	Per Center Mile * 1 Years	10.90	\$187.50	\$2,043.75
	CCTV	EA	per year	1.00	\$192.00	\$192.00
UTILITY	ATC	EA	per year	4.00	\$840.00	\$3,360.00
UTILITY	WIRELESS ANTENNA	EA	per year	0.00	\$192.00	\$0.00
	BLUETOOTH	EA	per year	2.00	\$96.00	\$192.00
					Total	\$5,787.75
				O&M (Per Year)	Total	\$25,287.75
			-			
	Life Cycle Replacen	ment Investm	ent (TO BE DONE AT YEAR 10)			
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA		2.00	\$880.00	\$1,760.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA		2.00	\$5,775.00	\$11,550.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA		1.00	\$6,400.00	\$6,400.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA		0.13	7 .,	\$500.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA		0.00	\$3,900.00	\$0.0
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA		0.00	\$3,500.00	\$0.00
	<u> </u>				Total	\$20,210.00
				10% Cost of N	1OT/Mobilization	\$2,021.00
					% Cost of Design	\$2,021.00

Cost Estimate - SR 326 from I-75 SR 200A Project 3

Project Jength (mile) - 4.91 Number of CCTV Cameras - 1 Number of ATC Devices - 6

Number of Radio Devices - 5 Number of Bluetooth Devices - 2

		Capital In	vestment			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
		CCTV Eq	uipment			
630-2-11	CONDUIT , F&I, OPEN TRENCH	LF	2-1.25" and 1-2", 100 LF per device	100.00	\$5.01	\$501.00
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	100.00	\$3.95	\$395.00
635-2-11	ITS PULL AND JUNCTION BOX,F&I	LF	1 per each Pole	1.00	\$501.84	\$501.84
641-3-163	CONCRETE CCTV POLE, FURNISH & INSTALL WITH LOWERING DEVICE, 63'	EA	1 per each device as needed	1.00	\$20,608.00	\$20,608.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA	1 per location	1.00	\$6,400.00	\$6,400.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA	1 per 8 CCTV	0.13	\$4,000.00	\$500.00
		ATC Eq	uipment			
670-5-150	TRAFFIC CONTROLLER ASSEMBLY (CONTROLLER WITH CABINET)	EA	1 per location	6	\$18,835.00	\$113,010.00
	W	ireless Rad	io Equipment			
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA	1 per location	5.00	\$3,500.00	\$17,500.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA	1 per location	5.00	\$3,900.00	\$19,500.00
		Bluetooth	Equipment			
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	200.00	\$3.95	\$790.00
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA	1 per location	2.00	\$880.00	\$1,760.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA	1 per location	2.00	\$5,775.00	\$11,550.00
					Total	\$193,015.84
				10% Cost of N	IOT/Mobilization	\$19,301.58
				10	% Cost of Design	\$19,301.58
					15% Cost of CEI	\$28,952.38
				10% Co	st of Contingency	
					Grand Total	\$279,872.97

		Mainte	enance			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	CCTV MAINTENANCE	EA	per year	1.00	\$1,500.00	\$1,500
	ATC MAINTENANCE	EA	per year	6.00	\$3,000.00	\$18,000
	WIRELESS RADIO MAINTENANCE	EA	per year	5.00	\$1,000.00	\$5,000
	BLUETOOTH MAINTENANCE	EA	per year	2.00	\$3,000.00	\$6,000
					Total	\$30,500
		Opera	ntions			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	DATA MANAGEMENT	EA	Per Center Mile * 1 Years	4.91	\$187.50	\$920
	CCTV	EA	per year	1.00	\$192.00	\$192
UTILITY	ATC	EA	per year	6.00	\$840.00	\$5,040
	WIRELESS ANTENNA	EA	per year	5.00	\$192.00	\$960
	BLUETOOTH	EA	per year	2.00	\$96.00	\$192
	DEGE 100111			<u> </u>	Total	\$7,304
	base room					
	DESCRIPTION N					

	Life Cycle Replacemen	nt Investme	nt (TO BE DONE AT YEAR 10)			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA		2.00	\$880.00	\$1,760.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA		2.00	\$5,775.00	\$11,550.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA		1.00	\$6,400.00	\$6,400.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA		0.13	\$4,000.00	\$500.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA		5.00	\$3,900.00	\$19,500.00
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA		5.00	\$3,500.00	\$17,500.00
					Total	\$57,210.00
				•		
				10% Cost of M	OT/Mobilization	\$5,721.00
				10	% Cost of Design	\$5,721.00
					15% Cost of CEI	\$8,581.50
				10% Cos	t of Contingency	\$5,721.00
					Grand Total	\$82,954.50

Cost Estimate - SR 200 from SR 484 to SR 464
Project 4
Project Length (mile) - 11.13
Number of CCTV Cameras - 6 Number of ATC Devices - 15 Number of Radio Devices - 0 Number of Bluetooth Devices - 1

		Capital In	vestment			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
		CCTV Eq	uipment			
630-2-11	CONDUIT , F&I, OPEN TRENCH	LF	2-1.25" and 1-2", 100 LF per device	600.00	\$5.01	\$3,006.00
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	600.00	\$3.95	\$2,370.00
635-2-11	ITS PULL AND JUNCTION BOX,F&I	LF	1 per each Pole	6.00	\$501.84	\$3,011.04
641-3-163	CONCRETE CCTV POLE, FURNISH & INSTALL WITH LOWERING DEVICE, 63'	EA	1 per each device as needed	6.00	\$20,608.00	\$123,648.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA	1 per location	6.00	\$6,400.00	\$38,400.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA	1 per 8 CCTV	0.75	\$4,000.00	\$3,000.00
		ATC Equ	uipment			
670-5-150	TRAFFIC CONTROLLER ASSEMBLY (CONTROLLER WITH CABINET)	EA	1 per location	15	\$18,835.00	\$282,525.00
	V	/ireless Rad	io Equipment			
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA	1 per location	0.00	\$3,500.00	\$0.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA	1 per location	0.00	\$3,900.00	\$0.00
		Bluetooth	Equipment			
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	100.00	\$3.95	\$395.00
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA	1 per location	1.00	\$880.00	\$880.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA	1 per location	1.00	\$5,775.00	\$5,775.00
					Total	\$463,010.04
				10% Cost of N	IOT/Mobilization	\$46,301.00
				10	% Cost of Design	\$46,301.00
					15% Cost of CEI	\$69,451.51
				10% Cos	st of Contingency	\$46,301.00
					Grand Total	\$671,364.56

		Mainte	enance			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	CCTV MAINTENANCE	EA	per year	6.00	\$1,500.00	\$9,000.
	ATC MAINTENANCE	EA	per year	15.00	\$3,000.00	\$45,000
	WIRELESS RADIO MAINTENANCE	EA	per year	0.00	\$1,000.00	\$0
	BLUETOOTH MAINTENANCE	EA	per year	1.00	\$3,000.00	\$3,000
					Total	\$57,000
					-	
		Opera	ntions			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	DATA MANAGEMENT	EA	Per Center Mile * 1 Years	11.10	\$187.50	\$2,081
	CCTV	EA	per year	6.00	\$192.00	\$1,152
	170	EA	per year	15.00	\$840.00	\$12,600
LITILITY	ATC	LA			\$192.00	\$0
UTILITY	WIRELESS ANTENNA	EA	per year	0.00	7-00	
UTILITY				0.00 1.00		\$96.
UTILITY	WIRELESS ANTENNA	EA	per year			
UTILITY	WIRELESS ANTENNA	EA	per year		\$96.00	\$96

	Life Cycle Repla	cement Investn	nent (TO BE DONE AT YEAR 10)			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA		1.0	0 \$880.00	\$880.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA		1.0	0 \$5,775.00	\$5,775.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA		6.0	\$6,400.00	\$38,400.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA		0.7	\$4,000.00	\$3,000.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA		0.0	\$3,900.00	\$0.00
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA		0.0	\$3,500.00	\$0.00
					Total	\$48,055.00
				10% Cost of I	MOT/Mobilization	\$4,805.50
				1	0% Cost of Design	\$4,805.50
					15% Cost of CEI	\$7,208.25
				10% Co	st of Contingency	\$4,805.50
l					Grand Total	\$69,679.75

Cost Estimate - US 301/US 441 from SE 165th St to SR 464 Project 5 Project Length (mile) - 16.04 Number of CCTV Cameras - 0

Number of ATC Devices - 19 Number of Radio Devices - 0 Number of Bluetooth Devices - 3

			vestment			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
		CCTV Eq	uipment			
630-2-11	CONDUIT , F&I, OPEN TRENCH	LF	2-1.25" and 1-2", 100 LF per device	0.00		\$0.00
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	0.00	\$3.95	\$0.00
635-2-11	ITS PULL AND JUNCTION BOX,F&I	LF	1 per each Pole	0.00	\$501.84	\$0.00
641-3-163	CONCRETE CCTV POLE, FURNISH & INSTALL WITH LOWERING DEVICE, 63'	EA	1 per each device as needed	0.00	\$20,608.00	\$0.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA	1 per location	0.00	\$6,400.00	\$0.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA	1 per 8 CCTV	0.00	\$4,000.00	\$0.00
	•	ATC Equ	uipment		•	
670-5-150	TRAFFIC CONTROLLER ASSEMBLY (CONTROLLER WITH CABINET)	EA	1 per location	19	\$18,835.00	\$357,865.00
	V	/ireless Rad	io Equipment			
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA	1 per location	0.00	\$3,500.00	\$0.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA	1 per location	0.00	\$3,900.00	\$0.00
		Bluetooth	Equipment	•	•	
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	300.00	\$3.95	\$1,185.00
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA	1 per location	3.00	\$880.00	\$2,640.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA	1 per location	3.00	\$5,775.00	\$17,325.00
				•	Total	\$379,015.00
				10% Cost of N	IOT/Mobilization	\$37,901.50
				10	% Cost of Design	\$37,901.50
					15% Cost of CEI	\$56,852.25
				10% Cos	st of Contingency	\$37,901.50
					Grand Total	\$549,571.75

		Mainte	enance			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	CCTV MAINTENANCE	EA	per year	0.00	\$1,500.00	\$0.0
	ATC MAINTENANCE	EA	per year	19.00	\$3,000.00	\$57,000.0
	WIRELESS RADIO MAINTENANCE	EA	per year	0.00	\$1,000.00	\$0.0
	BLUETOOTH MAINTENANCE	EA	per year	3.00	\$3,000.00	\$9,000.0
					Total	\$66,000.0
					-	
		Opera	ntions			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	DATA MANAGEMENT	EA	Per Center Mile * 1 Years	16.00	\$187.50	\$3,000.0
	CCTV	EA	per year	0.00	\$192.00	\$0.0
UTILITY	ATC	EA	per year	19.00	\$840.00	\$15,960.0
UTILITY	WIRELESS ANTENNA	EA	per year	0.00	\$192.00	\$0.0
	BLUETOOTH	EA	per year	3.00	\$96.00	\$288.0
					Total	\$19,248.0

	Life Cycle Replacement	nt Investme	nt (TO BE DONE AT YEAR 10)			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA		3.00	\$880.00	\$2,640.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA		3.00	\$5,775.00	\$17,325.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA		0.00	\$6,400.00	\$0.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA		0.00	\$4,000.00	\$0.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA		0.00	\$3,900.00	\$0.00
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA		0.00	\$3,500.00	\$0.00
					Total	\$19,965.00
				10% Cost of M	OT/Mobilization	\$1,996.50
				10	% Cost of Design	\$1,996.50
					15% Cost of CEI	\$2,994.75
				10% Cos	t of Contingency	\$1,996.50
					Grand Total	\$28,949.25

Cost Estimate - US 301 from NW 35th St to SR 326 Project 6

Project Length (mile) - 2.55 Number of CCTV Cameras - 1 Number of ATC Devices - 0

Number of Radio Devices - 1 Number of Bluetooth Devices - 0

		Capital I	nvestment			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
		CCTV E	quipment			
630-2-11	CONDUIT , F&I, OPEN TRENCH	LF	2-1.25" and 1-2", 100 LF per device	100.00	\$5.01	\$501.00
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	100.00	\$3.95	\$395.00
635-2-11	ITS PULL AND JUNCTION BOX,F&I	LF	1 per each Pole	1.00	\$501.84	\$501.84
641-3-163	CONCRETE CCTV POLE, FURNISH & INSTALL WITH LOWERING DEVICE, 63'	EA	1 per each device as needed	1.00	\$20,608.00	\$20,608.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA	1 per location	1.00	\$6,400.00	\$6,400.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA	1 per 8 CCTV	0.13	\$4,000.00	\$500.00
		ATC Eq	uipment			
670-5-150	TRAFFIC CONTROLLER ASSEMBLY (CONTROLLER WITH CABINET)	EA	1 per location	0	\$18,835.00	\$0.00
	W	ireless Rad	dio Equipment			
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA	1 per location	1.00	\$3,500.00	\$3,500.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA	1 per location	1.00	\$3,900.00	\$3,900.00
		Bluetooth	Equipment			
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	0.00	\$3.95	\$0.00
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA	1 per location	0.00	\$880.00	\$0.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA	1 per location	0.00	\$5,775.00	\$0.00
					Total	\$36,305.84
				10% Cost of N	IOT/Mobilization	\$3,630.58
				10	% Cost of Design	\$3,630.58
					15% Cost of CEI	\$5,445.88
				10% Cos	st of Contingency	\$3,630.58
					Grand Total	\$52,643.47
						•

		Mainte	enance			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	CCTV MAINTENANCE	EA	per year	1.00	\$1,500.00	\$1,500.
	ATC MAINTENANCE	EA	per year	0.00	\$3,000.00	\$0.
	WIRELESS RADIO MAINTENANCE	EA	per year	1.00	\$1,000.00	\$1,000.
	BLUETOOTH MAINTENANCE	EA	per year	0.00	\$3,000.00	\$0.
					Total	\$2,500.
		Opera	itions			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	DATA MANAGEMENT	EA	Per Center Mile * 1 Years	2.60	\$187.50	\$487.
	CCTV	EA	per year	1.00	\$192.00	\$192
UTILITY	ATC	EA	per year	0.00	\$840.00	\$0.
UTILITY	WIRELESS ANTENNA	EA	per year	1.00	\$192.00	\$192.
	BLUETOOTH	EA	per year	0.00	\$96.00	\$0.
	·		-		Total	\$871.

	Life Cycle Replacen	ent Investme	ent (TO BE DONE AT YEAR 10)			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA		0.00	\$880.00	\$0.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA		0.00	\$5,775.00	\$0.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA		1.00	\$6,400.00	\$6,400.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA		0.13	\$4,000.00	\$500.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA		1.00	\$3,900.00	\$3,900.00
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA		1.00	\$3,500.00	\$3,500.00
					Total	\$14,300.00
				10% Cost of M	OT/Mobilization	\$1,430.00
				10	% Cost of Design	\$1,430.00
					15% Cost of CEI	\$2,145.00
				10% Cos	t of Contingency	\$1,430.00
					Grand Total	\$20,735.00

Cost Estimate - SR 40 from Hwy 328 to SW 27th Ave
Project 7
Project Length (mile) - 8.71
Number of CCTV Cameras - 1 Number of ATC Devices - 3 Number of Radio Devices - 3 Number of Bluetooth Devices - 1

		Capital I	nvestment			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
		CCTV E	quipment			
630-2-11	CONDUIT , F&I, OPEN TRENCH	LF	2-1.25" and 1-2", 100 LF per device	100.00	\$5.01	\$501.00
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	100.00	\$3.95	\$395.00
635-2-11	ITS PULL AND JUNCTION BOX,F&I	LF	1 per each Pole	1.00	\$501.84	\$501.84
641-3-163	CONCRETE CCTV POLE, FURNISH & INSTALL WITH LOWERING DEVICE, 63'	EA	1 per each device as needed	1.00	\$20,608.00	\$20,608.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA	1 per location	1.00	\$6,400.00	\$6,400.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA	1 per 8 CCTV	0.13	\$4,000.00	\$500.00
		ATC Eq	uipment			
670-5-150	TRAFFIC CONTROLLER ASSEMBLY (CONTROLLER WITH CABINET)	EA	1 per location	3	\$18,835.00	\$56,505.00
	V	Vireless Rac	dio Equipment			
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA	1 per location	3.00	\$3,500.00	\$10,500.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA	1 per location	3.00	\$3,900.00	\$11,700.00
		Bluetooth	Equipment			
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	100.00	\$3.95	\$395.00
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA	1 per location	1.00	\$880.00	\$880.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA	1 per location	1.00	\$5,775.00	\$5,775.00
					Total	\$114,660.84
				10% Cost of M	OT/Mobilization	\$11,466.08
				10	% Cost of Design	\$11,466.08
					15% Cost of CEI	\$17,199.13
				10% Cos	t of Contingency	\$11,466.08
					Grand Total	\$166,258.22

		Mainte	enance			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	CCTV MAINTENANCE	EA	per year	1.00	\$1,500.00	\$1,500
	ATC MAINTENANCE	EA	per year	3.00	\$3,000.00	\$9,000
	WIRELESS RADIO MAINTENANCE	EA	per year	3.00	\$1,000.00	\$3,000
	BLUETOOTH MAINTENANCE	EA	per year	1.00	\$3,000.00	\$3,000
					Total	\$16,500
					-	
		Opera	ations			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	DATA MANAGEMENT	EA	Per Center Mile * 1 Years	8.70	\$187.50	\$1,631
	CCTV	EA	per year	1.00	\$192.00	\$192
	ATC	EA	per year	3.00	\$840.00	\$2,520
LITILITY		Γ.	per year	3.00	\$192.00	\$576
UTILITY	WIRELESS ANTENNA	EA				
UTILITY	WIRELESS ANTENNA BLUETOOTH	EA	per year	1.00	\$96.00	\$96
UTILITY				1.00	\$96.00 Total	\$96 \$5,01 5
UTILITY				1.00		

	Life Cycle Replacemer	nt Investme	nt (TO BE DONE AT YEAR 10)			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA		1.00	\$880.00	\$880.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA		1.00	\$5,775.00	\$5,775.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA		1.00	\$6,400.00	\$6,400.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA		0.13	\$4,000.00	\$500.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA		0.00	\$3,900.00	\$0.00
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA		0.00	\$3,500.00	\$0.00
					Total	\$13,555.00
				10% Cost of M	OT/Mobilization	\$1,355.50
				10	% Cost of Design	\$1,355.50
					15% Cost of CEI	\$2,033.25
				10% Cos	t of Contingency	\$1,355.50
J					Grand Total	\$19,654.75

Cost Estimate - SR 40 from NE 1st Ave to SE 25th Ave
Project 8
Project Length (mile) - 1.98
Number of CCTV Cameras - 4 Number of ATC Devices - 0 Number of Radio Devices - 0 Number of Bluetooth Devices - 0

		Capital I	nvestment			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
		CCTV E	quipment			
630-2-11	CONDUIT , F&I, OPEN TRENCH	LF	2-1.25" and 1-2", 100 LF per device	400.00	\$5.01	\$2,004.00
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	400.00	\$3.95	\$1,580.00
635-2-11	ITS PULL AND JUNCTION BOX,F&I	LF	1 per each Pole	4.00	\$501.84	\$2,007.36
641-3-163	CONCRETE CCTV POLE, FURNISH & INSTALL WITH LOWERING DEVICE, 63'	EA	1 per each device as needed	4.00	\$20,608.00	\$82,432.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA	1 per location	4.00	\$6,400.00	\$25,600.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA	1 per 8 CCTV	0.50	\$4,000.00	\$2,000.00
		ATC Ec	quipment			
670-5-150	TRAFFIC CONTROLLER ASSEMBLY (CONTROLLER WITH CABINET)	EA	1 per location	0	\$18,835.00	\$0.00
	V	Vireless Ra	dio Equipment			
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA	1 per location	0.00	\$3,500.00	\$0.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA	1 per location	0.00	\$3,900.00	\$0.00
		Bluetooth	n Equipment			
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	0.00	\$3.95	\$0.00
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA	1 per location	0.00	\$880.00	\$0.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA	1 per location	0.00	\$5,775.00	\$0.00
					Total	\$115,623.36
				10% Cost of M	OT/Mobilization	\$11,562.34
				10	% Cost of Design	\$11,562.34
					15% Cost of CEI	\$17,343.50
				10% Cos	t of Contingency	\$11,562.34
					Grand Total	\$167,653.87

		Mainte	enance			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	CCTV MAINTENANCE	EA	per year	4.00	\$1,500.00	\$6,000.0
	ATC MAINTENANCE	EA	per year	0.00	\$3,000.00	\$0.
	WIRELESS RADIO MAINTENANCE	EA	per year	0.00	\$1,000.00	\$0.
	BLUETOOTH MAINTENANCE	EA	per year	0.00	\$3,000.00	\$0.0
					Total	\$6,000.0
					<u>-</u>	
		Opera	ations			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	DATA MANAGEMENT	EA	Per Center Mile * 1 Years	2.00	\$187.50	\$375.0
	CCTV	EA	per year	4.00	\$192.00	\$768.0
LITILITY	CCTV ATC	EA EA	per year per year	4.00 0.00		
UTILITY					\$840.00	\$768.0 \$0.0 \$0.0
UTILITY	ATC	EA	per year	0.00	\$840.00 \$192.00	\$0.0
UTILITY	ATC WIRELESS ANTENNA	EA EA	per year per year	0.00 0.00	\$840.00 \$192.00	\$0.0 \$0.0
UTILITY	ATC WIRELESS ANTENNA	EA EA	per year per year	0.00 0.00	\$840.00 \$192.00 \$96.00	\$0. \$0. \$0.

	Life Cycle Replacem	ent Investme	ent (TO BE DONE AT YEAR 10)			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA		0.00	\$880.00	\$0.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA		0.00	\$5,775.00	\$0.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA		4.00	\$6,400.00	\$25,600.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA		0.50	\$4,000.00	\$2,000.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA		0.00	\$3,900.00	\$0.00
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA		0.00	\$3,500.00	\$0.00
					Total	\$27,600.00
				10% Cost of M	OT/Mobilization	\$2,760.00
				10	% Cost of Design	\$2,760.00
					15% Cost of CEI	\$4,140.00
				10% Cos	t of Contingency	\$2,760.00
					Grand Total	\$40,020.00

Cost Estimate - Magnolia Ave from NE 20th St to SR 200A Project 9 Project Length (mile) - 1.42 Number of CCTV Cameras - 6

Number of ATC Devices - 18 Number of Radio Devices - 0 Number of Bluetooth Devices - 0

630-2-11 C	Description	Capital Inv	estment							
630-2-11 C	Description				lu u a a					
			Notes	Quantities	Unit Price	Total Price				
		CCTV Equ	·	1						
	CONDUIT , F&I, OPEN TRENCH	LF	2-1.25" and 1-2", 100 LF per device	600.00		\$3,006.00				
	TS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	600.00		\$2,370.00				
	TS PULL AND JUNCTION BOX,F&I	LF	1 per each Pole	6.00	\$501.84	\$3,011.04				
641-3-163 C	CONCRETE CCTV POLE, FURNISH & INSTALL WITH LOWERING DEVICE, 63'	EA	1 per each device as needed	6.00	\$20,608.00	\$123,648.00				
682-1-11 I	TS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA	1 per location	6.00	\$6,400.00	\$38,400.00				
684-4-11 I	TS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA	1 per 8 CCTV	0.75	\$4,000.00	\$3,000.00				
	ATC Equipment									
670-5-150 T	TRAFFIC CONTROLLER ASSEMBLY (CONTROLLER WITH CABINET)	EA	1 per location	18	\$18,835.00	\$339,030.00				
	Wi	reless Radio	Equipment							
684-1-1 I	TS MANAGED FIELD ETHERNET SWITCH,F&I	EA	1 per location	0.00	\$3,500.00	\$0.00				
684-6-11 V	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA	1 per location	0.00	\$3,900.00	\$0.00				
		Bluetooth E	quipment		•					
633-8-1 I	TS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	0.00	\$3.95	\$0.00				
660-6-121 I	TS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA	1 per location	0.00	\$880.00	\$0.00				
660-6-122 I	TS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA	1 per location	0.00	\$5,775.00	\$0.00				
			•		Total	\$512,465.04				
					•					
				10% Cost of M	IOT/Mobilization	\$51,246.50				
				10	% Cost of Design	\$51,246.50				
					15% Cost of CEI	\$76,869.76				
				10% Cos	st of Contingency	\$51,246.50				
				· ·	Grand Total	\$743,074.31				

			enance			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	CCTV MAINTENANCE	EA	per year	6.00	\$1,500.00	\$9,000.
	ATC MAINTENANCE	EA	per year	18.00	\$3,000.00	\$54,000.
	WIRELESS RADIO MAINTENANCE	EA	per year	0.00	\$1,000.00	\$0
	BLUETOOTH MAINTENANCE	EA	per year	0.00	\$3,000.00	\$0
					Total	\$63,000
		Oper	ations			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	Description DATA MANAGEMENT	Unit EA	Notes Per Center Mile * 1 Years	Quantities 1.40		
				.,	\$187.50	\$262
LITHITY	DATA MANAGEMENT	EA	Per Center Mile * 1 Years	1.40	\$187.50 \$192.00	\$262 \$1,152
UTILITY	DATA MANAGEMENT CCTV	EA EA	Per Center Mile * 1 Years per year	1.40 6.00	\$187.50 \$192.00	\$262 \$1,152 \$15,120
UTILITY	DATA MANAGEMENT CCTV ATC	EA EA EA	Per Center Mile * 1 Years per year per year	1.40 6.00 18.00	\$187.50 \$192.00 \$840.00 \$192.00	\$262 \$1,152 \$15,120 \$0
UTILITY	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA	EA EA EA EA	Per Center Mile * 1 Years per year per year per year	1.40 6.00 18.00 0.00	\$187.50 \$192.00 \$840.00 \$192.00	\$262. \$1,152. \$15,120. \$0. \$0. \$16,534.
UTILITY	DATA MANAGEMENT CCTV ATC WIRELESS ANTENNA	EA EA EA EA	Per Center Mile * 1 Years per year per year per year	1.40 6.00 18.00 0.00	\$187.50 \$192.00 \$840.00 \$192.00 \$96.00	\$262 \$1,152 \$15,120 \$0

	Life Cycle Replac	ement Investm	ent (TO BE DONE AT YEAR 10)			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA		0.00	\$880.00	\$0.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA		0.00	\$5,775.00	\$0.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA		6.00	\$6,400.00	\$38,400.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA		0.75	\$4,000.00	\$3,000.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA		0.00	\$3,900.00	\$0.00
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA		0.00	\$3,500.00	\$0.00
					Total	\$41,400.00
				10% Cost of M	OT/Mobilization	\$4,140.00
				10	% Cost of Design	\$4,140.00
					15% Cost of CEI	\$6,210.00
				10% Cos	t of Contingency	\$4,140.00
					Grand Total	\$60,030.00

Cost Estimate - SR 464 from SR 200 to Oak Rd Project 10 Project Length (mile) - 12.07 Number of CCTV Cameras - 2

Number of ATC Devices - 24 Number of Radio Devices - 0 Number of Bluetooth Devices - 0

		Capital I	nvestment			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
		CCTV E	quipment			
630-2-11	CONDUIT , F&I, OPEN TRENCH	LF	2-1.25" and 1-2", 100 LF per device	200.00	\$5.01	\$1,002.00
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	200.00	\$3.95	\$790.00
635-2-11	ITS PULL AND JUNCTION BOX,F&I	LF	1 per each Pole	2.00	\$501.84	\$1,003.68
641-3-163	CONCRETE CCTV POLE, FURNISH & INSTALL WITH LOWERING DEVICE, 63'	EA	1 per each device as needed	2.00	\$20,608.00	\$41,216.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA	1 per location	2.00	\$6,400.00	\$12,800.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA	1 per 8 CCTV	0.25	\$4,000.00	\$1,000.00
		ATC Eq	uipment			
670-5-150	TRAFFIC CONTROLLER ASSEMBLY (CONTROLLER WITH CABINET)	EA	1 per location	24	\$18,835.00	\$452,040.00
	ı	Wireless Rad	dio Equipment			
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA	1 per location	0.00	\$3,500.00	\$0.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA	1 per location	0.00	\$3,900.00	\$0.00
		Bluetooth	Equipment			
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	0.00	\$3.95	\$0.00
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA	1 per location	0.00	\$880.00	\$0.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA	1 per location	0.00	\$5,775.00	\$0.00
					Total	\$509,851.68
				10% Cost of M	OT/Mobilization	\$50,985.17
				10	% Cost of Design	\$50,985.17
					15% Cost of CEI	\$76,477.75
				10% Cos	t of Contingency	\$50,985.17
					Grand Total	\$739,284.94

		Maint	enance			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	CCTV MAINTENANCE	EA	per year	2.00	\$1,500.00	\$3,000.
	ATC MAINTENANCE	EA	per year	24.00	\$3,000.00	\$72,000.
	WIRELESS RADIO MAINTENANCE	EA	per year	0.00	\$1,000.00	\$0.
	BLUETOOTH MAINTENANCE	EA	per year	0.00	\$3,000.00	\$0
					Total	\$75,000.
					-	
		Opera	ations			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	DATA MANAGEMENT	EA	Per Center Mile * 1 Years	12.10	\$187.50	\$2,268.
	CCTV	EA	per year	2.00	\$192.00	\$384.
LITILITY	CCTV ATC	EA EA	per year per year	2.00 24.00		
UTILITY					\$840.00	\$20,160
UTILITY	ATC	EA	per year	24.00	\$840.00 \$96.00	\$384. \$20,160. \$0. \$0.
UTILITY	ATC BLUETOOTH	EA EA	per year per year	24.00 0.00	\$840.00 \$96.00	\$20,160. \$0
UTILITY	ATC BLUETOOTH	EA EA	per year per year	24.00 0.00	\$840.00 \$96.00 \$192.00	\$20,160 \$0 \$0

	Life Cycle Replacement Investment (TO BE DONE AT YEAR 10)									
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price				
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA		0.00	\$880.00	\$0.00				
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA		0.00	\$5,775.00	\$0.00				
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA		2.00	\$6,400.00	\$12,800.00				
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA		0.25	\$4,000.00	\$1,000.00				
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA		0.00	\$3,900.00	\$0.00				
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA		0.00	\$3,500.00	\$0.00				
					Total	\$13,800.00				
				10% Cost of M	OT/Mobilization	\$1,380.00				
				10	% Cost of Design	\$1,380.00				
					15% Cost of CEI	\$2,070.00				
				10% Cos	t of Contingency	\$1,380.00				
					Grand Total	\$20,010.00				

Cost Estimate - SE 36th St from SR 464 to SR 40
Project 11
Project Length (mile) - 2.73
Number of CCTV Cameras - 3 Number of ATC Devices - 5 Number of Radio Devices - 0 Number of Bluetooth Devices - 0

		Capital II	nvestment			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
		CCTV E	quipment	·		
630-2-11	CONDUIT , F&I, OPEN TRENCH	LF	2-1.25" and 1-2", 100 LF per device	300.00	\$5.01	\$1,503.00
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	300.00	\$3.95	\$1,185.00
635-2-11	ITS PULL AND JUNCTION BOX,F&I	LF	1 per each Pole	3.00	\$501.84	\$1,505.52
641-3-163	CONCRETE CCTV POLE, FURNISH & INSTALL WITH LOWERING DEVICE, 63'	EA	1 per each device as needed	3.00	\$20,608.00	\$61,824.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA	1 per location	3.00	\$6,400.00	\$19,200.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA	1 per 8 CCTV	0.38	\$4,000.00	\$1,500.00
		ATC Eq	uipment			
670-5-150	TRAFFIC CONTROLLER ASSEMBLY (CONTROLLER WITH CABINET)	EA	1 per location	5	\$18,835.00	\$94,175.00
	V	Vireless Rac	dio Equipment			
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA	1 per location	0.00	\$3,500.00	\$0.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA	1 per location	0.00	\$3,900.00	\$0.00
		Bluetooth	Equipment			
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	0.00	\$3.95	\$0.00
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA	1 per location	0.00	\$880.00	\$0.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA	1 per location	0.00	\$5,775.00	\$0.00
					Total	\$180,892.52
				10% Cost of M	OT/Mobilization	\$18,089.25
				10	% Cost of Design	\$18,089.25
					15% Cost of CEI	\$27,133.88
				10% Cos	t of Contingency	\$18,089.25
					Grand Total	\$262,294.15

		Mainte	nance			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	CCTV MAINTENANCE	EA	per year	3.00	\$1,500.00	\$4,500.0
	ATC MAINTENANCE	EA	per year	5.00	\$3,000.00	\$15,000.0
	WIRELESS RADIO MAINTENANCE	EA	per year	0.00	\$1,000.00	\$0.0
	BLUETOOTH MAINTENANCE	EA	per year	0.00	\$3,000.00	\$0.0
					Total	\$19,500.0
		Opera	tions			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	DATA MANAGEMENT	EA	Per Center Mile * 1 Years	2.70	\$187.50	\$506.2
	CCTV	EA	per year	3.00	\$192.00	\$576.0
UTILITY	ATC	EA	per year	5.00	\$840.00	\$4,200.0
UTILITY	BLUETOOTH	EA	per year	0.00	\$192.00	\$0.0
	WIRELESS ANTENNA	EA	per year	0.00	\$96.00	\$0.0
					Total	\$5,282.2
					l.	

	Life Cycle Replaceme	ent Investme	nt (TO BE DONE AT YEAR 10)			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA		0.00	\$880.00	\$0.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA		0.00	\$5,775.00	\$0.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA		3.00	\$6,400.00	\$19,200.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA		0.38	\$4,000.00	\$1,500.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA		0.00	\$3,900.00	\$0.00
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA		0.00	\$3,500.00	\$0.00
					Total	\$20,700.00
				10% Cost of M	OT/Mobilization	\$2,070.00
				10	% Cost of Design	\$2,070.00
					15% Cost of CEI	\$3,105.00
				10% Cos	t of Contingency	\$2,070.00
					Grand Total	\$30,015.00

Cost Estimate - NW 35th St from NW 35th Ave Rd to NE 36th Ave Project 12 Project Length (mile) - 5.45 Number of CCTV Cameras - 0 Number of ATC Devices - 5 Number of Radio Devices - 4 Number of Bluetooth Devices - 0

		Capital I	nvestment			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
		CCTV E	quipment			
630-2-11	CONDUIT , F&I, OPEN TRENCH	LF	2-1.25" and 1-2", 100 LF per device	0.00	\$5.01	\$0.00
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	0.00	\$3.95	\$0.00
635-2-11	ITS PULL AND JUNCTION BOX,F&I	LF	1 per each Pole	0.00	\$501.84	\$0.00
641-3-163	CONCRETE CCTV POLE, FURNISH & INSTALL WITH LOWERING DEVICE, 63'	EA	1 per each device as needed	0.00	\$20,608.00	\$0.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA	1 per location	0.00	\$6,400.00	\$0.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA	1 per 8 CCTV	0.00	\$4,000.00	\$0.00
		ATC Ec	quipment			
670-5-150	TRAFFIC CONTROLLER ASSEMBLY (CONTROLLER WITH CABINET)	EA	1 per location	5	\$18,835.00	\$94,175.00
	V	/ireless Ra	dio Equipment			
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA	1 per location	4.00	\$3,500.00	\$14,000.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA	1 per location	4.00	\$3,900.00	\$15,600.00
		Bluetooth	n Equipment			
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	0.00	\$3.95	\$0.00
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA	1 per location	0.00	\$880.00	\$0.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA	1 per location	0.00	\$5,775.00	\$0.00
					Total	\$123,775.00
				10% Cost of M	OT/Mobilization	\$12,377.50
				10	% Cost of Design	\$12,377.50
					15% Cost of CEI	\$18,566.25
				10% Cos	t of Contingency	\$12,377.50
					Grand Total	\$179,473.75
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		Mainte	nance			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	CCTV MAINTENANCE	EA	per year	0.00	\$1,500.00	\$0.0
	ATC MAINTENANCE	EA	per year	5.00	\$3,000.00	\$15,000.0
	WIRELESS RADIO MAINTENANCE	EA	per year	4.00	\$1,000.00	\$4,000.0
	BLUETOOTH MAINTENANCE	EA	per year	0.00	\$3,000.00	\$0.0
					Total	\$19,000.0
					•	
		Opera	tions			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	DATA MANAGEMENT	EA	Per Center Mile * 1 Years	5.50	\$187.50	\$1,031.2
	CCTV	EA	per year	0.00	\$192.00	\$0.0
UTILITY	ATC	EA	per year	5.00	\$840.00	\$4,200.0
UTILITY	WIRELESS ANTENNA	EA	per year	4.00	\$192.00	\$768.0
	BLUETOOTH	EA	per year	0.00	\$96.00	\$0.0
					Total	\$5,999.2
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Life Cycle Replacement Investment (TO BE DONE AT YEAR 10)									
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price			
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA		0.0	0 \$880.00	\$0.00			
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA		0.0	0 \$5,775.00	\$0.00			
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA		0.0	0 \$6,400.00	\$0.00			
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA		0.0	0 \$4,000.00	\$0.00			
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA		4.0	0 \$3,900.00	\$15,600.00			
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA		4.0	0 \$3,500.00	\$14,000.00			
					Total	\$29,600.00			
				10% Cost of I	MOT/Mobilization	\$2,960.00			
				1	0% Cost of Design	\$2,960.00			
					15% Cost of CEI	\$4,440.00			
				10% Co	st of Contingency	\$2,960.00			
I					Grand Total	\$42,920.00			

Cost Estimate - SR 200A from US 301 to NE 49th St Project 13 Project Length (mile) - 2.83 Number of CCTV Cameras - 3 Number of ATC Devices - 4 Number of Radio Devices - 0 Number of Bluetooth Devices - 1

		Capital II	nvestment			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
		CCTV E	quipment			
630-2-11	CONDUIT , F&I, OPEN TRENCH	LF	2-1.25" and 1-2", 100 LF per device	300.00	\$5.01	\$1,503.00
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	300.00	\$3.95	\$1,185.00
635-2-11	ITS PULL AND JUNCTION BOX,F&I	LF	1 per each Pole	3.00	\$501.84	\$1,505.52
641-3-163	CONCRETE CCTV POLE, FURNISH & INSTALL WITH LOWERING DEVICE, 63'	EA	1 per each device as needed	3.00	\$20,608.00	\$61,824.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA	1 per location	3.00	\$6,400.00	\$19,200.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA	1 per 8 CCTV	0.38	\$4,000.00	\$1,500.00
		ATC Eq	uipment	•	•	
670-5-150	TRAFFIC CONTROLLER ASSEMBLY (CONTROLLER WITH CABINET)	EA	1 per location	4	\$18,835.00	\$75,340.00
	V	Vireless Rac	lio Equipment			
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA	1 per location	0.00	\$3,500.00	\$0.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA	1 per location	0.00	\$3,900.00	\$0.00
		Bluetooth	Equipment			
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	100.00	\$3.95	\$395.00
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA	1 per location	1.00	\$880.00	\$880.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA	1 per location	1.00	\$5,775.00	\$5,775.00
					Total	\$169,107.52
				10% Cost of M	IOT/Mobilization	\$16,910.75
				10	% Cost of Design	\$16,910.75
					15% Cost of CEI	\$25,366.13
				10% Cos	st of Contingency	\$16,910.75
					Grand Total	
1						,

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	Description	Unit	Notes	Quantities	Unit Price	Total Price
	CCTV MAINTENANCE	EA	per year	3.00	\$1,500.00	\$4,50
	ATC MAINTENANCE	EA	per year	4.00	\$3,000.00	\$12,00
	WIRELESS RADIO MAINTENANCE	EA	per year	0.00	\$1,000.00	\$
	BLUETOOTH MAINTENANCE	EA	per year	1.00	\$3,000.00	\$3,00
					Total	\$19,50
		Oper	ations			
	Description	Oper Unit	Notes Notes	Quantities	Unit Price	Total Price
	Description DATA MANAGEMENT			Quantities 2.80		
		Unit	Notes		\$187.50	\$52
TILITY	DATA MANAGEMENT	Unit EA	Notes Per Center Mile * 1 Years	2.80	\$187.50 \$192.00	\$52 \$57 \$3,36
TILITY	DATA MANAGEMENT CCTV	Unit EA EA	Notes Per Center Mile * 1 Years per year	2.80 3.00	\$187.50 \$192.00 \$840.00	\$52 \$57 \$3,36
ITILITY	DATA MANAGEMENT CCTV ADMS	Unit EA EA EA	Notes Per Center Mile * 1 Years per year per year	2.80 3.00 4.00	\$187.50 \$192.00 \$840.00 \$192.00	\$52 \$57
TILITY	DATA MANAGEMENT CCTV ADMS WIRELESS ANTENNA	Unit EA EA EA EA	Notes Per Center Mile * 1 Years per year per year per year	2.80 3.00 4.00 0.00 1.00	\$187.50 \$192.00 \$840.00 \$192.00	\$52 \$57 \$3,36
TILITY	DATA MANAGEMENT CCTV ADMS WIRELESS ANTENNA	Unit EA EA EA EA	Notes Per Center Mile * 1 Years per year per year per year	2.80 3.00 4.00 0.00 1.00	\$187.50 \$192.00 \$840.00 \$192.00 \$96.00	\$52 \$53,30 \$3,30 \$9

	Life Cycle Repla	cement Investr	nent (TO BE DONE AT YEAR 10)			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA		1.0	0 \$880.00	\$880.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA		1.0	0 \$5,775.00	\$5,775.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA		3.0	\$6,400.00	\$19,200.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA		0.3	\$4,000.00	\$1,500.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA		0.0	\$3,900.00	\$0.00
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA		0.0	\$3,500.00	\$0.00
					Total	\$27,355.00
				10% Cost of I	MOT/Mobilization	\$2,735.50
				1	0% Cost of Design	\$2,735.50
					15% Cost of CEI	\$4,103.25
				10% Co	st of Contingency	\$2,735.50
					Grand Total	\$39,664.75

Cost Estimate - SW 42nd St from SR 200 to SR 464
Project 14
Project Length (mile) - 7.00
Number of CCTV Cameras - 2 Number of ATC Devices - 6 Number of Radio Devices - 0 Number of Bluetooth Devices - 1

		Capital In	vestment			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
		CCTV Eq	uipment			
630-2-11	CONDUIT , F&I, OPEN TRENCH	LF	2-1.25" and 1-2", 100 LF per device	200.00	\$5.01	\$1,002.00
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	200.00	\$3.95	\$790.00
635-2-11	ITS PULL AND JUNCTION BOX,F&I	LF	1 per each Pole	2.00	\$501.84	\$1,003.68
641-3-163	CONCRETE CCTV POLE, FURNISH & INSTALL WITH LOWERING DEVICE, 63'	EA	1 per each device as needed	2.00	\$20,608.00	\$41,216.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA	1 per location	2.00	\$6,400.00	\$12,800.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA	1 per 8 CCTV	0.25	\$4,000.00	\$1,000.00
		ATC Equ	ipment			
670-5-150	TRAFFIC CONTROLLER ASSEMBLY (CONTROLLER WITH CABINET)	EA	1 per location	6	\$18,835.00	\$113,010.00
	V	/ireless Rad	io Equipment			
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA	1 per location	0.00	\$3,500.00	\$0.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA	1 per location	0.00	\$3,900.00	\$0.00
		Bluetooth	Equipment			
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	100.00	\$3.95	\$395.00
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA	1 per location	1.00	\$880.00	\$880.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA	1 per location	1.00	\$5,775.00	\$5,775.00
					Total	\$177,871.68
				10% Cost of M	OT/Mobilization	\$17,787.17
				10	% Cost of Design	\$17,787.17
					15% Cost of CEI	\$26,680.75
				10% Cos	t of Contingency	\$17,787.17
					Grand Total	\$257,913.94

		Mainte	enance					
	Description	Unit	Notes	Quantities	Unit Price	Total Price		
	CCTV MAINTENANCE	EA	per year	3.00	\$1,500.00	\$4,500		
	ATC MAINTENANCE	EA	per year	4.00	\$3,000.00	\$12,000		
	WIRELESS RADIO MAINTENANCE	EA	per year	0.00	\$1,000.00	\$0		
	BLUETOOTH MAINTENANCE	EA	per year	1.00	\$3,000.00	\$3,000		
					Total	\$19,500		
		Opera	tions					
	Description	Unit	Notes	Quantities	Unit Price	Total Price		
	DATA MANAGEMENT	EA	Per Center Mile * 1 Years	7.00	\$187.50	\$1,312		
	CCTV	EA	per year	2.00	\$192.00	\$384		
UTILITY	ADMS	EA	per year	6.00	\$840.00	\$5,040		
UTILITY	WIRELESS ANTENNA	EA	per year	0.00	\$192.00	\$0		
	BLUETOOTH	EA	per year	1.00	\$96.00	\$96		
	_	•		•	Total	\$6,832		

	Life Cycle Replacemen	nt Investme	nt (TO BE DONE AT YEAR 10)			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA		1.00	\$880.00	\$880.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA		1.00	\$5,775.00	\$5,775.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA		2.00	\$6,400.00	\$12,800.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA		0.25	\$4,000.00	\$1,000.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA		0.00	\$3,900.00	\$0.00
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA		0.00	\$3,500.00	\$0.00
					Total	\$20,455.00
				10% Cost of M	OT/Mobilization	\$2,045.50
				10	% Cost of Design	\$2,045.50
					15% Cost of CEI	\$3,068.25
				10% Cos	t of Contingency	\$2,045.50
					Grand Total	\$29,659.75

Cost Estimate - SR 484 from Marion Oaks Course to US 441
Project 15
Project Length (mile) - 10.61
Number of CCTV Cameras - 0 Number of ATC Devices - 11 Number of Radio Devices - 0 Number of Bluetooth Devices - 2

		Capital In	nvestment			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
		CCTV Eq	quipment			
630-2-11	CONDUIT , F&I, OPEN TRENCH	LF	2-1.25" and 1-2", 100 LF per device	0.00	\$5.01	\$0.00
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	0.00	\$3.95	\$0.00
635-2-11	ITS PULL AND JUNCTION BOX,F&I	LF	1 per each Pole	0.00	\$501.84	\$0.00
641-3-163	CONCRETE CCTV POLE, FURNISH & INSTALL WITH LOWERING DEVICE, 63'	EA	1 per each device as needed	0.00	\$20,608.00	\$0.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA	1 per location	0.00	\$6,400.00	\$0.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA	1 per 8 CCTV	0.00	\$4,000.00	\$0.00
		ATC Eq	uipment			
670-5-150	TRAFFIC CONTROLLER ASSEMBLY (CONTROLLER WITH CABINET)	EA	1 per location	11	\$18,835.00	\$207,185.00
	V	Vireless Rad	lio Equipment			
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA	1 per location	0.00	\$3,500.00	\$0.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA	1 per location	0.00	\$3,900.00	\$0.00
		Bluetooth	Equipment			
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	200.00	\$3.95	\$790.00
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA	1 per location	2.00	\$880.00	\$1,760.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA	1 per location	2.00	\$5,775.00	\$11,550.00
					Total	\$221,285.00
				10% Cost of M	OT/Mobilization	\$22,128.50
				10	% Cost of Design	\$22,128.50
					15% Cost of CEI	\$33,192.75
ĺ				10% Cos	t of Contingency	\$22,128.50
ĺ					Grand Total	\$320,863.25
ĺ				-		

		Mainte	nance			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	CCTV MAINTENANCE	EA	per year	0.00	\$1,500.00	\$0.
	ATC MAINTENANCE	EA	per year	11.00	\$3,000.00	\$33,000.
	WIRELESS RADIO MAINTENANCE	EA	per year	0.00	\$1,000.00	\$0.0
	BLUETOOTH MAINTENANCE	EA	per year	2.00	\$3,000.00	\$6,000.
					Total	\$39,000.0
					•	
		Opera	tions			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	DATA MANAGEMENT	EA	Per Center Mile * 1 Years	10.60	\$187.50	\$1,987.
	CCTV	EA	per year	0.00	\$192.00	\$0.0
UTILITY	ATC	EA	per year	11.00	\$840.00	\$9,240.0
UTILITY	WIRELESS ANTENNA	EA	per year	0.00	\$192.00	\$0.0
	BLUETOOTH	EA	per year	2.00	\$96.00	\$192.0
					Total	\$11,419.5

	Life Cycle Repla	cement Investr	nent (TO BE DONE AT YEAR 10)			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA		2.0	0 \$880.00	\$1,760.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA		2.0	0 \$5,775.00	\$11,550.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA		0.0	0 \$6,400.00	\$0.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA		0.0	0 \$4,000.00	\$0.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA		0.0	\$3,900.00	\$0.00
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA		0.0	0 \$3,500.00	\$0.00
					Total	\$13,310.00
					-	
				10% Cost of I	//OT/Mobilization	\$1,331.00
				1	0% Cost of Design	\$1,331.00
					15% Cost of CEI	\$1,996.50
				10% Co	st of Contingency	\$1,331.00
					Grand Total	\$19,299.50

Cost Estimate -Hwy 42 from US 301 to US 441 Project 16 Project Length (mile) - 3.26 Number of CCTV Cameras - 0

Number of ATC Devices - 4 Number of Radio Devices - 5 Number of Bluetooth Devices - 1

		Capital In	ivestment			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
		CCTV Eq	uipment			
630-2-11	CONDUIT , F&I, OPEN TRENCH	LF	2-1.25" and 1-2", 100 LF per device	0.00	\$5.01	\$0.00
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	0.00	\$3.95	\$0.00
635-2-11	ITS PULL AND JUNCTION BOX,F&I	LF	1 per each Pole	0.00	\$501.84	\$0.00
641-3-163	CONCRETE CCTV POLE, FURNISH & INSTALL WITH LOWERING DEVICE, 63'	EA	1 per each device as needed	0.00	\$20,608.00	\$0.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA	1 per location	0.00	\$6,400.00	\$0.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA	1 per 8 CCTV	0.00	\$4,000.00	\$0.00
		ATC Eq	uipment			
670-5-150	TRAFFIC CONTROLLER ASSEMBLY (CONTROLLER WITH CABINET)	EA	1 per location	4	\$18,835.00	\$75,340.00
	V	/ireless Rad	lio Equipment			
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA	1 per location	5.00	\$3,500.00	\$17,500.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA	1 per location	5.00	\$3,900.00	\$19,500.00
		Bluetooth	Equipment			
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	100.00	\$3.95	\$395.00
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA	1 per location	1.00	\$880.00	\$880.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA	1 per location	1.00	\$5,775.00	\$5,775.00
					Total	\$119,390.00
				10% Cost of M	OT/Mobilization	\$11,939.00
				10	10% Cost of Design	
					15% Cost of CEI	\$17,908.50
				10% Cos	t of Contingency	\$11,939.00
1					Grand Total	\$173,115.50
1						

		Mainte	enance			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	CCTV MAINTENANCE	EA	per year	0.00	\$1,500.00	\$0.
	ATC MAINTENANCE	EA	per year	4.00	\$3,000.00	\$12,000
	WIRELESS RADIO MAINTENANCE	EA	per year	5.00	\$1,000.00	\$5,000
	BLUETOOTH MAINTENANCE	EA	per year	1.00	\$3,000.00	\$3,000
					Total	\$20,000.
		Opera	itions			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	DATA MANAGEMENT	EA	Per Center Mile * 1 Years	3.30	\$187.50	\$618
	CCTV	EA	per year	0.00	\$192.00	\$0
UTILITY	ATC	EA	per year	4.00	\$840.00	\$3,360
UTILITY	WIRELESS ANTENNA	EA	per year	5.00	\$192.00	\$960.
	BLUETOOTH	EA	per year	1.00	\$96.00	\$96
					Total	\$5,034.
				·		

	Life Cycle Replacemen	nt Investme	nt (TO BE DONE AT YEAR 10)			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA		1.00	\$880.00	\$880.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA		1.00	\$5,775.00	\$5,775.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA		0.00	\$6,400.00	\$0.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA		0.00	\$4,000.00	\$0.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA		0.00	\$3,900.00	\$0.00
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA		0.00	\$3,500.00	\$0.00
					Total	\$6,655.00
				'		
				10% Cost of M	OT/Mobilization	\$665.50
				10	% Cost of Design	\$665.50
					15% Cost of CEI	\$998.25
				10% Cos	t of Contingency	\$665.50
					Grand Total	\$9,649.75

Cost Estimate - SW 27th Ave from SW 42nd St to SR 464
Project 17
Project Length (mile) - 2.15
Number of CCTV Cameras - 0 Number of ATC Devices - 4 Number of Radio Devices - 0 Number of Bluetooth Devices - 0

		Capital II	nvestment			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
		CCTV E	quipment			
630-2-11	CONDUIT , F&I, OPEN TRENCH	LF	2-1.25" and 1-2", 100 LF per device	0.00	\$5.01	\$0.00
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	0.00	\$3.95	\$0.00
635-2-11	ITS PULL AND JUNCTION BOX,F&I	LF	1 per each Pole	0.00	\$501.84	\$0.00
641-3-163	CONCRETE CCTV POLE, FURNISH & INSTALL WITH LOWERING DEVICE, 63'	EA	1 per each device as needed	0.00	\$20,608.00	\$0.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA	1 per location	0.00	\$6,400.00	\$0.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA	1 per 8 CCTV	0.00	\$4,000.00	\$0.00
		ATC Eq	uipment			
670-5-150	TRAFFIC CONTROLLER ASSEMBLY (CONTROLLER WITH CABINET)	EA	1 per location	4	\$18,835.00	\$75,340.00
	V	Vireless Rac	dio Equipment			
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA	1 per location	0.00	\$3,500.00	\$0.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA	1 per location	0.00	\$3,900.00	\$0.00
		Bluetooth	Equipment			
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	0.00	\$3.95	\$0.00
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA	1 per location	0.00	\$880.00	\$0.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA	1 per location	0.00	\$5,775.00	\$0.00
					Total	\$75,340.00
				10% Cost of M	OT/Mobilization	\$7,534.00
				10	% Cost of Design	\$7,534.00
					15% Cost of CEI	\$11,301.00
				10% Cos	t of Contingency	\$7,534.00
					Grand Total	\$109,243.00

		Mainte	enance			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	CCTV MAINTENANCE	EA	per year	0.00	\$1,500.00	\$0.0
	ATC MAINTENANCE	EA	per year	4.00	\$3,000.00	\$12,000.
	WIRELESS RADIO MAINTENANCE	EA	per year	0.00	\$1,000.00	\$0.
	BLUETOOTH MAINTENANCE	EA	per year	0.00	\$3,000.00	\$0.
					Total	\$12,000.
		Opera	tions			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	DATA MANAGEMENT	EA	Per Center Mile * 1 Years	2.20	\$187.50	\$412.
	CCTV	EA	per year	0.00	\$192.00	\$0.
UTILITY	ATC	EA	per year	4.00	\$840.00	\$3,360.
UTILITY	WIRELESS ANTENNA	EA	per year	0.00	\$192.00	\$0.
	BLUETOOTH	EA	per year	0.00	\$96.00	\$0.
					Total	\$3,772.

Life Cycle Replacement Investment (TO BE DONE AT YEAR 10)						
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA		0.00	\$880.00	\$0.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA		0.00	\$5,775.00	\$0.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA		0.00	\$6,400.00	\$0.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA		0.00	\$4,000.00	\$0.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA		0.00	\$3,900.00	\$0.00
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA		0.00	\$3,500.00	\$0.00
					Total	\$0.00
				10% Cost of MOT/Mobilization		\$0.00
				10% Cost of Design		\$0.00
				15% Cost of CEI		\$0.00
				10% Cost of Contingency		\$0.00
					Grand Total	\$0.00

Cost Estimate - SW 20th St to NW 60th Ave to SR 200
Project 18
Project Length (mile) - 3.12
Number of CCTV Cameras - 0 Number of ATC Devices - 5 Number of Radio Devices - 0 Number of Bluetooth Devices - 1

		Capital Ir	nvestment			
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
		CCTV Ec	quipment			
630-2-11	CONDUIT , F&I, OPEN TRENCH	LF	2-1.25" and 1-2"	0.00	\$5.01	\$0.00
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	0.00	\$3.95	\$0.00
635-2-11	ITS PULL AND JUNCTION BOX,F&I	LF	1 per each Pole	0.00	\$501.84	\$0.00
641-3-163	CONCRETE CCTV POLE, FURNISH & INSTALL WITH LOWERING DEVICE, 63'	EA	1 per each device as needed	0.00	\$20,608.00	\$0.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA	1 per location	0.00	\$6,400.00	\$0.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA	1 per 8 CCTV	0.00	\$4,000.00	\$0.00
		ATC Eq	uipment			
670-5-150	TRAFFIC CONTROLLER ASSEMBLY (CONTROLLER WITH CABINET)	EA	1 per location	5	\$18,835.00	\$94,175.00
	V	Vireless Rac	dio Equipment			
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA	1 per location	0.00	\$3,500.00	\$0.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA	1 per location	0.00	\$3,900.00	\$0.00
		Bluetooth	Equipment			
633-8-1	ITS MULT-CONDUCTOR COMMUNICATION CABLE,F&I	LF	100 LF per device	100.00	\$3.95	\$395.00
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA	1 per location	1.00	\$880.00	\$880.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA	1 per location	1.00	\$5,775.00	\$5,775.00
					Total	\$101,225.00
				10% Cost of M	OT/Mobilization	\$10,122.50
				10	10% Cost of Design	
					15% Cost of CEI	
				10% Cos	10% Cost of Contingency	
					Grand Total	\$146,776.25

		Mainte	enance			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	CCTV MAINTENANCE	EA	per year	0.00	\$1,500.00	\$0.
	ATC MAINTENANCE	EA	per year	5.00	\$3,000.00	\$15,000.
	WIRELESS RADIO MAINTENANCE	EA	per year	0.00	\$1,000.00	\$0.
	BLUETOOTH MAINTENANCE	EA	per year	1.00	\$3,000.00	\$3,000.
					Total	\$18,000.
		Opera	ations			
	Description	Unit	Notes	Quantities	Unit Price	Total Price
	DATA MANAGEMENT	EA	Per Center Mile * 1 Years	3.10	\$187.50	\$581.
					\$192.00	\$0.
	CCTV	EA	per year	0.00	\$192.00	φo.
ITILITY	ATC	EA EA	per year per year	5.00	\$192.00	
UTILITY						\$4,200.
UTILITY	ATC	EA	per year	5.00	\$840.00 \$192.00	\$4,200. \$0. \$96.
JTILITY	ATC WIRELESS ANTENNA	EA EA	per year per year	5.00 0.00	\$840.00 \$192.00	\$4,200. \$0.
JTILITY	ATC WIRELESS ANTENNA	EA EA	per year per year	5.00 0.00	\$840.00 \$192.00 \$96.00	\$4,200 \$0 \$96

Life Cycle Replacement Investment (TO BE DONE AT YEAR 10)						
Pay Item No.	Description	Unit	Notes	Quantities	Unit Price	Total Price
660-6-121	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH, CAB. EQUIP.	EA		1.00	\$880.00	\$880.00
660-6-122	ITS VEHICLE DETECT. SYSTEM,F&I, BLUETOOTH ABOVE GND EQUIP	EA		1.00	\$5,775.00	\$5,775.00
682-1-11	ITS CCTV CAMERA,F&I DOME ENCLOSURE,PRESSURIZED	EA		0.00	\$6,400.00	\$0.00
684-4-11	ITS DIGITAL VIDEO ENCODER,F&I,W/HARDENED DECODER	EA		0.00	\$4,000.00	\$0.00
684-6-11	WIRELESS COMM DEVICE, F&I, ETHERNET ACCESS POINT	EA		0.00	\$3,900.00	\$0.00
684-1-1	ITS MANAGED FIELD ETHERNET SWITCH,F&I	EA		0.00	\$3,500.00	\$0.00
					Total	\$6,655.00
				'		
				10% Cost of MOT/Mobilization		\$665.50
				10% Cost of Design		\$665.50
					15% Cost of CEI	\$998.25
				10% Cos	t of Contingency	\$665.50
					Grand Total	\$9,649.75