

## CRTPA BOARD

# MEETING OF MONDAY, JANUARY 28, 2013 AT 1:00 PM 

CITY OF TALLAHASSEE COMMISSION CHAMBERS<br>300 S. ADAMS STREET<br>TALLAHASSEE, FL 32301

## MISSION STATEMENT

"The mission of the CRTPA is to act as the principal forum for collective transportation policy discussions that results in the development of a long range transportation plan which creates an integrated regional multimodal transportation network that supports sustainable development patterns and promotes economic growth."

## FINALAGENDA

## 1. AWARDS AND SPECIAL PRESENTATIONS

- CRTPA 2012 Chair Award to Commissioner Sauls

2. AgENDA MODIFICATIONS

## 3. CONSENT AGENDA

## A. Minutes of the November 26, 2012 CRTPA Board Meeting

B. CRTPA Congestion Management Process Plan Adoption

The CRTPA's Congestion Management Process Plan has been developed for board adoption.
C. Jefferson County Bicycle and Pedestrian Plan

The Jefferson County Bicycle and Pedestrian Plan, adopted by Jefferson County on January 17, 2013, is proposed to be adopted by the CRTPA for incorporation into the next Regional Mobility Plan (the agency's long range transportation plan) update.

## Recommended Action: Approve consent agenda

## 4. CONSENT ITEMS PULLED FOR DISCUSSION

## 5. ROLL CALL Vote Agenda ITEMS

A. Fiscal Year (FY) 2013 - FY 2017 Transportation Improvement Program (TIP) Amendment

The CRTPA FY 2013 - FY 2017 TIP is proposed to be amended to reflect the following:

- CR 12 (Fairbanks Ferry Road) Study (Project \#4333891): Add new project related to the study and preliminary design of CR 12 (Gadsden County) from $5^{\text {th }}$ Street (Havana) to the Leon County line to address lane departure crashes (Total funding: $\$ 220,000$ in FY 2013).
- City of Tallahassee StarMetro (Project \#4336851): Add new project related to use of Federal Transit Administration Section 5310 funds (Total funding: $\$ 200,000$ in FY 2013).
- Capital Circle, Southwest (Crawfordville Road to Springhill Road) (Project \#2197492): Add this project to TIP to reflect the receipt of design funding (Total funding: $\$ 1,969,500$ in FY 2013).


## Recommended Action: Approve agenda item by roll call vote

## 6. CRTPA DISCUSSION (85 MINUTES)

The public is welcome to comment on any discussion item after a motion has been made and seconded. Each member of the public is provided three (3) minutes to address the CRTPA.

## A. Capital City to the Sea Consultant Selection (Action) ( 15 minutes)

The Capital City to the Sea Consultant Selection Committee has reviewed and ranked proposals for the Board's consideration.

## Recommended Action: For Board Approval

## B. Monroe Street Access Management and Lake Ella Implementation Study Approval (Action) (20 minutes)

The Monroe Street Access Management and Lake Ella Implementation Study has been developed for board approval.

## Recommended Action: For Board Approval

C. CRTPA 2010 Urbanized Boundary Maps (Action) ( 5 minutes)

Updated Urbanized Boundary maps reflecting the most recent US Census information have been developed for CRTPA adoption.

## Recommended Action: For Board Approval

D. CRTPA Geographic Information System (GIS) Data Discovery and Assessment and Gap Analysis Approval (Action) ( $\mathbf{1 0}$ minutes)

CRTPA Staff is seeking approval of $\$ 42,935$ to be used for regional GIS Data Discovery and Assessment and Gap Analysis activities to be performed by the Environmental Systems Research Institute, Inc. (ESRI) through the Tallahassee-Leon County GIS (TLCGIS).

## Recommended Action: For Board Approval

## E. Orange Avenue Resurfacing (Information) ( $\mathbf{1 0}$ minutes)

Consultant staff for the resurfacing project will provide an update on the resurfacing project of Orange Avenue (from Lake Bradford Road to Monroe Street), including soliciting input from the Board concerning the concepts for addressing the improvements at the St. Marks Bike Trail.

## Recommended Action: For Board information

## F. Sustainability Calculator Update (Information) ( $\mathbf{1 5}$ minutes)

An update on the CRTPA's Sustainability Calculator will be provided by consultant staff.

## Recommended Action: For Board Information

## G. CRTPA Webpage Update (Information) (10 minutes)

At the November 26, 2012 CRTPA Board meeting, members approved a resolution related to updating the agency's webpage. Project consultants will provide an update on this project.

## Recommended Action: For Board Information

## 7. EXECUTIVE DIRECTOR'S REPORT

A status report on CRTPA activities and items of interest will be provided, including the following:

Recommended Action: Information only - No action required
8. ITEMS FROM MEMBERS

This portion of the agenda is provided to allow members an opportunity to discuss issues relevant to the CRTPA.
9. CITIZEN COMMENT

This portion of the agenda is provided to allow for citizen input on any CRTPA issue. Those interested in addressing the CRTPA should complete a speaker request form located at the rear of the meeting room. Speakers are requested to limit their comments to three (3) minutes.

## 10. INFORMATION

A. FY 2013 - FY 2017 Transportation Improvement Program Administrative Amendment
B. Correspondence
C. Committee Actions (Citizen's Multimodal Advisory Committee/ Technical Advisory Committee/Transportation Disadvantaged Coordinating Board)
D. Future Meeting Dates and Agenda Items (Next Meeting: March 25, 2013)
E. CRTPA Expense Reports
F. News Articles/For Your Information

- "A Carolina Governor Who Breaks All Molds" (January 10, 2013, Neil Pierce, Washington Post Writers Group)


## Recommended Action: Information only - No action required



- A service award will be presented to Commissioner Sauls for her dedicated service to the Capital Region Transportation Planning Agency as Chair of the organization during 2012.



The minutes from the November 26, 2012 CRTPA meeting are provided as Attachment 1 .

## RECOMMENDED ACTION

Option 1: Approve the November 26, 2012 CRTPA Minutes.

## CRTPA BOARD

# MEETING OF MONDAY, NOVEMBER 26, 2012 AT 1:00 PM 

CITY OF TALLAHASSEE COMMISSION CHAMBERS<br>300 S. ADAMS STREET<br>TALLAHASSEE, FL 32301

MISSION STATEMENT
"The mission of the CRTPA is to act as the principal forum for collective transportation policy discussions that results in the development of a long range transportation plan which creates an integrated regional multimodal transportation network that supports sustainable development patterns and promotes economic growth."

## FINAL MINUTES

## Members Present:

Commissioner Jane Sauls, Leon County, Chair
Commissioner Mary Ann Lindley, Leon County
Commissioner Kristen Dozier, Leon County
Commissioner Nick Maddox, Leon County
Commissioner Bryan Desloge, Leon County
Commissioner John Dailey, Leon County
Commissioner Bill Proctor, Leon County
Commissioner Doug Croley, Gadsden County
Commissioner Nancy Miller, City of Tallahassee
Commissioner Hines Boyd, Jefferson County
Commissioner Randy Merritt, Wakulla County
Staff and Others Present: Thornton Williams, CRTPA Attorney; Bryant Paulk, FDOT; Ivan Maldonaldo, StarMetro; Jay Townsend, City of Tallahassee; Wayne Tedder, PLACE; Greg Burke, CRTPA; Colleen Roland, CRTPA; Harry Reed, CRTPA; Yulonda Mitchell, CRTPA; Tony Park, Leon County Public Works.

## 1. AGENDA MODIFICATIONS

The agenda was modified to remove item 5F Federal Highway Administration Certification Report from the agenda.

Board Action: Commissioner Dozier made a motion to accept the modification to the agenda.
Commissioner Miller seconded the motion and the motion was unanimously passed.

## 2. CONSENT AGENDA

A. Minutes of the September 24, 2012 CRTPA Board Meeting

## B. 2013 CRTPA Meeting Calendar

The CRTPA Board meeting calendar for 2013 has been developed for board approval.
C. CRTPA General Planning Consultant Website Implementation Work Order
Authorization
D. FY 2011-2012 Federal Transit Administration (FTA) Job Access and Reverse Commute (JARC) and New Freedom Grant Applications and Ranking
Applications for the JARC and New Freedom Grant have been reviewed and ranked by a selection committee staffed by Star Metro. The CRTPA must approve this ranking before it is submitted to the FTA.

Board Action: Commissioner Dozier made a motion to accept the Consent Agenda as presented by staff. Commissioner Madison seconded the motion and the motion was unanimously passed.

## 3. CONSENT ITEMS PuLled FOR DISCUSSION NONE

## 4. Roll Call Vote Agenda ITEMS

## A. Fiscal Year (FY) 2013 - FY 2017 Transportation Improvement Program (TIP) Amendment

The CRTPA FY 2013 - FY 2017 TIP is proposed to be amended to reflect the following:

- Gadsden County Bike Lane/Sidewalk (Project \#4281032): Delete project and place funding on new project (Florida Arts Bicycle Trail Project (Project \#4333801)); consolidate funding (currently in FY 13 and FY 14) to FY 2013; add additional funding (portion allocated to Gadsden County) to FY $2013(\$ 65,000)$ from CRTPA Bicycle and Pedestrian Project (Project \#4098036) (Total funding: \$527,000 in FY 2013).
- CRTPA Bicycle and Pedestrian Projects (Project \#4098036): Amend project to place Gadsden County's bicycle and pedestrian funding share for FY 2015 on Florida Arts Bicycle Trail Project (Project \#4333801) in FY 2013 ( $\$ 65,000$ ) (see above).
- Franklin Boulevard (Project \#4318991): Delete project funding and place funding $(\$ 550,000)$ on the Capital Cascade Connector Bridge Project (Project \#4259411) in FY 2013 and in the CRTPA's Unified Planning Work Program (UPWP) $(\$ 150,000)$ in FY 2013.
- Capital Cascade Connector Bridge Project (Project \#4259411): Amend project to place additional funding on project in FY $2013(\$ 550,000)$ from the Franklin Boulevard Project (Project \#4318991).
- Wakulla County Bike Lane/Sidewalk (Ochlocknee Bay Trail Phase 5A) (Project \#4301491): Delete project and place funding on new Ochlocknee Bay Trail Phase 5A

Project (Project \#4140322) and update funding to support design efforts in FY 2013 $(\$ 34,700)$ and construction efforts in FY 2015 ( $\$ 312,300$ ) (Total Funding: $\$ 347,000)$.

- Capital Circle, NW (Blueprint 2000 payback) (Project \#2197221): Amend project to advance FDOT payback funds to Blueprint $2000(\$ 1,000,000)$ from FY 2014 to FY 2013.
- Apalachee Parkway Landscaping Project (Project \#4322101): Add project to TIP related to landscape funding on Apalachee Parkway (Monroe Street to Magnolia Drive) in FY 2013.
- Capital Circle (Springhill Road to Orange Avenue) (Project \#4157829): Add project to TIP in FY 12 \& FY 13 to reflect project being developed by the Florida Department of Transportation.
- Add a new appendix ("Appendix G") to the document reflecting three (3) transportation projects located on public lands in Wakulla County that have received funding by the Federal Highway Administration- Eastern Federal Lands Highway Division (as requested by FHWA).

Board Action: Commissioner Merritt made a motion to accept the Fiscal Year (FY) 2013 - FY 2017 Transportation Improvement Program (TIP) Amendment. Commissioner Maddox seconded the motion. A roll call vote was conducted and the motion passed unanimously.

## B. Regional Mobility Plan (RMP) Administrative Amendment

Staff is seeking approval to administratively amend the adopted Regional Mobility Plan (the agency's Long Range Transportation Plan) to add financial information related to Capital Circle, Southwest. The project, already in the Regional Mobility Plan (RMP), is proposed to be amended to ensure consistency with upcoming project development activities.

Board Action: Commissioner Merritt made a motion to accept the Regional Mobility Plan (RMP) Administrative Amendment. Commissioner Maddox seconded the motion. A roll call vote was conducted and the motion passed unanimously.

## 5. CRTPA DISCUSSION ( 90 MINUTES)

## A. DRAFT Fiscal Year (FY) 2014 - FY 2018 Work Program (Discussion) ( 45 minutes)

Regina Battles, Florida Department of Transportation (FDOT), District 3, will present the Draft FY 2014 - FY 2018 Work Program. CRTPA written comments on the Draft Work Program must be provided to the FDOT by January 22, 2013.

Commissioners Madison and Croley discussed the need for bridge repairs and replacements within Gadsden County.

Board Action: This item was for information, therefore no action was taken.
B. CRTPA Safety Grant Approval for Teen Driver Program in Leon County and Associated Unified Planning Work Program (UPWP) Amendment (Action) (10 minutes)

Staff is seeking approval to accept a teen driving safety grant award in association with the Tallahassee Police Department and in coordination with the Leon County CTST. Approval of this grant award requires an amendment to the CRTPA's UPWP to enable the CRTPA to accept the safety grant from FDOT to fund this project.

Board Action: Commissioner Merritt made a motion to accept the CRTPA Safety Grant Approval for Teen Driver Program in Leon County and Associated Unified Planning Work Program (UPWP) Amendment. Commissioner Dailey seconded the motion and the motion was unanimously passed.
C. Sixth Avenue Sidewalk (Tallahassee) Update (Action) (15 minutes)

The $6^{\text {th }}$ Avenue Sidewalk project was presented to the CRTPA Board in June 2012. Since that time, staff has been working with City of Tallahassee and Leon County staff as well as utilizing public input to develop a concept to move forward with and present to the Tallahassee City Commission. CRTPA staff is seeking approval of the $6^{\text {th }}$ Avenue concept to present to the Tallahassee City Commission.

Board Action: Commissioner Merritt made a motion to accept the Sixth Avenue Sidewalk (Tallahassee) Update. Commissioner Desloge seconded the motion and the motion was unanimously passed.

## D. Designation of CRTPA Chair and Vice-Chair (Action) (5 minutes)

Annually, CRTPA members elect a new Chair and Vice-Chair to serve for the upcoming calendar year. Currently, Commissioner Sauls and Commissioner Miller hold the CRTPA Chair and Vice-Chair positions, respectively.

Board Action: Commissioner Croley nominated Commissioner Miller for Chair. Commissioner Merritt seconded the motion and the nomination was accepted unanimously.

Board Action: Commissioner Desloge nominated Commissioner Merritt for Vice-Chair. Commissioner Maddox seconded the motion and the nomination was accepted unanimously.

## E. Designation of MPOAC Representative and Alternate (Action) (5 minutes)

Annually, the CRTPA approves an appointment and alternate to serve on the Governing Board for the Florida Metropolitan Planning Organization Advisory Council (MPOAC). The current CRTPA representative is Commissioner Madison. Commissioner Dozier and Commissioner Maddox serve as MPOAC Alternate.

Board Action: Commissioner Croley made a motion have the designation remain the same with Commissioner Madison serving as the CRTPA's MPOAC representative and Commissioner Dozier and Commissioner Maddox serving as the MPOAC alternates. Commissioner Merritt seconded the motion and the motion was unanimously passed.

## 6. EXECUTIVE DIRECTOR'S REPORT

A status report on CRTPA activities and items of interest will be provided, including the following:

- No Cost Work Order Time Extensions for CRTPA's General Planning Consultants
- Draft Congestion Management Process Plan Update

Board Action: This item was an informational item, therefore no action was taken.

## 7. ITEMS From Members

This portion of the agenda is provided to allow members an opportunity to discuss issues relevant to the CRTPA.

## 8. Citizen Comment

None

## 9. INFORMATION

A. News Articles/For Your Information

- "Bicycling for Better Business" (October 31, 2012, Jay Walljasper, Citiwire.net)
- "How biking can help a company's bottom line" (June 7, 2011, Christine Fruechte, StarTribune)
- "Chicago's Green Alley Initiative" (May 26, 2009, Benjamin Roman)
- "Housing In America: The Baby Boomers Turn 65" (October 17, 2012, New ULI Report)
- "The Fuel Tax: An Unsustainable Transportation Revenue Source" (October 31, 2012, Mark Reichert, Florida Transportation Commission, Transpo 2012)
B. CRTPA Draft Congestion Management Process Plan
C. Correspondence
D. Committee Actions (Citizen's Multimodal Advisory Committee/ Technical Advisory Committee/Transportation Disadvantaged Coordinating Board)
E. Future Meeting Dates and Agenda Items (Next Meeting: January 28, 2013)
F. CRTPA Expense Reports
G. October 15, 2012 CRTPA Retreat Summary


## Attested:

Yulonda Mitchell, Recording Secretary
Nancy Miller, Chair


## STATEMENT OF ISSUE

The purpose of this agenda item is to seek approval of the Update to the Congestion Management Process Report for the CRTPA.

## CRTPA SUBCOMMITTEE ACTIONS

On January 15, 2013, the CRTPA's Citizens Multimodal Advisory Committee (CMAC) recommended approval of the Congestion Management Process Plan with a request that the Plan include language that highlights the need to evaluate existing facilities for deficiencies in accessibility (related to the Americans With Disabilities Act) when evaluating areas for appropriate strategies to address congestion. The Plan has been amended to address this request and can be seen in Changes 6 and 7 in Attachment 2.

On January 15, 2013 the CRTPA's Technical Advisory Committee (TAC) recommended CRTPA approval of the Congestion Management Process Plan.

## RECOMMENDED ACTION

Option 1: Approve the Update to the Congestion Management Process Report for the CRTPA.

## History and Analysis

As a Transportation Management Area, Federal law requires that the CRTPA develop a Congestion Management Process Plan (CMP). This document serves to measure the system performance of transportation facilities within the planning boundary, and identifies various low-cost strategies that could be employed to alleviate congestion and maximize the mobility options available (such as operational improvements, initiation of park-and ride lots, increased transit service, etc.).

The CRTPA local governments utilize the CMP when making decisions regarding the investment of resources in the transportation infrastructure of the region, and the CRTPA utilizes the document to identify potential solutions to congestion that can be accomplished as a companion to the adopted Regional Mobility Plan. The report outlines different types of congestion management strategies that can be utilized to improve the efficiency and functionality of the roadway network.

The CMP Update was prepared by the consulting firm URS in accordance with the guidelines provided by the Federal Highway Administration. The Plan Update utilizes the most current traffic data available for the CRTPA region by the Florida Department of Transportation and was improved to provide crash data and maps depicting the location of crashes by type (involving bicycle, pedestrian, or automotive crashes). The CMP Update replaces the current CMP that was adopted in September of 2009 and can be found on the CRTPA's webpage at www.crtpa.org as part of the Board Meeting's agenda PDF file.

## RECENT ACTIVITY

The Draft CMP Update was released for intergovernmental, CRTPA, and public review on Tuesday, November 13, 2012. Since that date, comments were received by current members of the CRTPA's Citizen's Multimodal Advisory Committee (CMAC) and forwarded to the consultant for their consideration in updating the final document. The comments received were included in the agenda item for the CRTPA committees to review and were addressed in discussion form at the committee meetings. This committee item and the comments received are included as Attachment 1.

Changes were made to the Draft CMP to address a majority of the comments and concerns raised by the committee members in Attachment 1. These changes are listed in Attachment 2, and represent all changes made to the document since its release for public review in November of 2012.

## NEXT STEPS

Following adoption of the Updated Congestion Management Process Report, the document will be forwarded to the Florida Department of Transportation and the Federal Highway Administration for review.

## OPTIONS

Option 1: Approve the Updated Congestion Management Process Report. (Recommended)

Option 2: Provide other direction.

## ATTACHMENTS

Attachment 1: CRTPA Committee Agenda Item \& Comments Received on the Draft Congestion Management Process Report.

Attachment 2: Reflected Changes to the Draft Congestion Management Process Report.

# COMMITTEE 

Agenda Item 3 A

# Congestion Management Process Report 

## REQUESTED BY: CRTPA Staff <br> TYPE OF ITEM: Committee Action

## Statement of Issue

The purpose of this agenda item is to provide information on the upcoming update to the Congestion Management Process Report (CMPR) for the CRTPA, which was originally adopted in September of 2009. A draft of the CMPR is provided on CRTPA's website for review.

## History and Analysis

As a Transportation Management Area, Federal law requires that the Capital Region Transportation Planning Agency (CRTPA) develop a Congestion Management Process Plan (CMP). The document serves to measure the system performance of transportation facilities within the planning boundary, and identifies various low-cost strategies that could be employed to alleviate congestion and maximize the mobility options available (such as operational improvements, initiation of park-and ride lots, increased transit service, etc.).

The CMP is a tool used by the CRTPA local governments when making decisions regarding the investment of resources in the transportation infrastructure of the region. As such, the report outlines a process whereby site-specific congestion management strategies can be identified, and recommended for future funding programming.

## RECENT ACTIVITY

Under the CRTPA's General Consultant Contract, the CRTPA's CMP has been under review. Currently, segments of the CMP are being revised to reflect updated information pertaining to crash data, operating level of service, and current operations by Star Metro and the City of Tallahassee Traffic Engineering Department. The CMP has been improved to provide crash data and maps depicting the location of crashes by type (involving bicycle, pedestrian, or automotive crashes).

The Draft CMP was released for intergovernmental, CRTPA, and public review in November of 2012. Comments received by CMAC Members have been forwarded and will be considered by the consultant in preparation of the final document. Comments received are included below:

## Member 1:

- What are "on system" versus "off system" roads?
- Are there performance measures of transit, bike and ped service (including accident rates)? If not, are there plans to develop some over time?
- What is the status of the midterm transit improvements? 2015 is within the 5 year budget window.
- Page 3-5 discussion on concurrency reads as though concurrency only applies to local streets. Also, on page 4-3, it sounds as though there are no concurrency programs.
- I'd appreciate some explanation from staff as to how well access management techniques are working, particularly on state roads.
- Page 5-5: Would appreciate some clarification on "public acceptance" barriers. Maybe there is a better way to address this issue.
- Consider depicting congested roads on map. In Leon County, show the MMTD boundary, as the nature of improvements should be different inside and outside the District.
- Street name is Blair Stone, not Blairstone
- Consider using shortened names in lieu of so many acronyms (e.g., "Study" in lieu of CMS)


## Member 2:

- In a word search, the terms 'disability' was only referenced once, and 'accessibility' twice.
- Under our performance measures and evaluations, is there a better way for us to capture and document how this community makes accessibility enhancements that better serve the senior and disabled populations?
- For example: "Tallahassee has 30 miles of accessible sidewalks, and by 2020 will have 100 miles." Another measure could be "CRTPA has 50 accessible bus stops... by 2020 all shall be accessible."
- The region's demographics are changing to an older population. Moreover, we are aggressively recruiting seniors, and thus, we should more clearly document mobility enhancements that speak to our population needs.
- Could we route/highlight accessible paths of travel on our website and maps?


## Member 3:

- Realization that the wording of 4.2.3 Analysis, Design, and Construction (page 4-10, 2012 report) is the same as the wording of from page 24 of the 2009 report -Does the highlighted portion below mean existing median or bike/ped facilities could be redesigned to create a HOV lane? If not, it should be reworded so that the redesign could create HOV lanes/new travel lane or bike/ped facilities from the existing median/reduced lane width in the ROW.
"Software exists today that can be of great benefit to planners and engineers when determining if physical changes to the roadway network should be done to increase the efficiency or safety of the system. One strategy to reduce congestion is intersection redesign to increase capacity or allow pedestrian refuge. Existing roadways can also be redesigned or restriped to designate existing lanes as High Occupancy Vehicle Lanes (HOV lanes), or to create a new travel lane from the existing median or bicycle and pedestrian facilities in the existing right-of-way."
- Since the RMP and the Trails \& Greenways Master Plan is referenced in paragraph 3Section 4.1.5 Alternative Modes (page 4-8) could paragraph 2 include multi-use trails?


## Next STEPS

The comments received will be considered by the consultant and addressed at the Committee Meetings. The proposed final CMP, including any revisions made as a result of comments received, will be presented to the CRTPA Committees and Board at the January meetings. The CRTPA Board is expected to adopt the final document on January 28, 2013.

## Changes to CMP as of January 16, 2013.

Change \#1 - Changed Title on cover page to "January 2013".
Change \#2 - Added "Acknowledgements" Page.
Change \#3 - Changed "Blairstone" to "Blair Stone"
Change \#4 - Added "As an Example:" to page 4-10, under Analysis, Design and Construction Section.

Change \#5 - Added "multi-use trails" to page 4-8, under Alternatives Modes Section.
Change \#6 - Added to fourth bullet item on page 4-27, "Does modification correct any existing ADA issues?", under Identifying Appropriate Strategies Section.

Change \#7 - Added "Strategies to improve alternative modes of travel must include the evaluation of the existing facility for deficiencies related to the Americans with Disability Act (ADA). ", to page 4-8 under Alternative Modes Section.

Change \#8 - Added "The City has also created a Multi-Modal Transportation District (MMTD) to create a pedestrian-friendly and transit-supportive downtown district. This district treats several areas experiencing congestion differently to improve the urban environment through an increased emphasis on urban design. The MMTD district and related codes and regulations focus on different types of improvements within the district to promote Multi-Modal transportation choices. Projects undertaken in the MMTD district to address congestion need to be consistent with the vision and policies within the MMTD. More information and maps can be located at this website:
http://www.talgov.com/planning/planning-trans-mmtd-code.aspx" to page 3-5 under Local Roads Section.", under the Local Roadways Section.

# Congestion Management Process Report 

for the


January 2013

## Acknowledgements

## Document Content

The Capital Region Transportation Planning Agency thanks the following citizen groups, and governmental agencies for their contributions to the content of this document:

Citizens Multimodal Advisory Committee;
Technical Advisory Committee;
StarMetro;
City of Tallahassee Public Works Department;
Florida Department of Transportation;
Federal Transit Administration;
Federal Highway Administration

## Financial

"The preparation of this report has been financed in part through grant[s] from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the State Planning and Research Program, Section 505 [or Metropolitan Planning Program, Section 104(f)] of Title 23, U.S. Code. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation."
"This report was funded in part through grant[s] from the Federal Highway Administration [and Federal Transit Administration], U.S. Department of Transportation. The views and opinions of the authors [or agency] expressed herein do not necessarily state or reflect those of the U.S. Department of Transportation."
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## CONGESTION MANAGEMENT REQUIREMENTS

The Capital Region Transportation Planning Agency (CRTPA) is the region's metropolitan planning organization (MPO). As such, the CRTPA is responsible for coordinating transportation planning within Florida's Capital Region. The CRTPA includes all of Leon, Wakulla, Gadsden, and Jefferson Counties. The general population of the planning area is between 370,000 and 371,000 people.
The Moving Ahead for Progress in the 21st Century Act (MAP-21) designates areas with populations of 200,000 or greater as Transportation Management Areas (TMA's) and furthermore, requires that these areas have a Congestion Management System (CMS) as part of the transportation planning process. A CMS is defined as, "a systematic process for managing congestion that provides information on transportation system performance and on alternative strategies for alleviating congestion and enhancing the mobility of persons and goods to levels that meet state and local needs" (23CFR 500.109). As a designated TMA, the CRTPA must have a CMS in place.

On August 10, 2005, the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was signed into law (Public Law 109-59). It authorized \$286 billion in spending for the six-year period from 2004-2009 for a number of surface transportation programs, including highways, transit, bridge, freight, safety, and research. The act first expired September 30, 2009. Since that time, the program has been temporarily extended nine times; Resolution was reached with the enactment of MAP-21, which now replaces the SAFETEA-LU.

MAP-21 was signed into law P.L. 112-141 by the President on July 6, 2012 and extends current law through September 30, 2012. MAP-21 went into effect on October 1, 2012 and authorizes programs for two years, through September 30, 2014. Funding surface transportation programs at over $\$ 105$ billion for fiscal years (FY) 2013 and 2014, MAP-21 is the first long-term highway authorization enacted since 2005.

MAP-21 creates a streamlined, performance-based, and multimodal program to address the many challenges facing the U.S. transportation system. These challenges include improving safety, maintaining infrastructure condition, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, and reducing delays in project delivery. MAP-21 builds on and refines many of the highway, transit, bike, and pedestrian programs and policies established in 1991.

## CONGESTION MANAGEMENT PROCESS REPORT

The Congestion Management Process (CMP) Report for the CRTPA, as required under MAP-21, is presented in the subsequent sections of this document. In summary, the report outlines the process and provides the basic information needed that will enable the CRTPA to implement metropolitan-wide strategies on addressing traffic congestion in the CRTPA.

The CMP Report begins by identifying the existing performance of transportation facilities (roadways, bike lanes, sidewalks, and transit services) in the planning area, which serves as the ground-work for selecting strategies for improving the system. Following this identification, a
process is identified to incorporate the values of the CRTPA community into the planning and programming of congestion management projects so that they are identified in an objective, manageable fashion that can lead to greater cost effectiveness and utility of the entire multimodal system. This is achieved through the application of existing established evaluation criteria utilized in other CRTPA planning efforts. By following this process, the resulting information is intended to be used by several groups of people including elected officials, engineers, planners, developers, and consultants, as future planning documents such as Long Range Transportation Plans, Master Plans, local government development orders, Florida Department of Transportation (FDOT) Work Programs, and the CRTPA's Transportation Improvement Programs (TIP's) are developed. The resulting plans will then be grounded in values representative of the planning area and representative of the visions of individual transportation plans (such as the Regional Mobility Plan, Transit Development Plan, etc.) for the planning area.

To effectuate a streamlined approach to addressing congestion and improving the transportation network, a team of transportation professionals in the region review the traffic system throughout the year and make recommendations to the CRTPA and affected local governments on instituting congestion management strategies for identified facilities. The status of the system, as reflected in the CMP Report, and the findings of the review team will together form the foundation from which all future transportation planning documents and plans will stem. Reviewers are involved throughout the year in the development of local priority project lists for various transportation plans and documents, the FDOT's Five-Year Work Program, the local government TIP, Long Range Transportation Plans, and through association with their respective local governments, the local capital improvement project lists.

The CMP is updated in accordance with the requirements of MAP-21, which reauthorizes the Congestion Mitigation and Air Quality Improvement Program (CMAQ). This program provides funding to states and localities for transportation projects that help meet the goals of the Clean Air Act. The CMAQ program has new performance-based features, in which the Secretary will establish measures for States to use to assess traffic congestion and on-road mobile source emissions. Each Metropolitan Planning Organization (MPO) with a transportation management area of more than one million in population representing a nonattainment or maintenance area is required to develop and update biennially a performance plan to achieve air quality and congestion reduction targets. A CMAQ outcomes assessment study for the program is also required.

Because this is a continuous planning and monitoring process, the benefits of the individual congestion mitigation strategies employed in the previous year will not necessarily be immediately apparent. However, the proposals identified and employed will be monitored and tracked for qualitative and quantitative improvements on the target area and system as a whole.

### 1.1 PURPOSE

The Congestion Management Process (CMP) Report exists to provide the necessary information for the identification of areas with congestion or safety issues, to develop and assess potential mitigation strategies, and to support prioritization decisions on investments in short-term congestion and safety improvements. The creation and maintenance of the CMP Report is a requirement for all MPO's under Florida Law and for all TMA's under federal law. However, before an analysis of congestion can begin, the terms and identification of why congestion is a serious issue must first be defined.

Congestion can be defined qualitatively as a function of actual facility volume to accepted facility capacity (how many of a particular modal choice are utilizing a facility designed to accommodate "x" number of users), or qualitatively as how well you feel the facility is meeting your needs (taking too long, degree of maintenance satisfaction, etc.). Because planning for and providing safe and efficient mobility for people and goods is one of the most essential functions of transportation, identifying congestion management strategies that allow cost-effective ways to maintain and improve mobility is a high priority.

The CMP Report has an important role in the transportation planning process, but it is important to remember that the role of the CMP Report is to support, not supersede ongoing transportation planning processes. The report is designed to provide the framework within which decisions regarding cost-and-time effective investments in the transportation system can be readily made. The CMP Report accomplishes this by identifying congestion (through utilization of established methods of performance evaluation and monitoring), identifying alternative actions, and framing a process whereby recommended actions can be easily and cost-effectively incorporated into the pertinent planning and programming documents of the CRTPA and local governments where appropriate.

### 1.2 ORGANIZATION OF REPORT

This report is divided into seven sections. Section One summarizes state and federal requirements with respect to the CMP Report and identifies the CMP modes of transportation within the reporting area (planning area). Section Two focuses on the establishment and subsequent results from the application of performance measures per travel mode. Section Three outlines CRTPA project evaluation criteria. Section Four identifies congestion management strategies/projects that could be undertaken or are being utilized currently in the planning area. Section Five outlines a CMS implementation plan, Section Six outlines the implementation plan, and Section Seven summarizes the conclusions of the report.

### 2.1 CONGESTION MANAGEMENT PROCESS STUDY AREA

The Capital Region Transportation Planning Agency (CRTPA) is the region's metropolitan planning organization (MPO). As such, the CRTPA is responsible for coordinating transportation planning within Florida's Capital Region. The CRTPA includes all of Leon, Wakulla, Gadsden, and Jefferson Counties. The general population of the planning area is between 370,000 and 371,00 people and is the home to the State Capitol, three large institutions of higher learning (Florida A\&M University, Florida State University, and Tallahassee Community College), and several state parks and environmentally significant lands.

Figure 1, shown below, shows the planning area boundary of the CRTPA. Within this boundary, the CRTPA has the responsibility of coordinating safe and efficient mobility for cyclists, pedestrians, transit providers and passengers, air traffic, and automotive/truck transportation. With limited dollars, an ever growing population, and high community values on protecting and preserving the environment and "neighborhood feel" of the planning area, the CRTPA shoulders a daunting responsibility that is scrutinized by both state and federal governments.

Figure 1: CRTPA Planning Area Boundary


### 2.2 STATE AND FEDERAL REQUIREMENTS OF THE CONGESTION MANAGEMENT PROCESS

The legislation under which the state and federal governments direct the CRTPA to institute and manage a Congestion Management System (CMS) and concurrent Implementation Process for that system are identified below.

### 2.2.1 Federal Requirements

Federal regulations define a CMS as a systematic process that provides information on transportation system performance and alternative strategies to alleviate congestion and enhance the mobility of persons and goods.

Federal regulations provide insight into the rationale behind the requirement of MPOs and TMA's to develop a CMS. The federal regulations for the development and implementation of CMS's were provided in 23 Code of Federal Regulations (CFR) Part 599 and 626, Management and Monitoring Systems, Subpart E - Traffic Congestion Management System, published December1, 1993. A summary of relevant information from these regulations is provided below.

- Each state shall develop, establish, and implement, on a continuing basis, a CMS that result in the identification and implementation of strategies that provide the most efficient use of existing and future transportation facilities in all areas of the state, including metropolitan and non-metropolitan areas, where congestion is occurring or is expected to occur.
- In both metropolitan and non-metropolitan areas, consideration shall be given to strategies that reduce single occupant vehicle (SOV) travel and improve existing transportation system efficiency. Where the addition of general purpose lanes is determined to be an appropriate strategy, explicit consideration shall be given incorporating appropriate features into the SOV project to facilitate further demand management and operational improvement strategies to maintain the functional integrity of those lanes.
- Transportation corridors or facilities with existing or potential recurring congestion shall be identified and an assessment of the level of the current or potential congestion shall be made on a continuing basis.

The federal regulations define the CMS components as follows:

- Performance Measures - Parameters shall be defined that will provide a measure of the extent of congestion and permit the evaluation of the effectiveness of congestion reduction and mobility enhancement strategies for the movement of people and goods.
- Data collection and systems monitoring - A continuous program of data collection and system monitoring shall be established to determine and monitor the duration and magnitude of congestion and to evaluate the effectiveness of implemented actions.
- Identification and evaluation of proposed strategies - The anticipated performance and expected benefits of traditional and nontraditional strategies that will contribute to the more efficient use of existing and future transportation systems shall be identified and evaluated based upon the established performance measures. Strategies, or combinations of strategies, to be appropriately considered include, but are not limited to:
o Transportation demand management measures, such as carpooling, vanpooling, alternative work hours, telecommuting, and parking management;
o Traffic operational improvements, such as intersection and roadway widening, channelization, traffic surveillance and control systems, motorist information systems, ramp metering, traffic control centers, and computerized signal systems;
o Measures to encourage high occupancy vehicle (HOV) use, such as HOV lanes, guaranteed ride home programs, and employer trip reduction ordinances;
o Public transit capital improvements, such as exclusive rights-of-way (rail, bus ways, bus lanes) bus bypass ramps, park and ride and mode changes facilities, and paratransit services;
o Public transit operational improvements, such as service enhancements or expansions, traffic signal preemption, fare reductions, and transit information systems;
o Measures to encourage the use of non-traditional modes such as bicycle facilities, pedestrian facilities, and ferry service;
o Congestion pricing;
o Growth Management and activity center strategies;
o Access management techniques;
o Incident Management;
o Intelligent vehicle highway system and advanced public transportation system technology, and

0 The addition of general purpose lanes.

- Implementation of strategies - For each strategy (or combination of strategies) proposed for implementation, an implementation schedule, implementation responsibilities, and possible funding sources shall be identified.
- Evaluation of the effectiveness of implemented strategies - A process for periodic assessment of the effectiveness of implemented strategies, in terms of the area's established performance measures, shall be implemented. The results of this evaluation shall be provided to decisions makers to provide guidance on selection of effective strategies for future implementation.


### 2.2.2 MAP-21

MAP-21 retains much of the existing law regarding metropolitan planning organizations (MPOs), including the 50,000 population threshold for creating an MPO. The law also encourages a performance-based approach to decision making and the development of transportation plans, coordinated with the states to ensure consistency. MAP-21 keeps most current Highway Trust Fund taxes intact, including the 18.4 cents-per-gallon tax on gasoline and the 24.4 cents-per-gallon surcharge on diesel purchases, and fills the funding gap with a financing package that includes private-sector pension changes. The Act continues to provide a majority of Federal highway funds to states through core programs of the Act. Listed below are highlights of MAP-21:

- Strengthens America's highways

MAP-21 expands the National Highway System (NHS) to incorporate principal arterials not previously included. Investment targets the enhanced NHS, with more than half of highway funding going to the new program devoted to preserving and improving the most important highways -- the National Highway Performance Program.

- Establishes a performance-based program.

Under MAP-21, performance management will transform Federal highway programs and provide a means to more efficient investment of Federal transportation funds by focusing on national transportation goals, increasing the accountability and transparency of the Federal highway programs. MPOs are to establish performance targets.

- Creates jobs and supports economic growth

MAP-21 authorizes $\$ 82$ billion in Federal funding for FYs 2013 and 2014 for road, bridge, bicycling, and walking improvements. In addition, MAP-21enhances innovative financing and encourages private sector investment through a substantial increase in funding for the TIFIA program. It also includes a number of provisions designed to improve freight movement in support of national goals.

- Supports the Department of Transportation's (DOT) safety agenda

MAP-21 continues the successful Highway Safety Improvement Program, doubling funding for infrastructure safety, strengthening the linkage among modal safety programs, and creating a positive agenda to make significant progress in reducing highway fatalities. It also continues to build on other safety efforts, such as reducing distracted driving, improve transit and motor carrier safety.

- Streamlines Federal highway transportation programs.

The Act substantially consolidates the program structure into a smaller number of core programs. The new law authorizes appropriations of $\$ 37.5$ billion in fiscal 2013 and $\$ 37.8$ billion in fiscal 2014 for the federal highway aid program, which includes a new national highway performance program, the surface transportation program, the highway safety improvement program, and the congestion mitigation and air quality improvement program. The measure consolidates federal surface transportation programs by two-thirds and speeds up the environmental review of new transportation projects, helping to significantly shorten approval periods and allow construction to be started and be completed more quickly. It also provides $\$ 1.75$ billion for the Transportation Infrastructure Finance and Innovation Act (TIFIA) program, which provides low-interest federal loans, loan guarantees, and standby lines of credit to finance nationally or regionally significant surface transportation projects. In addition, TIFIA can now finance up to 49 percent of a project's costs, up from 33 percent.

- Accelerates project delivery and promotes innovation.

MAP-21 incorporates several changes aimed at ensuring the timely delivery of transportation projects. Changes will improve innovation and efficiency in the development of projects, through the planning and environmental review process, to project delivery

MAP-21 modifications include Sections 5303 and 5304 related to Metropolitan and Statewide Planning. Modifications require MPOs that serve TMAs to include transit agency officials in their governing structures, and to establish performance targets. The performance based planning process:

- Requires MPOs to establish performance targets that address both the surface transportation performance measures set forth in 23 U.S.C 150(c), in coordination with the state, and public transportation performance measures in coordination with providers of public transportation, to ensure consistency with performance targets related to transit asset management and transit safety, as set forth in 49 U.S.C. 5326(c) and 5329(d).
- MPO plans must include performance targets that address performance measures and standards and a System Performance Report.
- Transportation Improvement Programs (TIP) must include a description of the anticipated progress brought about by implementing the TIP toward achieving the performance targets and the TIP should be updated at least every four years.


## Other Provisions of MAP-21

- Retains the Transportation Enhancement Program but provides states with greater flexibility to use the enhancement funding for other purposes. Under the new law, half of a state's transportation enhancement funding will be allocated directly to local governments for enhancements such as pedestrian and bicycle infrastructure, safety programs, and scenic and historic highway programs. States will have the flexibility to use the other half of the funding for enhancements or road construction or related projects.
- Authorizes $\$ 10.6$ billion in fiscal year 2013 and $\$ 10.7$ billion in fiscal year 2014 for programs administered by the Federal Transit Administration. This includes $\$ 17.1$ billion from the Mass Transit Account of the Highway Trust Fund for several formula grant programs, including urbanized area formula grants, bus formula grants, rural area formula grants, and mobility program formula grants. As for other urbanized area grants, the new law retains the existing criteria for using the funds for capital projects in urban areas with populations of more than 200,000.
- Retains the off-system bridge program, a local government-supported program that has provided significant funding--\$650 million a year--to repair mostly locally owned bridges that are not included as part of the federal aid system. The National Association of Counties estimates that continued funding will help repair 80,000 deficient off-system bridges
- Expands states' ability to use federal funds for toll roads, so long as the federal share of toll road projects does not exceed 80 percent. The law encourages public-private partnerships by requiring the Department of Transportation compile best practices on
how the government can work with the private sector on developing, financing, constructing, and operating transportation infrastructure.


### 2.2.3 State Requirements

Relevant portions of the applicable Florida Statutes are provided below. These requirements guide the development and application of the CRTPA Congestion Management Process.

- Chapter Title XXVI, Chapter 339.175 (2002), Metropolitan Planning Organization "In order to provide recommendations to the department and local government entities regarding transportation plans and programs, each MPO shall prepare a congestion management system for the metropolitan area and cooperate with the department in the development of all other transportation management systems required by state or federal law."
- Chapter Title XXVI, Chapter 339.177 (2002), Transportation Management Programs "Each MPO within the state must develop and implement a congestion management system." It continues that the CMS "should be developed and implemented so as to provide the information needed to make informed decisions regarding the proper allocation of transportation resources." The CMS "must use appropriate data gathered at the state or local level to define problems, identify needs, analyze alternatives, and measure effectiveness."

This section presents a performance review of the CRTPA's multi-modal system.

### 3.1 MEASUREMENT OF CONGESTION AND TRANSPORTATION SYSTEM PERFORMANCE

There are numerous ways to measure congestion and system performance. Examples include roadway and transit level of service (LOS), crash rates, transit headways, vehicle miles traveled, volume to capacity ratios, and travel delay. Some of these performance measures require intricate data collection efforts or model simulations to produce detailed measurements of system performance. In updating the current Congestion Management Process (CMP) for the expanded CRTPA planning area, the availability of system wide comparable data was an important factor when selecting the performance measures per transportation mode.

### 3.2 REVIEW OF BEST PRACTICES

A review of existing practices both in Florida and nationally was performed to help evaluate the existing congestion management performance measures and to identify possible alternative approaches.

### 3.2.1 Roadway Congestion Management Performance Measures

By far, the most widely used measure for roadway analysis appeared to be a two-tiered approach, whereby FDOT's generalized LOS tables are used as a first step of analysis (to determine congestion) followed by a second level of more detailed analysis on select congested roadway facilities. Generally, this second level of analysis involves intersection analyses, model runs, the initiation of corridor management plans, or intricate software applications.

### 3.2.2 Pedestrian, Bicycle, and Transit Performance Measures

For pedestrian, bicycle, and transit performance measures there appears to be little, if any consensus on a preferred approach. On one end of the spectrum, some Congestion Management Process Reports have treated these modes as strategies to manage congestion, and therefore, did not include any performance measures for them. Other reports have conducted extensive analyses on these modes, all with varying degrees and sophistication of available data.

### 3.3 EXISTING PERFORMANCE MEASURES

The existing CRTPA Congestion Management Process Plan was reviewed and evaluated against current state and federal CMS requirements to determine the applicability of current performance measures for roadway, transit, and bicycle and pedestrian features. Guidelines for developing and selecting performance measures are as follows:

- Performance measures should provide a tool to evaluate transportation system performance and identify system deficiencies, based on an accepted standard of operation;
- Performance measures should provide the means to identify roadway system congestion at a level that facilitates the development of congestion management strategies;
- Performance measures should provide the means to evaluate the use of transit and nontraditional modes of transportation to alleviate roadway congestion and enhance mobility of persons and goods; and
- Performance measures should use, to the greatest extent practical, existing or easily obtainable data and resources to efficiently identify transportation system deficiencies.

Upon reviewing the current performance measures against the guidelines outlined above, it was determined that they were consistent with the current regulations and suitable for continued use. The performance measures chosen and resulting operational status of the transportation system are discussed on the following pages.

### 3.4 ROADWAY PERFORMANCE MEASURES

The approach the CRTPA CMP takes regarding performance measures for roadway evaluations is a modified two-level approach. During the first level, the roadway system is evaluated utilizing the 2010 Level of Service Analysis Tables for state roadways for Leon, Wakulla, Jefferson, and Gadsden Counties (and their municipalities). Note at the time of this analysis, the 2010 counts from FDOT were the latest data available. These LOS tables provide a quantitative stratification of quality of service that is easy to understand. Beginning in 1965, the Highway Capacity Manual (HCM) divided highway quality of service into six letter grades that indicate operational conditions on roadways. The level of service ranges from LOS A (highest achievable) to LOS F (lowest achievable), and can be considered a qualitative measure of driver satisfaction. Additionally, a quantitative measure of maximum automotive volume is associated with the letter grades, A through F. Depending on several roadway characteristics such as number of lanes, population densities, and signal spacing, an acceptable maximum number of vehicles for each LOS category is determined. The 2010 Level of Service Analysis Tables take all of the FDOT roadway factors into consideration, and summarizes the current operating LOS of the roadway calculated from current traffic counts, as well as projections of LOS from projected growth trends. The LOS Analysis Tables are provided in Appendix B
For purposes of this first level of analysis, if the level of service on the roadway exceeds the adopted FDOT LOS for the roadway, it is considered congested. At times, the local government may have adopted a higher or lower level of service standard for these roadways, where this is the case, a note will be made. Upon identifying congested roadways, they can then be further analyzed using highway planning software and more specific roadway data conducted in level 2 of the analysis.

The second level of analysis will be conducted on an on-going basis by a combination or "team" of transportation professionals throughout the year. This team of professionals will be coordinating reviews of transportation projects and safety concerns throughout the year as they build toward the programming of transportation dollars throughout this region. This second tier analysis is explained in further detail in Sections 4 and 5. The results of this level of analysis are not reported in this Process Report, but are included in subsequent work products (such as the Regional Mobility Plan for this region) and implemented as part of ongoing transportation plans and funding programs.

### 3.5 ROADWAY PERFORMANCE EVALUATIONS

Upon reviewing the 2010 Level of Service Analysis Tables and projections for state roadways within the CRTPA boundary, summary tables were generated to identify those roadways identified as experiencing congestion in 2010, or projected to be experiencing congestion by 2015, or 2020. These Tables are provided as Table A for Leon County, Table B for Gadsden County, Table C for Chattahoochee in Gadsden County, Table D for Jefferson County, and Table E for Wakulla County. All five tables are included in Appendix A of this report.

Based on the AADT criteria from the FDOT Level of Service Analysis Tables, 31 roadway segments were identified to be congested in the year 2010 in Leon County by both FDOT and Leon County standards ( 23 operating at LOS F, 6 operating at LOS E, and 1 operating at LOS D). One roadway segment which met FDOT's adopted LOS of D was shown to be deficient by Leon County standards (operating at LOS D, with a Leon County adopted LOS of C). By the year 2015, 48 roadway segments ( 38 at LOS F, and 7 at LOS E and 2 at LOS D) are projected to be congested, and 60 in year 2020 ( 52 at LOS F, 4 at LOS E, and 2 at LOS D.) (Table A).

For Gadsden County, no state roadways are projected to be operating below the adopted LOS. (Table B)

For the Town of Chattahoochee, no state roadways are projected to be operating below the adopted LOS. (Table C)

For Jefferson County, no state roadways are projected to be operating below the adopted LOS. (Table D)

Wakulla County has 3 roadway segments that are identified as congested per FDOT standards either by existing counts or projections for the years 2015 and 2020. The FDOT LOS in Wakulla County is C while the County LOS is E . Only 2 of the 3 roadway segments are identified as failing in 2010 and in 2015 ( 1 at LOS F, and 1 at LOS D). Two roadway segments are projected to be LOS F in 2020. (Table E)

Below is a list of the state roadways shown to be operating at LOS F after analyzing the 2010 FDOT traffic counts. These roadways offer a first glimpse of those that show an immediate need for congestion relief if possible. Those roadways shown in bold have been identified in whole or in part for improvement in the Regional Mobility Plan. Roadways \#3 and \#19, shown in bold, have improvements funded for the roadway segment by Blueprint 2000. Roadways shown with an asterisk* represent roadways which may no longer be operating at LOS F due to roadway improvements now on the ground.

### 3.6 ROADWAY SEGMENTS CURRENTLY (2010) OPERATING AT LOS F IN THE CRTPA AREA:

## Leon County

1. S.R. 10/U.S. 90/Tennessee Street/Mahan Drive (S.R. 61/U.S. 27/North Monroe Street to North Meridian Road)
2. S.R. 10/U.S. 90/Tennessee Street/Mahan Drive (S.R. 261/U.S. 319/Capital Circle to C.R. 1568/Buck Lake Road)
3. S.R. 10/U.S. 90/Tennessee Street/Mahan Drive (C.R. 1568/Buck Lake Road to S.R. 8/I-10) (Roadway widening currently under construction from Dempsey Mayo Road to Interstate 10)
4. SR10/ US 90/ Tennessee Street/Mahan Drive (Appleyard Drive to Ocala Road)
5. S.R. 20/U.S. 27/Apalachee Parkway (Blair Stone Road to S.R. 261/U.S. 319/Capital Circle)
6. S.R. 61/South Monroe Street (SR 20/US 27/Apalachee Parkway to East Pensacola Street)
7. S.R. 61/South Monroe Street (East Pensacola Street to SR 10/US 90/Tennessee Street)
8. S.R. 61//South Monroe Street (SR 10/US 90/Tennessee Street to Brevard Street)
9. S.R. 61/U.S. 27/South Monroe Street (Brevard Street to SR 63/US 27/North Monroe Street)
10. S.R. 61/U.S. 319/Thomasville Road (SR 63/US 27/North Monroe Street to SR 155/Meridian Road $/ 7^{\text {th }}$ Avenue)
11. S.R. 63/U.S. 27/North Monroe Street ( $7^{\text {th }}$ Avenue to C.R. 158/Tharpe Street)
12. S.R. 63/U.S. 27/North Monroe Street (CR 158/Tharpe Street to John Knox Road/Monticello Drive)
13. S.R. 63/U.S. 27/North Monroe Street (Allen Road to SR 8/I-10)
14. S.R. 261/U.S. 319/Capital Circle (SR 363/Woodville Highway to Tram Road)
15. S.R. 261/U.S. 319/Capital Circle (Park Avenue to SR 10/US 90/Mahan Drive)
16. S.R. 261/U.S. 319/Capital Circle (SR 10/US 90/Mahan Drive to CR 146/Miccosukee Road)
17. S.R. 261/U.S. 319/Capital Circle (CR 146/Miccosukee Road to CR 151/Centerville Road)
18. S.R. 261/U.S. 319/Capital Circle (CR 151/Centerville Road to Eastgate Way)
19. S.R. 263/Capital Circle (SR 371/Orange Avenue to SR 20/Blountstown Highway)
(Blueprint 2000 is anticipating construction on this roadway from approximately 1,650 feet north of Blountstown Highway to south of U.S. 90 in 2012. Additionally, TIGER grant funds have been requested to construct the project to approximately 1,850 feet south of the Blountstown Highway intersection and east and west along Blountstown Highway for about 1,000 feet.)
20. S.R. 263/Capital Circle (SR 20/Blountstown Highway to SR 10/US 90/Tennessee Street)
21. S.R. 363/Adams Street (Putnam Drive to Magnolia Drive)
22. S.R. 363/Adams Street (Magnolia Drive to Bronough Street)
23. S.R. 366/Pensacola Street (South Ocala Road to Stadium Drive West)
24. S.R. 371/Lake Bradford Road (Colman Street/Springhill Road/End Exception to SR 371/Gaines Street)
25. S.R. 373/Orange Avenue (C.R. 2203/Springhill Road to Holton Street)

Wakulla County
26. U.S. 319 (Lower Bridge Road to S.R. 267/Bloxham Cutoff Road)

This list of roadways, combined with those identified in the Regional Mobility Plan provides a narrowed list of areas experiencing recurring congestion. That is, areas that are experiencing
congestion as a factor of too many vehicles trying to use the roadway at the same time. Roadways listed above that are not currently under construction should be studied further to identify congestion management strategies that could be effective in those locations.

### 3.6.1 Non-Recurring Congestion

Another type of congestion that affects roadways is non-recurring. Non-recurring congestion occurs when the roadway's carrying capacity is temporarily disrupted. FHWA identifies four causes of non-recurring congestion: roadway construction, weather-related conditions, special events, and incidents, such as crashes and disabled vehicles. The FHWA estimates that about 25 percent of all congestion is incident related.
One way that incident-related congestion can be managed is through the review of safety data/crash data. Departments within the various CRTPA local governments frequently collect crash data on their own and conduct analyses for their respective local governments on how to address safety concerns. From a regional perspective, the CRTPA coordinates with the local governments of the region to collaboratively address safety issues and share information. This information is utilized in updates to the Regional Mobility Plan as well as on-going corridor studies, design, and construction projects within the CRTPA area. Additionally, the CRTPA participates in safety focus groups in the region including formalized groups such as the Community Traffic Safety Team and informal groups such as the Leon County Bicycle Safety Work Group. Attending and participating in meetings such as these helps the CRTPA filter the safety and congestion information into ongoing plans and public participation efforts.

For other types-of non-recurring congestion, the local police and sheriff's departments have done an effective job of responding to incidents and redirecting traffic away from the affected areas. Temporary road closures and change of travel direction on roadways has also been implemented to handle the efficient flow of heavy traffic to, from, and around special events, such as the Downtown Get Down, University Football games, and local events such as the Winter Festival of Lights, Springtime Tallahassee, and Holiday Parades.

### 3.6.2 Local Roadways

Note that there are other roadways within the CRTPA boundary with identified congestion problems. These roadways are under the jurisdiction of the City or Town within which they operate.

The City of Tallahassee and Leon County both implement a concurrency management system (CMS), in which the transportation impacts, trip by trip, are loaded into a spreadsheet that tracks the amount of capacity remaining on a given segment of roadway. This CMS allows local governments to protect the capacity of the roadway segment through the requirement to mitigate, when appropriate. Applicants may decide to limit development, including building a project by phase, based on the cost of concurrency mitigation. The funds collected are programmed to provide transportation improvements that enhance the capacity of the CMS. The City has also created a Multi-Modal Transportation District (MMTD) to create a pedestrian-friendly and transit-supportive downtown district. This district treats several areas experiencing congestion differently to improve the urban environment through an increased emphasis on urban design.

The MMTD district and related codes and regulations focus on different types of improvements within the district to promote Multi-Modal transportation choices. Projects undertaken in the MMTD district to address congestion need to be consistent with the vision and policies within the MMTD. More information and maps can be located at this website:
http://www.talgov.com/planning/planning-trans-mmtd-code.aspx

Wakulla County has adopted a concurrency management system whereby they annually update traffic counts and predict future year "development trips" to the roadway system based on historical growth trends. The County has adopted its CMS as an Element in the County's Comprehensive Plan. Policy 1.5.6 provides guidance for completing traffic impact analyses for minimal, small and large developments and the County per Policy 1.5.7 also allows applicants to satisfy transportation concurrency through a Proportionate Fair Share Ordinance.

CRTPA staff will coordinate with the CRTPA local governments, including those in Jefferson and Gadsden Counties to identify a regional mechanism for sustaining growth in a fiscally responsible manner.

Jefferson County adopted a new concurrency management system in September 2011 and the adopted amendment currently is being reviewed by the DEO. The CMS has been adopted into the County's Comprehensive Plan. This CMS tracks only impacts from transportation and parks and recreation projects. For traffic analysis, the County uses the Institute of Transportation Engineers Trip Generation, trip generation rates. If a development concurrency analysis reveals that the proposed development would cause any roadway segment to drop below the adopted LOS, the development order would be denied, unless the developer mitigates the capacity deficiency.

Gadsden County has adopted its CMS in to the County's Land Development Code. No land development order (DO) will be issued until the County's Department of Planning and Zoning (the Department) has evaluated the DO and determined that the proposal is consistent with the Comprehensive Plan, zoning and building regulations or other applicable regulations. In order to determine whether the proposal is in compliance with the Comprehensive Plan and land development regulations, a concurrency evaluation must be conducted to determine that the proposal does not exceed the level of service (LOS) standards established in the adopted Comprehensive Plan. The Department will conduct concurrency evaluations through a comparison of the demand requirements of proposed developments with the capacity of existing facilities. No DO shall be issued by Department of Planning and Zoning or any other Department unless LOS for all public facilities and services meet or exceed LOS standards adopted by the County.

### 3.6.3 Identified High Crash Roadway Segments

Roadway performance can also be assessed by examining the number of accidents that occur along a roadway segment and comparing the accident rate derived to accident rates on similar roadways. Federal Highway Administration (FHWA) uses a formula to determine the average crash rates for roadways of similar characteristics. Those roadways identified as having a higher crash rate than the expected average are reported by FHWA. Figures 2 through 5 along with their accompanying tables, detail the 2010 High Crash Segments for Leon, Gadsden, Jefferson, and Wakulla Counties. Figures 6 through 9 along with their accompanying tables, detail the 2010 High Risk Rural Segments for Leon, Gadsden, Jefferson, and Wakulla Counties.


Capital Region Transportation Planning Agency-2010 High Crash Segments Leon County

| Map <br> ID | Roadway | Beginning <br> Milepost | Ending <br> Milepost | Number of <br> Crashes |
| :---: | :--- | :---: | :---: | :---: |
| 1 | State Road 261/Capital Circle | 5.429 | 5.829 | 128 |
| 2 | State Road 20/US 27/Apalachee Parkway | 1.821 | 2.821 | 169 |
| 3 | State Road 10/US 90/Tennessee Street | 7.606 | 8.455 | 330 |
| 4 | State Road 10/US 90/Tennessee Street | 6.202 | 7.102 | 407 |
| 5 | County Road 2146/Old St. Augustine Road | 0.0 | 1.9 | 87 |
| 6 | Duval Street | 0.0 | 1.0 | 90 |
| 7 | Bronough Street | 0.000 | 1.793 | 112 |
| 8 | County Road 361/Old Bainbridge Road | 0.1 | 2.0 | 126 |
| 9 | High Road | 0.2 | 1.3 | 84 |
| 10 | County Road 158/Tharpe Street | 0.4 | 1.7 | 123 |
| 11 | County Road 158/Tharpe Street | 1.7 | 2.4 | 75 |
| 12 | County Road 158/Tharpe Street | 2.4 | 3.6 | 129 |
| 13 | Ocala Road | 0.000 | 1.585 | 82 |

Capital Region Transportation Planning Agency-2010 High Crash Intersections Leon County

| Map <br> ID | Roadway 1 | Roadway 2 | Milepost <br> Crashes |  |
| :---: | :--- | :--- | :---: | :---: |
| A | State Road 10/US 90/Tennessee Street | Ramp to Ocala Road | 6.177 | 110 |
| B | State Road 10/US 90/Tennessee Street | Ocala Road | 6.196 | 103 |
| C | State Road 261/Capital Circle, north of <br> Raymond Diehl Road | Raymond Diehl Road | 10.998 | 69 |
| D | Raymond Diehl Road, west of SR 261/ US <br> 90/Capital Circle | SR 261/US 319/Capital Circle | 0.278 | 71 |
| E | State Road 261/Capital Circle, south of State <br> Road 10/US 90/Mahan Drive | State Road 10/US 90/Mahan Drive | 7.852 | 77 |
| F | State Road 261/Capital Circle | State Road 10/US 90/Mahan Drive | 7.872 | 75 |
| G | State Road 261/Capital Circle, north of State <br> Road 10/US 90/Mahan Drive | State Road 10/US 90/Mahan Drive | 7.894 | 76 |



Capital Region Transportation Planning Agency-2010 High Crash Segments Gadsden County

| Roadway | Beginning Milepost | Ending Milepost | Number of Crashes |
| :---: | :---: | :---: | :---: |
| County Highway 268 | 2.1 | 2.6 | 9 |



Capital Region Transportation Planning Agency-2010 High Crash Segments Jefferson County

| Roadway | Beginning Milepost | Ending Milepost | Number of Crashes |
| :---: | :---: | :---: | :---: |
| State Road 259/Waukeenah Highway | 12.2 | 13.9 | 4 |



Capital Region Transportation Planning Agency-2010 High Crash Segments Wakulla County

| Roadway | Beginning Milepost | Ending Milepost | Number of Crashes |
| :--- | :---: | :---: | :---: |
| Cajer Posey Road | 1.9 | 2.6 | 8 |



Capital Region Transportation Planning Agency-2010 High Risk Rural Segments Leon County

| Map <br> ID | Roadway | Beginning <br> Milepost | Ending <br> Milepost | Number of <br> Crashes |
| :---: | :--- | :---: | :---: | :---: |
| 1 | County Highway 373/Springhill Road | 1.4 | 1.9 | 4 |
| 2 | County Highway 361/Old Bainbridge Road | 9.7 | 10.2 | 6 |
| 3 | County Highway 157/Old Bainbridge Road | 10.3 | 11.1 | 9 |
| 4 | County Highway 344/Orchard Pond Road | 0.000 | 4.612 | 8 |
| 5 | County Highway 155/Meridian Road | 6.3 | 7.0 | 6 |
| 6 | County Highway 12/Fairbanks Ferry Road | 0.2 | 0.8 | 4 |
| 7 | County Highway 12/Fairbanks Ferry Road | 5.4 | 6.1 | 4 |
| 8 | County Highway 151/Centerville Road | 7.8 | 8.2 | 7 |
| 9 | County Highway 347/Miccosukee Road | 9.3 | 9.9 | 4 |
| 10 | County Highway 347/Miccosukee Road | 0.0 | 1.4 | 7 |
| 11 | County Highway 142/Old Magnolia Road | 0.000 | 6.674 | 4 |
| 12 | County Highway 1540/Capitola Road | 2.9 | 3.5 | 6 |



Capital Region Transportation Planning Agency-2010 High Risk Rural Segments Gadsden County

| Map <br> ID | Roadway | Beginning <br> Milepost | Ending <br> Milepost | Number of <br> Crashes |
| :---: | :--- | :---: | :---: | :---: |
| 1 | County Highway 270/Little Sycamore Road | 2.3 | 3.8 | 4 |
| 2 | County Highway 270/Little Sycamore Road | 5.2 | 6.3 | 5 |
| 3 | County Highway 270A/Flat Creek Road | 3.8 | 5.2 | 7 |
| 4 | County Highway 268/High Bridge Road | 2.1 | 2.6 | 6 |
| 5 | County Highway 268/High Bridge Road | 3.5 | 4.0 | 4 |
| 6 | Brickyard Road | 0.1 | 0.6 | 4 |
| 7 | Lanier Road | 1.4 | 2.3 | 4 |
| 8 | County Highway 153/Iron Bridge Road | 0.5 | 1.5 | 6 |
| 9 | County Highway 12/Fairbanks Ferry Road | 5.1 | 5.6 | 4 |
| 10 | County Highway 12/Fairbanks Ferry Road | 4.0 | 4.5 | 6 |
| 11 | County Highway 12/Fairbanks Ferry Road | 2.9 | 3.5 | 6 |
| 12 | County Highway 159/Salem Road | 3.7 | 4.3 | 4 |
| 13 | County Highway 159/Salem Road | 4.4 | 5.2 | 5 |
| 14 | County Highway 159/Salem Road | 6.1 | 7.7 | 6 |



Capital Region Transportation Planning Agency-2010 High Risk Rural Segments Jefferson County

| Roadway | Beginning Milepost | Ending Milepost | Number of Crashes |
| :--- | :---: | :---: | :---: |
| Asheville Highway | 6.5 | 7.0 | 3 |



Capital Region Transportation Planning Agency-2010 High Risk Rural Segments Wakulla County

| Map <br> ID | Roadway | Beginning <br> Milepost | Ending <br> Milepost | Number of <br> Crashes |
| :---: | :--- | :---: | :---: | :---: |
| 1 | Northwood Lane | 0.7 | 1.9 | 4 |
| 2 | Lower Bridge Road | 2.4 | 3.4 | 7 |

### 3.7 TRANSIT PERFORMANCE MEASURES AND EVALUATION

The CRTPA recognizes the importance of having a quality transit system for the area. The presence of a safe, affordable, and efficiently operating transit system is viewed as essential by the CRTPA and the communities it serves, as is an extended service area that eventually would cover the entire CRTPA region. An effective and accessible transit system would assist those outside the current service area hit hardest by rising fuel costs to travel more cost effectively, would help reduce automobile vehicle miles traveled, and would contribute greatly toward achieving the multi-modal transportation network that this CRTPA desires.
The continual monitoring and updating of system performance indicators are key to building a successful transit system. A major update to StarMetro's Transit Development Plan (TDP) was completed in 2011 in association with the development of the Regional Mobility Plan (RMP).
Additionally, after more than a half century of running a downtown-oriented transit system, StarMetro undertook a complete route restructuring in July of 2011 and is based on several high frequency, unscheduled, independent routes that traverse the city without necessarily going downtown. Several other less frequent routes complete the system for a total of 12 routes.

Furthermore, efforts to address regional transit issues were initiated in 2009 with the Regional Transit Study (RTS). The study's purpose was to develop a long-term vision for transit within the capital region (Gadsden, Jefferson, Leon and Wakulla counties).
The CRTPA in 2010 adopted the above referenced Regional Transit Study which identifies two types of transit improvements for the region. The Study identifies service improvements and capital projects. Service improvements include fixed route services and capital projects include fixed guideway, bus rapid transit and streetcar. The two types of transit improvements are listed as near term, mid-term and long term projects and are listed below:

## Near Term (2010-2014)

- Gadsden Express (already started)


## Mid Term (2015-2024)

- North Leon County StarMetro Local Bus Service Expansion
- Capital Circle Office Complex/Southwood StarMetro Local Bus Service Expansion
- Tram Road StarMetro Local Bus Service Expansion
- Crawfordville Express Bus Service
- East Leon County StarMetro Local Bus Service Expansion
- Quincy Fixed Route Expansion
- Havana Fixed Route
- Monticello Fixed Route
- Woodville Highway Express Bus Service
- Capital Circle East Express Bus Service
- Havana Express Bus Service
- Monticello Express Bus Service
- Airport Express Bus Service
- West Tennessee Street Bus Rapid Transit
- Thomasville Road Bus Rapid Transit
- Apalachee Parkway Bus Rapid Transit
- Gaines Street Streetcar Line
- Campus Streetcar Line


## Long Term (2024-2050)

- Crawfordville Fixed Route
- Quincy Fixed Route Expansion
- Havana Fixed Route Expansion
- Havana/Quincy Express Bus Service
- Capital Circle East Bus Rapid Transit
- Monroe Street Bus Rapid Transit
- East Tennessee Street (Mahan Drive) Phase $1 \& 2$ Bus Rapid Transit

More information about the RTS study can be found in Appendix C.
StarMetro is committed to the continued performance monitoring of the system so that everchanging needs of the community are met as the CRTPA develops and expands. Additionally, CRTPA staff is committed to working with StarMetro to promote transit opportunities in the area. The cooperative working relationship is a winning combination and can be seen as transit representatives are becoming more visible and vocal at the CRTPA's subcommittee meetings (technical advisory committee and citizen's multi-modal advisory committee meetings.

It should be noted that StarMetro is also the Community Transportation Coordinator (CTC) for Leon County. The CTC is responsible for overseeing the operations of the local transportation disadvantaged coordinating board for their county. These local coordinating boards are responsible for reviewing and discussing issues related to the provision (or lack thereof) of transportation services to those members in the community who are unable to provide their own transportation to vital services, such as medical appointments and employment due to physical or mental disability, economic status, or age. The CTC for Gadsden and Jefferson County is Big Bend Transit. The CTC for Wakulla County is the Senior Citizens Council. Information on the service needs in the respective counties inside the CRTPA boundary is shared with CRTPA and StarMetro staff. Coordination of this type helps in future planning of routes that can provide needed service to the transportation disadvantaged. Multi-county routes are understudy for feasibility and cost-sharing.

### 3.8 BICYCLE AND PEDESTRIAN PERFORMANCE MEASURES AND EVALUATION

The CRTPA is committed to expanding and improving the bicycle and pedestrian network in the CRTPA boundary. The commitment to planning for these modes of transportation was clear in the vision of the adopted Year 2025 Bicycle and Pedestrian Master Plan:
"Ensure that Tallahassee-Leon County becomes a premier community known for its safe, accessible and interconnected pedestrian and bicycle system that provides mobility for all ages and abilities supports economic opportunity, and enhances public health."
The initiation of a Bicycle and Pedestrian Master Plan for Tallahassee-Leon County was a turning point in transportation planning for this community. The Plan is strategic -- planning for facilities and programs to improve safety, connectivity and comfort for the users on a 20 -year horizon. The Plan development was built upon a combination of analytical methods, extensive research, and public participation. As with the Transit Renaissance Plan, discussed in the previous section, the Bicycle and Pedestrian Master Plan was initiated with the goal of reforming the transportation network into one that would not only improve upon the existing conditions for current users, but also expand facilities to entice new users and provide new options for travel.

Since the adoption of the Bicycle and Pedestrian Master Plan for Tallahassee-Leon County, the Long Range Transportation Plan (LRTP) for the CRTPA has been updated. The updated LRTP included the revolutionary Regional Mobility Plan (RMP), which incorporates the Bicycle and Pedestrian Master Plan. The RMP is inclusive of all mobility options and acknowledges them all as integral to overall mobility for the area. Bicycle, Pedestrian, Transit, and vehicular mobility are all planned for under the one RMP document.

The resolve to improve the attractiveness and efficiency of the bicycle and pedestrian system in the CRTPA area is high. The Bicycle and Pedestrian Master, currently a stand-alone document, is currently in the process of being updated for the entire CRTPA area as part of the Regional Mobility Plan. The intent is to maximize the non-automotive mobility options available to people throughout the region for daily living. In the current economy, the region needs to be forward-thinking and provide for more affordable methods of transportation. Recognizing the importance of cost-effective choices for mobility, the local governments of Gadsden County and Wakulla County have submitted applications for the development of Bicycle and Pedestrian Master Plans for their jurisdictions through the SAFETEA-LU Transportation Enhancement Funding Program. Additionally, active neighborhood groups are submitting applications for SAFETEA-LU funding for neighborhood sidewalk projects connecting their homes to area businesses, schools, and parks in the City of Tallahassee. Clearly the region is exhibiting signs of multimodal acceptance, and a desire turn ideas into reality via funding projects.

In 2009, the City of Tallahassee received a Bronze Status designation as a "Bicycle Friendly Community" through the League of American Bicyclists. Through the application process, much data had to be gathered on the bicycle programs and infrastructure available within the City of Tallahassee. The designation recognizes communities for their efforts to increase the safety for cyclists and for providing infrastructure and planning that enables and encourages safe cycling in the community. The Bronze Status designation was a step forward for the CRTPA local government as it constitutes an outward statement that the local government is bicycle friendly, and sees value in this transportation mode as not only an environmentally wise transportation choice, but an economical alternative to congestion.

The "Bicycle Friendly Community" Bronze Status designation will be reviewed by the League of American Bicyclists in October of 2013. The City of Tallahassee is working diligently to increase its status designation in the next cycle. Leon County will also be applying for a designation from the League of American Bicyclists in 2013.

### 3.8.1 Identified High Crash Roadway Segments

Pedestrian and bicycle safety is an important performance measure in the evaluation of the effectiveness of implementing new pedestrian and bicycle facilities. Pedestrian and bicycle crash are monitored to identify problem areas.
Figures 10 through 13 details the available pedestrian crashes for the last 5 years, 2008 through 2010 for Leon, Gadsden, Jefferson, and Wakulla Counties. Figures 14 through 17 details the available bicycle crashes for the last 5 years, 2008 through 2010 for Leon, Gadsden, Jefferson, and Wakulla Counties.


| Capital Region Transportation Planning Agency--2010 Pedestrian Crashes--Leon County |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SYSTEM | CRASHNUM | CRASHDATE | CRASHTIME | DAYOFWEEK | ROAD NAME ON WHICH CRASH OCCURRED | ROAD NAME TO THE NEAREST INTERSECTION CRASH OCCURRED |
| 1 | OFF | 108777310 | 2/1/2010 | 1700 | 1 | CALL ST | COPELAND AVE |
| 2 | OFF | 718887300 | 1/6/2010 | 0809 | 3 | LAFAYSTTE ST | INDIANHEAD DR |
| 3 | OFF | 718888130 | 1/8/2010 | 2018 | 5 | EDDIE RD | TUDOR RD |
| 4 | OFF | 718890110 | 1/16/2010 | 0129 | 6 | THARPE ST W | TRIMBLE LN |
| 5 | OFF | 718893930 | 1/29/2010 | 1932 | 5 | COLLEGE AVE W | MACOMB ST S |
| 6 | OFF | 718895870 | 2/5/2010 | 1928 | 5 | OCALA RD | HERITAGE GROVE CIR |
| 7 | OFF | 718898350 | 2/14/2010 | 2139 | 7 | MACOMB ST S | PENSACOLA ST |
| 8 | OFF | 718899630 | 2/18/2010 | 1045 | 4 | OLD BAINBRIDGE RD | BREVARD ST W |
| 9 | OFF | 718900110 | 2/20/2010 | 0230 | 6 | 1505 W THARPE ST | 1505 W THARPE ST |
| 10 | OFF | 718905020 | 3/12/2010 | 1954 | 5 | SAXON ST | POPPY ST |
| 11 | OFF | 718905180 | 3/13/2010 | 1752 | 6 | 805 COBLE ST | UNKNOWN |
| 12 | OFF | 718915300 | 4/17/2010 | 1637 | 6 | BREVARD ST | MALCOMB ST |
| 13 | OFF | 718917250 | 4/25/2010 | 0357 | 7 | ALABAMA ST | ABRAHAM ST |
| 14 | OFF | 718922460 | 5/16/2010 | 0016 | 7 | ALLEN RD | MONROE ST N |
| 15 | OFF | 718923210 | 5/15/2010 | 1107 | 6 | PENSACOLA ST | DUVAL ST S |
| 16 | OFF | 718923650 | 5/21/2010 | 0200 | 5 | 459 W COLLEGE ST | UNKNOWN |
| 17 | OFF | 718924820 | 5/27/2010 | 0806 | 4 | MADISON ST | DUVAL ST |
| 18 | OFF | 718928100 | 6/9/2010 | 0546 | 3 | 1400 BLK VILLAGE SQ BLV | FINANCIAL PLZ |
| 19 | OFF | 718930060 | 6/17/2010 | 2113 | 4 | 1444 MICCOSUKEE RD | UNKNOWN |
| 20 | OFF | 718930120 | 6/17/2010 | 1324 | 4 | KILLEARN CENTER BLVD | VILLAGE SQUARE BLVD |
| 21 | OFF | 718934140 | 7/2/2010 | 1652 | 5 | DEWEY ST | ACADEMIC WAY |
| 22 | OFF | 718934430 | 7/3/2010 | 1552 | 6 | ORANGE AVE | BRIGHTON ST |
| 23 | OFF | 718935140 | 7/7/2010 | 1727 | 3 | 900 OCALA RD | 900 OCALA RD |
| 24 | OFF | 718935790 | 7/10/2010 | 0145 | 6 | VIRGINIA ST | COPELAND ST |
| 25 | OFF | 718942520 | 8/7/2010 | 1516 | 6 | MISSION RD | VISTA RISE DR |
| 26 | OFF | 718943110 | 8/10/2010 | 0942 | 2 | JEFFERSON ST W | WOODWARD AVE S |
| 27 | OFF | 718948190 | 8/27/2010 | 2048 | 5 | 1702 KEITH ST | UNKNOWN |
| 28 | OFF | 718956280 | 9/25/2010 | 1514 | 6 | MADISON ST | GAY ST |
| 29 | OFF | 718956400 | 9/25/2010 | 2059 | 6 | COLORADO ST | INDIANA ST |
| 30 | OFF | 718957230 | 9/27/2010 | 0745 | 1 | MACOMB ST | PENSACOLA ST |
| 31 | OFF | 718957570 | 9/28/2010 | 1740 | 2 | COUNTRY CLUB DR | CANTON CIR |
| 32 | OFF | 718957640 | 9/28/2010 | 1755 | 2 | PENSACOLA ST | WOODWARD AVE S |
| 33 | OFF | 718958480 | 10/2/2010 | 0230 | 6 | DUVAL ST | 7TH AVE W |
| 34 | OFF | 718958860 | 10/3/2010 | 1507 | 7 | CONNIE DR | VOGUE DR |
| 35 | OFF | 718958930 | 10/3/2010 | 1922 | 7 | OLD BAINBRIDGE | BREVARD ST W |
| 36 | OFF | 718960430 | 10/7/2010 | 2000 | 4 | CALL ST | CHAPEL DRIVE |
| 37 | OFF | 718961140 | 10/11/2010 | 1835 | 1 | 3360 THOMAS BUTLER RD | UNKNOWN |
| 38 | OFF | 718961630 | 10/13/2010 | 1108 | 3 | CALL ST W | STADIUM DR |
| 39 | OFF | 718967000 | 10/30/2010 | 2038 | 6 | PALMER AVE | M L KING BLVD |
| 40 | OFF | 718967030 | 10/30/2010 | 2139 | 6 | PASCO ST | LIBERTY ST |
| 41 | OFF | 718967250 | 10/31/2010 | 1208 | 7 | BELLE VUE WAY | CARDINAL CT |
| 42 | OFF | 718972400 | 11/17/2010 | 2028 | 3 | STADIUM DR | CALL ST |
| 43 | OFF | 718972850 | 11/19/2010 | 0827 | 5 | PARK AVE E | BLAIR STONE RD S |
| 44 | OFF | 718974680 | 11/28/2010 | 0313 | 7 | 1698 STUCKEY AVE | UNKNOWN |
| 45 | OFF | 718975690 | 12/2/2010 | 1631 | 4 | PEDRICK RD | SIOUX TRACE |
| 46 | OFF | 718977930 | 12/9/2010 | 2345 | 4 | PAUL RUSSELL RD | LARETTE DR |
| 47 | OFF | 718981790 | 12/29/2010 | 1330 | 3 | PENSACOLA ST | ADAMS ST |
| 48 | OFF | 719747310 | 8/31/2010 | 0624 | 2 | SPRINGHILL RD | SPRINIL RD |
| 49 | OFF | 731696790 | 2/10/2010 | 1213 | 3 | UNIVERSITY WAY | GRAY ST |
| 50 | OFF | 770003390 | 5/25/2010 | 1900 | 2 | 17TH AVE E | COYNERS ST |
| 51 | OFF | 770139790 | 6/4/2010 | 2225 | 5 | CR 149A DILLS RD | BROCK RD |
| 52 | OFF | 770144400 | 7/2/2010 | 2218 | 5 | BUCKLAKE ROAD | REDFIELD ROAD |
| 53 | OFF | 770144440 | 7/22/2010 | 0630 | 4 | MICCOSUKEE ROAD | CRUMP ROAD |
| 54 | OFF | 770156150 | 5/29/2010 | 2130 | 6 | TENNEL ROAD | PETERS ROAD |
| 55 | OFF | 770156260 | 8/4/2010 | 1516 | 3 | HUTCHINSON FERRY RD | GLORY ROAD |
| 56 | OFF | 770161170 | 7/3/2010 | 2125 | 6 | AENON CHURCH RD | SR 20 |
| 57 | OFF | 813118500 | 8/18/2010 | 2035 | 3 | OTTER LAKE RD | PIGOTT ROAD |
| 58 | OFF | 813118910 | 8/11/2010 | 2106 | 3 | SHADEVILLE RD | SR 61 |


| Capital Region Transportation Planning Agency--2010 Pedestrian Crashes--Leon County |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SYSTEM | CRASHNUM | CRASHDATE | CRASHTIME | DAYOFWEEK | ROAD NAME ON WHICH CRASH OCCURRED | ROAD NAME TO THE NEAREST INTERSECTION CRASH OCCURRED |
| 59 | OFF | 905754170 | 2/5/2010 | 1705 | 5 | SALINGER WAY | BECKETT RD |
| 60 | OFF | 905771180 | 9/11/2010 | 1919 | 6 | BILL HEADLEY RD | BANNESMAN RD |
| 61 | OFF | 908361120 | 11/12/2010 | 1730 | 5 | COLLEGE AVE | DUVAL ST |
| 62 | OFF | 908362860 | 9/21/2010 | 1750 | 2 | PARK AVE | CAPITAL CIR |
| 63 | OFF | 908364250 | 9/17/2010 | 0239 | 5 | MICCOSUKEE RD | CRUMP RD |
| 64 | OFF | 908364420 | 6/9/2010 | 2300 | 3 | WESTWAY ROAD | POINSETTIA AVE |
| 65 | OFF | 908373690 | 10/6/2010 | 1038 | 3 | SUMMERBROOKE DR | LOCHKNOLL LN |
| 66 | OFF | 908375990 | 9/24/2010 | 0700 | 5 | WHIPPOORWILL | HEADWATER CREEK DR |
| 67 | OFF | 908376030 | 11/6/2010 | 1636 | 6 | BLOUNTSTOWN ST | NEKOMA LN |
| 68 | OFF | 908382560 | 10/26/2010 | 1546 | 2 | PENSACOLA ST | COPELAND ST S |
| 69 | OFF | 908398690 | 11/9/2010 | 1235 | 2 | BOLD VENTURE TRL | APOLLO TRL |
| 70 | ON | 110788860 | 8/2/2010 | 1144 | 1 | TENNESSEE ST | WOODWARD AVE N |
| 71 | ON | 110227120 | 6/3/2010 | 2102 | 4 | WOODVILLE HWY | ROSS RD |
| 72 | ON | 718950800 | 9/6/2010 | 1409 | 1 | TENNESSEE ST | DEWEY ST N |
| 73 | ON | 718963590 | 10/20/2010 | 0710 | 3 | CRAWFORDVILLE RD | GAILE AVE |
| 74 | ON | 718914910 | 4/16/2010 | 1149 | 5 | RICHVIEW RD | APALACHEE PKWY |
| 75 | ON | 718910760 | 4/2/2010 | 2011 | 5 | THOMASVILLE RD | BETTON RD |
| 76 | ON | 718981610 | 12/29/2010 | 1512 | 3 | ADAMS ST | JENNINGS ST |
| 77 | ON | 718940530 | 7/30/2010 | 2020 | 5 | MAHAN DR | CAPITAL CIR |
| 78 | ON | 718933870 | 7/1/2010 | 2246 | 4 | TENNESSEE ST | BASIN ST |
| 79 | ON | 718902580 | 3/2/2010 | 1153 | 2 | TENNESSEE ST W | COPELAND ST N |
| 80 | ON | 718951870 | 9/9/2010 | 1528 | 4 | REMINGTON GREEN N | CAPITAL CIR |
| 81 | ON | 718958800 | 10/2/2010 | 2323 | 6 | MONROE ST | PUTNAM DR |
| 82 | ON | 718956070 | 9/24/2010 | 1809 | 5 | TENNESSEE ST | CALHOUN ST N |
| 83 | ON | 718901790 | 2/27/2010 | 0135 | 6 | TENNESSEE ST | DEWEY ST N |
| 84 | ON | 718907820 | 3/23/2010 | 0751 | 2 | PENSACOLA ST | WHITE DR L |
| 85 | ON | 718939930 | 7/28/2010 | 1511 | 3 | LAKE BRADFORD R | GAINES ST |
| 86 | ON | 718934570 | 7/4/2010 | 2229 | 7 | TENNESSEE ST | WEST 10 |
| 87 | ON | 718917090 | 4/24/2010 | 1420 | 6 | PENSACOLA ST | LIPONA RD S |
| 88 | ON | 718962110 | 10/15/2010 | 0110 | 5 | BRONOUGH ST N | TENNESSEE ST |
| 89 | ON | 718951710 | 9/9/2010 | 1554 | 4 | MONROE ST N | 4TH AVE |
| 90 | ON | 718962980 | 10/17/2010 | 1946 | 7 | DIXIE DR | TENNESSEE ST W |
| 91 | ON | 718930870 | 6/21/2010 | 0727 | 1 | 110 | MONROE ST N |
| 92 | ON | 718891660 | 1/21/2010 | 1424 | 4 | CALL ST | TENNESSEE ST |
| 93 | ON | 718970100 | 11/9/2010 | 1703 | 2 | MICCOSUKEE RD | MAGNOLIA DR N |
| 94 | ON | 718929050 | 6/13/2010 | 1752 | 7 | CALHOUN ST N | TENNESSEE ST |
| 95 | ON | 718958430 | 10/1/2010 | 1804 | 5 | KISSIMMEE ST | LAKE BRADFORD RD |
| 96 | ON | 718923030 | 5/18/2010 | 1736 | 2 | PENSACOLA ST | AUSLEY RD S |
| 97 | ON | 718964080 | 10/22/2010 | 0220 | 5 | TENNESSEE ST W | RAVEN ST |
| 98 | ON | 718961340 | 10/12/2010 | 0753 | 2 | PENSACOLA ST | CHAPEL DR |
| 99 | ON | 718888170 | 1/9/2010 | 0102 | 6 | TENNESSEE ST | COPELAND ST N |
| 100 | ON | 718887600 | 1/6/2010 | 1115 | 3 | SR 63 | CALLAWAY RD |
| 101 | ON | 718906970 | 3/20/2010 | 0231 | 6 | TENNESSEE ST | BREVARD ST |
| 102 | ON | 718912720 | 4/9/2010 | 1221 | 5 | APALACHEE PKWY | ALBRITTON DR |
| 103 | ON | 718981470 | 12/27/2010 | 2124 | 1 | US 27 | MARIANNA DR |
| 104 | ON | 718923640 | 5/20/2010 | 1611 | 4 | OCALA RD | TENNESSEE ST W |
| 105 | ON | 718970950 | 11/12/2010 | 1814 | 5 | BASIN ST | TENNESSEE ST W |
| 106 | ON | 718976030 | 12/3/2010 | 1532 | 5 | PUTNAM DR | MONROE ST |
| 107 | ON | 731816840 | 4/21/2010 | 0809 | 3 | SPRINGHILL RD | ORANGE AVE |
| 108 | ON | 770130360 | 5/17/2010 | 1750 | 1 | US 90 | IDA RD |
| 109 | ON | 770163280 | 10/29/2010 | 1500 | 5 | BEN BOSTICK RD | US 90 |
| 110 | ON | 770156460 | 9/29/2010 | 2106 | 3 | US 319 | NEW LIGHT CHURCH RD |
| 111 | ON | 820107920 | 12/11/2010 | 1846 | 6 | US 27 | MCNAIR RD |
| 112 | ON | 819960560 | 12/11/2010 | 2335 | 6 | US 90 | WOODBERRY RD |
| 113 | ON | 820454530 | 12/17/2010 | 1150 | 5 | 110 | CR 270A |
| 114 | ON | 905751360 | 3/14/2010 | 2300 | 7 | 110 | WB ENT FROM NB SR 63 L |
| 115 | ON | 905750500 | 3/17/2010 | 1415 | 3 | MERIDIAN ST N | TENNESSEE ST |
| 116 | ON | 905774960 | 11/11/2010 | 1630 | 4 | SR 10 | BUCK LAKE RD |


| Capital Region Transportation Planning Agency--2010 Pedestrian Crashes--Leon County |  |  |  |  |  |  |  |
| :--- | :--- | :--- | ---: | :--- | :--- | :--- | :--- |
|  | SYSTEM | CRASHNUM | CRASHDATE | CRASHTIME | DAYOFWEEK | ROAD NAME ON WHICH <br> CRASH OCCURRED | ROAD NAME TO THE NEAREST <br> INTERSECTION CRASH OCCURRED |
| 117 | ON | 905786770 | $11 / 26 / 2010$ | 1815 | 5 | CRAWFORDVILLE RD | RIDGE RD |
| 118 | ON | 908355860 | $2 / 3 / 2010$ | 2240 | 3 | TENNESSEE ST | OCALA RD |
| 119 | ON | 908377170 | $10 / 20 / 2010$ | 1655 | 3 | I | MONROE ST |
| 120 | ON | 908356130 | $2 / 23 / 2010$ | 2004 | 2 | ORANGE AVE E | SR 61 |
| 121 | ON | 908368190 | $10 / 29 / 2010$ | 1546 | 5 | OCALA RD S | PENSACOLA ST |
| 122 | ON | 908390480 | $1 / 1 / 2010$ | 0618 | 5 | SR 63 | HARRIETT DR |
| 123 | ON | 908376160 | $9 / 28 / 2010$ | 1745 | 2 | PENSACOLA ST | APPLEYARD DR |
| 124 | ON | 908359260 | $10 / 10 / 2010$ | 1349 | 7 | FOUR POINTS WAY | CRAWFORDVILLE RD |
| 125 | ON | 908383210 | $11 / 22 / 2010$ | 1930 | 1 | BLOUNTSTOWN HWY | CRICKET RD |



| Capital Region Transportation Planning Agency--2010 Pedestrian Crashes--Gadsden County |  |  |  |  |  |  |  |
| :--- | :--- | :--- | ---: | :--- | :--- | :--- | :--- | :--- |
|  | SYSTEM | CRASHNUM | CRASHDATE | CRASHTIME | DAYOFWEEK | ROAD NAME ON WHICH <br> CRASH OCCURRED | ROAD NAME TO THE NEAREST <br> INTERSECTION CRASH OCCURRED |
| 1 | OFF | 770003390 | $5 / 25 / 2010$ | 1900 | 2 | 17TH AVE E | COYNERS ST |
| 2 | OFF | 770156150 | $5 / 29 / 2010$ | 2130 | 6 | TENNEL ROAD | PETERS ROAD |
| 3 | OFF | 770156260 | $8 / 4 / 2010$ | 1516 | 3 | HUTCHINSON FERRY RD | GLORY ROAD |
| 4 | ON | 770163280 | $10 / 29 / 2010$ | 1500 | 5 | BEN BOSTICK RD | US 90 |
| 5 | ON | 820107920 | $12 / 11 / 2010$ | 1846 | 6 | US 27 | MCNAIR RD |
| 6 | ON | 819960560 | $12 / 11 / 2010$ | 2335 | 6 | US 90 | WOODBERRY RD |
| 7 | ON | 820454530 | $12 / 17 / 2010$ | 1150 | 5 | 110 | CR 270A |




| Capital Region Transportation Planning Agency--2010 Pedestrian Crashes--Wakulla County |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | SYSTEM | CRASHNUM | CRASHDATE | CRASHTIME | DAYOFWEEK | ROAD NAME ON WHICH <br> CRASH OCCURRED | ROAD NAME TO THE NEAREST <br> INTERSECTION CRASH OCCURRED |
| 1 | OFF | 813118500 | $8 / 18 / 2010$ | 2035 | 3 | OTTER LAKE RD | PIGOTT ROAD |
| 2 | OFF | 813118910 | $8 / 11 / 2010$ | 2106 | 3 | SHADEVILLE RD | SR 61 |
| 3 | ON | 770156460 | $9 / 29 / 2010$ | 2106 | 3 | US 319 | NEW LIGHT CHURCH RD |



| Capital Region Transportation Planning Agency--2010 Bicycle Crashes--Leon County |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SYSTEM? | CRASHNUM | CRASHDATE | CRASHTIME | DAYOFWEEK | ROAD NAME ON WHICH CRASH OCCURRED | ROAD NAME TO THE NEAREST INTERSECTION CRASH OCCURRED |
| 1 | OFF | 108776810 | 10/15/2010 | 1330 | 5 | CHIEFTAN WAY | CALL ST |
| 2 | OFF | 111124190 | 8/23/2010 | 1726 | 1 | JACKSON BLUFF RD | MABRY ST |
| 3 | OFF | 718894110 | 1/30/2010 | 1133 | 6 | FRANKLIN BLVD N | PARK AVE |
| 4 | OFF | 718898970 | 2/16/2010 | 0700 | 2 | CENTERVILLE DR | MEDICAL DR |
| 5 | OFF | 718900450 | 2/21/2010 | 1929 | 7 | LAFAYETTE ST | MARVIN ST |
| 6 | OFF | 718902380 | 3/1/2010 | 1451 | 1 | GADSDEN ST N | BREVARD ST E |
| 7 | OFF | 718903140 | 3/3/2010 | 1428 | 3 | UNKNOWN | UNKNOWN |
| 8 | OFF | 718904500 | 3/10/2010 | 1202 | 3 | MISSION RD | THARPE ST |
| 9 | OFF | 718908410 | 3/25/2010 | 0900 | 4 | CALL ST | CHAPEL DR |
| 10 | OFF | 718910400 | 4/1/2010 | 1840 | 4 | CONTINENTAL AVE | OCALA RD |
| 11 | OFF | 718913210 | 4/10/2010 | 1938 | 6 | RIDGE RD N | SPRINGSAX RD |
| 12 | OFF | 718914320 | 4/14/2010 | 1155 | 3 | EUGENIA ST | PINELLAS ST |
| 13 | OFF | 718920130 | 5/4/2010 | 2205 | 2 | BRONOUGH ST S | GEORGIA ST W |
| 14 | OFF | 718927000 | 6/3/2010 | 1557 | 4 | BUFORD BLVD | CENTERVILLE RD |
| 15 | OFF | 718927410 | 6/6/2010 | 1907 | 7 | LAURA LEE AVE | KEVIN ST |
| 16 | OFF | 718931640 | 6/23/2010 | 2044 | 3 | VICTORIA ST | BETHUNE ST |
| 17 | OFF | 718932450 | 6/27/2010 | 1132 | 7 | HIGH RD | CONTINENTAL AVE |
| 18 | OFF | 718932760 | 6/28/2010 | 1740 | 1 | LEVY AVE | PAUL DIRAC DR E |
| 19 | OFF | 718940120 | 7/29/2010 | 1606 | 4 | DESOTO PARK DR | LAFAYETTE ST |
| 20 | OFF | 718942320 | 8/6/2010 | 1646 | 5 | BRONOUGH ST N | GEORGIA ST |
| 21 | OFF | 718943190 | 8/10/2010 | 1446 | 2 | BRONOUGH ST N | CAROLINA ST W |
| 22 | OFF | 718944780 | 8/16/2010 | 1728 | 1 | RAYMOND DIEHL RD | RAYMOND DIEHL BUSINESS LN |
| 23 | OFF | 718944810 | 8/16/2010 | 1029 | 1 | WOODWARD ST | ST AUGUSTINE ST |
| 24 | OFF | 718946940 | 8/24/2010 | 1242 | 2 | 3000 JACKSON BLUFF RD | JACKSONBLUFF RD |
| 25 | OFF | 718947450 | 8/25/2010 | 1411 | 3 | OCALA RD | RUMBA LN |
| 26 | OFF | 718949090 | 8/31/2010 | 1318 | 2 | MARKET ST | MACLAY BLVD |
| 27 | OFF | 718949170 | 8/31/2010 | 1755 | 2 | OLD BAINBRIDGE RD | THARPE ST |
| 28 | OFF | 718951690 | 9/9/2010 | 1415 | 4 | HIGH RD | CONTINENTAL AVE |
| 29 | OFF | 718953070 | 9/13/2010 | 1717 | 1 | 475 APPLEYARD DR | UNKNOWN |
| 30 | OFF | 718956330 | 9/25/2010 | 1845 | 6 | GAINES ST E | MERIDIAN RD S |
| 31 | OFF | 718957650 | 9/29/2010 | 0820 | 3 | OLD ST AUGUSTINE RD | APAKIN NENE |
| 32 | OFF | 718959240 | 10/4/2010 | 1811 | 1 | COLLEGE AVE | MACOMB ST |
| 33 | OFF | 718959550 | 10/5/2010 | 1817 | 2 | WOODWARD AVE | ST AUGUSTINE ST W |
| 34 | OFF | 718962800 | 10/16/2010 | 1828 | 6 | CALL ST W | COPELAND ST |
| 35 | OFF | 718966430 | 10/29/2010 | 1712 | 5 | SHUMARD OAK DR | CEP WAY |
| 36 | OFF | 718970400 | 11/10/2010 | 1629 | 3 | 3535 ROBERTS AVE | UNKNOWN |
| 37 | OFF | 718972350 | 11/17/2010 | 1535 | 3 | BRONOUGH ST N | GEORGIA ST W |
| 38 | OFF | 718973120 | 11/19/2010 | 2123 | 5 | OLD ST AUGUSTINE RD | BLAIR STONE RD S |
| 39 | OFF | 718973240 | 11/20/2010 | 1820 | 6 | CALL ST W | WHITEHALL ST |
| 40 | OFF | 718975290 | 11/30/2010 | 2234 | 2 | PARK AVE E | FRANKLIN BLVD N |
| 41 | OFF | 731696790 | 2/10/2010 | 1213 | 3 | UNIVERSITY WAY | GRAY ST |
| 42 | OFF | 731697800 | 4/20/2010 | 2010 | 2 | CALL ST | MURPHREE ST |
| 43 | OFF | 765656720 | 9/30/2010 | 1842 | 4 | CALL ST | CONRADI ST |
| 44 | OFF | 770134870 | 7/12/2010 | 1757 | 1 | CR 268 | JOE ADAMS RD |
| 45 | OFF | 770156230 | 7/22/2010 | 1815 | 4 | CR 274 | IMPERIAL NURSERY RD |
| 46 | OFF | 770163590 | 7/9/2010 | 0908 | 5 | BANNERMAN RD | SR 61 |
| 47 | OFF | 801588580 | 1/8/2010 | 1654 | 5 | LAURA ST | 11TH ST S |
| 48 | OFF | 801589070 | 6/15/2010 | 1615 | 2 | B W ROBERTS ST | SHADOW ST S |
| 49 | OFF | 908364420 | 6/9/2010 | 2300 | 3 | WESTWAY ROAD | POINSETTIA AVE |
| 50 | OFF | 908369690 | 11/30/2010 | 0930 | 2 | CARE DR | BUFORD BLVD |
| 51 | OFF | 914996100 | 4/30/2010 | 0640 | 5 | SPRING CREEK HWY | MAIDO ST |
| 52 | ON | 106996830 | 40381 | 1248 | 4 | TENNESSEE ST | DEWEY ST N |
| 53 | ON | 718943310 | 40400 | 2116 | 2 | 7TH AVE E | MONROE ST N |
| 54 | ON | 718938410 | 40379 | 0540 | 2 | ADAMS ST | ORANGE AVE |
| 55 | ON | 718971490 | 40496 | 0013 | 7 | OCALA RD S | PENSACOLA ST |
| 56 | ON | 718953040 | 40434 | 2016 | 1 | OCALA RD | TENNESSEE ST W |
| 57 | ON | 718910710 | 40270 | 1750 | 5 | CONRADI ST | TENNESSEE ST |
| 58 | ON | 718958400 | 40452 | 1724 | 5 | PENSACOLA ST | AUSLEY RD S |


| Capital Region Transportation Planning Agency--2010 Bicycle Crashes--Leon County |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | SYSTEM? | CRASHNUM | CRASHDATE | CRASHTIME | DAYOFWEEK | ROAD NAME ON WHICH <br> CRASH OCCURRED | ROAD NAME TO THE NEAREST <br> INTERSECTION CRASH OCCURRED |
| 59 | ON | 718920470 | 40304 | 1325 | 4 | MONROE ST | GAINES ST |
| 60 | ON | 718947650 | 40416 | 0803 | 4 | ORANGE AVE | WAHNISH WAY |
| 61 | ON | 718903220 | 40240 | 1830 | 3 | MONROE ST | PAUL RUSSELL RD |
| 62 | ON | 718932090 | 40354 | 1559 | 5 | MONROE ST N | 7TH AVE E |
| 63 | ON | 718959170 | 40455 | 1525 | 1 | EDWARDS ST | PENSACOLA ST |
| 64 | ON | 718959630 | 40455 | 1414 | 1 | LAKE BRADFORD RD | JACKSON BLUFF RD |
| 65 | ON | 718891960 | 40200 | 0950 | 5 | 5TH AVE E | MONROE ST N |
| 66 | ON | 718893370 | 40206 | 1140 | 4 | EPPES DR | LAKE BRADFORD RD |
| 67 | ON | 718913760 | 40280 | 1643 | 1 | CAPITAL CIR | REMINGTON GREEN |
| 68 | ON | 718924380 | 40323 | 1053 | 2 | HIGH RD | TENNESSEE ST W |
| 69 | ON | 718935340 | 40367 | 1315 | 4 | PENSACOLA ST | AUSLEY RD S |
| 70 | ON | 718975130 | 40512 | 1000 | 2 | TENNESSEE ST | CALHOUN ST N |
| 71 | ON | 731816580 | 40186 | 1542 | 5 | JACKSON BLUFF RD | BLOUNTSTOWN HWY |
| 72 | ON | 765658880 | 40366 | 1425 | 3 | THOMASVILLE RD | PROCTOR RD |
| 73 | ON | 908375890 | 40495 | 1130 | 6 | TENNESSEE ST | BICYCLE RD |



| Capital Region Transportation Planning Agency--2010 Bicycle Crashes--Gadsden County |  |  |  |  |  |  |  |
| :--- | :--- | :--- | ---: | :--- | :--- | :--- | :--- |
|  | SYSTEM | CRASHNUM | CRASHDATE | CRASHTIME | DAYOFWEEK | ROAD NAME ON WHICH <br> CRASH OCCURRED | ROAD NAME TO THE NEAREST <br> INTERSECTION CRASH OCCURRED |
| 1 | OFF | 770134870 | $7 / 12 / 2010$ | 1757 | 1 | CR 268 | JOE ADAMS RD |
| 2 | OFF | 770156230 | $7 / 22 / 2010$ | 1815 | 4 | CR 274 | IMPERIAL NURSERY RD |
| 3 | OFF | 801588580 | $1 / 8 / 2010$ | 1654 | 5 | LAURA ST | 11TH ST S |
| 4 | OFF | 801589070 | $6 / 15 / 2010$ | 1615 | 2 | B W ROBERTS ST | SHADOW ST S |




## CRITA

Figure 17
Capital Region
Transportation
Planning
Agency--2010
Bicycle
Crashes
Wakulla County


There are no on-system 2010 bicycle crashes in Wakulla CountyOff System Urban Area MPO Boundary

In the past, efforts to manage traffic congestion were aimed primarily at expanding roadway infrastructure, typically adding additional through lanes for vehicular use. Today, it is understood that other measures can be employed to improve the operating efficiency of the existing transportation infrastructure. These measures are referred to as congestion management strategies.

### 4.1 EXISTING STRATEGIES TO REDUCE CONGESTION

There are numerous technologies and administrative policies that have been used nationally and locally to manage congestion. These strategies improve the efficiency of the existing transportation infrastructure, without necessarily demanding a large cash-outlay to accomplish it. These strategies can be grouped into three general categories of application: Policy, Alternative Mode, and Technological.

### 4.1.1 Policy Applications

## Employment

Policy applications can alter trip patterns on the roadways, and thereby, reduce congestion. For example, employers can allow flexible work hours, telecommuting, and incentives for carpooling to have a positive impact on alleviating congestion. The City of Tallahassee and Leon County governments, for example, both allow for flexible work hours and telecommuting within established parameters. Additionally, the City of Tallahassee provides incentives to employees for carpooling (in terms of parking fee waivers or reductions) and for choosing transit as a means to travel to and from work. Wakulla County through its Transportation Demand Management program promotes compressed work weeks, staggered and flexible work hours, ride sharing, telecommuting and transit fare discounts as applicable.

## Transportation and Land Use

Land Use policies are in effect in the CRTPA boundary that encourage mixed use developments, provide for sector planning, require provisions for bicycles, pedestrians, and transit stops in large scale developments, and which require good access management standards to be upheld. Together, these requirements shape the CRTPA into a livable space that is multi-modal friendly.

Access Management includes everything from curb cut restrictions on local roads to minimum interchange spacing on freeways. Restricting turning movements on local roads can reduce accidents and prevent turning vehicles from impeding traffic flow. Other strategies include requiring shared access driveways, alleyways, and frontage roads when planning large scale developments or reviewing applicable site plans.

## Transportation Concurrency

Concurrency Management is another tool that is used in the CRTPA boundary to manage congestion. This tool allows the local government to protect the capacity of the roadway system by disallowing or limiting further development in an area that is projected to experience transportation failure as a result of the project. In regard to roads, a developer could be required
to construct additional travel lanes or make improvements to intersections, incorporate bicycle and pedestrian amenities into the development plan, provide money or infrastructure for transit, or reduce the size of the project as a condition of approval.

Although no longer required to conduct concurrency analyses on new developments, the City of Tallahassee, Leon County, Wakulla County, Jefferson County and Gadsden County will continue to utilize concurrency as a tool for managing roadway capacity.

CRTPA staff will coordinate with the CRTPA local governments, including those in Jefferson and Gadsden Counties to identify a regional mechanism for sustaining growth in a fiscally responsible manner. The creation of a mobility fee structure is currently being explored.

### 4.1.2 Transportation Systems Management Strategies for Congested Links

Transportation Systems Management (TSM) is an integrated program for optimizing the performance of existing infrastructure through the implementation of systems, services, and projects designed to preserve capacity and improve security, safety, and reliability. Below is a list of areas and specific strategies where TSM can be implemented to create a more efficient, safe, and mobile transportation facility.

## A. Transportation System Management Strategies

1. Traffic Signalization and Control

- New Signal Installation
- Modifying Signal Phase Sequences
- Signal Re-timing/Updating Timing Plans
- Signal Hardware Updates/Updating Equipment
- Signal Interconnection
- Demand-responsive Signal Systems
- Eliminate Unnecessary Traffic Control Signs

2. Intersection and Street Improvements

- Intersection/Street Widening
- Lane Assignment Changes/Re-striping
- Install Turn Lanes
- Turning Movement and Lane Use Restrictions
- Bus Loading Bays

3. Bottleneck Removal

- Re-striping
- Install Signage
- Add Lanes
- Reduce Merging and Weaving

4. Special Events

- Traffic Management Plans
- Signal Re-timing Plans
- Dynamic Lane Assignments

5. Access Management

- Turn Lanes
- Close Driveways/Driveway Spacing
- Access Spacing
- Median Treatments


## B. Travel Demand Strategies

1. Improve Transportation Options

- Alternative Work Schedules/Flex Time
- Commute Trip Reduction Programs
- Carpooling
- Telework/Telecommute
- Vanpooling
- HOV Priority/Managed Lanes
- Park and Ride
- Shuttle Services
- Bicycle and Pedestrian Improvements
- Transit Improvements
- Car Sharing/Ride Leasing/Station Car
- Taxi Service Improvements
- On-Site Employee Services
- Live Near Your Work
- Worksite Locations and Design
- Real-Time Commuter Services
- Advanced Route Planning

2. Incentives to Use Alternative Modes

- Commuter Financial Incentives
- Parking Management/Share Parking
- Congestion Pricing/Road Pricing
- Distance-Based Pricing/Pay-As-You-Drive Insurance
- Guaranteed Ride Home
- Parking-Time of Day Pricing

3. Sustainable Development

- Transit Oriented Development (TOD)
- Land Use Density and Clustering
- Location Efficient Development
- Bike/Transit System Integration
- Pedestrianized Streets
- Bicycle Parking Facilities

4. Policy and Institution Reform

- Asset Management
- Car-Free Parking
- Context Sensitive Design
- Road Space Reallocation
- Speed Reduction
- Street Reclaiming

5. TDM Marketing and Education

- TDM Marketing to Schools (K-12)
- Walking and Cycling Encouragement
- Transit and Alternative Mode Encouragement
- TDM Marketing/Ride Matching Services
- Transportation Management Associations (TMA)

6. TDM Planning and Evaluation

- Auto Dependency
- Land Use Evaluation
- Parking Evaluation
- Evaluating Pricing Strategies
- Evaluating Effectiveness of TDM Programs


## C. Intelligent Transportation System Strategies

1. Archived Data Management

- ITS Data Mart
- ITS Data Warehouse
- ITS Virtual Data Warehouse

2. Public Transportation

- Transit Vehicle Tracking
- Transit Fixed-Route Operations
- Demand Response Transit Operations
- Transit Passenger and Fare Management
- Transit Security
- Transit Maintenance
- Multimodal Coordination
- Transit Traveler Information

3. Traveler Information

- Broadcast Traveler Information
- Interactive Traveler Information
- Autonomous Route Guidance
- Dynamic Route Guidance
- Information Service Provider Based Trip Planning and Route Guidance
- Integrated Transportation Management/Route Guidance
- Yellow Pages and Reservations
- Dynamic Ridesharing
- In-Vehicle Signing

4. Traffic Management

- Network Surveillance
- Probe Surveillance
- Surface Street Control
- Freeway Control
- HOV/Managed Lane Management
- Traffic Information Dissemination
- Regional Traffic Control
- Traffic Incident Management System
- Traffic Forecast and Demand Management
- Electronic Toll Collection
- Emissions Monitoring and Management
- Virtual TMC and Smart Probe Data
- Standard Railroad Grade Crossing
- Advanced Railroad Grade Crossing
- Parking Facility Management
- Regional Parking Management
- Reversible Lane Management
- Speed Monitoring
- Roadway Closure Management
- Vehicle Safety Monitoring
- Driver Safety Monitoring
- Longitudinal Safety Warning
- Lateral Safety Warning
- Intersection Safety Warning
- Pre-Crash Restraint Development
- Driver Visibility Improvement
- Advanced Vehicle Longitudinal Control
- Advanced Vehicle Lateral Control
- Intersection Collision Avoidance
- Automated Highway System

5. Commercial Vehicle Operations

- Fleet Administration
- Freight Administration
- Electronic Clearance
- Commercial Vehicle Administrative Process
- Weigh-In Motion
- Roadside Commercial Vehicle Operation Safety
- On-Board Commercial Vehicle Operation and Freight Safety and Security
- Commercial Vehicle Operation Maintenance
- Hazardous Materials Management
- Roadside Hazardous Materials Security Detection and Mitigation
- Commercial Vehicle Driver Security Administration
- Freight Assignment Tracking

6. Emergency Management

- Emergency Call-Taking and Dispatch
- Emergency Routing
- Mayday and Alarms Support
- Roadside Service Patrols
- Transportation Infrastructure Protection
- Wide-Area Alert
- Early Warning System
- Disaster Response and Recovery
- Evacuation and Reentry Management
- Disaster Traveler Information

7. Maintenance and Construction Management

- Maintenance and Construction Vehicle and Equipment Tracking
- Maintenance and Construction Vehicle Maintenance
- Road Weather Data Collection
- Weather Information Processing and Distribution
- Roadway Automated Treatment
- Roadway Maintenance and Construction
- Work Zone Management
- Work Zone Safety
- Maintenance and Construction Activity Coordination


### 4.1.3 Parking Management

Parking Management strategies can also be used with great success in the CRTPA boundary. Parking management reduces automotive trips to work, school, and shopping by reducing the number of parking opportunities in the area, and/or charging a large amount of money to park in the few spaces that exist. A successful parking management strategy depends on the presence of
good bicycle, pedestrian, and transit services to and from large activity centers and neighborhoods to ensure that the lack of parking does not result in the inability to frequent the workplace, school, or shopping and entertainment centers.

### 4.1.4 Congestion Pricing

Charging user fees for roadway travel is another strategy to not only reduce congestion and encourage alternative mode travel (non-charged), it also generates revenue. Congestion pricing can include charging prices to utilize higher level of service travel lanes, charging for use of an entire road or "zone" and even charging fees for use of the entire roadway system.

Introducing "user fees" for the roadway system can alter traveler mode choice, route choice, and even residence, school, and employment choices. However, congestion pricing carries with it an environmental justice issue that is not yet well-understood throughout the nation. Additionally, there are revenue collection and investment issues as well as administrative and technological costs to be considered when entertaining this type of pricing system.

The CRTPA area has examined the possibility of congestion pricing and the use of toll facilities in updates to the long range transportation plan. However, because of the environmental justice issues and political questions of how to successfully and responsibly administer such a system in a planning area that is neither economically vibrant nor critically congested, congestion pricing strategies have not been embraced.

### 4.1.5 Alternative Modes

Congestion can be reduced through the introduction and promotion of alternative modes of transportation to the personal automobile. Improving and expanding the facilities that service pedestrians, bicyclists, and transit providers/users can have a positive impact on changing the way people travel. Additionally, investments in these modes is often less expensive than adding travel lanes to roadway segments.

Strategies that can be employed in the alternative mode category include increasing the amount of resources allocated to these modes in financial program documents (Long Range
Transportation Plan, Transportation Improvement Plans, etc.), building additional sidewalks and bicycle lanes, multi-use trails, park and ride lots for car pools and transit, funding activity center shuttles, and adding safety features to the amenities such as proper lighting, shelter, and emergency phones (call stations). Strategies to improve alternative modes of travel must include the evaluation of the existing facility for deficiencies related to the Americans with Disability Act (ADA).

The Regional Mobility Plan and the Trails and Greenways Master Plan provide a wealth of guidance on where additional bicycle and pedestrian improvements are needed in the CRTPA area. Likewise, the Tallahassee Transit Renaissance Plan provides guidance on the types of improvements that could really have a positive impact on transit ridership, and subsequently, congestion. Some of these suggestions include increasing transit coverage area, providing new shuttle services between employers and activity/shopping centers, providing more bus shelters, and constructing sidewalks to existing bus shelters.

### 4.2 TECHNOLOGY

### 4.2.1 Intelligent Transportation Systems

Intelligent Transportation Systems (ITS) have been shown to be very effective tools in the CMS process. ITS can be defined as the application of management strategies and technologies to better increase the efficiency and safety of the surface transportation system.

The benefits of an ITS system are many. Everything from increased traffic signal synchronization to hurricane evacuation to early warning systems for congested highways can be achieved through deployment of ITS strategies. The ITS aspect is important to the CMS process.
The City of Tallahassee has been continually updating and expanding its ITS architecture to provide more efficiency and safety to the transportation system. Each year dollars are spent on ITS architecture that can sophisticate our methods of detecting and responding to inefficiencies of the transportation network. In place are traffic monitoring cameras on a majority of the downtown traffic signals which allow engineers in the command station to observe traffic congestion problems over a wide area. Detection of problems at select intersections can alert engineers of a need to repair a signal, or adjust signal timing at that intersection. There are also advance traveler information signs on I-10 that can alert drivers of travel conditions within other areas of the boundary so that they can avoid certain areas, and reduce congestion.

### 4.2.2 Technology: Red Light Safety Cameras in the City of Tallahassee

Many Florida cities are utilizing red light camera safety programs to deter red light running violations. This technology improves public safety by providing an additional deterrent to traffic signal violations and reducing accidents and injuries associated with such violations. The automated Red Light Camera Safety Program provides consistent enforcement on a continual basis and significantly deters violations.
The City of Tallahassee officially began a red light camera safety program on July 1, 2010. Currently, there are nineteen (19) red light cameras installed at seven (7) intersections in the City of Tallahassee. The City of Tallahassee Red Light Camera Safety Program's goals are to provide additional enhancement for motorist safety at signalized intersections and to potentially free up law enforcement personnel to perform other duties.
Public Works staff has worked closely with the vendor to design, permit and construct these red light cameras. All equipment and installation costs are incurred by the vendor. The Red Light Camera Safety Program operates at no cost to the City.

## Current Red Light Safety Camera Locations

From July 2010 through March 2012, the City of Tallahassee has activated 19 red light cameras at intersections that have the highest numbers of traffic violations and collisions, including the following:

- Monroe Street/Tennessee Street (eastbound, southbound, and northbound approaches)
- Capital Circle Northeast/Killearn Center Boulevard (westbound and northbound approaches)
- Ocala Road/Tennessee Street (northbound, westbound, and eastbound approaches)
- Capital Circle Northwest/Tennessee Street (northbound, eastbound, and westbound approaches)
- Apalachee Parkway/Magnolia Drive (southbound, westbound, and eastbound approaches)
- Apalachee Parkway/Capital Circle southeast (northbound, eastbound, and westbound approaches)
- Capital Circle Northeast/Mahan Drive (northbound, southbound)

A violation occurs only when a motorist enters the intersection and crosses the stop line after the light has turned red. When a yield sign controls a dedicated right turn lane at a signalized intersection with a red light safety camera, the right turn lane is not monitored by the camera. However, red light safety cameras do monitor right turn lanes when the lane is controlled by a traffic signal and not a yield sign.
Every potential violation that is recorded by the camera is reviewed by a Tallahassee Police officer to determine if a violation did in fact occur. If it is determined that a violation did occur, a Notice of Violation is mailed to the vehicle owner's registered address within 30 days of the incident. This program has been approved by the State of Florida and specifies that motorists receiving a violation issued through the Red Light Camera Safety program will be issued a $\$ 158$ civil penalty. Funds collected from violations will be allocated to research brain and spinal cord injuries, the State of Florida and the City of Tallahassee. The City receives 47 percent of the fines collected, but has to pay the vendor for the installation, operation, and maintenance of the cameras from its share of the revenue. A recent Audit Report on the City's Red Light Camera Safety Program revealed that the City of Tallahassee ultimately retains approximately 15 percent of the monies collected through the red light camera program. While the City's primary goal is safety, revenue will also be used to pay for City services.
On June 8, 2011, the City Commission approved the installation of seven (7) additional camera locations. The intersections being monitored have some of the highest numbers of red light violations and traffic collisions in the City. The current agreement with the City's vendor allows for the installation of a total of 24 cameras. However, at this time the City of Tallahassee does not anticipate installing any additional cameras in addition to the 19 existing cameras. In the future, City staff will assess whether the continued use of red light cameras at each location is justified. Existing cameras may be relocated as needed for continued red light running enforcement.

### 4.2.3 Analysis, Design, and Construction

Software exists today that can be of great benefit to planners and engineers when determining if physical changes to the roadway network should be done to increase the efficiency or safety of the system. One strategy to reduce congestion is intersection redesign to increase capacity or allow pedestrian refuge. As an example: Existing roadways can also be redesigned or restriped to designate existing lanes as High Occupancy Vehicle Lanes (HOV lanes), or to create a new travel lane from the existing median or bicycle and pedestrian facilities in the existing right-of-way. Software and analysis techniques can help planners and engineers determine with more accuracy the viability of a particular proposed strategy on a given intersection or roadway link.

### 4.2.4 Coordination between Agencies

Leon County and the City of Tallahassee are jointly constructing a $\$ 47.5$ million, 90,000 square foot, multi-purpose facility to house the Tallahassee Regional Transportation Management Center, the Leon County Emergency Operations Center, a joint Emergency Dispatch Center for the County and City, the Leon County Emergency medical and Emergency Operations Center.
The Tallahassee Regional Management Center is a partnership between the City and FDOT that employs advanced technologies to improve traffic flow throughout the area. The center will monitor traffic flow along the 18 -mile I-10 corridor with traffic monitoring cameras every mile along with congestion and incident detectors every half-mile.
Coordination of incident management, emergency management, and ITS infrastructure reduces congestion by minimizing the secondary impacts caused by accidents. The coordination of emergency assets provides timely help at accidents, reducing the delay to those involved and to clear the incident from the roadway.

### 4.3 ACCIDENT REDUCTION COUNTER MEASURES

High crash areas threaten any community's health, safety, and welfare goals. Countermeasures have been formulated that can help with determining the causes behind high crash roadway segments and intersections. The table provided details recommended countermeasures by the Federal Highway Administration (FHWA) and the National Cooperative Highway Research Program (NCHRP) to alleviate high crashes areas.

Table 1 lists general countermeasures that can possibly be implemented to mitigate a particular crash type. Before implementing any countermeasure, accident data should be collected for the high crash area and analyzed for safety problems. The crash study should include but not be limited to the following: accident type, severity, contributing circumstances, environmental conditions, time of day, and location. Data should also be collected for at least three years for reliability and identification of crash patterns.
The countermeasures apply to crash patterns at unsignalized intersections, signalized intersections, and both types of intersections. For example, rear-end collisions at unsignalized and signalized intersections have specific countermeasures. Left-turn-head-on-collision countermeasures can be applied to both types of intersections. Most of the countermeasures affect the physical environment, but there are a few that relate to driver compliance and public education. The physical improvements address geometric design and traffic signals. Things to consider when deciding on a countermeasure in addition to its safety effectiveness are cost and time.

## Table 1

General Crash Pattern and Countermeasures*

* Implementing countermeasures should be based on appropriate studies

| Crash Pattern | Probable Cause | General Countermeasure |
| :---: | :---: | :---: |
| Left-turn head-on collisions | Large volume of left-turns | $\checkmark \quad$ Create one-way street <br> $\checkmark$ Widen road <br> $\checkmark$ Provide left-turn signal phases <br> $\checkmark$ Prohibit left-turns <br> $\checkmark$ Reroute left-turn traffic <br> $\checkmark$ Channelize intersection <br> $\checkmark \quad$ Install stop signs (see MUTCD) <br> $\checkmark$ Revise signal sequence <br> $\checkmark$ Provide turning arrows or guide markings (if there is a dual left-turn lane) <br> $\checkmark$ Provide multiphase traffic signal if warranted by MUTCD <br> $\checkmark$ Retime signals <br> $\checkmark \quad$ Provide center two-way left-turn lanes for four- and two-lane roads |
|  | Restricted sight distance | $\checkmark$ Remove obstacles <br> $\checkmark$ Provide adequate channelization <br> $\checkmark$ Provide special phase for left-turning traffic <br> $\checkmark$ Provide left-turn slots <br> $\checkmark$ Install warning signs <br> $\checkmark$ Reduce speed limit on approaches <br> $\checkmark$ Clear sight triangles <br> $\checkmark$ Redesign intersection approaches |
|  | Too-short yellow phase | $\checkmark \quad$ Increase yellow phase <br> $\checkmark$ Provide all-red phase |
|  | Absence of special left-turn phase | $\checkmark$ Provide special phase for left turning traffic |
|  | Excessive speed on approaches | $\checkmark$ Reduce speed on all approaches |

Table 1 General Crash Pattern and Countermeasures (continued)

| Crash Pattern | Probable Cause | General Countermeasure |
| :---: | :---: | :---: |
| Rear-end collisions at unsignalized intersections | Driver unaware of intersection | $\checkmark$ Install/improve warning signs <br> $\checkmark$ Consider flashing signal <br> $\checkmark$ Provide pavement markings with supplementary messages, such as "STOP AHEAD" <br> $\checkmark \quad$ Improve visibility of intersection through lighting or enhanced signing |
|  | Slippery surface | $\checkmark$ Overlay pavement <br> $\checkmark$ Provide adequate drainage <br> $\checkmark$ Reduce speed limit on approaches <br> $\checkmark$ Groove pavement <br> $\checkmark$ Provide "slippery when wet" signs |
|  | Large number of turning vehicles | $\checkmark \quad$ Create or lengthen left or right-turn lanes <br> $\checkmark$ Prohibit turns <br> $\checkmark \quad$ Increase curb radii |
|  | Inadequate roadway lighting | $\checkmark$ Improve roadway lighting |
|  | Lack of adequate gaps | $\checkmark \quad$ Provide traffic signal if warranted by MUTCD <br> $\checkmark$ Provide stop signs |
|  | Crossing pedestrians | $\checkmark$ Install/improve signing or marking of pedestrian crosswalks |
|  | Excessive speed on approach | $\checkmark$ Reduce speed limit on approaches |
| Rear-end collisions at signalized intersections | Slippery surface | $\checkmark$ Overlay pavement <br> $\checkmark$ Provide adequate drainage <br> $\checkmark$ Groove pavement <br> $\checkmark$ Reduce speed limit on approaches <br> $\checkmark$ Provide "slippery when wet" signs |
|  | Large number of turning vehicles | $\checkmark$ Create left-turn lanes for left turning vehicles hit from behind <br> $\checkmark$ Create right-turn lanes for right turning vehicles hit from behind <br> $\checkmark$ Prohibit turns <br> $\checkmark \quad$ Increase curb radii <br> $\checkmark$ Provide special phase for left-turning traffic <br> $\checkmark$ Provide roundabouts at appropriate locations |

Table 1 General Crash Pattern and Countermeasures (continued)

| Crash Pattern | Probable Cause | General Countermeasure |
| :---: | :---: | :---: |
| Rear-end collisions at signalized intersections | Poor visibility of signals | $\checkmark$ Install/improve advance warning devices <br> $\checkmark$ Install overhead signals <br> $\checkmark \quad$ Install 12-inch signal lenses (see MUTCD) <br> $\checkmark \quad$ Install visors <br> $\checkmark$ Install back plates <br> $\checkmark$ Relocate signals <br> $\checkmark$ Add additional signal heads <br> $\checkmark$ Remove obstacles <br> $\checkmark$ Reduce speed limit on approaches |
|  | Inadequate signal timing | $\checkmark$ Adjust yellow phase <br> $\checkmark$ Provide progression through a set of signalized intersections <br> $\checkmark$ Add all-red clearance |
|  | Unwarranted signals | $\checkmark$ Remove signals (see MUTCD) |
|  | Inadequate roadway lighting | $\checkmark$ Improve roadway lighting |
|  | Crossing pedestrians | $\checkmark$ Install/improve signing or marking of pedestrian crosswalks <br> $\checkmark$ Provide pedestrian "WALK" phase |
| Right-angle collisions at signalized intersections | Restricted sight distance | $\checkmark$ Remove sight obstructions or relocate signal hardware out of clear zone <br> $\checkmark$ Restrict or eliminate parking near corners <br> $\checkmark \quad$ Install warning signs (see MUTCD) <br> $\checkmark \quad$ Reduce speed limit on approaches <br> $\checkmark$ Channelize intersections <br> $\checkmark$ Clear sight triangles <br> $\checkmark$ Redesign intersection approaches <br> $\checkmark$ Install advance markings to supplement signs |
|  | Excessive speeding on approaches | $\checkmark$ Increase yellow phase <br> $\checkmark$ Install rumble strips |

Table 1 General Crash Pattern and Countermeasures (continued)

| Crash Pattern | Probable Cause | General Countermeasure |
| :---: | :---: | :---: |
| Right-angle collisions at signalized intersections | Poor visibility of signal | $\checkmark \quad$ Install advance warning devices <br> $\checkmark$ Install 12-inch signal lenses (see MUTCD) <br> $\checkmark$ Install overhead signal <br> $\checkmark$ Install visors <br> $\checkmark$ Install back plates <br> $\checkmark \quad$ Improve location of signal heads <br> $\checkmark$ Add additional signal heads <br> $\checkmark$ Add illuminated name signs |
|  | Inadequate signal timing | $\checkmark$ Adjust yellow phase <br> $\checkmark$ Provide all-red clearance phase <br> $\checkmark$ Add multiphase controller <br> $\checkmark \quad$ Install signal actuation <br> $\checkmark$ Retime signals—optimize change intervals <br> $\checkmark$ Provide progression through a set of signalized intersections |
|  | Inadequate roadway lighting | $\checkmark$ Improve roadway lighting |
|  | Inadequate advance intersection warning signs | $\checkmark$ Install advance intersection warning signs <br> $\checkmark \quad$ Improve visibility of intersections on approach(es) <br> $\checkmark \quad$ Improve visibility of signals and signs at intersections |
|  | Large total intersection volume | $\checkmark$ Retime signals <br> $\checkmark$ Add traffic lane |
|  | Traffic control and operational improvements | $\checkmark$ Employ multiphase signal operation <br> $\checkmark$ Optimize clearance intervals <br> $\checkmark$ Restrict or eliminate turning maneuvers (including right turns on red) <br> $\checkmark$ Employ signal coordination along a corridor or route <br> $\checkmark$ Employ emergency vehicle preemption <br> $\checkmark \quad$ Improve operation of pedestrian and bicycle facilities at signalized intersections <br> $\checkmark$ Remove unwarranted signal |

Table 1 General Crash Pattern and Countermeasures (continued)

| Crash Pattern | Probable Cause | General Countermeasure |
| :---: | :---: | :---: |
| Right-angle collisions at signalized intersections | Geometric improvements | $\checkmark$ Provide/improve left-turn channelization <br> $\checkmark$ Provide/improve right-turn channelization <br> $\checkmark$ Improve geometry of pedestrian and bicycle facilities <br> $\checkmark$ Revise geometry of complex intersections <br> $\checkmark$ Construct special solutions |
|  | Disobedience of traffic signal | $\checkmark$ Provide Public Information and Education (PI\&E) <br> $\checkmark$ Provide targeted conventional enforcement of traffic laws <br> $\checkmark$ Implement automated enforcement of red-light running (cameras) <br> $\checkmark$ Implement automated enforcement of approach speeds (cameras) <br> $\checkmark$ Control speed on approaches |
|  | Nearby driveways | $\checkmark$ Restrict access to properties using driveway closures or turn restrictions <br> $\checkmark$ Restrict cross-median access near intersections |
|  | Infrastructure treatments | $\checkmark \quad$ Improve drainage in intersection and on approaches <br> $\checkmark \quad$ Provide skid resistance in intersection and on approaches <br> $\checkmark$ Coordinate closely spaced signals near at-grade railroad crossings <br> $\checkmark$ Relocate signal hardware out of clear zone <br> $\checkmark$ Restrict or eliminate parking on intersection approaches |
| Right-angle collisions at unsignalized intersections | Restricted sight distance | $\checkmark$ Remove sight obstructions <br> $\checkmark$ Restrict parking near corners <br> $\checkmark$ Install stop signs (see MUTCD) <br> $\checkmark$ Install warning signs (see MUTCD) <br> $\checkmark \quad$ Install signal (see MUTCD) <br> $\checkmark$ Install yield signs (see MUTCD) <br> $\checkmark \quad$ Channelize intersection |
|  | Restricted sight distance | $\checkmark$ Install advance markings to supplement signs <br> $\checkmark$ Install guide markings |
|  | Large total intersection volume | $\checkmark \quad$ Install signal (see MUTCD) <br> $\checkmark$ Reroute through traffic |

Table 1 General Crash Pattern and Countermeasures (continued)

| Crash Pattern | Probable Cause | General Countermeasure |
| :---: | :---: | :---: |
| Right-angle collisions at unsignalized intersections | Excessive speed on approaches | $\checkmark \quad$ Install rumble strips <br> $\checkmark$ Provide targeted speed enforcement <br> $\checkmark \quad$ Provide traffic calming on intersection approaches through a combination of geometrics and traffic control devices <br> $\checkmark$ Post appropriate speed limit on intersection approaches |
|  | Inadequate roadway lighting | $\checkmark$ Improve roadway lighting |
|  | Inadequate advance intersection warning signs | $\checkmark$ Install advance intersection warning signs |
|  | Inadequate traffic control devices | $\checkmark \quad$ Upgrade traffic control devices <br> $\checkmark$ Increase enforcement |
|  | Poor visibility of signal | Clear sight triangles on stop- or yield-controlled approaches to intersections <br> $\checkmark$ Clear sight triangles in the medians of divided highways near intersections <br> $\checkmark$ Change horizontal and/or vertical alignment of approaches to provide more sight distance <br> $\checkmark$ Eliminate parking that restricts sight distance |
|  | Nearby driveways | $\checkmark$ Implement driveway closures/relocations <br> $\checkmark$ Implement driveway turn restrictions |
|  | Intersection conflicts through geometric design improvements | $\checkmark \quad$ Provide left-turn lanes at intersections <br> $\checkmark \quad$ Provide longer left-turn lanes at intersections <br> $\checkmark \quad$ Provide offset left-turn lanes at intersections <br> $\checkmark$ Provide bypass lanes on shoulders at T-intersections <br> $\checkmark \quad$ Provide left-turn acceleration lanes at divided highway intersections <br> $\checkmark$ Provide right-turn lanes at intersections <br> $\checkmark$ Provide longer right-turn lanes at intersections <br> $\checkmark$ Provide offset right-turn lanes at intersections <br> $\checkmark$ Provide right-turn acceleration lanes at intersections <br> $\checkmark \quad$ Provide full-width paved shoulders in intersection areas <br> $\checkmark$ Restrict or eliminate turning maneuvers by signing <br> $\checkmark \quad$ Close or relocate "high-risk" intersections |

Table 1 General Crash Pattern and Countermeasures (continued)

| Crash Pattern | Probable Cause | General Countermeasure |
| :---: | :---: | :---: |
| Right-angle collisions at unsignalized intersections | Intersection conflicts through geometric design improvements | Restrict or eliminate turning maneuvers by providing channelization or closing median openings <br> $\checkmark$ Convert four-legged intersections to two T-intersections <br> $\checkmark$ Convert offset T-intersections to four-legged intersections <br> $\checkmark$ Realign intersection approaches to reduce or eliminate intersection skew <br> $\checkmark$ Use indirect left-turn treatments to minimize conflicts at divided highway intersections <br> $\checkmark \quad$ Improve pedestrian and bicycle facilities to reduce conflicts between motorists and nonmotorists |
|  | Inadequate availability of gaps | Provide an automated real-time system to inform drivers of the suitability of available gaps for making turning and crossing maneuvers <br> Provide roadside markers or pavement markings to assist drivers in judging the suitability of available gaps for making turning and crossing maneuvers <br> $\checkmark$ Retime adjacent signals to create gaps at stop-controlled intersections |
|  | Drivers unaware of intersections | $\checkmark \quad$ Improve visibility of intersections by providing enhanced signing and delineation <br> $\checkmark \quad$ Improve visibility of the intersection by providing lighting <br> $\checkmark$ Install splitter islands on the minor-road approach to an intersection <br> $\checkmark \quad$ Provide a stop bar (or provide a wider stop bar) on minor-road approaches <br> $\checkmark$ Install larger regulatory and warning signs at intersections <br> $\checkmark \quad$ Call attention to the intersection by installing rumble strips on intersection approaches <br> $\checkmark \quad$ Provide dashed markings (extended left edgelines) for major road continuity across the median opening at divided highway intersections <br> $\checkmark \quad$ Provide supplementary stop signs mounted over the roadway <br> $\checkmark$ Provide pavement markings with supplementary messages, such as STOP AHEAD <br> $\checkmark$ Provide improved maintenance of stop signs <br> $\checkmark$ Install flashing beacons at stop-controlled intersections |
|  | Intersection traffic control | $\checkmark$ Avoid signalizing through roads <br> $\checkmark$ Provide all-way stop control at appropriate intersections <br> $\checkmark$ Provide roundabouts at appropriate locations |

Table 1 General Crash Pattern and Countermeasures (continued)

| Crash Pattern | Probable Cause | General Countermeasure |
| :---: | :---: | :---: |
| Right-angle collisions at unsignalized intersections | Violation of traffic laws | $\checkmark$ Provide targeted enforcement to reduce stop sign violations <br> $\checkmark$ Provide targeted public information and education on safety problems at specific intersections |
|  | Complex intersections (use to guide motorists more effectively) | $\checkmark \quad$ Provide turn path markings <br> $\checkmark$ Provide a double yellow centerline on the median opening of a divided highway at intersections <br> $\checkmark$ Provide lane assignment signing or marking at complex intersections |
| Pedestrian-vehicle collisions | Restricted sight distance (use to improve sight distance and/or visibility between motor vehicles and pedestrians) | $\checkmark$ Remove sight obstructions <br> $\checkmark$ Install pedestrians crossings <br> $\checkmark$ Install/improve pedestrian crossing signs <br> $\checkmark$ Reroute pedestrian paths <br> $\checkmark$ Prohibit curb parking near crosswalks <br> $\checkmark$ Provide crosswalk enhancements <br> $\checkmark$ Implement lighting/crosswalk illumination measures <br> $\checkmark$ Eliminate screening by physical objects <br> $\checkmark$ Add signals to alert motorists that pedestrians are crossing <br> $\checkmark$ Improve reflectorization/conspicuity of pedestrians |
|  | Inadequate protection for pedestrians (use to reduce pedestrian exposure to vehicular traffic) | $\checkmark$ Add pedestrian refuge islands <br> $\checkmark$ Install pedestrian barriers <br> $\checkmark$ Provide sidewalks/walkways and curb ramps <br> $\checkmark \quad$ Provide vehicle restriction/diversion measures <br> $\checkmark$ Install overpasses/underpasses |
|  | School crossing area | $\checkmark$ Use crossing guard at school crossing areas <br> $\checkmark$ Provide school route improvements |
|  | Inadequate signals | $\checkmark$ Install pedestrian signals (see MUTCD) |
|  | Inadequate phasing signal | $\checkmark$ Change timing of pedestrian phase |

Table 1 General Crash Pattern and Countermeasures (continued)

| Crash Pattern | Probable Cause | General Countermeasure |
| :---: | :---: | :---: |
| Pedestrian-vehicle collisions | Driver had inadequate warning of frequent midblock crossings | $\checkmark$ Prohibit parking <br> $\checkmark \quad$ Install warning signs <br> $\checkmark \quad$ Lower speed limit <br> $\checkmark$ Install pedestrian barriers |
|  | Inadequate pavement markings | $\checkmark$ Install thermoplastic markings <br> $\checkmark$ Supplement markings with appropriate signing (see MUTCD) <br> $\checkmark \quad$ Upgrade pavement markings (see MUTCD) |
|  | Inadequate gaps at unsignalized intersections | $\checkmark \quad$ Install traffic signal if warranted by MUTCD <br> $\checkmark \quad$ Install pedestrian crosswalk and signs <br> $\checkmark$ Install pedestrian "WALK-DON'T WALK" signals |
|  | Inadequate roadway lighting | $\checkmark$ Install roadway lighting |
|  | Excessive vehicle speed | $\checkmark$ Install proper warning signs <br> $\checkmark$ Install pedestrian barriers <br> $\checkmark$ Enforcement <br> $\checkmark$ Implement road narrowing measures <br> $\checkmark \quad$ Install traffic calming |
|  | Pedestrian and motorist safety awareness and behavior | $\checkmark \quad$ Provide education, outreach, and training <br> $\checkmark$ Implement enforcement campaigns |
| Run-off-roadway collisions | Slippery pavement | $\checkmark$ Overlay existing pavement <br> $\checkmark$ Provide adequate drainage <br> $\checkmark$ Groove existing pavement <br> $\checkmark$ Reduce speed limit <br> $\checkmark$ Provide "slippery when wet" signs |
|  | Roadway design inadequate for traffic conditions | $\checkmark \quad$ Widen lanes <br> $\checkmark$ Relocate islands <br> $\checkmark$ Close curb lanes <br> $\checkmark$ Install guardrails |

Table 1 General Crash Pattern and Countermeasures (continued)

| Crash Pattern | Probable Cause | General Countermeasure |
| :---: | :---: | :---: |
| Run-off-roadway collisions | Poor delineation | $\checkmark$ Install/improve pavement markings <br> $\checkmark$ Install roadside delineators <br> $\checkmark \quad$ Install advance warning signs <br> $\checkmark$ Improve design of roadside hardware (e.g., light poles, signs, bridge rails) <br> $\checkmark$ Improve design and application of barrier and attenuation systems |
|  | Inadequate roadway lighting | $\checkmark$ Improve roadway lighting |
|  | Inadequate shoulder | $\checkmark$ Provide full-width paved shoulders in intersection areas |
|  | Improper channelization | $\checkmark$ Improve channelization |
|  | Inadequate pavement maintenance | $\checkmark$ Perform road surface repair |
|  | Poor visibility | $\checkmark$ Increase size of signs |
|  | Vehicles encroaching on the roadside | $\checkmark$ Install shoulder rumble strips <br> $\checkmark$ Install edgeline "profile marking," edgeline rumble strips or modified shoulder rumble strips on section with narrow or no paved shoulders <br> $\checkmark \quad$ Install mid-lane rumble strips <br> $\checkmark \quad$ Provide enhanced shoulder or in-lane delineation and marking for sharp curves <br> $\checkmark$ Provide improved highway geometry for horizontal curves <br> $\checkmark$ Provide enhanced pavement markings <br> $\checkmark$ Provide skid-resistant pavement surfaces <br> $\checkmark$ Apply shoulder treatments-eliminate shoulder drop-offs, widen and/or pave shoulders |
|  | Crashing into an object or overturning if the vehicle travels off the shoulder | $\checkmark$ Design safer slopes and ditches to prevent rollovers <br> $\checkmark$ Remove/relocate objects in hazardous locations <br> $\checkmark \quad$ Delineate trees or utility poles with retroreflective tape |
| Fixed-object collisions | Obstructions in or too close to roadway | $\checkmark$ Remove obstacles <br> $\checkmark \quad$ Install barrier curbing <br> $\checkmark$ Install breakaway features to light poles, signposts, etc. <br> $\checkmark$ Install guardrail <br> $\checkmark$ Install crash cushioning devices |
|  | Inadequate roadway lighting | $\checkmark$ Install roadway lighting |

Table 1 General Crash Pattern and Countermeasures (continued)

| Crash Pattern | Probable Cause | General Countermeasure |
| :---: | :---: | :---: |
| Fixed-object collisions | Inadequate pavement markings | $\checkmark$ Install reflector pavement markings |
|  | Inadequate signs, delineators, and guardrails | $\checkmark$ Install reflector paint and/or reflectors on the obstruction |
|  | Inadequate roadway design | $\checkmark$ Provide proper superelevation <br> $\checkmark \quad$ Improve superelevation at curves <br> $\checkmark$ Install appropriate warning signs and delineators |
|  | Slippery pavement | $\checkmark$ Improve skid resistance <br> $\checkmark \quad$ Provide adequate drainage <br> $\checkmark$ Provide "slippery when wet" signs <br> $\checkmark$ Provide wider lanes |
| Collisions with trees | Trees growing in hazardous locations | Develop, revise, and implement planting guidelines to prevent placing trees in hazardous locations <br> $\checkmark \quad$ Mowing and vegetation control guidelines <br> $\checkmark$ Remove trees in hazardous locations <br> $\checkmark$ Shield motorists from striking trees <br> $\checkmark$ Modify roadside clear zone in the vicinity of trees <br> $\checkmark$ Delineate trees in hazardous locations |
| Collisions with utility poles | Specific utility poles in high-crash and high-risk spot locations. | $\checkmark$ Remove poles in high-crash locations <br> $\checkmark$ Relocate poles in high-crash locations farther from the roadway and/or to less vulnerable locations <br> $\checkmark \quad$ Shield drivers from poles in high-crash locations <br> $\checkmark \quad$ Improve the drivers' ability to see poles in high-crash locations <br> $\checkmark$ Apply traffic calming measures to reduce speeds on high-risk sections <br> $\checkmark$ Develop, revise, and implement policies to prevent placing or replacing poles within the recovery area. |
|  | Several utility poles along a corridor (to minimize the likelihood of crashing into a utility pole if a vehicle runs off the road) | $\checkmark \quad$ Place utilities underground <br> $\checkmark$ Relocate poles along the corridor farther from the roadway and/or to less vulnerable locations <br> $\checkmark$ Decrease the number of poles along the corridor |

Table 1 General Crash Pattern and Countermeasures (continued)

| Crash Pattern | Probable Cause | General Countermeasure |
| :---: | :---: | :---: |
| Collisions with parked vehicles | Improper pavement markings | $\checkmark$ Paint parking stall limits 7 feet from curb face |
|  | Improper parking clearance | $\checkmark$ Post parking restrictions near driveways |
|  | Angle parking | $\checkmark$ Convert angle parking to parallel parking |
|  | Excessive vehicle speed | $\checkmark$ Reduce speed limit if justified by spot speed studies <br> $\checkmark$ Widen lanes |
|  | Illegal parking | $\checkmark$ Enforcement |
|  | Improper parking | $\checkmark$ Prohibit parking <br> $\checkmark$ Create off-street parking |
|  | Large parking turnover | $\checkmark$ Create one-way streets <br> $\checkmark$ Reroute through traffic |
| Sideswipe of head-on collisions | Inadequate roadway design | $\checkmark \quad$ Create one-way streets to provide wider lanes |
|  | Improper roadway maintenance | $\checkmark$ Perform necessary road surface repairs |
|  | Inadequate shoulders | $\checkmark$ Provide full-width paved shoulders in intersection areas |
|  | Excessive vehicle speed | $\checkmark$ Install median devices <br> $\checkmark$ Remove constriction such as parked vehicles |
|  | Inadequate pavement markings | Install or refurbish centerlines, lane lines, and pavement edge lines <br> $\checkmark$ Install reflectorized lines, edges |
|  | Inadequate channelization | $\checkmark \quad$ Install acceleration and deceleration lanes <br> $\checkmark \quad$ Channelize intersection <br> $\checkmark$ Provide turning bays |
|  | Inadequate signing | $\checkmark$ Place direction and lane change signs to give proper advance warning <br> $\checkmark$ Add illuminated name signs |
|  | Vehicles encroaching into opposite lane | $\checkmark$ Install centerline rumble strips for two-lane roads <br> $\checkmark$ Install profiled thermoplastic strips for centerlines <br> $\checkmark$ Provide wider cross sections on two-lane roads |

Table 1 General Crash Pattern and Countermeasures (continued)

| Crash Pattern | Probable Cause | General Countermeasure |
| :---: | :---: | :---: |
| Sideswipe of head-on collisions | Minimize the likelihood of crashing into an oncoming vehicle | $\checkmark \quad$ Use alternating passing lanes or four-lane sections at key intersections <br> $\checkmark$ Install median barriers for narrow-width medians on multilane roads |
| Driveway-related collisions | Improperly located driveways | $\checkmark$ If possible, regulate minimum spacing of driveways <br> $\checkmark$ Regulate minimum corner clearance <br> $\checkmark \quad$ If possible, move driveway to side street <br> $\checkmark$ Install curbing to define driveway locations <br> $\checkmark$ If possible, consolidate adjacent driveways |
|  | Right-turning vehicles | $\checkmark \quad$ Provide right-turn lanes <br> $\checkmark$ Restrict parking near driveways <br> $\checkmark \quad$ Increase the width of driveways <br> $\checkmark \quad$ Widen through lanes <br> $\checkmark$ Increase curb radii |
|  | Large volume of through traffic | $\checkmark$ If possible, move driveway to side street <br> $\checkmark$ Construct a local service road <br> $\checkmark$ Reroute through traffic <br> $\checkmark$ Signalize driveway <br> $\checkmark \quad$ Provide acceleration and deceleration lanes <br> $\checkmark$ Channelize driveway |
|  | Restricted sight distance | $\checkmark$ Remove sight obstructions <br> $\checkmark$ Restrict parking near driveway <br> $\checkmark$ Install/improve street lighting <br> $\checkmark$ Reduce speed limit |
|  | Inadequate roadway lighting | $\checkmark$ Improve street lighting |
|  | Inadequate access management | $\checkmark$ Restrict access to properties using driveway closures or turn restrictions <br> $\checkmark$ Restrict cross-median access near intersections <br> $\checkmark$ Close or relocate of driveways adjacent to unsignalized intersections. |

Table 1 General Crash Pattern and Countermeasures (continued)

| Crash Pattern | Probable Cause | General Countermeasure |
| :---: | :---: | :---: |
| Train-vehicle accidents | Restricted sight distance | $\checkmark$ Remove sight obstructions <br> $\checkmark$ Reduce grade <br> $\checkmark \quad$ Install train actuated signals (see MUTCD) <br> $\checkmark \quad$ Install advance warning signs (see MUTCD) <br> $\checkmark$ Install automatic flashers and gates |
|  | Poor visibility | $\checkmark$ Improve roadway lighting <br> $\checkmark$ Increase size of signs |
|  | Improper traffic signals preemption timing | $\checkmark$ Coordinate closely spaced signals near at-grade railroad crossings |
|  | Inadequate pavement markings | $\checkmark$ Install advance markings to supplement signs <br> $\checkmark$ Install limit lines <br> $\checkmark$ Install/improve pavement markings |
|  | Slippery surface | $\checkmark$ Skid-proof roadway |
|  | Improper preemption of railroad signals and gates | $\checkmark$ Retime railroad signals and gates |
|  | Rough crossing surfaces | $\checkmark$ Improve crossing surface |
|  | Sharp crossing angle | $\checkmark$ Rebuild crossing with proper angle |
| Wet-pavement accidents | Inadequate pavement markings | $\checkmark$ Upgrade pavement markings |
|  | Slippery pavement | $\checkmark$ Overlay existing pavement <br> $\checkmark$ Groove existing pavement <br> $\checkmark$ Reduce speed limit <br> $\checkmark$ Provide "slippery when wet" signs <br> $\checkmark$ Skid-proof roadway |
|  | Inadequate drainage | $\checkmark$ Provide adequate drainage |

Table 1 General Crash Pattern and Countermeasures (continued)

| Crash Pattern | Probable Cause |  | General Countermeasure |
| :--- | :--- | :--- | :--- |
| Night accidents |  | $\checkmark$ | Install/improve street lighting |
|  |  | $\checkmark$ | Install/improve delineation markings |
|  |  | $\checkmark$ | Install/improve warning signs |
|  |  | $\checkmark$ | Upgrade signing |
|  |  | $\checkmark$ | Provide illuminated signs |
|  |  | $\checkmark$ | Install pavement markings |
|  | Inadequate channelization or | $\checkmark$ | Improve delineation markings |
|  | delineation | $\checkmark$ | Provide raised markers or islands |
|  |  | $\checkmark$ | Upgrade advance warning signing |

Additional research into these factors for a specific countermeasure should be researched. For additional information on any countermeasure, please refer to the Highway Safety Engineering Studies Procedural Guide, US Department of Transportation, Federal Highway Administration, January 1981; National Cooperative Highway Research Program Volume 500: Guidance for Implementation for the AASHTO Strategic Highway Safety Plan. There are several volumes of the NCHRP 500 that cover a range of topics. The ones used in creating the table are listed below.

- A Guide for Addressing Collisions with Trees in Hazardous Locations
- A Guide for Addressing Head-On Collisions
- A Guide for Addressing Unsignalized Intersection Collisions
- A Guide for Addressing Run-Off-Road Collisions
- A Guide for Reducing Collisions Involving Utility Poles
- A Guide for Reducing Collisions Involving Pedestrians
- A Guide for Reducing Collisions Involving at Signalized Intersections


### 4.4 IDENTIFYING APPROPRIATE STRATEGIES

Congestion management strategies are not one size fits all. Instead, the congested roadways or intersections must be examined carefully to determine which management strategy will best address the particular problems. Screening questions need to be asked to better evaluate the benefits and appropriateness of a particular strategy for solving the congestion and/or safety issues of a particular project. A sample of some screening questions that should be asked when exploring congestion management strategy options are as follows:

- Is the congested roadway in an area that could benefit from transit service or additional bicycle and pedestrian improvements?
- Does available right-of-way or median width exist for the improvement?
- If an intersection project is being considered, does the intersection geometry allow the proposed fix while maintaining design standards?
- Does the modification improve safety? Does the modification correct any existing ADA issues?
- Does the roadway segment present many opportunities for improvement? If so, should a Corridor Management Plan be recommended to further evaluate the most cost-effective plan of action?


### 5.1 CONGESTION MANAGEMENT REVIEW TEAM

In the CRTPA area, one hundred and thirteen (113) of the regional roadway segments have been identified as operating at LOS F in 2010. These hundred and thirteen (113) areas of the transportation network require a second level of evaluation to determine which congestion management strategy (or strategies) identified earlier would be the most appropriate to address the specific problem. This second tier of evaluation relies upon the use of screening questions to quickly identify impediments and benefits associated with the strategy in question, and technically qualified personnel who are able to analyze the possibilities and answer the questions. Thus, the evaluation of congested network areas requires the coordinated review efforts of many individuals throughout the CRTPA area - they will be referred to as, "the review team".

The review team will include technically qualified staff members from each CRTPA local government representing working knowledge in the areas of traffic engineering and ITS, intersection analysis, access management, roadway design standards, transit planning, land use planning, concurrency, transportation planning, bicycle and pedestrian planning, and roadway construction costs. The review team will evaluate congested roadways and intersections as requested by the CRTPA, and its advisory committees, and at its own discretion, the team may evaluate local roads and intersections of interest for congestion management improvements.

A recent downturn of the local economy has forced local governments to do more with fewer staff resources. These budgetary and staff reductions have severely limited the amount of time that all review team members have to devote to any one initiative, requiring the CRTPA to initiate and coordinate congestion management discussions within other on-going transportationrelated meetings. Meetings will be coordinated throughout the year with other transportation projects and initiatives within the planning area. Because congestion management strategies are often implemented through capital improvement budgets, the Transportation Improvement Plan, and adopted changes in local government policy (such as in comprehensive plan amendments, etc.), tying congestion management project/strategy discussions with other MPO coordination projects is both a logical and an efficient coordination effort. The entire review team is present in the transportation technical subcommittee to the CRTPA, but staff also meets no less than quarterly with focus groups/special project groups to coordinate congestion management strategy discussions and initiatives. For example, the CRTPA meets regularly with groups such as Commuter Services of North Florida, the Community Traffic Safety Team, Bicycle Safety Work Group, Tallahassee-Leon County Planning Department, and several other project groups that are working toward reducing congestion within the region through non-motorized improvements to the system, increased transit services, and inventive changes to the existing network such as adding bus rapid transit lanes to congested inner-city locations.
Recommendations from the review team will be forwarded to the CRTPA subcommittees for review, and subsequently to the CRTPA for further consideration and approval. These recommendations may take place within other agenda items, such as the Long Range Transportation Plan Update, Priority Project List, Transportation Enhancement Projects, etc., or they may be presented as stand-alone items under discussion.

### 5.2 PRIORITIZATION OF PROJECTS TO BE IMPLEMENTED

Since congestion mitigation strategies cannot be implemented for all of the congested facilities simultaneously, a systematic method for determining which congested facilities and strategies should be given the highest consideration must be in place. Additionally, because staff time is limited, the process must also lend efficiency. Outlined below is the process by which congested facilities under evaluation could be paired with appropriate congestion management strategies, and then prioritized for implementation.

1. The facility is identified in the CMP Report as experiencing congestion, or there is a special request by the CRTPA or its subcommittees to evaluate the facility.
2. The facility is evaluated by Congestion Management Review Team Members for appropriate congestion management strategies to resolve or lessen the congestion (or safety issue).
3. The facility and proposed strategy are compared against the established evaluation criteria to determine initial prioritized ranking for further consideration.
4. The recommended projects or strategies are assembled in an action item for the CRTPA subcommittees and CRTPA to respond to.
5. The proposed projects are included on the next Priority Project Lists for inclusion and funding programming in the appropriate documents (Transit Development Plan, Bicycle and Pedestrian Master Plan, Long Range Transportation Plan, FDOT Work Program, etc.).
6. If the proposed project is a policy directive, or action to be taken by a governmental entity other than the CRTPA, appropriate documents will be generated and presented to the governing bodies for action. (Includes comprehensive plan amendments, land development regulation amendments, capital improvement plan amendments, etc. associated with local government action outside of the CRTPA purview.)

### 5.2.1 Evaluation Criteria

The evaluation criteria and associated point values were drawn in part from the evaluation criteria and weighting schedules presently in place in currently approved CRTPA planning documents. Initial guidance was taken from the former adopted Bicycle and Pedestrian Master Plan, (an integrated component of the Regional Mobility Plan) and the current Regional Mobility Plan, both of which reflect considerable public participation in the establishment of their goals, objectives, and evaluation criteria. The proposed list of evaluation criteria and scoring was then reviewed and tweaked by the CRTPA subcommittees and CRTPA to result in a final list to be used by the review team. The resulting list is shown in Table 2.

Table 2
Congestion Management Strategy Evaluation Criteria


Table 2 (continued)
Congestion Management Strategy Evaluation Criteria

| Regional Mobility Plan Goals \& Objectives (as applicable) | Planning Factors | Score |
| :---: | :---: | :---: |
| Economic Development | Connectivity to Schools and Regional Economic Hubs |  |
| Objectives: 2, 4, 6 and 7 |  |  |
| Financial Feasibility |  |  |
| Objective: 4 |  |  |
| Land Use |  |  |
| Objectives:1, 2, 4 and 6 |  |  |
| Multimodalism |  |  |
| Objectives:1, 2, 3, 4, 5 and 8 |  |  |
| Safety \& Public Health |  |  |
| Objective: 5 |  |  |
| Access | Multi-Modal Interconnectivity |  |
| Objectives: 1, 3 and 4 | The project promotes linkages between modes of |  |
| Connectivity | transportation. | 2 |
| Objectives: 1, 2, 3 and 4 | The project fills in facility gaps for at least one mode | 1 |
| Economic Development | of transportation. |  |
| Objectives: 1, 2, 3, 5, 6 and 7 |  |  |
| Land Use |  |  |
| Objectives:1, 2, 3, 4, 6 and 7 |  |  |
| Multimodalism |  |  |
| Objectives: 1-8 |  |  |
| Natural Resource Protection and Conservation |  |  |
| Objectives: 3 and 6 |  |  |
| Safety \& Public Health |  |  |
| Objectives: 1, 4, 5, 6 and 7 |  |  |
| Security |  |  |
| Objective: 2 |  |  |
| Access | Safety |  |
| Objective: 4 | The project addresses a documented safety problem. | 2 |
| Connectivity | The project increases pedestrian safety at high traffic | 1 |
| Objectives: 1, 3 and 4 | locations. |  |
| Economic Development |  |  |
| Objective: 5 |  |  |
| Land Use |  |  |
| Objectives: 3 and 4 |  |  |
| Multimodalism |  |  |
| Objectives: 2, 3 and 7 |  |  |
| Safety \& Public Health |  |  |
| Objectives: 3, 4, 5, 6, 7, 8, 9 and 10 |  |  |
| Security |  |  |
| Objectives: 1-4 |  |  |

Table 2 (continued)
Congestion Management Strategy Evaluation Criteria

| Regional Mobility Plan Goals \& Objectives (as applicable) | Planning Factors | Score |
| :---: | :---: | :---: |
| Connectivity | Project Implementation Barriers |  |
| Objective: 4 | The project has no identifiable implementation barriers. | 3 |
| Coordination |  |  |
| Objective: 4 |  |  |
| Economic Development |  |  |
| Objectives: 3 and 9 | The project has right-of-way/drainage, signal/utility, or landscaping barriers. | 2 |
| Financial Feasibility |  |  |
| Objectives: 1, 2 and 4 | The project has public acceptance barriers. | 1 |
| Land Use |  |  |
| Objective: 5 |  |  |
| Natural Resource Protection and Conservation |  |  |
| Objectives: 1, 2, 4, 5 and 7 |  |  |
| Public Participation |  |  |
| Objectives: 1-7 |  |  |
| Safety \& Public Health |  |  |
| Objectives: 9 and 10 |  |  |
| Security |  |  |
| Objectives: 1 and 4 |  |  |

NOTE: Public input provides an additional measure. A value between zero and three points can be assigned to a project strategy based on the number of comments related to the same issue, apparent validity of the issue, and public input on the severity of the problem. The public input measure comes from the review team's personal experience and reports from the public, and also as reported from the CRTPA Advisory Committees.

## Results of Priority Ranking

The points that each project earned under each planning consideration are added together, and the higher the scores, the more beneficial the strategy is considered to be. The more beneficial the project is revealed to be, the more attention that project should attract when competing for implementation funding.

Note that although this process results in a numerically listed group of projects, it does not dictate or supersede any priority project list approved by the CRTPA. The priority ranking process is merely a tool to assist decision-makers in quickly identifying options so that quick progress can be made on implementing congestion management strategies.

Upon generating and reviewing a priority-ranking list of recommended projects, the Review Team and CRTPA can apply recommendations and value points outside of the established criteria to specific projects where deemed logical changing the priority-ranking list. One example of this would be if the number one project was expensive, and the number two, three,
and four projects could be constructed with the same amount of funding and in the same time span as priority project \#1, the Review Team and CRTPA may recommend that the benefits of immediately implementing three high ranking projects outweighs, in their professional opinion, implementing only the top project at that time. Other factors of consideration could include if the project segment was currently under study in a corridor management plan, or on a funding list in the TIP, or FDOT Work Program.

Congestion Management Strategies selected for implementation will be forwarded to the appropriate decision-making entities for approval and programming. For state and federal roadways, the projects will be forwarded to the CRTPA for discussion and consideration. Upon approval, they will then follow the same funding sequence as other regional projects. In most cases, the projects will be entered in Priority Project Lists for the Transportation Improvement Program, and then included in the $5^{\text {th }}$ Year of the FDOT Five Year Work Program. In some cases, congestion management strategies could qualify for funding under enhancement projects, which are also reviewed and prioritized by the CRTPA subcommittees, CRTPA, and then evaluated by FDOT upon receipt. CRTPA staff will be the responsible entity for requesting approval of congestion management strategies on regional roadways. Note that the FDOT allocates a funding source annually to be used for congestion management and safety projects in the CRTPA boundary. The Congestion Management Review Team should strive to identify projects each year that can be implemented using these funds.

For congestion management strategies requiring local funding, the projects will be forwarded for review to the appropriate local governing board for consideration.

### 6.1 MONITORING STRATEGIC EFFECTIVENESS

The monitoring of the levels of congestion in the CRTPA area is an ongoing process through concurrency, traffic engineering, corridor studies, and updates to the Long Range Transportation Plan, Transit development Plan, and Bicycle and Pedestrian Master Plans. However, more detailed data is needed on the facilities in Wakulla, Gadsden, and Jefferson Counties to be comparable with the information that is available for Leon County and the City of Tallahassee regarding traffic counts, concurrency tables, and safety data.
Because this is a continuous planning and monitoring process, the effectiveness and benefits of the individual congestion mitigation strategies employed in the previous year will not necessarily be immediately apparent. However, the proposals identified and employed will be monitored and tracked for qualitative and quantitative improvements on the target area and system as a whole. Note that the CRTPA considers the expansion of bicycle, pedestrian, and transit services and facilities as a success in congestion management by the merits of introducing viable alternatives to the personal automobile.

### 6.2 UPDATES

The CMP is updated in accordance with current legislation. It is intended that each update of the CMP will bring about better and more efficient strategies for identifying congestion and targeting cost-effective solutions. Provided there is available funding, future updates should incorporate additional data sets, such as travel time and am/pm peak hour LOS counts for the entire planning region of the CRTPA. These additional data sets would enable the update to assess congestion and the effectiveness of congestion management strategies on a more refined level. Additionally, it would be preferred if travel time data could be gathered with the use of global positioning system (GPS) receivers so that the data is readily compatible with Geographic Information Software (GIS) which would be helpful in the creation of travel time maps and reports, for this and other transportation projects in the region.

The CRTPA updated its Congestion Management Process (CMP) in agreement with current legislation to identify a process that could be used to identify low-cost congestion management strategies on a narrow list of projects and could be implemented within a short time frame. The CMP was developed using the best practices and data available for the CRTPA area. Within the CMP, performance measures, strategies, and prioritization criteria were outlined, and a list of roadway segments and projects were identified for monitoring and further evaluation.

A methodology for bringing together a group of professionals (review team) to identify and evaluate the merits of applying various congestion management strategies to improve the operations of the transportation network has been established. The members of the Review Team will both collectively and independently uses their expertise and knowledge of ongoing and proposed roadway/traffic operational improvements within the CRTPA area to ensure that the proposed CMS projects do not duplicate other ongoing planned projects. This ensures that projects are planned and programmed cost effectively.

This CMP has identified the overall level of congestion in the CRTPA area and has highlighted the most problematic areas. The plan also defines a process for moving identified congested roadways and problematic intersections from a "problem list" to "on the ground improvements", through avenues of incorporation into the Transportation Improvement Program, Long Range Transportation Plan, Bicycle and Pedestrian Master Plan, Transit Development Plan, and other Transportation Master Plans.

### 7.1 LOOKING TOWARD THE FUTURE

The CMP Update is a continually evolving process dynamic in nature and requiring change as the CRTPA area changes and grows. It is desirable that future updates incorporate additional data sets, such as travel time and $\mathrm{am} / \mathrm{pm}$. peak hour LOS counts for the entire planning area, however, due to recent trends with the local economy, it is unlikely that this will be a possibility in the near future.

CRTPA staff would like to hire a consultant in the future to prepare a comprehensive CMP Update, including data gathering in the scope of services. A consultant that has the capability to gather travel time data with global positioning system (GPS) receivers would be preferred in this endeavor. The GPS receivers can automatically record vehicle position, speed, and time along the entire length of the route at short time intervals, even as often as one second, and within an accuracy of one meter. The GPS data is readily compatible with Geographic Information Software (GIS), which would be helpful in the creation of travel time maps and reports for this and other transportation projects in the region.

Appendix A

Table A: Level of Service on State Roads in Leon County


| Roadway | Segment | Functional Classification | Jurisdiction | LOS <br> Standard | Congestion Year and Level of Service |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 2010 |  | 2015 |  | 2020 |  |
|  |  |  |  |  | AADT | PHPD | AADT | PHPD | AADT | PHPD |
| SR 20/US 27/ Apalachee Parkway | SR 265/Magnolia Drive to Blairstone Road | Principal Arterial | State | D | E | F | F | F | F | F |
|  |  |  | Local | D | E | F | F | F | F | F |
|  | Blairstone Road to SR 261/US 319/Capital Circle | Principal Arterial | State | D | NC | NC | NC | NC | NC | NC |
|  |  |  | Local | D | NC | NC | NC | NC | NC | NC |
|  | SR 261/US 319/Capital Circle to Southwood Plantation Road | Principal Arterial | State | D | D | D | D | E | F | F |
|  |  |  | Local | D | D | D | D | E | F | F |
| SR 61/ <br> South Monroe Street | SR 371/Gaines Street to SR 20/US 27/Apalachee Parkway | Principal Arterial | State | D | E | F | F | F | F | F |
|  |  |  | Local | D | E | F | F | F | F | F |
|  | SR 20/US 27/Apalachee Parkway to East Pensacola Street | Principal Arterial | State | D | F | F | F | F | F | F |
|  |  |  | Local | D | F | F | F | F | F | F |
|  | East Pensacola Street to SR 10/US 90/ Tennessee Street | Principal Arterial | State | D | F | F | F | F | F | F |
|  |  |  | Local | D | F | F | F | F | F | F |
|  | SR 10/US 90/Tennessee Street to Brevard Street | Principal Arterial | State | D | F | F | F | F | F | F |
|  |  |  | Local | D | F | F | F | F | F | F |
|  | Brevard Street to SR 63/US 27/North Monroe Street | Principal Arterial | State | D | F | F | F | F | F | F |
|  |  |  | Local | D | F | F | F | F | F | F |
| SR 61/US 319/ Thomasville Road | SR 63/US 27/North Monroe St to SR 155/ Meridian Road $/ 7^{\text {th }}$ Avenue | Principal Arterial | State | D | F | F | F | F | F | F |
|  |  |  | Local | D | F | F | F | F | F | F |
|  | East Betton Road to Live Oak Plantation Road | Principal Arterial | State | D | C | C | F | F | F | F |
|  |  |  | Local | D | C | C | F | F | F | F |
|  | SR 8/I-10 to SR 261/Market Street/Capital Circle | Principal Arterial | State | D | D | D | D | E | E | F |
|  |  |  | Local | C | D | D | D | E | E | F |
|  | SR 261/Market Street/Capital Circle to Killarney Way | Principal Arterial | State | D | D | D | E | F | F | F |
|  |  |  | Local | D | D | D | E | F | F | F |
|  | Killarney Way to Woodbine Drive | Principal Arterial | State | D | E | F | F | F | F | F |
|  |  |  | Local | C | E | F | F | F | F | F |
|  | Woodbine Drive to Velda Dairy Road | Principal Arterial | State | D | C | F | F | F | F | F |
|  |  |  | Local | C | C | F | F | F | F | F |
|  | Velda Dairy Road to Kinhega Drive | Principal Arterial | State | D | B | B | C | C | C | F |
|  |  |  | Local | C | B | B | C | C | C | F |
| SR 61/SR 363/ Adams Street | SR 61/Crawfordville Highway to SR 373/ Orange Avenue | Principal Arterial | State | D | C | C | D | D | D | E |
|  |  |  | Local | D | C | C | D | D | D | E |


| Roadway | Segment | Functional Classification | Jurisdiction | LOS <br> Standard | Congestion Year and Level of Service |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 2010 |  | 2015 |  | 2020 |  |
|  |  |  |  |  | AADT | PHPD | AADT | PHPD | AADT | PHPD |
| SR 63/US 27/ North Monroe Street | SR 61/Thomasville Road to ${ }^{\text {th }}$ Avenue | Principal Arterial | State | D | E | E | F | F | F | F |
|  |  |  | Local | D | E | E | F | F | F | F |
|  | $7{ }^{\text {th }}$ Avenue to CR 158/Tharpe Street | Principal Arterial | State | D | F | F | F | F | F | F |
|  |  |  | Local | D | F | F | F | F | F | F |
|  | CR 158/Tharpe Street to John Knox Road/ Monticello Drive | Principal Arterial | State | D | F | F | F | F | F | F |
|  |  |  | Local | D | F | F | F | F | F | F |
|  | John Knox Road/Monticello Drive to Allen Road | Principal Arterial | State | D | D | D | E | F | F | F |
|  |  |  | Local | D | D | D | E | F | F | F |
|  | Allen Road to SR 8/I-10 | Principal Arterial | State | D | F | F | F | F | F | F |
|  |  |  | Local | D | F | F | F | F | F | F |
|  | SR 8/I-10 to CR 356/Fred George Road/ Crowder Road | Principal Arterial | State | D | C | D | F | F | F | F |
|  |  |  | Local | D | C | D | F | F | F | F |
| SR 155/ <br> Meridian Road | John Knox Road to Lake Shore Drive | Major Arterial | State | D | C | C | D | D | F | F |
|  |  |  | Local | D | C | C | D | D | F | F |
| SR 261/US 319/ Capital Circle | SR 363/Woodville Highway to Tram Road | Principal Arterial | State | D | F | F | F | F | F | F |
|  |  |  | Local | D | F | F | F | F | F | F |
|  | Park Avenue to SR 10/US 90/Mahan Drive | Principal Arterial | State | D | F | F | F | F | F | F |
|  |  |  | Local | D | F | F | F | F | F | F |
|  | SR 10/US 90/Mahan Drive to CR 146/ Miccosukee Road | Principal Arterial | State | D | F | F | F | F | F | F |
|  |  |  | Local | D | F | F | F | F | F | F |
|  | CR 146/Miccosukee Road to CR 151/ Centerville Road | Principal Arterial | State | D | F | F | F | F | F | F |
|  |  |  | Local | D | F | F | F | F | F | F |
|  | CR 151/Centerville Road to Eastgate Way | Principal Arterial | State | D | F | F | F | F | F | F |
|  |  |  | Local | D | F | F | F | F | F | F |
|  | Eastgate Way to SR 61/US 319/ Thomasville Road | Principal Arterial | State | D | D | D | D | D | D | E |
|  |  |  | Local | D | D | D | D | D | D | E |
| SR 261/US 319/ Capital Circle Southbound Flyover | SR 61/US 319/Thomasville Road to North Footer Bridge | Principal Arterial | State | D | C | E | D | F | D | F |
|  |  |  | Local | D | C | E | D | F | D | F |
| $\begin{array}{\|l\|} \hline \text { SR 261/ } \\ \text { Capital Circle } \\ \hline \end{array}$ | SR 363/Woodville Highway to SR 61/ US 319/Crawfordville Road | Principal Arterial | State | D | D | D | F | F | F | F |
|  |  |  | Local | D | D | D | F | F | F | F |


| Roadway | Segment | Functional Classification | Jurisdiction | $\overline{\mathrm{LOS}}$ <br> Standard | Congestion Year and Level of Service |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 2010 |  | 2015 |  | 2020 |  |
|  |  |  |  |  | AADT | PHPD | AADT | PHPD | AADT | PHPD |
| $\begin{aligned} & \text { SR 261/ } \\ & \text { Capital Circle } \end{aligned}$ | SR 61/US 319/Crawfordville Road to CR 2203/Springhill Road | Principal Arterial | State | D | C | C | C | C | D | F |
|  |  |  | Local | D | C | C | C | C | D | F |
| $\begin{aligned} & \hline \hline \text { SR 263/ } \\ & \text { Capital Circle } \end{aligned}$ | CR 2203/Springhill Road to Airport Entrance | Principal Arterial | State | D | C | C | F | F | F | F |
|  |  |  | Local | D | C | C | F | F | F | F |
|  | Airport Entrance to SR 371/Orange Avenue | Principal Arterial | State | D | C | C | D | D | F | F |
|  |  |  | Local | D | C | C | D | D | F | F |
|  | SR 371/Orange Avenue to SR 20/ Blountstown Highway | Principal Arterial | State | D | F | F | F | F | F | F |
|  |  |  | Local | D | F | F | F | F | F | F |
|  | SR 20/Blountstown Highway to SR 10/ US 90/Tennessee Street | Principal Arterial | State | D | F | F | F | F | F | F |
|  |  |  | Local | D | F | F | F | F | F | F |
|  | SR 8/I-10 to Gearhart Road | Principal Arterial | State | D | D | E | F | F | F | F |
|  |  |  | Local | D | D | E | F | F | F | F |
|  | Gearhart Road to CR 356/Fred George Road | Principal Arterial | State | D | D | F | F | F | F | F |
|  |  |  | Local | D | D | F | F | F | F | F |
|  | CR 356/Fred George Road to SR 63/US 27/ North Monroe Street | Principal Arterial | State | D | C | C | C | D | D | F |
|  |  |  | Local | D | C | C | C | D | D | F |
| SR 265/Magnolia Drive | Park Avenue to SR 10/US 90/Tennessee Street/Mahan Drive | Minor Arterial | State | D | D | D | D | D | D | E |
|  |  |  | Local | D | D | D | D | D | D | E |
|  | CR 146/Miccosukee Road to East $7^{\text {th }}$Avenue | Minor Arterial | State | D | E | F | F | F | F | F |
|  |  |  | Local | D | E | F | F | F | F | F |
| SR 363/Woodville Highway | 0.3 miles south of Rhodes Cemetery Road to 0.9 miles south of SR 261/Capital Circle | Minor Arterial | State | D | C | C | C | C | C | D |
|  |  |  | Local | C | C | C | C | C | C | D |
|  | 0.9 miles south of SR 261/Capital Circle to SR 261/SR 263/US 319/Capital Circle | Principal Arterial | State | D | C | C | D | F | F | F |
|  |  |  | Local | D | C | C | D | F | F | F |
| SR 363/Adams Street | Putnam Drive to Magnolia Drive | Principal Arterial | State | D | F | F | F | F | F | F |
|  |  |  | Local | D | F | F | F | F | F | F |
|  | Magnolia Drive to Bronough Street | Principal Arterial | State | D | F | F | F | F | F | F |
|  |  |  | Local | D | F | F | F | F | F | F |
| SR 366/Pensacola Street | SR 20/Blountstown Highway to Appleyard Drive | Principal Arterial | State | D | D | E | F | F | F | F |
|  |  |  | Local | D | D | E | F | F | F | F |
|  | Appleyard Drive to South Ocala Road | Principal Arterial | State | D | D | D | E | F | F | F |
|  |  |  | Local | D | D | D | E | F | F | F |


| Roadway | Segment | Functional Classification | Jurisdiction | LOS Standard | Congestion Year and Level of Service |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 2010 |  | 2015 |  | 2020 |  |
|  |  |  |  |  | AADT | PHPD | AADT | PHPD | AADT | PHPD |
| SR 366/Pensacola Street | South Ocala Road to Stadium Drive West | Principal Arterial | State | D | F | F | F | F | F | F |
|  |  |  | Local | D | F | F | F | F | F | F |
|  | MLK Boulevard to Macomb Street/ Railroad Avenue | Principal Arterial | State | D | D | C | D | C | E | D |
|  |  |  | Local | D | D | C | D | C | E | D |
| SR 369/US 319/ Crawfordville Road | Wakulla County Line to SR 61/Wakulla Springs Road | Principal Arterial | State | D | C | C | C | D | D | D |
|  |  |  | Local | C | C | C | C | D | D | D |
| SR 371/Gaines Street | Railroad Avenue to MLK Boulevard | Minor Arterial | State | D | B | B | C | C | F | F |
|  |  |  | Local | D | B | B | C | C | F | F |
| SR 371/Lake Bradford Road | CR 2205/Lake Bradford Road to Coleman Street/Springhill Road/End Exception | Minor Arterial | State | D | C | C | C | D | D | F |
|  |  |  | Local | D | C | C | C | D | D | F |
|  | Coleman Street/Springhill Road/End Exception to SR 371/Gaines Street | Minor Arterial | State | D | F | F | F | F | F | F |
|  |  |  | Local | D | F | F | F | F | F | F |
| SR 373/Orange Avenue | SR 371/Lake Bradford Road to CR 2203/ Springhill Road | Minor Arterial | State | D | D | D | D | D | E | E |
|  |  |  | Local | D | D | D | D | D | E | E |
|  | CR 2203/Springhill Road to Holton Street | Minor Arterial | State | D | F | F | F | F | F | F |
|  |  |  | Local | D | F | F | F | F | F | F |
|  | SR 363/South Adams Street to SR 61/South Monroe Street | Minor Arterial | State | D | D | E | E | E | F | F |
|  |  |  | Local | D | D | E | E | E | F | F |

Table B: Level of Service on State Roads in Gadsden County

| Roadway | Segment | Functional Classification | Jurisdiction | $\begin{gathered} \hline \hline \text { LOS } \\ \text { Standard } \end{gathered}$ | Congestion Year and Level of Service |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 2010 |  | 2015 |  | 2020 |  |
|  |  |  |  |  | AADT | PHPD | AADT | PHPD | AADT | PHPD |
| None in 2010 LOS |  |  |  |  |  |  |  |  |  |  |

Table C: Level of Service on State Roads in Town of Chattahoochee

| Roadway | Segment | Functional Classification | Jurisdiction | LOS <br> Standard | Congestion Year and Level of Service |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 2010 |  | 2015 |  | 2020 |  |
|  |  |  |  |  | AADT | PHPD | AADT | PHPD | AADT | PHPD |
| None in 2010 LOS |  |  |  |  |  |  |  |  |  |  |

Table D: Level of Service on State Roads in Jefferson County

| Roadway | Segment | Functional Classification | Jurisdiction | $\begin{gathered} \hline \hline \text { LOS } \\ \text { Standard } \end{gathered}$ | Congestion Year and Level of Service |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 2010 |  | 2015 |  | 2020 |  |
|  |  |  |  |  | AADT | PHPD | AADT | PHPD | AADT | PHPD |
| None in 2010 LOS |  |  |  |  |  |  |  |  |  |  |

Table E: Level of Service on State Roads in Wakulla County

| Roadway | Segment | Functional Classification | Jurisdiction | LOS <br> Standard | Congestion Year and Level of Service |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 2010 |  | 2015 |  | 2020 |  |
|  |  |  |  |  | AADT | PHPD | AADT | PHPD | AADT | PHPD |
| US 319 | US 98 to Lower Bridge Road | Principal Arterial/ Interstate | State | C | C | C | C | C | F | F |
|  |  |  | Local | E | C | C | C | C | F | F |
|  | Lower Bridge Road SR 267/Bloxham Cutoff Road | Principal Arterial/ Interstate | State | C | F | F | F | F | F | F |
|  |  |  | Local | E | F | F | F | F | F | F |
|  | Bloxham Cutoff Road to Leon County Line | Principal Arterial/ Interstate | State | C | D | D | D | D | D | D |
|  |  |  | Local | E | D | D | D | D | D | D |

## Appendix B

(Electronic Appendix)

## Appendix C

## APPENDIX C

## CRTPA Regional Transit Study, Adopted March 2010

## Transit Service Improvements

Note: This information was extracted from the RTS Technical Memorandum \#3
This appendix discusses the proposed transit improvements that were identified as part of the Regional Transit Study (RTS), adopted by the Capital Region Transportation Planning Agency (CRTPA) in 2010. This appendix contains information extracted from the RTS Technical Memorandum \#3 which analyses existing transit services, current travel patterns, population projections, employment data and other socioeconomic data. The data was analyzed at super district level and compared to the 2007 base data to identify trends and to identify opportunities for future transit improvements as a way to reduce congestion. The identified improvements are categorized in to service improvements and capital projects.

The RTS conducted a transit potential analysis to quantify the demand for travel within the CRTPA region which comprises of Leon, Wakulla, Jefferson and Gadsden Counties. The Region's travel demand model was used to forecast trip flows and volumes which in turn were used to determine the current and future corridors with the highest daily travel demand. The results were the basis for future transit improvements.

The population projections indicate that between 2007 and 2050, Leon County and the City of Tallahassee will see a $52 \%$ population increase. Population in Gadsden, Wakulla, and Jefferson Counties is projected to increase $69 \%, 145 \%$, and $46 \%$, respectively, during that time period. The region as a whole is projected to increase its population by $62 \%$ in 2050 .

Employment, which is the second primary factor in estimating transit demand, indicates that between 2007 and 2050, Leon County and the City of Tallahassee will experience a $52 \%$ increase in employment. Employment in Gadsden, Wakulla, and Jefferson Counties is projected to increase $69 \%, 145 \%$, and $46 \%$, respectively, during that time period. The region as a whole is projected to increase its employment by $56 \%$ in 2050.

The RTS also generated zone to zone travel patterns using the population and employment forecasts and updated roadway and transit network information. The origin and destination by traffic analysis zone was categorized in to three (3) travel patterns:

1. Home-based work (HBW): Home-based-work trips are trips made between a household and place of employment
2. Home-based other (HBO): Home-based-other trips are trips made between a household and any other destination (i.e. school, shopping)
3. Non-home based (NHB): Non-home-based trips are all trips that do not have an origin or destination at a household

There were approximately 1.3 total million daily trips within the Capital region in the baseline year (2007). Of these trips, approximately 200,000 are HBW ( $16 \%$ ), while approximately 1.1 million are of

HBO or NHB. $24 \%$ of all trips in the baseline year were intra-district trips, meaning trips were conducted entirely within their zone of origin.

In the horizon year 2050, it is estimated that there will be approximately 2 million total daily person trips in the region. Approximately 329,000 daily trips are forecasted HBW trips, while 1.6 million are forecasted HBO or NHB trips. Approximately $25 \%$ of all trips are intra-district in 2050.

The majority of trips into Tallahassee originates in outer Leon County and has final destinations in the inner Northeast and inner Northwest districts. Wakulla County produces the next greatest volume of trips into the City of Tallahassee, followed by Gadsden and Jefferson. An overwhelming majority of total trips are to outer Leon, followed by Wakulla, Gadsden, and Jefferson. The majority of intra-zonal trips are for trip purposes other than HBW.

Potential transit markets were identified based on travel demand analyses. The RTS identified potential transit corridors and service options based on estimated trips by type as a way to reduce and/or manage congestion.

## Transit Service Improvements

Following is a list of proposed transit improvements to reduce and/or manage congestion:

Local Fixed Routes
Deviated Fixed Route
Transfer Centers
Park and Ride Lots
Express Bus

Bus Rapid Transit
Light Rail Transit
Modern Streetcar
Commuter Rail
High Speed Rail

## Near-Term Plan (2010-2014)

The near-term plan focuses on enhancing local service within the City of Tallahassee, Gadsden and Wakulla Counties. The StarMetro NOVA 2010 decentralized the bus service in early 2011. This framework added service in the rapidly-developing southeast quadrant of the City. Two express routes will be implemented in the Near-Term between Quincy and Tallahassee, and Crawfordville and Tallahassee. Both of these routes will be served by new park and ride lots at the end of the lines in the out-counties. Additionally, three transfer centers are proposed to provide for better connections between the decentralized StarMetro routes, planned express routes, and future BRT routes proposed in the later phases.

## Near-Term Service improvements include:

Star Metro Decentralization
CCOC/Southwood
Tram Road

## Near-Term Capital projects include:

Crawfordville Express
Quincy Express
Satellite transfer Centers (US 319/Mahan, Southwood, Hopkins Crossing)
Regional Park and Ride (Quincy, Crawfordville)

## Mid-Term Plan (2015-2024)

The Mid-Term Plan builds upon the Near-Term by adding two additional areas of local service, five new regional express routes, and three BRT routes. Fixed-guideway transit is introduced in this phase, as two streetcar routes are planned as circulators connecting key employment and education centers in downtown Tallahassee. Four transfer centers and two park and ride lots are planned to serve the new transit routes.

Mid-Term Service Improvements include:
North Leon County Service, East Leon County service, Quincy Fixed Route, Havana fixed route, and Monticello Fixed route

## Mid-Term Capital projects include:

Express Bus (Woodville Highway Express, Capital Circle East Express, Havana Express, Monticello
Express, Airport Express)
Bus Rapid Transit (West Tennessee, Thomasville Road, Apalachee Parkway)
Streetcar (Gaines Street line, Campus Line)
Satellite Transfer Centers (FSU/Stadium, Tallahassee community College, Tallahassee Regional Airport, Quincy)
Regional Park and Ride (Havana, Woodville)

## Long-Term Plan (2025-2050)

The Long-Term Plan is the final phase of proposed transit improvements. Included in this phase are several capital projects including two light rail transit (LRT) segments, four BRT corridors, and two express bus routes. Local service improvements include LRT feeder bus service and a fixed route circulator in Crawfordville. Possible commuter rail corridors and connections to high-speed rail were also evaluated and included in the long-range plans.

## Long-Term Service Improvements include:

LRT feeder service
Crawfordville fixed route
Rural fixed route expansion

## Long-Term Capital Projects Include:

Express Bus (Havana-Quincy, Capital Circle Southwest)
Bus Rapid Transit (West Tennessee BRT extension, Capital Circle East BRT, Monroe BRT, East Tennessee BRT)
Light Rail Transit (Airport to downtown, downtown to I-10 high speed rail station)
Commuter rail
High speed rail
Regional Park and ride (Bradfordville, Monticello)

## Appendix D

(Electronic Appendix)

## Agenda Item 3 C

## Jefferson County Bicycle and Pedestrian Master Plan Adoption

## REQUESTED BY: CRTPA Staff

Type of Item: Consent

## STATEMENT OF ISSUE

The purpose of this agenda item is to adopt the Jefferson County Bicycle and Pedestrian Master Plan.

## CRTPA SUBCOMMITTEE ACTIONS

On January 15, 2013, the CRTPA's Citizens Multimodal Advisory Committee (CMAC) recommended approval of the Jefferson County Bicycle and Pedestrian Master Plan.

On January 15, 2013, the CRTPA's Technical Advisory Committee (TAC) recommended CRTPA approval of the Jefferson County Bicycle and Pedestrian Master Plan.

## RECOMMENDED ACTION

Option 1: Adopt the Jefferson County Bicycle and Pedestrian Plan.

## History and Analysis

Following the adoption of the Regional Mobility Plan (RMP) for the Capital Region Transportation Planning Agency (CRTPA) in November of 2010, a Bicycle and Pedestrian Master Plan for Jefferson County was initiated. The development of the plan, which was conducted by Renaissance Planning Group, involved many meetings with the public as well as CRTPA staff, elected officials, Jefferson County staff, and CRTPA committees. The kick-off public meeting for the project was held in May of 2012, and by December of 2012, the Draft Jefferson County Bicycle and Pedestrian Master Plan was released for public review. Since that date, Jefferson County staff and CRTPA staff worked with the consultant team to finalize and format the document.

The Master Plan is comprehensive and includes sections on goals, existing conditions, crash data, public involvement, design standards and improvement concepts, funding strategies, project priorities, and programs and policies for the local government's consideration as well as maps and tables of the identified projects. Projects were divided into eight (8) category types: paved shoulders, roadway signage, multi-use trails/pathways, road diets, bicycle lanes, shared lane markings (aka
'Sharrows'), sidewalks, and pedestrian crossing enhancements. A description of each project considered is provided under the project type section.

Projects are prioritized into Tier 1, 2, and 3 classifications. Tier 1 projects are those which are desired to be completed first. Projects in Tier 1 are ranked by priority weight compared against all projects within the tier. The number one ranked project is a pedestrian crossing by the courthouse on US 90 from Walnut Street to Dogwood Street, and again on US 19 from Mulberry Street to Cherry Street.

Projects in Tier 2 and 3, however, are ranked differently. Projects within Tiers 2 and 3 are grouped by project type and then ranked by priority within the project category. There is no prioritization of project types/categories compared against one another in Tiers 2 and 3.

The proposed final plan was presented to the CRTPA committees on January 15, 2013. Both the TAC and the CMAC approved a recommendation to approve the plan as presented, which includes projects such as pedestrian crossings, paved shoulders, sidewalks, roadway signage, and multi-use trails/shared paths in Tier 1. Shared lane markings, bicycle lanes, and road diets appear in Tiers 2 and 3.

## RECENT ACTIVITY

The Jefferson County Board of County Commissioners held a public hearing on Thursday, January 17,2013 on the plan. The public hearing was well attended with many citizens providing comments on the transportation needs in Jefferson County. The comments received were in support of Jefferson County planning for their transportation future both in terms of physical plans and financial budgeting. Roadway improvements and services for the transportation disadvantaged population were stressed by several speakers, while the need to provide improvements to address overall safety and accessibility for all users including emergency vehicles was stressed by others.

The Plan was adopted by the Jefferson County Board of County Commissioners with small clarification changes noted by Clerk of Court relating to proper road names, descriptions, and spelling errors. The revised Master Plan, correcting these errors, will be available to review on the CRTPA webpage at www.crtpa.org on Wednesday, January 23, 2013 as part of the Board Meeting's agenda PDF file.

## NEXT STEPS

The adoption of this Master Plan completes a series of comprehensive bicycle and pedestrian needs assessments conducted for the four-counties that comprise the CRTPA area. These plans will be used heavily in the update to the Regional Mobility Plan, and in the application for and programming of funds for bicycle and pedestrian projects within the CRTPA area. Information on all $\underline{\text { adopted }}$ local government Bicycle and Pedestrian Master Plans can be viewed on the CRTPA webpage at www.crtpa.org under the "Documents and Projects" Tab.

## OPTIONS

Option 1: Adopt the Jefferson County Bicycle and Pedestrian Master Plan. (Recommended)

Option 2: Provide other direction.

# JEFFERSON COUNTY BICYCLE AND PEDESTRIAN MASTER PLAN 



# JEFFERSON COUNTY BICYCLE AND PEDESTRIAN MASTER PLAN 

Developed for Jefferson County, Florida

By Renaissance Planning Group
with assistance from HDR Inc., Wendy Grey Land Use Planning LLC, and Carpe Diem Community Solutions


The Jefferson County Bicycle and Pedestrian Master Plan was developed in collaboration with state, regional, and local governments and agencies; stakeholders from local organizations and businesses; and local residents.
A special thank you goes to the following entities for their involvement during the development of this Master Plan:
Jefferson County Board of County Commissioners

- John Nelson, Chair
- Betsy Barfield, Vice Chair
- Benjamin "Benny" Bishop
- Hines Boyd
- Stephen Walker

Federal, State and Regional Agencies and Organizations:

- Florida Department of Environmental Protection (FDEP) Office of Greenways and Trails (OGT)
- Florida Department of T ransportation
- Capital Region Transportation Planning Agency (CRTPA)

Local Government Agencies and Organizations:

## Jefferson County

- Sheriff's Office
- Chamber of Commerce
- Recreation Department
- Tourist Development Council
- School Board
- Planning Department
- Roads Department
- Office of the Clerk of the Court
- Office of the County Coordinator
- Economic Development Council
- Community Traffic Safety Team (CTST)


## City of Monticello

- Office of the Mayor and City Council
- Local Planning Agency (LPA)
- Office of the Chief of Police
- Office of the Clerk and Treasurer
- Office of the City Manager
- Office of the Planning Director



## Capital City Cyclists

The preparation of this report has been financed in part through grant(s) from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation, under the State Planning and Research Program, Section 505 [or Metropolitant Planning Program, Section 104(f)] of Title 23, U.S. Code. The contents of this report do not necessarily reflect the official views or policy of the U.S. Department of Transportation.
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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION GREENAIS $\&$ TRUIS


Pedestrian and Bicycle facilities connect people to places.
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An example of a creative solution near Pearl Street that enhances the accessibility of the park.

## Introduction

Jefferson County was created in 1827, named after the early $19^{\text {th }}$ Century United States President, Thomas Jefferson. Its geography is unique in that it connects with both the State of Georgia to the north and the Gulf of Mexico to the south. As a whole, Jefferson County is mostly rural with forested and agricultural lands and some rolling topography. It has a relatively low population at approximately 14,666 persons (2011) and a noticeable overall percentage of minority persons, consisting mostly of African-Americans, per 2010 US Census data.
The county seat and only incorporated municipality within the County is the City of Monticello, the name of which is also significant to the former president, as it was named after Thomas Jefferson's famous Virginia plantation and estate. The City of Monticello, north of Interstate 10, is the population center of the County with a rich history and quant historic streets and buildings. The City center includes a unique traffic circle at the intersection of two major state highways with the historic, century-old Jefferson County Courthouse building at the center. Monticello includes most of the business activity in the county along with most county-related government facilities and institutions. Notable unincorporated population centers in Jefferson County include Lloyd, Wacissa, Aucilla and Drifton. The Florida State capital, Tallahassee, is located approximately 30 miles west of Monticello in neighboring Leon County.
Jefferson County with its natural beauty and historic charm is a popular destination for recreational cyclists in the Florida Panhandle. The well-connected system of streets and destinations within and near the population center of Monticello allows the possibility for a robust non-motorized transportation network to provide flexibility and alternatives to residents and visitors alike to travel through and experience important assets of the City and County.

## Purpose

The Jefferson County Bicycle and Pedestrian Master Plan is an effort to create a vision and framework for a safe and robust bicycle and pedestrian infrastructure network that connects the City of Monticello, rural unincorporated communities in the County, other communities in the region, major employers, schools, and other desired destinations. This effort complements similar Capital Region Transportation Planning Agency (CRTPA) bicycle and pedestrian master plan projects previously completed in Leon County and in Wakulla and Gadsden Counties, and the Safe Routes to School project in Leon County.
The Jefferson County Bicycle and Pedestrian Master Plan identifies key destinations, routes and facilities, prioritize projects for future funding, and provides consistent design of bicycle and pedestrian infrastructure throughout the County.


Signage helps of communicate the county's vision and message for pedestrians and bicyclists.

## The Planning Process

This master plan was developed under a comprehensive planning process utilizing a number of methods and techniques to obtain quantitative and qualitative information for analysis and consideration. This planning process included:

- Data collection
- Data analysis
- Field review
- Stakeholder interviews
- Online public survey
- Public workshop
- Countywide vision map
- Master plan goals and strategies
- MPO committee updates and input
- Joint county-city work session

The development of the plan was influenced by many different people and organizations including local residents, business representatives, advocacy groups, and government agencies. This process was instrumental in developing the overall countywide bicycle and pedestrian network vision map, goals and strategies to guide project prioritization to implement the master plan.

## Vision Map: A Connected Bicycle and Pedestrian Network

The countywide vision map was developed with the idea of providing more mobility options within the County, specifically through the development of bicycle and pedestrian facilities. The development of such facilities should enhance walkability, expand bicycling opportunities, provide for better connectivity and mobility, and promote economic opportunities within the County. The recommendations of this master plan were developed in accordance with this vision. The Vision Map is included in the figure on the following page.


## Goals and Strategies

Five primary, overarching goals were established as the foundation for the master plan. With these goals in place, complimentary strategies were drafted as an approach to implementing the goals and to give guidance to setting the project recommendations and prioritization of the plan. The master plan goals and strategies are as follows:


Figure 2: Jefferson County Goals \& Strategies

The Monticello Bike Irail is one of the county's valuable existing

## Geography

Jefferson County includes approximately 637 square miles of area spanning from the Georgia State line southward to the Gulf of Mexico, and from Wakulla County and the major Florida Panhandle population and employment center of Leon County eastward to Taylor and Madison Counties. The County is mostly rural with forested and agricultural lands and some rolling topography. It is also rich with natural recreation and conservation areas including the Aucilla Wildlife Management Area, St. Marks National Wildlife Refuge, Middle and Upper Aucilla Conservation Areas, and the Wacissa Conservation Area. Jefferson County borders the eastern shore of Lake Miccosukee.

The City of Monticello is the county seat and only incorporated municipality within Jefferson County. Monticello is a small city at just over three square miles and a population of approximately 2,500 . It includes a quaint, historic downtown along with many standing historic structures, some dating back to the $19^{\text {th }}$ Century. Monticello is also the hub for business activity in the County along with most county-related government facilities and institutions. Notable unincorporated population centers in the County include Lloyd, Wacissa, Aucilla, Lamont, Waukeenah, and Drifton.
The City of Tallahassee is located approximately 30 miles west of Monticello in neighboring Leon County. As the Florida State capital and largest city in the Florida Panhandle, Tallahassee is an important employment center and within a manageable, although lengthy automobile commuting distance from Monticello. A significant number of Jefferson County residents choose to live in the county and work in neighboring Leon County where employment opportunities are more plentiful.

## Demographics

Jefferson County has a relatively low population estimated at 14,666 persons, according to the 2011 Florida Statistical Abstract, published by the University of Florida Bureau of Economic and Business Research (BEBR). This represents an overall steady increase of around $14 \%$ since 2000; however, the population has been on a slight decline since the 2009 high for the decade of 14,772 persons. Projection estimates for the future vary widely. High-end growth estimates project a steady increase in population over the coming decades while low-end estimates project a slow but steady decline over the same period. Population projections for the County are shown in Figure 3.
Almost $19 \%$, or one-fifth of the County population is 17 years of age or younger. This statistic is significant, as this age bracket is predominantly below the driving age. At the other end of the scale, $16.5 \%$ of the County population is 65 years of age or older. This is an age bracket where some individuals may experience a need for greater mobility options beyond a personal automobile. The age breakdown of the population is shown in Figure 4.

Approximately three-quarters (76\%) of the County population travels to work alone by personal automobile and $15 \%$ carpool to work (Figure 5). Other travel mode shares were much lower with $2 \%$ walking and $1 \%$ using public transit. Also, $4 \%$ of the population works from home.

Figure 3: Jefferson County Population Projections
Source: Source: Bureau of Economic and Business Research (2012)
Jefferson County Projected Population 2015-2040


Figure 4: Jefferson County Age Breakdown
Source: Source: Florida Office of Economic and Demographic Research

## 2010 Jefferson County Population Percentage by Age




Figure 5: Jefferson County Residents' Modes of Commuting to Work
Source: www.citymelt.com/county/Florida/Jefferson-County-FL (Total modes: 5,867)

## 2009 Modes of Transportation to Work



A significant percentage of the population is either below the legal minimum driving age or within an age bracket where additional mobility options become increasingly important. As the County struggles to maintain its population base or experience healthy population growth over the coming decades, additional modes of travel such as walking and bicycling should become more viable through the provision of supportive infrastructure and programs to encourage alternative transportation choices. Having such additional choices can make living in a small city or rural county more feasible and desirable for all segments of the population.


The project team completed an assessment of the existing context for bicycling and walking through a number of exploratory tasks, including:

- Assembly of geographic information systems (GIS) data and field review to compile existing conditions data
- Map series conveying the conditions analysis results and countywide vision
- Facility inventory with identification of gaps, barriers, and potential opportunities
- Audit of existing policies related to non-motorized transportation
- Stakeholder interviews to further identify issues and opportunities

This Context Inventory and Analysis documents the results of these tasks, which together describe the engineering, education, encouragement, enforcement, equity, and evaluation components of the existing context for biking and walking in Jefferson County.

## Data Collection and Assembly

The project team conducted several general surveillance efforts including an informal field review during the kick-off project studio and an in-depth field visit for the facility inventory and stakeholder interviews. The data, photos and other information collected during the field visits are documented in the Facility Inventory and Assessment sub-section.

The project team also obtained GIS data from various governmental agencies, including Jefferson County, Capital Region Transportation Planning Agency (CRTPA), and the State of Florida's Office of Greenways and Trails. These data sets provided a foundation of information for both the County and the CRTPA region. From this information, the project team created a map series to show a comprehensive picture of the existing and planned pedestrian and bicycle network in Jefferson County.

## Crash Data

The project team screened crash data from the Florida Department of Highway Safety and Motor Vehicles (DHSMV) for crashes involving pedestrians or bicyclists. The crash data from DHSMV indicate that for the five years from 2006-2010, the following injuries and fatalities occurred: three bicyclists and eight pedestrians were injured, and one bicyclist and four pedestrians died. For 201 1, the crash database shows two pedestrian injuries and zero bicyclist injuries; one of the two pedestrian injuries was fatal. While there were several pedestrian and bicyclist crashes in the County, mainly in the City of Monticello, there are not enough to show a distinct trend in location or cause. However, field review and discussions with residents and staff indicate a concern for bicycle and pedestrian safety.

Countywide Bicycle and Pedestrian Map Series
The following maps feature the existing and planned bicycle and pedestrian facilities within Jefferson County, summarizing the information obtained from the GIS data assembly task. Planned facilities represent those in previously completed regional and local planning documents, including the CRTPA Regional Mobility Plan (RMP), the RMP Sector Plan for the City of Monticello, and the CRTPA Regional Trails Plan.
Using the GIS data obtained through the assembly effort and the information gathered through other outreach and exploratory efforts explained later in this chapter, the project team created a conceptual map to show the vision of a connected network for bicycle and pedestrian travel in Jefferson County. This vision map, shown in Figure 6, identifies focus areas for economic development, historic areas, ecological sites, and areas for pedestrian emphasis. The network within the vision map provides general connections between these areas.
Figure 7 shows an overview of existing and planned facilities within Jefferson County. Most of the major roads throughout the County have paved shoulders. For the most part, existing sidewalks are limited to within the Monticello city limits. The GIS data indicate existing bicycle lanes within the County are located at the interchange of US 19 and Interstate 10, and along a short (about 250 feet) segment along northbound US 19 at the deceleration lane for Jordan Road about one mile south of the interchange with Interstate 10. The Regional Mobility Plan identifies a number of planned bicycle facilities along lower speed roads in the northwestern portion of the County. These future facilities would connect Monticello to communities like Wacissa, Cody, Alma, Waukeenah, and others in Leon County. A planned shared use path from the southern Monticello city limits to the community of Drifton is highlighted as a cost feasible project which could be funded in the near term.
Figure 8 shows a closer view of the existing and planned facilities within and nearby the City of Monticello.
It also identifies notable trip attractors including major employment locations, schools, parks, government buildings, and the downtown/historic district. The GIS data indicate that sidewalks are located along some but not all of the roads in Monticello. A shared use path exists along Railroad Street, which parallels US 19. Approaching the heart of Monticello, paved shoulders transition into sidewalks. Additional sidewalks are planned just north of the city limits and within the central portion of the city south of US 90.




Bicycle and Pedestrian Master Plan Monticello and Vicinity
BICYCLE AND PEDESTRIAN FACILITIES

Existing/Planned
N Sidewalk
$\sim$ Paved Shoulder
Bicycle Lanes
Hiking Trail
Shared Use Path
$\therefore$ Proposed Sidewalk
Planned Bicycle Facility
Planned Shared Use Path
Notable Trip Attractors
目 Major Employment Location

- School
* Park

血 Government Buildings

- Historic District

Figure 8: Monticello and Vicinity Bicycle \& Pedestrian Facilities

## Facility Inventory and Assessment

The project team conducted an in-depth field visit to review the existing facilities at a more detailed level and supplement the information from the GIS data assembly. The following subsections detail the existing facilities for nonmotorized transportation, identify facility gaps and barriers to pedestrian and bicycle travel, and describe potential opportunities for improvements.

## Assessment of Existing Facilities and Gaps

## Paved Shoulders and Bike Lanes

Jefferson County's existing bicycle facilities consist primarily of paved shoulders on the rural arterial roadways, including US 19, US 90, US 27, US 98, US 221, SR 59, and CR 257 . The only missing sections of paved shoulders on the state roadway system in Jefferson County are as follows:

- US 90 on the approximate 0.6 mile section in the far western portion of Jefferson County (and west of the 2.5 mile section of Leon County in between the two Jefferson County sections, which also does not have paved shoulders).
- US 19 and US 90 through Monticello in the sections where the roadway has an urban typical section with curb and gutter.
The only designated bicycle lane that was observed in Jefferson County is located on E. Cherokee Avenue connecting US 19 South and Waukeenah Street in Monticello adjacent to the CVS store (south of the Courthouse). However, the bicycle lane is of substandard width (approximately 4 feet from face of curb), is only provided on one side of the street, and is marked in a way that seems to encourage wrong-way riding (the bike lane word marking is oriented against traffic flow of the adjacent travel lane). The CRTPA Regional Mobility Plan identifies a small portion of a bike lane along US 19 near Interstate 10. This lane, though not designated (marked/signed) as a bike lane, is a keyhole lane that provides a correctly designed 5 -foot lane between the through lane and the exclusive right turn lanes at the Interstate 10 ramp intersections.
Many non-state roadways in the County are regularly used as part of recreational cycling routes, such as routes used by the Capital City Cyclists, but currently lack paved shoulders, including the following:
- CR 259/Waukeenah Highway
- CR 158/OId Lloyd Road
- Whitehouse Road
- Cherry Tree Road/Lloyd Creek Road
- Lake Road
- St. Augustine Road
- Barrington Road
- CR 257
- North Salt Road
- Bassett Dairy Road
- CR 149/Boston Highway
- CR 146/Ashville Highway
- Tram Road
- CR 158/Drifton-Aucilla Road
- Turkey Scratch Road
- Thompson Valley Road
- Beth Page Road
- CR 158B/Nash Road
- CR 158/Rabon Road

The addition of paved shoulders is currently considered on roadways during resurfacing projects and is typically justified based on safety concerns. The County has a programmed project to resurface CR 259 (Waukeenah Highway) and add paved shoulders between US 27 and SR 59 ( $\$ 1.47$ million in FY 2011/12). It is not clear whether other currently programmed resurfacing projects include the addition of paved shoulders or not; these projects listed in the CRTPA Draft FY 2013 - FY 2017 Transportation Improvement Program (TIP) include the following:

- $\$ 1.37$ million in FY 2013/14 for resurfacing CR 257/146 from US 90 to Ashville Highway (CR 146)
- $\$ 1.41$ million in FY 2013/14 for resurfacing Lloyd Creek Road from US 27 to Old Lloyd Road (CR 158)
- $\$ 268,000$ in FY 2014/15 for resurfacing CR 158A Old Lloyd Road from Leon Co line to SR 59 Gamble Road

The Jefferson County Community Traffic Safety Team (CTST) has identified priority locations for the addition of paved shoulders:

- CR 259 / Waukeenah Highway, from US 19 to US 27
- CR 158 / Old Lloyd Road, from US 90 to SR 59
- CR 146 / Ashville Highway (4 phases)
- CR 149 / Boston Highway (2 phases)
- Portions of US 90 West

The County Public Works Department is considering placement of signage to increase awareness of sharing the road along several roads in the County, including US 90, CR 158, SR 59, CR 257, and CR 259. Signage under consideration includes the "Share the Road" sign or the "Bicycles May Use Full Lane" (BMUFL) sign.

## Trails

Jefferson County has one paved shared use path, the Ike Anderson Trail, a 1.5-mile trail that travels north-south through the City of Monticello from Rocky Branch Road to Martin Road. The trail continues south from Martin Road for approximately 0.6 miles to Nacoosa Road as an unpaved trail.

## Sidewalks

The City of Monticello has existing sidewalks on a number of streets, particularly in the downtown area and on both sides of US 19 and US 90. However, there are a number of significant gaps, including the Water Street corridor, the area between the Ike Anderson Trail and US 19 near the Jefferson Square Shopping Center, and several streets that are part of the Jefferson County Chamber of Commerce's Walking Tour of Monticello. The only other existing sidewalks in Jefferson County outside the City of Monticello include an approximate 0.3 mile section on both sides of US 27 within the limits of the urban curb and gutter typical section through Lamont.

Many roadways near Jefferson County Elementary School currently have substandard sidewalks. These sidewalks are located on the immediate edge of the street and only measure about four feet wide. Further, most of these


An existing sidewalk on US 19 in downtown Monticello.


Cherry Street, looking south from York Street is a segment on the Walking Tour of Monticello, but lacks a sidewalk.


Vehicles parked on the substandard sidewalk on Wirick Street north of Madison Street.


The sidewalk near the junction of Cypress Street and Henry Street has a dangerous hazard in the walkway.


The roundabout at US 19 and US 90 sees a lot of truck traffic. The approaching streets are wide due to the angled parking.


This picture shows one of four crossing points to the Courthouse in the center of the roundabout.
sidewalks were not constructed at a standard curb height, but are only elevated above street level by a couple of inches. Vehicles were observed parked on these substandard sidewalks in several locations.

Many sidewalks in the City of Monticello are in need of maintenance, rehabilitation, or enhancements to be in compliance with the Americans with Disabilities Act (ADA) requirements.
Based on the CRTPA TIP, currently programmed sidewalk projects include the following:

- $\$ 380,648$ in FY 2013/14 to construct a sidewalk along the south side of US 90 from Holly Road to Willow Street, to be constructed by the City of Monticello through a Local Agency Program (LAP) agreement with FDOT with federal funding.
- $\$ 396,000$ in FY 2015/16 (Safe Routes to School funding) for construction of 1,800 feet of sidewalk along the east side of Mamie Scott Drive from existing sidewalk at Mississippi Street to Texas Hill Road.
Other County planned (but unfunded) sidewalk projects include:
- Texas Hill Road sidewalk project (Safe Routes to School) - includes sidewalks on Texas Hill Road between US 19 and Boston Highway, on Boston Highway between US 19 and Texas Hill Road, and on US 19 between Texas Hill Road and Boston Highway. (This does not appear to be included in the currently programmed sidewalk project on Mamie Scott Drive.)


## Design Standards Used by the City of Monticello and Jefferson County

Both Jefferson County and the City of Monticello currently use FDOT's Florida Greenbook for design standards on their projects. The FDOT's Plans Preparation Manual provides additional guidance, including some more flexible standards for downtown areas. Finally, there are recommended street design typologies in the CRTPA's RMP that focus on providing multimodal access for all users within the appropriate context to encourage walkability.

## Issues and Opportunities

## Downtown Courthouse Area

The Jefferson County Courthouse is located in the center of a single lane modern roundabout at the junction of US 19 and US 90. Concerns with this roundabout include the significant volume of truck traffic, and the pedestrian movements to and from the Courthouse which require crossing the circulating roadway (which is atypical of most roundabouts which only have pedestrian crossings on the outside of the roundabout, and not to and from the center). It can be difficult for drivers in the roundabout to see a pedestrian crossing from the inside of the roundabout, and in some locations, the visibility of pedestrian signage is blocked by trees and other obstructions.

While the geometric design of the roundabout is such that most large trucks have no issues negotiating the turns, there are infrequent occasions (about once a month according to stakeholder interviews) when an oversized truck will get stuck while negotiating the roundabout. There is not a good existing alternative route for trucks to bypass the downtown Monticello area and the existing roundabout. A Monticello bypass has been studied on four previous occasions, but remains unlikely to move forward given the cost to build such a facility and because the existing roadway network can accommodate the existing and
projected future traffic demand without capacity deficiencies.
There are current efforts to make enhancements to the pedestrian environment at the Courthouse roundabout and the blocks surrounding it. The County is preparing to have in-pavement pedestrian signs installed at the roundabout pedestrian crosswalks and is also looking to remark the crosswalks using a more visible ladder-style marking pattern (the stamped and colored asphalt markings have faded since they were first installed in the mid-2000s). Portions of US 19 North and US 90 (both east and west directions) within two blocks of the Courthouse have angled parking, which results in wide roadway crossings for pedestrians. Several intersections are being considered for the addition of curb extensions as part of a Transportation Enhancements grant application being championed by the CTST. Curb extensions extend the sidewalk or curb line out into the parking lane, which reduces the effective street width. They significantly improve pedestrian crossings by reducing the width of the roadway, improving the ability of pedestrians and motorists to see each other, and reducing the time that pedestrians are in the street. Curb extensions would also allow the existing pedestrian signs to be moved closer to the travel lanes where they would be more visible to motorists. With more visible signs, some existing signs could be removed; for example, pedestrian warning signs are currently used for the crossings on both the near and far side of each intersection, but having a visible sign at the near side crossing would eliminate the need for the second sign at the far side crossing.
It is important to note that curb extensions can impact other aspects of roadway design and operation such as street drainage, underground utilities, delivery access and garbage removal, street sweeper operation, and the turning movements of large vehicles including large fire trucks. Because the benefits of the curb extensions appear to outweigh the potential impacts (many of which can be adequately mitigated through appropriate design), it appears most feasible to move ahead with the curb extension concept in downtown Monticello.

It was observed that the angle of the parking had been changed at some point in the past to a shallower angle (it used to be approximately 45 degrees, but was reduced to approximately 30 degrees). It is assumed that this change was made to provide more width to the passing trucks and make it easier for motorists entering and exiting the angled parking. One issue with the current striping, however, is that the lines are not long enough to properly direct motorists into the parking spaces; because of the angle of the spaces, the lines on the left side of the vehicles do not extend to the back bumper of the vehicle. Consideration should be given to increasing the length of the parking stall lines. In addition, parking blocks should be considered to prevent vehicles from pulling too far forward onto the sidewalk; several vehicles were observed pulled too far forward.

One design element that could be used to mitigate drainage concerns with the curb extensions and create a stronger visual separation of the travel lane and parking lane is the use of a valley gutter (along with drainage grates), which would be located between the travel lane and parking lane/curb extensions. Valley gutters can sometimes allow the existing drainage infrastructure to remain in place. Valley gutters may also be considered to visually separate the circulating roadway of the roundabout with the paved parking areas on the outside of the roundabout in each quadrant of the intersection; the striping that is used to provide the separation today is worn and hardly visible.


Some signage at the roundabout is blocked by trees, and some striping has worn away. A valley gutter could be used to better visually separate the circulating roadway from the adjacent parking area.


Potential curb extensions would shorten pedestrian crossing distances and allow pedestrian signage on road edges to be moved more into driver cone of vision, and also eliminate the pedestrian signs on the far side of each intersection.


A vehicle parked partially on the sidewalk in an angled parking space. The vehicle also extends well past the striped parking stall length.


A Jefferson County Elementary School student crossing Rocky Branch Road at Rhodes Street at an existing school crosswalk.


Sidewalks near the school are of substandard width, minimally separated from the roadway, and in poor condition. There is an unnecessary marked crosswalk across Rocky Branch Road, but no marked crosswalk across school driveway, as shown in the picture above.


The Rocky Branch Road/Cypress Street/ Mamie Scott Drive intersection uses an unusual 3-way stop control.

## Jefferson County Elementary School Area

The student arrival period was observed at Jefferson County Elementary School on the morning of February 23, 2012. No students were observed riding bicycles to school despite the direct connection to the Ike Anderson Trail. Only five students were observed walking to school. The lack of students walking and bicycling can be attributed to two primary factors: first, the lack of pedestrian facilities and low quality/unsafe pedestrian environment, and second, the low number of students that live within a reasonable walking distance of the school.

The Jefferson County Schools Transportation Department confirmed that only those students living in the immediate school area walk to the campus. The current enrollment of the elementary school is approximately 610 to 615 students. About 230 ( $38 \%$ ) of these students are provided courtesy busing to the school from within the 2 -mile walk area due to safety concerns. Of the total school district enrollment (elementary school plus the middle/high school) of just under 1,100 students, about 800 ( $73 \%$ ) are bused to school. Despite safety concerns, there are no areas that have been designated as hazardous walking areas in the County by the Department of Education. Jefferson County Schools had requested hazardous walking designation for crossings of US 90 and US 19, but traffic volumes were not at high enough levels to meet the criteria to warrant the designation.
During the elementary school area observations, there were a number of issues observed, as well as the potential for improvements in the area immediately around the elementary school campus, as follows:

- There are no crossing guards that help students cross the street at the elementary school; the County lacks sufficient funds to afford them. According to the County, the school does get assistance from the police at times, although this was not observed.
- The existing sidewalks on Rocky Branch Road and Mamie Scott Drive are in poor condition and are only separated from the edge of roadway by about four to five feet in a rural cross section with no curb and gutter.
- There are no marked crosswalks across any of the school driveways, including the driveways on Rocky Branch Road (parent drop-off loop entrance and exit, and bus loop entrance) and Mamie Scott Drive (bus loop exit and back of school access driveway).
- The driveway providing access to the back of the school from Mamie Scott Drive does not have a stop sign or stop bar at its exit.
- There is a marked (but unsigned) crosswalk across Rocky Branch Road just west of the parent drop-off loop exit, which is unnecessary because it does not connect to anything.
- The existing 3-way stop traffic control at the intersection of Mamie Scott Drive/Rocky Branch Road/Cypress Street is awkward. All directions are required to stop except for southbound Mamie Scott Drive. This intersection should be considered for all-way stop control, which would make vehicle movements more predictable and make it safer for crossing pedestrians and bicyclists.
- There are no marked crosswalks at the Mamie Scott/Rocky Branch/ Cypress intersection, including the east leg of the intersection which connects the northern terminus of the lke Anderson trail to the sidewalk that continues on the east side of Mamie Scott Drive, or on the north leg of the intersection which should be marked as a school crossing. There is a marked school crossing across Mamie Scott Drive just north of this
intersection at a midblock location, which seems unnecessary given the locations of the school entrances which better align with the intersections at Cypress and Chestnut Streets.
- There are non-standard school speed limit signs on both Rocky Branch Road and Mamie Scott Drive, which should be replaced with standard Manual on Uniform Traffic Control Devices (MUTCD) school speed zone signs. Consideration should be given to supplementing the standard signs with flashing beacons to be active during the speed-restricted arrival and dismissal time periods.
- All existing crosswalks in the area use transverse line markings. Consideration should be given to re-marking the crossings as noted herein with FDOT standard ladder-style markings, which are much more visible to drivers. In addition, consideration should be given to marking advance yield lines and providing corresponding signage.
- All existing school warning signs are standard yellow, but should be upgraded to fluorescent yellow-green color to be in compliance with the current MUTCD.


## Trail Extensions \& Connections

A northern extension of the Ike Anderson Trail to the Jefferson County Recreation Park (approximately 0.35 miles) appears feasible based on the Mamie Scott Drive cross-section. Although this section of road does have a minimal width sidewalk that connects from the existing northern trail terminus at Jefferson County Elementary School to the park, a wider trail connection to the County's largest recreational facility would be preferred.
A southern extension of the Ike Anderson Trail to Jefferson County Middle/ High School has previously been considered, and is currently included in the CRTPA Regional Mobility Plan Priority Project List, Adopted FY 2013-2017, as priority \#65 (extension of trail from existing end to Jefferson County HS) and is identified for funding in the amount of $\$ 3.3$ million for PD\&E/Design/ROW. The following observations were made when reviewing the potential southern trail extension:

- Since the railroad corridor right-of-way has been abandoned in the section south of Nacoosa Road due to environmental concerns associated with the nursery, the most feasible trail connection would be along US 19.
- A paved connection from the existing southern paved trail terminus to US 19 ( 0.34 miles) could be provided on Martin Road. The CRTPA Regional Mobility Plan Priority Project List, Adopted FY 2013-2017, included a trail adjacent to Martin Road from US 19/S Jefferson Street to lke Anderson Bike Trail as priority \#T-12, with funding of \$219,142 identified for design and construction.
- Alternatively, the existing unpaved section of the trail between Martin Road and Nacoosa Road could be paved ( 0.56 miles), and a paved connection could be provided on Nacoosa Road to US 19 ( 0.20 miles).
- There appears to be sufficient right-of-way available on the east side of US 19 to construct a trail. There is an unpaved access way for mail delivery along much of US 19 south of Nacoosa Road to the railroad bridge north of the high school (mailboxes are oriented inward from this access way).
- There may be potential to use the Old Drifton Road corridor, particularly south of Aucilla Highway. This section is paved and already has an at-


The Ike Anderson Trail ends at Rocky Branch Road. However, there is no crosswalk connecting the trail to the sidewalk that continues on the north side of the intersection. If one was added, the stop bar would need to be shifted back.


A potential southern extension of the trail could be routed along the east side of US 19 South along the access-way currently used for mail delivery (note mailboxes turned inward towards accessway).


Existing sidewalk from the school to Jefferson County Recreation Park along Mamie Scott Drive, which could be enhanced and widened as a northern trail extension.


Water Street is a priority corridor to add sidewalks to connect between downtown Monticello and the planned eco-park at Seminole Street as well as to the proposed Magnolia Pines development.


Potential location to construct a new sidewalk on King Street, east of Martin Luther King Jr Avenue.
grade railroad crossing which would avoid having to build a structure adjacent to the US 19 bridge to cross over the railroad. Further, the Old Drifton corridor ties into David Road at the high school entrance. However, the roadway is narrow (approximately one lane wide), and the corridor is not paved north of Aucilla Highway.

- Other trails and connectors that should be evaluated further include the following:
- Connection between the existing Ike Anderson Trail and the planned ecopark at Water Street and Seminole Street. This connection would also provide improved pedestrian and bicycle access to Jefferson Square Shopping Center for residents of the Roostertown area.
- A paved trail connector to the Ike Anderson Trail from the newer residential area on Elliott Drive / Melrose Drive should be considered.
- An abandoned railroad corridor currently owned by Progress Energy provides an opportunity to create a new trail with eventual linkage from Lamont to the west and northwest of Monticello, and connect to a southern extension of the Ike Anderson Trail.


## Potential New Sidewalks

Based on the site review and stakeholder meetings conducted, new sidewalks should be pursued for the following areas:

- On US 90, west of Holly Road. Extending the currently programmed sidewalk project another 300 feet to the west would provide a connection to an existing dentist office and daycare business. This extension should be evaluated to determine if it could be accommodated during construction of the programmed project.
- Where there are currently gaps in the sidewalks on streets in downtown Monticello on the route of the Chamber of Commerce's Walking Tour of Monticello, including sections of Madison Street, Cherry Street, High Street, Pearl Street, Magnolia Street, and Palmer Mills Road. This amounts to a total of approximately 0.5 miles of missing sidewalk.
- On Water Street from the old high school campus to the proposed new Monticello Pines planned unit development and the planned eco-park located at Water Street and Seminole Avenue. Monticello Pines is planned to have sidewalks internally, but does not have a requirement to build any sidewalks external to the development.
- In the Roostertown area on Martin Luther King Jr. Avenue and King Street, at a minimum. Both of these streets are relatively wide and have curb and gutter sections, which may be able to accommodate new sidewalks on the back of the existing curb. Alternatively, the roadway could be narrowed with curb and gutter reconstructed further inward and connected to the existing drainage structures. Due to tight right-of-way, it may not be feasible to construct sidewalks on other streets having rural sections in this neighborhood, although right-of-way widths should be confirmed.
- Sidewalks have been discussed in the community of Lloyd, including a potential connection on SR 59 from Old Lloyd Road to the Interstate 10 area.
It is noted that the CRTPA TIP identifies funding for FY 2012/13 in the amount of $\$ 133,000$ to construct bicycle/pedestrian projects in Jefferson County. All or a portion of this funding, if unallocated to date, could potentially be used for one or more of the projects listed above.


## Sharrows

It is noted that the CRTPA Regional Mobility Plan Priority Project List, Adopted FY 2013-2017, includes priority \#T-2 for shared lane markings ("sharrows") at the following locations:

- US 90/W Washington Drive from Mahan Drive to MLK Jr Avenue
- S Water Street from Williams Street to US 90/W Washington Street

Installation of sharrows on these sections of US 90 and Water Street in downtown Monticello would be of benefit to bicyclists since these sections do not have paved shoulders and cyclists currently share the lane with motor vehicle traffic. Traveling eastbound on US 90 into Monticello, the paved shoulder ends at Mahan Drive; Share the Road signs should be reviewed for use at this location, at minimum, and consideration be given for installation of sharrows. Sharrows would also be the preferred bicycle facility on the downtown sections of US 19 in the areas that cannot accommodate the addition of a bicycle lane.

## Potential Road Diets

There are two sections of US 19, immediately north and south of downtown Monticello, as well as a section of US 90 east of downtown Monticello, which should be considered for potential road diets. A "road diet" describes a project to reduce the width of a street when it has an unnecessary number of through lanes or lanes with excessive width. The removal of unneeded travel lanes from a roadway provides space that can then be used for other uses and travel modes. The most common road diet projects involve converting a four-lane undivided roadway to a two-lane roadway (one travel lane in each direction plus a two-way center left turn lane) by removing one travel lane in each direction. The remaining space is most commonly used to add bicycle lanes. A center landscaped median and/or pedestrian refuge islands can be used in place of the center two-way left turn lane in locations where driveways are sparse or absent; the median or refuge islands allow pedestrians to cross the street in one direction and one lane of traffic at a time making it much easier and safer to cross the road. Road diets encourage non-motorized travel modes through reduced vehicle speeds and safer conditions for bicyclists and pedestrians. Because only under-utilized travel lanes are removed, motor vehicle traffic typically moves along a road dieted corridor with similar efficiency and travel time. The cost of a road diet project can be minimized by simply re-striping a roadway during its normal maintenance cycle. No right-of-way acquisition would be required for road diets on any of the sections described in Monticello.
The benefits of road diets to these roadway sections in Monticello include:

- Enhanced gateway treatments which will help to inform travelers that they have arrived in Monticello and establish an enhanced sense of place.
- Reduced corridor speeds to appropriate levels (posted speeds are 25 and 35 mph ) to establish calmer and less aggressive traffic flow.
- More accessible and safer pedestrian crossing opportunities, particularly at area destinations such as the Jefferson Square Shopping Center.
- Improved corridor aesthetics through additional landscaping in median islands.
- Opportunity to examine the possibility of re-designating the space of under-utilized on-street parking, potentially for wider pedestrian buffers or buffered bicycle lanes.
- For US 19 South, enhanced safety by merging northbound traffic into


The beginning of the urban section and end of paved shoulders on US 90, west of downtown Monticello. This location could have a Share the Road or Bikes May Use Full Lane sign, as well as sharrow markings to help cyclists transition from the shoulder to sharing the travel lane.


Potential road diet location on US 19 South.


Potential road diet location on US 90 East.


Existing sight distance issue on High Street at US 19 North due to the large trees.


The trail crossing at US 90 is not very visible. There is an opportunity to improve signage, lighting, and potentially install a refuge island to facilitate crossing one direction and one lane at a time.


Area of potential pedestrian crossing enhancements on US 19 South near Cherokee Street and Jefferson Square Shopping Center (looking south)
one lane sooner, prior to the immediate approach to the Courthouse and roundabout at US 90.

An average daily traffic volume range of 8,000 to 15,000 is generally considered to be ideal for four-lane to three-lane road diet projects. For the potential road diet sections, US 19 South has daily volumes of approximately 10,000 to 11,000 , while US 19 North has a daily traffic volume of 5,500 and US 90 East has a daily volume ranging from 2,600 to 9,000 (source: FDOT 2010 Florida Traffic Information DVD). These roadways have experienced negligible growth over the last 10 years, and no significant growth is forecast in the future at this time. As such, each roadway has volumes that are within or below the ideal range for consideration of a road diet.

If bike lanes are implemented as part of a road diet on US 19 North, it is important to note that even in the existing two lane section immediately north of downtown (from Pearl Street to north of Madison Street), the roadway is currently wide enough (approximately 40 feet curb to curb) to stripe bike lanes. A secondary benefit of bike lanes on this portion of US 19 is they would improve sight distance for vehicles on the side streets by defining the available space vehicles have to pull further forward to see around the large trees located adjacent to the roadway. For the portion of US 19 at the roundabout and in the two blocks north to Pearl Street, the preferred bicycle treatment is the use of sharrows.

## Pedestrian Crossing Enhancements

During the site visit conducted, enhancements were noted to be needed at two primary midblock pedestrian crossing areas, as follows:

- US 90 at Ike Anderson Trail. This crossing is not very visible and not well lit. It could be improved with additional signage, new crosswalk markings, additional overhead lighting, and potentially an enhanced crossing treatment, such as rectangular rapid flashing beacons (RRFBs). This crossing would also benefit from a median island that could be implemented as part of a road diet project, or independently. According to Jefferson County School Superintendant, there was a school speed zone at this crossing at one time, but it was removed due to a complaint.
- US 19 South at Cherokee Street / Jefferson Square Shopping Center area. This is a significant area with potential for frequent pedestrian crossings, especially following development of the proposed nearby ecopark. Crossings are currently challenging in this area due to the five-lane cross section, the speed of traffic (posted speed is 35 mph but traffic was generally observed traveling faster), and a significant hill just north of Cherokee Street that limits sight distance of both drivers and pedestrians. This area would benefit from installation of median islands as part of a potential road diet or separate project. The road diet would also be beneficial in helping eliminate pedestrian vehicle conflict points and controlling motor vehicle speeds. Some access management in terms of turning restrictions or driveway consolidation may be needed in order to implement one or more median islands in this area. A flashing beacon in this area was previously not approved by FDOT during review of the planned Dollar General project.
The existing Ike Anderson Trail is not well signed along the numerous intersecting cross streets. Even though many of the cross streets are minor with low traffic volumes, additional signs should be considered for installation to warn motorists
of the potential for crossing pedestrians and bicyclists at these locations.
Another consideration is to ensure adequate lighting of all marked crosswalks, including midblock locations and those located at intersections. FHWA HT-08-053, The Information Report on Lighting Design for Mid-block Crosswalks, found that a vertical illumination of 20 lux in front of the crosswalk, measured at a height of five feet from the road surface, provided adequate detection distances in most circumstances. The same principal applies at intersections as well.


## Assessment of Progress Toward Complete Streets

A 2008 article in ITE Journal describes "complete streets" and policies to implement them, and states: "A complete street is a road that is designed to be safe for drivers, bicyclists, transit vehicles and users, and pedestrians of all ages and abilities. The Complete Streets concept focuses not just on individual roads but on changing the decision-making and design process so that all users are routinely considered during the planning, designing, building and operating of all roadways. It is about policy and institutional change."

In terms of routine accommodation, FDOT has a statewide complete streets policy and typically does routinely consider all modes when planning and designing roadway projects for the state system. This has resulted in the inclusion of paved shoulders on all of the state roads in Jefferson County (except a section of US 90 West), as well as sidewalks on the state roads in more developed areas such as downtown Monticello. However, Jefferson County and the City of Monticello do not have complete streets policies. As such, County roads generally lack paved shoulders, and many streets within the more developed parts of the City of Monticello lack sidewalks.
Based on stakeholder interviews, which are described in further detail in the Stakeholder Interviews Summary section, the County and City acknowledge deficiencies in accommodating all modes of travel. The County is now considering the addition of paved shoulders during resurfacing projects in rural parts of the County to better accommodate recreational bicycle riders. Similar consideration is also needed for opportunities to piggyback on any other roadway-related projects to add other complete streets elements that may be needed such as sidewalks or bicycle facilities. The City and County should both consider developing and adopting complete streets policies into their Comprehensive Plan and Land Development Codes.

## Policy Audit

A key component of an effective bicycle and pedestrian program involves understanding the level of consistency of non-motorized transportation policies among the governmental agencies in the area. The project team conducted a policy audit to address policies and design standards used in the engineering, public works, and planning departments of Jefferson County and the City of Monticello relating to bicycle and pedestrian facility design, signage and markings, and project prioritization. Location-specific policies and development policies related to site plan treatments for bike and pedestrian travel and accessibility were also considered. The CRTPA's Regional Mobility Plan includes a number of goals, objectives, and policies related to multimodal transportation, including bicycle and pedestrian travel.


Area of potential pedestrian crossing enhancements on US 19 South near Cherokee Street and Jefferson Square Shopping Center (looking north)


The trail crossing is not signed at many cross street locations, and motorists may not be expecting crossing bicyclists or pedestrians.

## Jeffersön County Comprehensive Plan

## Existing Policies

A substantial number of Comprehensive Plan policies address bicycle and pedestrian needs. The policies can be categorized as follows:

- Policies supporting land use patterns that facilitate bicycling and walking. Policies include the creation of mixed use land use categories and the recognition of traditional and historic communities built at a pedestrian scale. These policies are included in Table 1.
- Policies establishing minimum design standards to accommodate bicycles and pedestrians. Policies provide direction for the content of land development regulations. These policies are included in Table 2.
- Policies promoting bicycling and walking as a means of achieving public health and safety. These policies generally address access to open space, including coastal areas. These policies are included in Table 3.


## Policy Gaps

Objectives and policies could be incorporated into the Comprehensive Plan to strengthen the concept of enhanced countywide bicycling and pedestrian networks. The following gaps were identified:

- The Plan lacks an objective that specifically addresses the benefits of countywide bicycle and pedestrian networks.
- The Plan does not specifically enable the development of road standards compatible with more pedestrian oriented communities, such as the Lloyd settlements and Traditional Communities.
- The Plan addresses the need to preserve adequate right-of-way for traffic flow (Transportation Policy T-3-1), but does not mention that the right-ofway should also provide for bicycles and pedestrians, as appropriate.
- The Plan does not contain a policy on the protection of Canopy Roads, although such roads are designated and protected in the Land Development Code. Canopy roads can contribute to the bicycling network.
- The County may wish to consider addressing bicycling as part of the County's economic development strategy. This approach could tie into Plan policies addressing historic preservation and access to the Gulf Coast.


## Discrepancies

No discrepancies or internal inconsistencies were identified. The County should consider renaming the "Traffic Circulation Element" the "Transportation Element" to reflect that this element incorporates various modes of transportation.

## Other Notes

The Comprehensive Plan calls for horse riding paths to be included, along with pedestrian and bicycling facilities, as integral part of roadways.

Table 1: Jefferson County Comprehensive Plan Policies Supporting a Land Use Pattern that Facilitates Bicycling and Walking

## POLICY

TEXT

## Future Land Use Element Policy

FLU-1. 2

## MIXED USE SUBURBAN RESIDENTIAL (MUSR):

This mixed use category is comprised of areas where suburban or exurban residential is the predominant type of use and includes many traditional communities. Infill development is particularly desirable and encouraged in these areas, particularly when community utilities become available.
All housing types will be allowed at a variety of densities with a maximum density of 4 units per acre utilizing individual septic tanks if on a community water system and up to 8 units per acre with community water and sanitary sewer. Parks and recreation uses are also appropriate. Non-residential use should not exceed 20 percent of the total area; intensity of such development, as measured by land coverage, should not exceed 65 percent impervious surface area.
MIXED USE BUSINESS/RESIDENTIAL (MUBR):
A mixed use category which provides for a variety of business types, including offices, retail, lodging, restaurants, services, commerce parks, shopping centers, or other similar business activities. Other uses may be allowed, consistent with the more intense development characteristics of this mixed use category, such as multi-family residential not to exceed 10 units per acre, medical facilities such as clinics, hospitals, nursing homes, public or private schools, churches or other similar uses, parks and recreation. The mix would allow for approximately a 6040 split between business (60\%) and residential (40\%) uses within each mapped MUBR area. Intensity of business use, as measured by land coverage, should not exceed 80 percent impervious surface area. These MUBR areas will be required to be served by community utilities, therefore, new residential development shall not be less than one dwelling unit per acre. Residential development shall include $5 \%$ of contiguous land for open space.
MIXED USE-INTERCHANGE BUSINESS:
A mixed use category located at an interchange of $1-10$, with a variety of primarily commercial businesses. Appropriate commercial uses include: (1) tourist-oriented facilities such as restaurants, automotive service stations, motels, campgrounds, and the like; (2) region-serving retail complexes or office centers; (3) commerce parks; (4) facilities for the storage and distribution of foods and products including wholesale activity; (5) light manufacture of goods for distribution to other locations; and (6) truck stops. Intensity of use, as measured by impervious surface, shall not exceed 80 percent.
CONSERVATION SUBDIVISIONS:
A form of clustering residential development in the County's agricultural land use categories that concentrates buildings or lots on part of the site to allow the remaining land to be used for common open space, recreation, and preservation of environmentally sensitive features in perpetual Conservation Easements. The concentration of lots is facilitated by reduction in lot size. A conservation subdivision will consist of one or more cluster groups surrounded by common open space in Conservation Easements. The parcel on which a conservation subdivision is proposed must be 80 or more acres in size to ensure that the preserved open space be environmentally viable. Density bonuses for conservation subdivisions as provided above shall be 10\% for every 15\% of additional open space up to a maximum density bonus of $40 \%$ for a minimum of $70 \%$ open space meeting the requirements for conservation subdivisions in the Land Development Code. The primary requirement regarding the condition of the Open Space shall be that $50 \%$ of the Open Space area shall be otherwise developable lands with no environmental constraints. The County's requirements for conservation subdivisions shall be consistent with the following purposes: ...
Promote construction of convenient landscaped walking trails and bike paths both within the subdivision and connected to neighboring communities, businesses, and facilities to reduce reliance on automobiles; ....

Future Land Use Objective FLU-6

Conservation Policy C-1.1.3
位 new development to occur primarily in a variety of mixed use concentrations, located in historic settlements as small nodes of development to support the surrounding rural and agricultural development, adjacent to and integrated with the City of Monticello, at major roadway intersections, or at interstate interchanges, specifically to serve the traveling public.

Jefferson County shall encourage mixed use development patterns that promote the mixture of residential and workplaces to encourage pedestrian or bicycle use and/ or transportation alternatives to automobiles.

Table 2: Jefferson County Comprehensive Plan Policies Establishing Minimum Design Standards to Accommodate Bicycles and Pedestrians

| POLICY |  |
| :--- | :--- | :--- |
| Future Land Use Policy FLU 5-5 | In addition to standards on access management, the Land Development Code <br> shall include standards for on-site circulation and parking, and where appropriate <br> (such as mixed use areas), pedestrian and bicycle access and the needs, types and <br> locations of interconnections between residential and commercial areas. |
| Transportation Objective T-4 | Provisions shall be adopted in the Land Development Code which ensures safe <br> and adequate movement of pedestrians and bicyclists. |
| Transportation Policy T-4-1 | Adequate pedestrian circulation and safety shall be ensured as a component of <br> highway system management, with accomplishment through traffic analysis and <br> roadway improvements. <br> - Pedestrian movement and safety studies shall be conducted to determine high <br> travel patterns and areas; <br> Remedial actions shall be taken by the County to mitigate safety problems <br> where conditions have been determined to be unacceptable; <br> Sidewalks shall be provided where feasible and appropriate along all <br> roadways |
| Transportation Policy T-4-3 | Bicycle facilities, pedestrian walkways, horse riding paths, and associated <br> facilities shall be included as integral components of roadways, with priority of <br> implementation being oriented to the establishment of networks along roadways <br> between residential centers and schools, employment and retail commercial areas, <br> and recreation and other public facilities as possible. |
| Transportation Policy T-4-4 | The County shall review all proposed development for its accommodation of <br> bicycle/horse riding and pedestrian traffic needs. |
| Transportation Policy T-7-2 | The site plan review applicable to all development will ensure that adequate and <br> safe on-site traffic flow and parking conditions will exist for pedestrians and <br> motorized and non-motorized vehicles. |

Table 3: Jefferson County Comprehensive Plan Policies Promoting Bicycling and Walking as a Means of Achieving Public Health and Safety

| POLICY | TEXT |
| :--- | :--- |
| Conservation Policy C-1.1.1 | Jefferson County shall promote programs on the health benefits derived from <br> using bicycles and walking by encouraging citizens to use public pathways <br> and at the same time reduce polluted emissions attendant with the use of their <br> automobiles.. |
| Housing Policy H-3-1.11 | On an on-going basis, support local projects involving walking, bicycling, and <br> driving tours to historic and archeological sites. |
| Coastal <br> Objective CME-1.4 | Ensure that provision for public access to the Gulf of Mexico through other <br> counties adjacent to Jefferson County shall be coordinated between them and <br> other agencies, such as Federal, State, and Regional; and shall be accomplished <br> in a consistent manner in keeping with the public need; and that both efforts, <br> coordination and accomplishment, will be enforced throughout the time frame <br> of this plan. |
| Coastal Management Element Policy <br> CME-1.4.1 | Coordinate with the Federal and State governments and Wakulla and Taylor <br> counties to ensure that the citizens of Jefferson County will have public access <br> when needs are being provided for during any upgrading of existing access <br> points or development of new access points to the County's coastal area from <br> adjacent counties. |
| Recreation Policy R-1.1 | The County will provide parking areas and bicycle racks for recreation sites. |
| Recreation Policy R-1.2 | Bike paths and pedestrian walkways shall be built to provide access to recreation <br> areas in accordance with site specific design features and the intended use of a <br> particular site. |

## Jefferson County Land Development Code

## Existing Policies

The Jefferson County land development code provides both policy direction (intent) regarding the significance of bicycle and pedestrian facilities and specific standards for the design and construction of those facilities.

## Intent

The Code specifically states that one intent of the land development code is to encourage bicycle and pedestrian travel.

## Development Standards

The code addresses the following standards, which are included in Table 4:

- Interconnections between developments
- Design of on-site parking and loading to address bicyclist and pedestrian safety
- Bicyclist and pedestrian access to development
- Shoulder construction
- Road cross sections
- Bicycle parking


## Policy Gaps

- 2.03.02: Traditional Communities. The code does not contain standards for development and redevelopment in Traditional Communities. Such standards could specifically address maintaining and enhancing the pedestrian scale of development.
- 2.03.03 B.1: Lloyd Historic Overlay. The code does not include standards that specifically address maintaining and enhancing the pedestrian scale of development.
- 2.05.02: Landscape buffers. The code does not consider allowing building and site design to ensure compatibility, in lieu of landscape buffers, in areas designated for mixed use pedestrian scale development.
- 5.02.02 A. 5 \& 6: Street design standards. The code does not include reference to bicycle and pedestrian interconnections in these standards.
- 9.02.03.D.14: General Development Review. The code does not include requirements to show sidewalks or pedestrian and bicycle circulation in on-site parking plan.


## Discrepancies

Although interconnections are encouraged (5.02.02A.5 \& 6), the Code also states that "[r]esidential streets shall be arranged to discourage through traffic...." (5.02.02A.7) The code should specifically encourage bicycle and pedestrian traffic, even when automobile traffic is discouraged.

Table 4: Jefferson County Land Development Code Standards

## TEXT

| Objectives of Code (1.02.01 L) |
| :--- |
| Design Standards for Off-Street <br> Parking and Loading Areas (5.02.03 <br> E) |

Realize a pattern of locations of dwelling units, jobs, and other trip origins and destinations to encourage pedestrian and bicycle travel, to minimize vehicular trips and trip lengths, and to facilitate the operation of public and quasi-public transportation systems;...

## 1.Location.

a.Except as provided herein, all required off-street parking spaces and the use they are intended to serve shall be located on the same parcel.
b.The Planning Commission may approve off-site parking facilities as part of the parking required by this Code if:
(1)The location of the off-site parking spaces will adequately serve the use for which it is intended. The following factors shall be considered:
(a)Proximity of the off-site spaces to the use that they will serve.
(b)Ease of pedestrian access to the off-site parking spaces.
(c) Whether or not off-site parking spaces are compatible with the use intended to be served, e.g., off-site parking is not ordinarily compatible with high turnover uses such as retail.
(2)The location of the off-site parking spaces will not create unreasonable:
(a)Hazards to pedestrians.
(b)Hazards to vehicular traffic.
(c)Traffic congestion.
(d)Interference with access to other parking spaces in the vicinity.
(e)Detriment to any nearby use.
Bicycle and Pedestrian Access
$(5.02 .04)$

## 1.Location.

a.Except as provided herein, all required off-street parking spaces and the use they are intended to serve shall be located on the same parcel.
b.The Planning Commission may approve off-site parking facilities as part of the parking required by this Code if:
(1)The location of the off-site parking spaces will adequately serve the use for which it is intended. The following factors shall be considered:
(a)Proximity of the off-site spaces to the use that they will serve.
(b)Ease of pedestrian access to the off-site parking spaces.
(c) Whether or not off-site parking spaces are compatible with the use intended to be served, e.g., off-site parking is not ordinarily compatible with high turnover uses such as retail.
(2)The location of the off-site parking spaces will not create unreasonable:
(a)Hazards to pedestrians.
(b)Hazards to vehicular traffic.
(c) Traffic congestion.
(d) Interference with access to other parking spaces in the vicinity.
(e)Detriment to any nearby use.
5.The street layout in all new developments shall be coordinated with and interconnected to the street system of the surrounding area.
6.Streets in proposed subdivisions shall be connected to rights-of-way in adjacent areas to allow for proper inter-neighborhood traffic flow. If adjacent lands are unplatted, stub outs in the new development shall be provided for future connection to the adjacent unplatted land.
Street Design Standards - Shoulders (5.02.02 D)

Shoulders, where required, shall measure at least four (4) feet in width and shall be required on each side of streets and shall be located within the right-
of-way. Shoulders shall consist of stabilized turf or other material permitted by the Planning Official. Shoulders and/or drainage swales are required as follows:
1.Shoulders are required on all residential access and residential subcollector streets.
2.All residential collector streets shall provide four (4) foot wide shoulders on both sides of the street. Shoulders should be grass surfaced. In no case shall the shoulders be paved. Pedestrian or bicycle traffic areas that are paved shall have shoulders on both sides unless they are connected to the street paving. Then a shoulder is only required on the side not connected to the paving.
3. Where shoulders are required by the Florida Department of Transportation.
4.Collector streets where curbing is not required.
5.Arterial streets where curbing is not required.
6.Shoulders are not required when curbing is used.

Off-Street Parking and Loading -
Number of Parking Spaces Required (5.02.03 B.7.c)

The following applies to bicycle parking:
(k) Other bicycle parking devices may be used if it is established to the satisfaction of the Development Administrator that the standards below are met.
(I) The rack or other facility shall:
(a) Be designed to allow each bicycle to be supported by its frame.
(b) Be designed to allow the frame and wheels of each bicycle to be secured against theft.
(c) Be designed to avoid damage to the bicycles.
(d) Be anchored to resist removal and solidly constructed to resist damage by rust, corrosion, and vandalism.
(e) Accommodate a range of bicycle shapes and sizes and to facilitate easy locking without interfering with adjacent bicycles.
(f) Be located to prevent damage to bicycles by cars.
(g) Be consistent with the surroundings in color and design and be incorporated whenever possible into building or street furniture design.
(h) Be located in convenient, highly-visible, active, well-lighted areas.
(i) Be located so as not to interfere with pedestrian movements.
(i) Be located as near the principal entrance of the building as practicable.
(k) Provide safe access from the spaces to the right of way or bicycle lane.

## TEXT

Review of Site Development Proposed Development Activities and Design - Streets, parking and

Plans - Application and Submittal Requirements - Development Review Requirements (9.02.03.D.14.f)

## loading

(1)The layout of all streets, bike paths, and driveways with paving and drainage plans and profiles showing existing and proposed elevations and grades of all public and private paved areas.
(2)A parking and loading plan showing the total number and dimensions of proposed parking spaces, spaces reserved for handicapped parking, loading areas, proposed ingress and egress (including proposed public street modifications), and projected onsite traffic flow.
Review of Site Development Plans - Application and Submittal Requirements - Major Review Requirements 9.02.03.F.1 d \& f

A Master Plan or Planned Unit Development (PUD) is required for a Major Development, which is to be developed in phases. A Master Plan shall provide the following information for the entire development:
a.Approximate location of proposed and existing streets and pedestrian
and bicycle routes, including points of ingress and egress....
f.A vicinity map of the area within five hundred (500) feet surrounding the site showing:
(1)Land use designations and boundaries.
(2)Traffic circulation systems.
(3)Major public facilities.
(4)Municipal boundary lines.

Street Design Standards (5.02.02)
Tables and Figures

Figures
5.02.02-A; B; C; and D

Table 5.02.02-A

## City of Monticello Comprehensive Plan

A substantial number of Comprehensive Plan policies address bicycle and pedestrian needs both directly and indirectly. The policies can be categorized as follows:

- Policies supporting a land use pattern that facilitates bicycling and walking. The Plan establishes mixed use future land use categories. It strongly encourages new development to incorporate smart growth practices and emphasizes the importance of new development incorporating the City's existing grid system. These policies are included in Table 6.
- Policies establishing minimum design standards to accommodate bicycles and pedestrians. The Plan contains specific standards (e.g., minimum sidewalk widths) as well as direction for standards in the land development code. These policies are included in Table 7.
- Policies promoting bicycling and walking as a means of achieving public health and safety. Policies address access to recreational facilities and improving safety conditions. These policies are included in Table 8.
- Policies that promote bicycling and walking as a means of improving environmental quality, including the reduction of greenhouse gases. These policies are included in Table 9.
- Policy that promote enhanced bicycling and pedestrian facilities as part of the City's overall economic development strategy, particularly related to downtown redevelopment. This policy is included in Table 10.

Table 5: City of Monticello Comprehensive Plan Policies Supporting Land Use Patterns that Facilitate Bicycling and Walking

| POLICY | TEXT |
| :---: | :---: |
| Land Use Policy 1-10 | Mixed-Use Office/Residential <br> The mixed-use office/residential land use category applies to areas in which historic structures exist and allows single family dwellings, as well as business and professional offices as the primary nonresidential use, excluding veterinarian offices. Residential uses and densities shall be the same as allowed for low density residential. In addition to offices, non-residential uses include a mix of pedestrian oriented uses allowed in the public, educational and recreational land use categories. Except as described below, any non-residential uses allowed in the mixed-use office/residential land use category may utilize only structures in existence on March 3, 1998. New structures intended specifically for non-residential uses shall be no larger than 5,000 square feet, and may not be placed on the site of a residential structure which existed on March 3, 1998. New non-residential uses shall be limited to an impervious surface ratio of 0.50 . The distribution of the mix of uses shall be within the range of 40-60\% Residential/40-60\% non-residential. <br> The establishment of all new non-residential uses in the office/ residential land use category shall be approved only pursuant to a special exception process (from low density residential zoning) to be included within the City of Monticello Land Development Regulations. |
| Land Use Policy 1-11 | Mixed-Use Business/Residential <br> The mixed-use business/residential land use category allows all uses permitted within mixed use office/residential and also allows residentially-compatible commercial uses. Commercial uses which are incompatible with this category include, but are not necessarily limited to, restaurants with fast food counters or providing take out or drive through service, convenience stores, automobile fueling and service establishments, laundry and dry cleaning facilities. Residential densities shall be up to ten units per acre. Non-residential uses shall be limited to an impervious surface ratio of .75. New structures intended specifically for non-residential uses shall be no larger than 7,500 square feet. The distribution of the mix of uses shall be within the range of $40-60 \%$ Residential/40-60\% non-residential. For undeveloped parcels greater than 25 acres in size not currently included within this category, the non-residential use component shall include a mix of commercial and recreational uses. <br> In addition, non-residential uses as allowed herein shall be allowed only by the City's site plan approval process. |
| Land Use Policy 4-3 | New development, to the extent possible, shall be located in areas with existing utilities as an effort to reduce infrastructure costs, increase infrastructure efficiency and reduce urban sprawl. |

## Land Use Policy 8-1

Master Planned Development - Master Planned Developments (MPD) are large scale projects that require a comprehensive analysis of a specified area of the City which is used to guide the timing, location, type and amount of future development. MPDs include developments that are mixed-use, large-scale, and may be located in new towns, highway corridors and interchanges, areas of rapid growth or land use changes, and areas with sensitive environmental resources or other areas where a comprehensive review is warranted. ...
f.The proposed traffic circulation system in the MPD must incorporate the City's existing grid system as part of the proposed transportation system if feasible. Alternatively, the system can provide a different approach as long as it provides similar benefits of the grid system including minimizing traffic onto US 19 and 90 and providing multiple options for travel. Any traffic circulation approach must also consider natural features and existing resources both on and off site, compatibility with adjacent neighborhoods (if any) and community character.

## Land Use Policy 10-1

The City encourages all new development (residential or commercial) to consider the following design elements or smart growth principles as part of the project's site design:

- Building placement - direct buildings toward the street especially in urban areas to encourage walkability. Alternatively, design the site to address the street through landscaping and other design features to avoid unbuffered parking areas along the street frontage.
- Direct parking beside or to the rear of the building to allow for building placement near the street. Alternatively, design the site to address the street through landscaping and other design features to avoid unbuffered parking areas along the street frontage.
- Design the site in consideration of all modes of transportation including the automobile, pedestrians and cyclists. Consider the safe movement and provision for all modes of transportation.
- Buffering - use landscaping to provide transition and hide undesirable areas. However, encourage mixture of land uses where possible and do not use landscaping to separate interaction of uses unless the use is undesirable by adjacent property owners.
- Encourage front porches rather than garages along the street
- Incorporate the City's existing grid pattern as part of new development including sidewalks, bike lanes and tree lined streets where feasible.
- Signage - Control signage and lighting to be more uniform and compatible with the City, to limit light pollution and sky glow and to be more energy efficient.
This policy does not restrict the City from adopting required development standards within the City's Land Development Code.

Table 6: City of Monticello Comprehensive Plan Policies Establishing Minimum Design Standards to Accommodate Bicycles and Pedestrians

| POLICY | TEXT |
| :---: | :---: |
| Transportation Policy 1-2 | The City shall provide local alternatives to US 19 and US 90 by protecting and extending the existing local grid street pattern. Local streets shall not be abandoned unless necessary for safety reasons. New streets will be required to connect to the existing street pattern as the land is developed. |
| Transportation Policy 1-3 | New development must incorporate the City's existing grid system as part of the proposed transportation system if feasible. Alternatively, new development can provide a different approach as long as it provides similar benefits of the grid system including minimizing traffic onto US 19 and 90 and providing multiple options for travel. Any traffic circulation approach must also consider natural features and existing resources both on and off site, compatibility with adjacent neighborhoods (if any) and community character. |
| Transportation Policy 2-7 | Marked pedestrian crossings shall be provided around the traffic circle surrounding the Courthouse, and within three blocks both north, east and west of the Courthouse. |
| Transportation Policy 3-4 | In order to protect pedestrians in downtown, reduce vehicle speeds, promote economic development, and protect the character of the City Center, all existing parking spaces on US 90 and on US 19 north of US 90 shall remain, unless clearly shown that removal is necessary to resolve an existing safety hazard. |
| Transportation Policy 3-5 | In order to reduce accidents and improve pedestrian safety, the City shall request that FDOT install a raised median on US 19 and US 90, where feasible, whenever a resurfacing occurs. |
| Transportation Policy 4-3 | All new roads or reconstructed roads shall include either a sidewalk on at least one side or a paved shoulder on both sides. |
| Transportation Policy 4-5 | All new sidewalks shall be a minimum of 5 feet wide, unless available right-of-way is less than five feet. |
| Transportation Policy 4-6 | The City will develop a mobility plan for the City as follows: <br> a) The City will identify on a map and evaluate the condition of the sidewalk and bicycle/pedestrian facilities within the City. <br> b)The City will determine the location of key attractor and generators within the City <br> c) The City will compare the existing bicycle and pedestrian facilities with the key areas (attractors and generators) in the City to determine where the critical gaps are located in the mobility system. <br> d)The City will identify the gaps in the system, prioritize those needed facilities and incorporate those facilities into the City's capital improvement planning. <br> e) The City will look for opportunities to have the private sector develop these needed facilities as new development is proposed within the City. |
| Transportation Policy 6-1 | All new businesses or public facilities which require additional vehicle parking shall include bicycle parking near the main entrance. Vehicle parking requirements may be reduced by the City in coordination with additional bicycle parking facilities. |


| POLICY | TEXT |
| :--- | :--- |
| Transportation Policy 6-2 | The City will have established a citizen's Bicycle and Pedestrian Advisory <br> Committee to advise on any transportation matters. This Committee <br> may be combined with a similar committee representing all of Jefferson <br> County, if one exists. |
| Transportation Policy 6-3 | Any new cul-de-sac streets shall include a bicycle/pedestrian connection <br> to adjacent properties. |

Table 7: : City of Monticello Comprehensive Plan Policies Promoting Bicycling and Walking as a Means of Achieving Public Health and Safety

| POLICY | TEXT |
| :--- | :--- |
| Transportation Policy 3-3 | The City shall participate as part of the Jefferson County Safety Team <br> to identify and minimize unsafe locations. |
| Transportation Policy 3-5 | In order to reduce accidents and improve pedestrian safety, the City <br> shall request that FDOT install a raised median on US 19 and US 90, <br> where feasible, whenever a resurfacing occurs. |
| Recreation and Open Space Policy <br> $1-1$ | Bicycle racks shall be available at recreation sites. When land is <br> available, the City shall also provide parking areas. |
| Recreation and Open Space Policy <br> $1-2$ | Bike paths and pedestrian walkways shall be built to provide access to <br> recreation areas including a bicycle trail parallel to Railroad Street. |

Table 8: : City of Monticello Comprehensive Plan Policies Promoting Improved Environmental Quality

POLICY
TEXT

## Land Use Objective 8

Conservation Policy 1-2

The City of Monticello will encourage large scale proposed developments to be designated "Master Planned Development" on the Future Land Use Map and to complete a comprehensive analysis of the project's impacts within the City. The City will also encourage the development to follow energy efficient town planning principles in order to reduce vehicle miles traveled (VMT) in the City and to reduce vehicle emissions by encouraging the use of other modes of transportation such as bicycle, pedestrian and ride sharing.

The City shall promote use of bike and pedestrian pathways to help reduce automobile pollution and reduce green house gas emissions.

Table 9: City of Monticello Comprehensive Plan Policies Promoting Enhanced Bicycling and Pedestrian Facilities as Part of the City's Overall Economic Development Strategy

| POLICY | TEXT |
| :---: | :--- |
| Transportation Policy 1-4 | In order to promote economic development and downtown revitalization, <br> and maintain the minimum level of service standards, pedestrian/bicycle <br> facilities, specifically sidewalks for all projects and encourage bicycle <br> racks for commercial projects, shall be included in all development plans. |

## City of Monticello Land Development Code

## Existing Policies

The Monticello land development code provides specific standards for the design and construction of bicycle and pedestrian facilities. The code addresses the following standards, which are included in Table 11:

- Interconnections between developments
- Shoulder construction
- Road cross sections
- Bicycle parking


## Policy Gaps

Intent: The code does not include explicit intent language stating the importance of bicycle and pedestrian mobility.

- 54.500: Parking Lot Design Criteria. This section does not include standards for safe bicycle and pedestrian access and circulation.
- 54.523(I): Connectivity: This section does not specifically reference bicycle and pedestrian connectivity.


## Discrepancies

Although interconnections are encouraged, the Code also states that " $[r]$ esidential streets shall be arranged to discourage through traffic...." (see $54.523(a) 5,6, \& 7$ ). The code should specifically encourage bicycle and pedestrian traffic, even when automobile traffic is discouraged.

Table 10: City of Monticello Land Development Code Standards

Planned Unit Developments 54-247 Final development plan.
(4)

## TEXT

Transportation Design Standards -
Street Design Standards 54-523 (e)
Shoulders.
Shoulders, where required, shall measure at least four feet in width and shall be required on each side of streets and shall be located within the right-of-way. Shoulders shall consist of stabilized turf or other material permitted by the development administrator. Shoulders and/or drainage swales are required as follows:
(1)Shoulders are required on all residential access and residential subcollector streets.
(2) All residential collector streets shall provide four-foot-wide shoulders on both sides of the street. Shoulders should be grass surfaced. In no case shall the shoulders be paved. Pedestrian or bicycle traffic areas that are paved shall have shoulders on both sides unless they are connected to the street paving. Then a shoulder is only required on the side not connected to the paving.
(3) Where shoulders are required by the state department of transportation.
(4)Collector streets where curbing is not required.
(5)Arterial streets where curbing is not required.
(6)Shoulders are not required when curbing is used.




## Project Involvement

This master plan was developed with the opportunity for extensive input and involvement from the general public, key community stakeholders, local and regional public agencies and elected officials, and business and economic development interests. Throughout the process, numerous elements of the public were asked to participate in the planning and decision making process, providing valuable local knowledge and resources to assure that this master plan is a true representation of the Jefferson County community. A range of strategies and tools were utilized to garner input from the public, including key stakeholder interviews, an online public survey, an advertised public workshop, and numerous public meetings with agency appointees and elected officials. Below includes descriptions of the public involvement activities conducted during the project.

## Stakeholder Meetings and Interviews

Stakeholder interviews were conducted with a cross section of people early in the process to gain initial input, local knowledge and thoughts on the development of the master plan. Below is a list of key stakeholders interviewed. Stakeholder interview notes are included in the appendix to this master plan.

- CRTPA staff
- Jefferson County Administrator
- Jefferson County Engineer
- Jefferson County Sheriff's Deputies
- Monticello Chief of Police
- Jefferson County Schools Superintendent
- Jefferson County Planning Director
- Jefferson County Roads Department staff
- Jefferson County Economic Development Council staff
- Jefferson County Tourist Development Council staff
- Monticello City Manager
- Monticello Clerk/Treasurer
- Local resident/business owner
- Capital City Cyclists members
- FDEP Office of Greenways and Trails (OGT) staff


## Online Public Survey

An online public survey was posted on the CRTPA website with a link from the Jefferson County website. The survey included four 'open ended' questions for participants to respond. The questions pertained to perceived issues, concerns, facility types and potential important destinations related to bicycling and walking in the County. A copy of the online survey results is included in the appendix to this master plan.

## Public Workshop

A public workshop was conducted at the Jefferson County library. The workshop was noticed via local newspaper and television, as well as CRTPA and Jefferson County websites. Local residents, merchants/businesses, churches, bike clubs, civic clubs, agencies, elected officials and community leaders were invited primarily through email. The intent of the workshop was to discuss bicycle- and pedestrian-related needs, identify a vision and set some of the priorities for the master plan. Copies of the workshop flyer and newspaper advertisement are included in the appendix to this master plan.

## Public Agency Meetings

A number of public agency meetings were held throughout the master plan process to keep the public informed, address questions and obtain valuable feedback to guide the project forward. Below is a list of the public agency meetings and presentations conducted for this master plan.

## CTRPA Technical Advisory Committee (TAC)

Project consultants presented to the TAC on the status of the project and the planned next steps moving forward. Questions were solicited from meeting attendees after the presentation and project comment cards were distributed to gain further input.

## CRTPA Citizens Multimodal Advisory Committee (CMAC)

Project consultants presented to the CMAC on the status of the project and the planned next steps moving forward. Questions were solicited from meeting attendees after the presentation and project comment cards were distributed to gain further input.

## Monticello Local Planning Agency (LPA)

Project consultants presented to the LPA on the status of the master plan along with draft bicycle and pedestrian project recommendations. Meeting attendees asked questions and provided comments and feedback on a number of the project recommendations. Meeting attendees also received project comment cards to complete and return.

## Jefferson County Board of County Commissioners

Project consultants presented to the Commission on the status of the master plan along with draft bicycle and pedestrian project recommendations. The group asked questions and provided comments and feedback on a number of the project recommendations. Meeting attendees also received project comment cards to complete and return.

## County-City Joint Work Session

While this master plan is a plan for Jefferson County at large, the County understands the importance of having the City of Monticello involved in project decision making throughout the process. Therefore, the Board of County Commissioners hosted an interactive joint work session with the City of Monticello, inviting elected officials, City staff and members of the public at large. The work session was focused primarily on gaining consensus on recommended projects and prioritization to complete the master plan. The work session was well attended and attendees provided the necessary information and feedback to finalize the master plan and associated project priorities.

## Jefferson County Board of County Commissioners

Project consultants presented the final Jefferson County Bicycle and Pedestrian Master Plan at a public hearing, requesting adoption of the plan by the Commission.

## CTRPA Technical Advisory Committee (TAC)

Project consultants presented the final Jefferson County Bicycle and Pedestrian Master Plan to the TAC for acceptance prior to adoption by the Jefferson County Board of County Commissioners.

## CRTPA Citizens Multimodal Advisory Committee (CMAC)

Project consultants presented the final Jefferson County Bicycle and Pedestrian Master Plan to the CMAC for acceptance prior to adoption by the Jefferson County Board of County Commissioners.

## CRTPA Board

Finally, project consultants presented the final, County-adopted Jefferson County Bicycle and Pedestrian Master Plan for adoption by the Board.

## Overview

The Conceptual Network defines an overall vision for bicycle and pedestrian transportation in Jefferson County and the City of Monticello. Based on the Inventory and Analysis of Existing Conditions and refined with input from staff and the public, this Conceptual Network makes key connections to a range of destinations in the County, complementing existing sidewalks, trails, and paved shoulders, provides mobility and access, and begins to identify a hierarchy or typology of bicycle and pedestrian treatments that could be considered for the County's bicycle and pedestrian network.
As shown on the bicycle and pedestrian facilities maps Figure 9 and 10 , the Conceptual Network combines existing bikeable streets with facilities and treatments that will improve mobility, access and visibility for cyclists in the community. The Conceptual Network also focuses on increasing walkability in areas that are likely to attract pedestrian traffic, especially downtown Monticello. The Conceptual Network recognizes that most of the County's roadways, with the exception of Interstate 10, are part of the bicycle and pedestrian network, and that cyclists and pedestrians in the City and County do, in fact, currently operate on most the roads allowed under the statutes, from quiet cul-de-sacs to downtown streets to arterial roads, regardless of whether there is a separate facility. Cyclists especially have varying levels of skill and comfort related to bicycling in the roadway with traffic, and even very skilled cyclists operate on a variety of street types from busy arterials to quiet residential streets. A well-planned network should provide for a variety of on- and off-street route options suited to the needs of a variety of cyclist experience levels.

As such, the Conceptual Network identifies a series of facilities, including sidewalks, bike lanes, shared use paths, paved shoulders, signed roadways, and roadways which should be considered for modification (including potential alternative configurations) to improve conditions for walking and bicycling in the County and City. The Network provides connections to existing facilities and key destinations around the County, including parks, schools, government buildings and other attractors. In addition, the Network needs to connect the various areas in the County together, providing for bicycle travel to Lloyd, Wacissa, Aucilla, Lamont, Waukeenah, and Drifton, providing recreational/touring loops, and connecting to the surrounding counties. The various components of the Conceptual Network and associated design standards are generally described below.



## Bicycle and Pedestrian

Facilities Map
Monticello and Vicinity

Existing Facilities
S Sidewalk
$N$
Paved Shoulder

- Shared Use Path

Programmed Facilities
A. Sidewalk

Planned Facilities
$\therefore \because$ (SW) Sidewalk
~( (BL) Bicycle Lane
$\therefore$ (PS) Paved Shoulder
$\therefore \therefore$ (MU) Shared Use Path
(RD) Road Diet
$\therefore \therefore$ (SL) Shared Lane Marking
(SN) Signage Segments
(bil "Bike May Use Full Lane" Signage

- (PX) Pedestrian Crossing Enhancements, etc.

Notable Trip Attractors
$\stackrel{5}{1}$ School
率 Park
Historic District

Figure 10: Monticello and Vicinity Bicycle \& Pedestrian Network Plan

## Paved Shoulders

A paved shoulder is a portion of the roadway which has been delineated by edge line striping but generally does not include special pavement markings for the preferential use by bicyclists. Adding paved shoulders to a roadway can greatly improve bicycle accommodation, particularly on roadways with higher speeds or traffic volumes, and is perhaps the most effective bicycle-related improvement that can be made to the various rural roadways within Jefferson County. Paved shoulders provide numerous benefits, including to motorists, in three important areas: safety, capacity, and maintenance. In terms of safety, highways and roadways with paved shoulders have lower accident rates as paved shoulders provide space to make evasive maneuvers, accommodate driver error, add lateral clearance to roadside objects and hazards, and provide increased sight distance for through vehicles and vehicles entering the roadway. For capacity, paved shoulders provide space for disabled vehicles, mail delivery and bus stops, provide a space for bicyclists to ride at their own pace, and provide a greater effective turning radius for trucks. Finally, highways with paved shoulders are easier to maintain as the provided structural support to the pavement, discharge water further from the travel lanes thereby reducing undermining of the base and subgrade, and provide space for maintenance operations.

- The appropriate width of paved shoulders should be based on the roadway's context and conditions in adjacent travel lanes. Key considerations and width recommendations are as follows:
- On uncurbed cross sections with no vertical obstructions immediately adjacent to the roadway, paved shoulders should be a minimum of 4 feet wide to accommodate bicyclists.
- A minimum width of 5 feet is recommended from the face of guardrail, curb, or other roadside barrier to provide additional operating width (cyclists typically shy away from a vertical face).
- Wider paved shoulders should be considered on roadways with higher bicycle usage, high motor vehicle speeds (greater than 50 mph , considerable use by heavy vehicles/trucks, buses, or recreational vehicles (greater than 10\%), or static obstructions at the edge of the roadway.


## Bicycle Signage

Bicycles May Use Full Lane (BMUFL) signs (R4-1 1) are similar to Share the Road signs, but provide an alternative message. They may be used on roadways where no bicycle lanes or adjacent shoulders usable by bicyclists are present and where travel lanes are too narrow for bicyclists and motor vehicles to operate side by side. These signs can be used in both rural and urban environments, and have the advantage of conveying a more specific message than Share the Road signs, which can be misconstrued by motorists as being directed towards bicyclists to "stay out of the way" of passing vehicles.
It is recommended that Jefferson County conform to the following general guidance on the use of Share the Road and/or BMUFL signs:

- The use of the signs should be limited to locations or corridors with issues or constraints, as described above, and should be limited to locations that do not have paved shoulders or other designated bicycle facilities. In specific locations with documented motorist courtesy or other issues on a roadway with a paved shoulder or designated bicycle facility, one or more Share the Road signs may be considered for installation (BMUFL signs are not to


An example of a paved shoulder in Lake County, FL


Bicycle May Use Full Lane sign in Orlando, FL.
be used in any case when there is a paved shoulder or designated bicycle facility).

- When used, signs are to be placed upstream of the constrained area, prior to intersection with a bicycle route, or following the intersection with a significant cross street; specific placement of signs will require engineering judgment.


## Multi-use Trails / Shared-Use Paths

Multi-use trails or shared-use paths are physically separated from motorized vehicle traffic by an open space or barrier and either within the roadway right-of-way or within an exclusive right-of-way. Multi-use trails may also be used by pedestrians, skaters, wheelchair users, joggers, and other non-motorized users. AASHTO recommends multi-use trails generally be 10 to 14 feet wide; pathways may be as narrow as 8 feet but only in rare circumstances with limited bicycle traffic, only occasional pedestrian traffic, horizontal and vertical alignments that provide safe and frequent passing opportunities, and where the path will not be subject to regular maintenance vehicle loadings which may cause pavement edge damage.

For further design guidance on multi-use trails, please refer to the AASHTO Guide for the Planning, Design and Operations of Bicycle Facilities, or to the FDOT Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (Commonly known as the "Florida Greenbook").

## Bicycle Lanes

Bicycle lanes are the portion of a roadway which has been designated by striping, signing, and pavement markings for the preferential or exclusive use of bicyclists. They are most appropriate and most useful on arterial and collector streets. Typically, unless traffic volumes are heavy, bicycle lanes are not needed on residential or local streets.

Bicycle lanes should be designed to the minimum standards contained in the AASHTO Guide for the Planning, Design, and Operation of Bicycle Facilities. The following are minimum or preferred characteristics:

- Minimum width (no curb and gutter) is 4 feet.
- Minimum width (with curb and gutter) is 5 feet measured from the face of curb. It is desirable to maintain a smooth longitudinal joint between the pavement and the gutter pan. However, if the joint is not smooth, 4 feet of ridable pavement surface should be provided.
- If a full-width bicycle lane cannot be provided, consider providing a wide curb lane/outside travel lane or use shared lane markings.
- If on-street parking is permitted, bicycle lanes should always be placed between the parking lane and the travel lane and have a minimum width of 5 feet. However, in areas with substantial parking volume or high turnover, bicycle lane widths adjacent to parking are often increased to 6-7 feet, while the parking width is limited to as little as 7 feet. A narrower parking lane encourages motorists to park closer to the curb. Providing 14 feet for the combined parking lane/bicycle lane is preferred as it allows cyclists to ride completely outside the "door zone".
- Bicycle lanes should be designated by pavement markings and signs so that more bicyclists will recognize the lanes as an area of the roadway that has been set aside for them to ride, and that they are to ride with

Example bicycle lane in Tempe, AZ.
Existing Ike Anderson Trail in Monticello, FL.

traffic when using the bike lane. Riding in the correct direction with traffic can be reinforced through the use of "WRONG WAY' and "RIDE WITH TRAFFIC" signs mounted so that they face bicyclists riding against traffic.

Bicycle lanes provide numerous benefits, including many for users other than bicyclists. Bicycle lanes:

- Are perceived to encourage bicycling. Studies have shown increased levels of bike commuting trips based on proximity to bicycle facilities.
- Serve as a symbol to many that "bicyclists belong on the road rather than the sidewalk".
- Encourage more predictable behavior by both motorists and bicyclists.
- Allow motorists to pass bicyclists with less delay and with fewer passing conflicts.
- Increase border width to fixed objects.
- Increase turning radius into and out of intersections and driveways.
- Improve sight distances when exiting driveways.
- Serve as a buffer to sidewalks and pedestrians, which increase comfort of pedestrians and people exiting parked cars.
- Calm traffic (through narrower travel lanes).
- Improve turning for trucks and transit.
- Provide space for disabled vehicles, mail delivery, bus stops, and place for cars to pull into when emergency response vehicles pass.
- Provide structural support to the pavement.
- Discharge water further from the travel lanes.
- Accommodate driver error.
- Provide more intersection and safe stopping sight distance.

If not designed properly, bicycle lanes do have the potential to increase certain types of conflicts between bicycles and vehicles. The following cautions are provided to illustrate these potential hazards:

- Bicycle lanes at intersections and driveways that are placed to the right of potential right turning vehicle traffic encourage poor behavior by through bicyclists and right turning motorists and may cause conflicts (i.e., "right hooks"). Bicycle lane striping should be dashed for, at minimum, the last 50 feet prior to an intersection if there is no exclusive right turn lane placed to the right of the bicycle lane. Bicycle lane striping should also be dashed in front of major driveways (those with a significant right turning volume), but can remain solid across minor driveways. To prevent conflicts with right turning vehicles, bicycle lanes must always be placed to the left of exclusive right turn lanes.
- Extreme care should be used in providing sufficient bicycle lane width adjacent to parallel on-street parking. Bicyclists should never ride or be forced or encouraged to ride within 3 feet of a parked car (the "door zone"). Crashes involving a bicyclist and an opening car door have a high potential for serious injury and death. The AASHTO Guide for the Planning, Design, and Operation of Bicycle Facilities illustrates a combined parking lane/bicycle lane of 11 feet (measured from the curb face to the inside bicycle lane stripe), and recommends 13 feet for areas with "substantial parking turnover" (e.g. commercial areas); however, with these dimensions, a bicyclist who rides in the center of the bicycle lane will be within the "door zone." Providing 14 feet for the combined parking lane/bicycle lane allows cyclists to ride completely outside the door zone.


The "right hook".


An example of a bike lane located within the "door zone" of the adjacent parallel parking lane.


Providing a striped buffer between onstreet parking and a bicycle lane is a potential design solution to encourage riding outside the "door zone".


This road in Panama City Beach, FL has 10-foot lanes (which easily accommodate large trucks) adjacent to 5-foot designated bike lanes (4 feet of asphalt, plus gutter pan).


A "road diet" project converted Edgewater Drive in Orlando, FL from a 4-lane undivided roadway to 2-lanes with center turn lane and bicycle lanes.


Example of a buffered bicycle lane in Seattle, WA.

Designers should consider not striping a bicycle lane in places where right-of-way or pavement width are insufficient to provide 14 feet ; shared lane markings can be used in lieu of bicycle lanes where insufficient width exists to provide a wide enough bicycle lane to ensure safety.

- Bicycle lanes often collect debris and broken glass, and are often overlooked in maintenance and repair, which can potentially make them (or sections of them) unusable. For this reason, it is important to establish a regular program of street sweeping and repair to ensure that bicycle lanes will be usable and free of debris, glass, and potholes.

There are a number of ways bicycle lanes can be implemented, including the following:

- Bicycle lanes (and pedestrian facilities) should be considered for implementation on all new roadway projects and resurfacing projects.
- Where possible, roadway lanes should be narrowed for inclusion of signed and marked bicycle lanes. Roadway lanes can be narrowed to 11 feet in nearly all cases, and can be narrowed to 10 feet on urban roadways having low volumes of truck traffic, generally less than $10 \%$. Lanes as narrow as 10 feet can safely accommodate traffic on lower speed roadways. Generally, the outside lane of a roadway needs to be a minimum of 14 feet wide (not including gutter width) to include a standard signed and marked bicycle lane.
- Incorporate bicycle lanes (and other bicycle and pedestrian improvements) into larger funded projects.

On the proposed bicycle lane project on US 19 north, bicycle lanes can be added between Pearl Street and just north of Madison Street simply by adding bicycle lane stripes, markings, and signage. With this section of roadway having a curb to curb width of approximately 38 feet, bicycle lanes can be striped 7 feet out from the face of curb to provide 12-foot travel lanes.

## Road Diets

A "road diet" describes a project to decrease the number of lanes when a street has an unnecessary number of through lanes, which provides space that can then be used for other uses and travel modes. The three road diet projects proposed in Jefferson County on US 19 and US 90 consist of four-lane undivided roadways with on-street parking (and a small section on US 19 south of fourlane roadway with center left turn lane and no on-street parking). Within the limits of each project, the on-street parking usage is extremely low, traffic volumes are not high enough to require four travel lanes at any time during the day, and observed speeds making crossing the street very hazardous for pedestrians and bicyclists. Therefore, it is proposed to convert each roadway to a two-lane roadway (one travel lane in each direction plus a two-way center left turn lane) by removing one travel lane in each direction. The remaining space including the unused on-street parking is recommended to be converted to buffered bicycle lanes.

Buffered bicycle lanes are conventional bicycle lanes paired with a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel lane. Buffered bike lanes are allowed as per Manual on Uniform Traffic Control Devices (MUTCD) guidelines for buffered preferential lanes (section 3D.01). The buffered bike lane provides additional space between the cyclists and the motoring public, and provide greater space for bicycling without making the bike lane appear so wide that it might be mistaken for a travel or parking lane.

Because only under-utilized travel lanes are removed in a road diet project, motor vehicle traffic typically moves along modified corridor with similar efficiency and travel time. The cost of a road diet project can be minimized by simply re-striping a roadway during its normal maintenance cycle. No right-of-way acquisition is required for any of the proposed road diets in Monticello.

For each of the proposed road diet projects in Monticello, the width of the street is typically 63 feet from face of curb to face of curb. It is recommended that the road diet section include two 12 -foot travel lanes, a 14-foot two-way center left turn lane, and 6-foot bicycle lanes (inclusive of gutter pan width). The bicycle lanes would typically be buffered from the adjacent travel lane by a striped buffer width of 6.5 feet. The use of this cross section allows for the roadway to simply be re-striped without having to reconstruct curb and gutter or address drainage facilities. At locations where midblock pedestrian crossings are proposed, such as near Cherokee Street on US 19 south, the bicycle lanes can be shifted inward taking the place of the striped buffer in order to provide 6.5 -foot wide curb extensions on each side of the street. Along with provision of a median refuge island in the center two-way left turn lane, this provision shortens the exposed crossing distance for pedestrians and allows them to cross one direction of traffic at a time.

## Sidewalks

The orientation and alignment of sidewalks are important considerations so that the walk provides an access between destinations. Pedestrians, and in some cases bicyclists, are more exposed to the environment as the users of sidewalks. This makes them more aware of the effects of sidewalk design elements such as location, width, utility interferences, shading, plantings, and the presence of amenities. A narrow sidewalk abutting the curb not only gets diminished by sharing space with utility poles, but makes the user feel less secure because there is no buffer from traffic. Conversely, a planting strip with room for trees provides buffering and shade, but require more right-of-way and may interfere with utilities. Pedestrian comfort is increased if they are buffered from passing vehicles. Some of the elements that serve as buffers include planting strips and landscaping, bicycle lanes, and on-street parking. Walking can be encouraged if the perceived distance can be minimized. Some ways to shorten a perceived distance is to create direct connections between land uses, provide mid-block crossings, and offer amenities along the way, such as benches, landscaping, defined paving, shelters and other resting area type design features. These amenities are also important design elements for transit stops.
General design guidance for sidewalks includes the following:

- Sidewalks should be provided on both sides of all collector and arterial roadways, and should be provided on at least one side of all local streets, along with safe crossing locations. In any areas of the City where sidewalks have not been provided on local streets, sidewalks should be pursued where there is sufficient resident support.
- All sidewalks should have a minimum width of 5 feet, with 6 feet used if the sidewalk is placed at the back of curb. In areas where significant use is anticipated, such as primary walking routes near schools, retail areas, main streets, etc., minimum sidewalks widths should be increased to 8-10 feet, with wider facilities provided based on need. Additional space in urban areas can be used for street furniture, outdoor cafes, and shy distance from buildings.


Urban sidewalk example on retail street, Winter Park, FL.


Sidewalk and landscaping buffer in Winter Park, FL.

Figure 11: Typical Sidewalk Section

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- When possible, use planter strips with 6 -foot widths (minimum) as a buffer between sidewalks and the roadway curb. If the roadway does not have curb and gutter, use a minimum sidewalk separation of 10 feet from edge of roadway, with sidewalk placement on outside of drainage (ditch/ swale) preferred.
- In adding missing sections of sidewalks, prioritize the most needed locations first, such as near schools, transit stops, parks, hospitals, and waterfront areas.

While the recommended sidewalk construction on most streets will be straightforward, the proposed projects on Martin Luther King Jr. Avenue and King Street may be more complicated if the right-of-way is constrained and sidewalks cannot be located at the back of the existing curb. In this case, these two roadways (within the sections having curb and gutter) are wide enough to support construction of sidewalk on at least one side of the street within the existing roadway, while not narrowing travel lanes to less than 12 feet. This would require the construction of new curbing 6 feet into the roadway from the existing curb to provide for a 6 -foot sidewalk which would be located at the back of the new curb. The construction of the new curb and gutter could be accomplished by saw-cutting the existing pavement to create a new edge of pavement / travel lane. The contractor would remove the pavement, curbing and inlet tops from the saw-cut line toward the right-of-way. The curb and sidewalk area would be rough graded to the proposed elevations. The new curb would be poured at the new edge of pavement and sidewalk placed at the appropriate offset from the back of curb. The contractor would then finish the grading and sod the work area. A conceptual diagram of this potential sidewalk construction is shown in Figure 11. Detailed planning-level project cost breakdowns are included in the Appendix for most pedestrian corssing enhancement (PX) project reccomendations.

## Pedestrian Crossing Enhancements

Pedestrian crossing enhancements are proposed at existing and future trail crossings at both major and minor roadways, within the downtown County Courthouse area, and in the vicinity of Jefferson County Elementary School. Elements of the pedestrian crossing enhancements include high visibility crosswalk markings, advance yield lines, median refuge islands, curb extensions, rectangular rapid flashing beacons (RRFBs), and lighting.

## High-Visibility Crosswalk Markings

High-visibility crosswalks alert motorists to the potential pedestrian conflict areas, enhance motorists' recognition of intersections, increase motorists yielding to pedestrians, attract pedestrians to the best crossing places, and assist people with visual impairment in their crossings. Ladder style markings are preferred because they are more visible to motorists than transverse lines alone.
General design guidance for crosswalks and markings include the following:

- Crosswalks should typically be a minimum of 8-10 feet wide, although 12foot widths are often preferred.
- Ramp and median openings should be as wide as the markings.
- Crossings need to be as close to the intersection as practicable (generally 2-10 feet). If ramps are set back further to match the tangent roadway section, then overly wide markings (12-20 feet wide) can be used to help draw motorists' attention to crossings.


High-visbility ladder style crosswalk markings, Corpus Christi, TX.


Midblock crosswalk with median island, advance yield lines, yield here to peds sign, and in-street pedestrian crossing sign, Tampa, FL.


Example of median refuge island with angled crossing.


Curb extensions, Venice, FL.


Closer view of the RRFBs mounted underneath the pedestrian warning sign.

- Crosswalks should be highly visible all times of the year. When thermoplastic is used it is helpful to add extra crushed glass content (increasing coefficient of friction as well as night visibility).
- Midblock or uncontrolled crosswalks markings may be supplemented with advance yield lines and additional signage such as Yield Here to Pedestrians (R1-5) and In-Street Pedestrian Crossing Signs (R1-6). Advance yield lines consist of a row of solid white isosceles triangles pointing oward approaching vehicles extending across the approach lanes and indicate the point at which yielding is required (placed 40 feet in advance of the crosswalk). In-street pedestrian crossing signs shall only be placed at the crosswalk location in the street on the center line, a lane line, or in the median (post mounted on the right or left side of the roadway is not permitted).
- All marked midblock crosswalks should be well lit, since pedestrians are being directed to cross at these are locations. Pedestrians can have difficulty in judging the speed of approaching cars at night when there are no street lights. An error in judgment by the pedestrian can easily result in a crash because even a driver with good eyesight can rarely see a pedestrian from more than 200 feet away, and a driver going 45 mph needs about 350 feet to see, react to and slow or stop for a pedestrian.


## Raised Median Refuge Islands

Providing median refuge islands at midblock pedestrian crossings separates conflicts in time and location by providing pedestrians a safe stopping point and allowing them to cross the roadway in two stages and cross one direction of traffic at a time. Angling the crossing through the median island at 45 degrees forces pedestrians to face towards traffic in the direction they are about to cross.

## Curb Extensions

Curb extensions move the curb line into the street, narrowing the street at intersections or midblock, and reallocating a portion of street space to pedestrians or ancillary uses such as landscaping, art, lighting, signage, and street furniture. They are most effective when used in areas with on-street parking. Benefits include reduced pedestrian crossing distance, enhanced visibility of pedestrian waiting to cross, and reduced traffic speeds.

## Rectangular Rapid Flashing Beacons (RRFB)

RRFBs are an experimental form of flashing beacon, although approved for interim use by FHWA. They use rectangular shaped high-intensity LED-based indications to supplement standard pedestrian warning signs at uncontrolled crossings. The beacons flash rapidly in a "flickering" patterns and greatly improve the percentage of motorists yielding to pedestrians at a midblock location (the City of St. Petersburg, Florida has documented a motorist yield rate of over $82 \%$ on four-lane roadways, compared to an average of only $11 \%$ with side mounted round flashing beacons). RRFBs may be considered for potential use at trail or other midblock crossing locations along US 90 and US 19 such as at the US 90/Ike Anderson Trail crossing and the proposed midblock crossing near US 19 and Cherokee Street; they are typically consider an optional treatment on low volume (less than 6,700 vehicles per day) and medium volume ( $6,700-12,000$ vehicles per day) roadways, with speed and number of lanes other factors that are considered. The use of this device on a
state road will require review and approval by the FDOT Traffic Engineering and Operations Office and FHWA prior to implementation.


## Project Recommendations

Project recommendations were developed primarily based on the countywide vision and facilities maps. The maps include the full set of recommended projects that, along with the existing and programmed facilities identified, complete the Jefferson County bicycle and pedestrian network. Each recommended ("planned") project is labeled on the maps with a unique project identifier that includes a project type prefix followed by a number. This same project identification label can be found on the associated "recommended projects by project type" list and "tiered project priorities" lists.

## Project Descriptions

Recommended projects fall into eight project category types: paved shoulders, roadway signage, multi-use trails/pathways, road diets, bicycle lanes, shared lane markings (aka 'sharrows'), sidewalks, and pedestrian crossing enhancements. The following includes a complete list of recommended projects, organized by project type, along with brief descriptions. The pedestrian crossing enhancement projects are explained in greater detail due to their special complexity. The unique project identifier labels are also included for easy cross-reference with the facilities maps displayed in the Concept Plan and Design Standards chapter.

## Paved Shoulders

(PS-1) CR 257/N Salt Rd from US 90 to CR 146/Ashville Hwy
This improvement is approximately 6.5 miles in length and is a popular cycling segment. The addition of paved shoulders would add safety for both cyclists and drivers alike.
(PS-2) CR 259/Waukeenah Hwy from US 27 to US 19
This improvement is approximately 9.5 miles in length and is a popular cycling segment providing a north-south alternative route to US 19 between downtown Monticello and US 27. The addition of paved shoulders would add safety for both cyclists and drivers alike.

## (PS-3) CR 158/Old Lloyd Rd from SR 59 to US 90

This improvement is approximately 8.8 miles in length and is a popular cycling segment between the west end of Monticello and State Road 59. The addition of paved shoulders would add safety for both cyclists and drivers alike.
(PS-4) CR 146/Ashville Hwy from St. Margaret Rd to US 221
This improvement is approximately 14.1 miles in length and is a popular cycling segment between downtown Monticello and US 221 toward the east end of the County. The addition of paved shoulders would add safety for both cyclists and drivers alike.
(PS-5) CR 149/Boston Hwy from US 19 to GA State Line
This improvement is approximately 8.1 miles in length and is also a popular cycling segment from Monticello to the Georgia State Line. The addition of paved shoulders would add safety for both cyclists and drivers alike.
(PS-6) CR 158/Rabon Rd from CR 158/Old Lloyd Rd to CR 259/Waukeenah Hwy
This approximately 3.3-mile improvement would provide a desirable connection and additional safety between County Road 158/Old Lloyd Road and County Road 259/Waukeenah Highway.
(PS-7) CR 158/Drifton-Aucilla Rd from US 19 to CR 257
This approximately 8.1 -mile improvement would provide a valuable connection and additional safety along Drifton-Aucilla Road between US 19 and CR 257.
(PS-8) Lake Rd from Leon Co Line to US 19
This approximately 10.8 -mile improvement would provide a valuable connection and additional safety from US 19 to the Leon County Line.
(PS-9) CR 158B/Nash Rd from CR 259/Waukeenah Hwy to US 19
This approximately 1.9 -mile improvement is a short, but useful east-west connection south of Interstate 10 between US 19 and Count Road 259/ Waukeenah Highway.
(PS-10)CR 259/Tram Rd from Leon Co Line to SR 59
This improvement is approximately 5.3 miles in length and would add safety for both drivers and cyclists alike.

## Roadway Signage*

(SN-1) US 90 from Leon Co Line (west) to Leon Co Line (east)
This improvement is approximately 3.7 miles in length and is a popular cycling segment. "Bikes may use full lane" (BMUFL) signage is recommended for this segment, as an alternative to paved shoulders, due to concerns with protecting the roadway aesthetic created by the crape myrtle street tree canopy.
(SN-2) CR $158 /$ Old Lloyd Rd from Leon Co Line to SR 59
This short 1.2-mile improvement would include BMUFL signage and is planned as an east-west connector south of Interstate 10 from SR 59 to the Leon County Line.
(SN-3) US 90 from Mahan Dr to Ike Anderson Trail
This 0.8-mile project would traverse through the heart of downtown Monticello and include BMUFL signage in conjunction with shared lane (sharrow) markings (SL-1).
(SN-5) Bassett Dairy Rd from CR 257/N Salt Rd to CR 146/Ashville Hwy This improvement is approximately 4.6 miles in length and would include BMUFL signage connecting County Road 257/ N Salt Road to County Road 146/ Ashville Highway. It would provide a scenic bikeway alternative to US 90.

## (SN-6) Miscellaneous Locations

This project includes BMUFL and Share the Road (STR) signage to address documented problem locations with existing paved shoulders.
(SN-7) Whitehouse Rd from Leon Co Line to SR 59
This 2.9-mile improvement would include BMUFL signage and is planned as an east-west connector between Interstate 10 and US 27, from SR 59 to the Leon County Line.
(SN-8) Lloyd Creek Road from US 27 to Old Lloyd Road
This improvement is approximately 5.3 miles in length and would include BMUFL signage connecting US 27 to Old Lloyd Road. It would provide a scenic bikeway alternative to SR 59.
(SN-9) Natural Bridge Rd/Fanlew Rd from Leon Co Line to SR 59
This 2.3-mile improvement would be a timely addition of BMUFL signage along an existing dirt roadway programmed to be paved.
(SN-10) Casa Bianca Road from CR 259/Waukeenah Hwy to CR 158/Old Lloyd Road
This 2.4-mile improvement would be a timely addition of BMUFL signage along an existing dirt roadway programmed to be paved.
(SN-1 1 )Oetinger Road from Lake Rd to US 19
This 1.1-mile improvement would be a timely addition of BMUFL signage along an existing dirt roadway programmed to be paved.
(SN-1 2) Tyson Road from CR 259/Waukeenah Hwy to US 19
This 2.2-mile improvement would be a timely addition of BMUFL signage along an existing dirt roadway programmed to be paved.
(SN-1 3) Blue Lake Road from CR 257 to US 90
This 2.6-mile improvement would be a timely addition of BMUFL signage along an existing dirt roadway programmed to be paved.
(SN-14) Connell Rd/Brooks Rd/CR 206 from SR 59 to CR 259/Tram Road
This 3.8-mile improvement would be a timely addition of BMUFL signage along an existing dirt roadway programmed to be paved.
(SN-15) Limestone Rd/CR 205 from Brooks Road/CR 206 to SR 59
This 1.7-mile improvement would be a timely addition of BMUFL signage along an existing dirt roadway programmed to be paved.
(SN-16) Springfield Road from SR 59 to Lloyd Creek Road
This 1.5 -mile improvement would be a timely addition of BMUFL signage along an existing dirt roadway programmed to be paved.
*Project SN-4 was removed from list prior to final adoption of this Master Plan.

## Multi-Use Trails / Pathways

(MU-1 ) Progress Energy Rail Trail I from Georgia State Line to Lake Rd This is one of five project segments spanning approximately 23.9 miles from Drifton to the Georgia State Line via utility corridor right-of-way (MU-1 thru MU-5). The overall project would include a dedicated, non-vehicular pathway to accommodate both bicyclists and pedestrians. This particular segment is approximately 5.8 miles.
(MU-2) Progress Energy Rail Trail II from Lake Rd to US 90
This is one of five project segments spanning approximately 23.9 miles from Drifton to the Georgia State Line via utility corridor right-of-way (MU-1 thru MU-5). The overall project would include a dedicated, non-vehicular pathway to accommodate both bicyclists and pedestrians. This particular segment is approximately 5.2 miles.
(MU-3) Progress Energy Rail Trail III from US 90 to US 19
This is one of five project segments spanning approximately 23.9 miles from Drifton to the Georgia State Line via utility corridor right-of-way (MU-1 thru MU-5). The overall project would include a dedicated, non-vehicular pathway to accommodate both bicyclists and pedestrians. This particular segment is approximately 3.8 miles.
(MU-4) Progress Energy Rail Trail IV from US 19 to Thompson Valley Rd This is one of five project segments spanning approximately 23.9 miles from Drifton to the Georgia State Line via utility corridor right-of-way (MU-1 thru MU-5). The overall project would include a dedicated, non-vehicular pathway to accommodate both bicyclists and pedestrians. This particular segment is approximately 2.2 miles.
(MU-5) Progress Energy Rail Trail V from Thompson Valley Rd to CR 257 This is one of five project segments spanning approximately 23.9 miles from Drifton to the Georgia State Line via utility corridor right-of-way (MU-1 thru MU-5). The overall project would include a dedicated, non-vehicular pathway to accommodate both bicyclists and pedestrians. This particular segment is approximately 6.9 miles.
(MU-6) Water St Eco-Park Tr Connector from Water St at Seminole Ave to US 19 at Cherokee St
This is one of two project segments within Monticello connecting the west and east sides of US 19 at an important retail/shopping destination. This particular segment is approximately 0.3 miles and is located west of US 19.
(MU-7) Water St Eco-Park Tr Connector from US 19 at Cherokee St to Ike Anderson Trail at Chase Dr
This is one of two project segments within Monticello connecting the west and east sides of US 19 at an important retail/shopping destination. This particular segment is approximately 0.4 miles and is located east of US 19.
(MU-8) Ike Anderson Tr N Extension from Rocky Branch Rd to Jefferson Co Recreation Park
This improvement is approximately 0.4 miles in length and would extend the lke Anderson Trail northward from Rocky Branch Road to Mississippi Street near the recreation park where a sidewalk is programmed to continue northward to Texas Hill Road.
(MU-9) Ike Anderson Tr S Extension I from Martin Rd to US 19 at Nacoosa Rd This is one of three project segments spanning approximately 3.2 miles from the south end of the paved portion of the lke Anderson Trail (at Martin Road) in Monticello southward to the Jefferson County Middle/High School campus. This particular segment includes the portion of the trail that is existing, but currently unpaved. It is approximately 0.8 miles in length.
(MU-10) Ike Anderson Tr S Extension II from US 19 at Nacoosa Rd to US 19 at Drifton-Aucilla Rd
This is one of three project segments spanning approximately 3.2 miles from the south end of the paved portion of the Ike Anderson Trail (at Martin Road) in Monticello southward to Jefferson County Middle/High School campus. This particular segment extends from the southern terminous of the existing trail
(unpaved) to US 19 at Drifton-Aucilla Road and is approximately 1.7 miles in length.
(MU-11) Ike Anderson Tr S Extension III from US 19 at Drifton-Aucilla Rd to Jefferson Co MS/HS
This is one of three project segments spanning approximately 3.2 miles from the south end of the paved portion of the Ike Anderson Trail (at Martin Road) in Monticello southward to Jefferson County Middle/High School campus. This particular segment extends from US 19 at Drifton-Aucilla Road to the Jefferson County Middle/High School campus and is approximately 0.7 miles in length.
(MU-12) US 90 from Leon Co Line (west) to Leon Co Line (east)
This improvement is approximately 3.7 miles in length and would provide a multimodal trail connection from the Leon County Line eastward through a brief portion of Leon County and back into Jefferson County. The project is proposed as an alternative to paved shoulders, due to concerns with protecting the roadway aesthetic created by the crape myrtle street tree canopy in this location.
(MU-13) Elliot Dr Connector from Elliot Dr at Melrose Dr to Ike Anderson Trail This improvement is a mere 0.04 miles, but would create a neighborhood connection to the Ike Anderson Trail.

## Road Diets

(RD-1) US 19 from 0.1 mi north of Madison St to Texas Hill Rd
The project would convert this approximately 0.6 -mile segment of US 19 to a two-lane roadway (one travel lane in each direction plus a two-way center left turn lane) by removing one travel lane in each direction. The remaining space including the unused on-street parking is recommended to be converted to buffered bicycle lanes. The use of this cross section allows for the roadway to simply be re-striped without having to reconstruct curb and gutter or address drainage facilities.
(RD-2) US 19 from 0.25 mi south of E . Cherokee St to Courthouse Circle The project would convert this approximately 0.9 -mile segment of US 19 to a two-lane roadway (one travel lane in each direction plus a two-way center left turn lane) by removing one travel lane in each direction. The remaining space including the unused on-street parking is recommended to be converted to buffered bicycle lanes. The use of this cross section allows for the roadway to simply be re-striped without having to reconstruct curb and gutter or address drainage facilities.
(RD-3) US 90 from Ike Anderson Trail to 0.1 mi west of St. Margaret Rd The project would convert this approximately 0.6 -mile segment of US 90 to a two-lane roadway (one travel lane in each direction plus a two-way center left turn lane) by removing one travel lane in each direction. The remaining space including the unused on-street parking is recommended to be converted to buffered bicycle lanes. The use of this cross section allows for the roadway to simply be re-striped without having to reconstruct curb and gutter or address drainage facilities.

## Bicycle Lanes

(BL-1) US 19 from Pearl St to 0.1 mi north of Madison St
This includes a short segment (approximately one-quarter mile in length) in downtown Monticello north of US 90 from Pearl Street to just north of Madison Street. The project could be accomplished by simply adding bicycle lane stripes, markings, and signage; and due to the existing curb-to-curb roadway width, could be striped seven feet out from the face of curb to provide 12foot travel lanes. Also, this project could be completed as part of a future resurfacing project.

## Shared Land Markings (i.e. Sharrows)

(SL-1) US 90 from 0.05 mi east of Mahan Dr to Ike Anderson Trail
This improvement is approximately 0.8 miles in length through downtown Monticello. The installation of sharrow lanes through this segment would be of benefit to bicyclists since this section does not have paved shoulders and cyclists currently share the lane with motor vehicle traffic. At the west end, the existing paved shoulder along US 90 ends near Mahan Drive.
(SL-2) US 19 from Courthouse Cir (south side) to Pearl St
This improvement is a mere 0.15 miles in length, but would be of benefit to bicyclists along this segment of US 19 in downtown Monticello, as the area cannot accommodate the addition of bicycle lanes.
(SL-3) Water St from Seminole Ave to US 90
This is an approximately 0.5 -mile improvement through downtown Monticello. It would provide a north-south alternative to US 19 through downtown between business destinations at US 90 and near Seminole Avenue at US 19.

## Sidewalks

(SW-1) Palmer Mills Rd from Waukeenah St to Ike Anderson Trail
This improvement is approximately 0.25 miles in length and completes a sidewalk gap between downtown Monticello, southeast of the US 90/US 19 intersection, from Waukeenah Street to the Ike Anderson Trail. The right-of-way appears somewhat constrained; therefore, an easement to accommodate the sidewalk could be required. Also, the installation of a sidewalk could require a creative solution similar to that described in the Sidewalks section of the Concept Plan and Design Standards chapter. The section includes a typical sidewalk cross section drawing for constrained rights-of-way.

## (SW-2) Branch St from Ike Anderson Trail to Sage Street

This improvement is approximately 0.4 miles in length and extends from the lke Anderson trail eastward into the Roostertown area. The right-of-way appears somewhat constrained; therefore, an easement to accommodate the sidewalk could be required. Also, the installation of a sidewalk could require a creative solution similar to that described in the Sidewalks section of the Concept Plan and Design Standards chapter. The section includes a typical sidewalk cross section drawing for constrained rights-of-way.
(SW-3) Waukeenah St from 200 ft north of Seminole Ave to Chase Dr
This improvement is approximately 0.12 miles in length and would complete a pedestrian gap from north of Seminole Avenue where the current sidewalk ends, southward to Chase Drive where a separate multi-use pathway facility (MU-7) is planned to connect US 19 to the Ike Anderson Trail. The right-of-way may be constrained in this area.
(SW-4) Palmer Mills Rd from 150 ft west of Water St to Water St This short 150 -foot improvement would fill a sidewalk gap along Palmer Mills Road west of Water Street in downtown Monticello.
(SW-5) US 90 from 300 ft west of Holly Rd to Willow St
This improvement is approximately 0.23 miles in length and would fill a sidewalk gap along the south side of US 90 from the western terminus of the existing sidewalk at Willow Street, westward to approximately 300 feet west of Holly Road. A new sidewalk is current programmed for construction at the western terminus of this project and will extend westward to the City Limits of Monticello.
(SW-6) Madison St from US 19 to Cherry St
This short 0.06-mile improvement would connect Cherry Street to US 19 on the north side of downtown Monticello. Madison Street is part of the popular downtown Monticello historic walking tour route.
(SW-7) Pearl St from US 19 to Cherry St
This short 0.06-mile improvement would connect Cherry Street to US 19 on the north side of downtown Monticello. Pearl Street is part of the popular downtown Monticello historic walking tour route.
(SW-8) Cherry St from Pearl St to Madison St
This 0.14-mile improvement would complete a sidewalk gap along Cherry Street between Pearl Street and Madison Street on the north side of downtown Monticello. Cherry Street is part of the popular downtown Monticello historic walking tour route.
(SW-9) High St from Magnolia St to Railroad St
This improvement is approximately 0.15 miles in length and would provide a sidewalk connection between Magnolia Street and Railroad Street on the north side of downtown Monticello. High Street is part of the popular downtown Monticello historic walking tour route.
(SW-10)Magnolia St from Dogwood St to High St
This short improvement is approximately 0.09 miles in length and would provide a sidewalk connection between Dogwood Street and High Street on the north side of downtown Monticello. Magnolia Street is part of the popular downtown Monticello historic walking tour route.
(SW-1 1)Old Lloyd Road from Leon County Line to Main Street (Post Office) This improvement is approximately 1.3 miles in length and would provide a sidewalk connection from the Leon County Line eastward to the post office along Main Street near the center of Lloyd. The project would also include a crosswalk at State Road 59. It should be noted that there appears to be constrained right-of-way along Old Lloyd Road near the east end of the project.
(SW-1 2)SR 59 from CR 158/Old Lloyd Rd to 0.25 mi south of $1-10$ overpass This improvement is approximately 0.44 miles in length and would provide a sidewalk connection between the central population center of Lloyd and the retail commercial center along State Road 59 just south of Interstate 10.
(SW-1 3)Water St (east side) from Walnut St to Seminole Ave
This improvement is approximately 0.5 miles in length and would connect Walnut Street, just south of US 90, to Seminole Avenue where a separate multiuse pathway facility (MU-6) is planned to continue to US 19 near a major shopping destination.
(SW-1 4)King St from Martin Luther King Jr Ave to Park Ave This improvement is approximately 0.33 miles in length and provides a pedestrian facility through the heart of the Roostertown area from Martin Luther King Jr Avenue to Park Avenue. The right-of-way appears somewhat constrained and building setbacks are shallow. The installation of a sidewalk could require a creative solution similar to that described in the Sidewalks section of the Concept Plan and Design Standards chapter. The section includes a typical sidewalk cross section drawing for constrained rights-of-way.

## (SW-1 5)Martin Luther King Jr Ave from US 90 to King St

This improvement is approximately 0.26 miles in length and provides a pedestrian connection between US 90 and King Street in the Roostertown area. The right-of-way appears somewhat constrained and building setbacks are shallow. The installation of a sidewalk could require a creative solution similar to that described in the Sidewalks section of the Concept Plan and Design Standards chapter. The section includes a typical sidewalk cross section drawing for constrained rights-of-way.
(SW-16)US 19 from CR 259/Waukeenah Street to near Gulf Coast Supply This improvement is approximately 0.66 miles in length and would provide a sidewalk extension along the east side of US 19 from Waukeenah Street to the existing southern sidewalk terminus near Gulf Coast Supply.

## Pedestrian Crossing Enhancements

(PX-1 and PX-2) Downtown Courthouse Area

- (PX-1) US 90 from Walnut St to Dogwood St; US 19 from Mulberry St to Cherry St.
- (PX-2) US 90 from Olive St to Mulberry St, and from Cherry St to Waukeenah St; US 19 from Palmer Mill Rd to Walnut St, and from Dogwood St to Pearl St.
This project consists of intersection improvements in the vicinity of the Courthouse on US 90 from Olive Street to Waukeenah Street and on US 19 from Palmer Mill Road to Pearl Street, encompassing two intersections each to the north, south, east, and west of the Courthouse roundabout, as well as improvements at the roundabout itself. Specific elements include curb extensions at eight intersections which extend from the curb to the edge of parallel or angle parking, high visibility crosswalks at all intersections within the project area, modifications to on-street parking, incorporation of valley gutters to visually separate travel lanes from parking areas, and roundabout entry markings.
sign above speed limit sign)

Figures $12 a$ and $12 b$ provides a concept of the improvements for this area.

Figure 12a: Jefferson County Courthouse Area - Existing Conditions


Figure 1 2b: Jefferson County Courthouse Area - Snapshot of Proposed Improvements


During design for these projects, the angle used for angled parking should be reviewed as it may be possible to increase the angle to help narrow the roadway further without causing issues for passing trucks or motorists backing from parking spaces. The potential for back-in angle parking might also be considered for the following reasons:

- The backing maneuvering required is similar to that for parallel parking, but involves half the effort
- Considered to be superior to straight-in diagonal parking because visibility is much improved for exiting and the driver controls the space while entering just as with parallel parking
- Provides direct access to vehicle trunks from the sidewalk, making it easier to load a vehicle
- When vehicle doors are opened, adults and children alike are naturally directed back towards the sidewalk, rather than into the street
- Safer for bicyclists: it is impossible for bicyclists to be "doored" unlike parallel parking, and drivers are able to see bicyclists easier and much sooner when exiting their parking stalls
- Has a traffic calming effect on vehicle speeds
- Documented reduction of crashes (Urban Transportation Monitor, June 11, 2004, "Conversion to Back-in Angle Parking Generally Successful: Results in Reduced Accidents, Benefits for Cyclists")

There are potential issues with converting to back-in angle parking as well, as follows, although each can be addressed (see response to issue or strategy in parentheses):

- Drivers used to head-in angle parking may not realize they need to back into back-in angled spaces (this can be combated though the use of information signs)
- Driver skills may be too poor for them to successfully back into back-in angle spaces (the skills needed for back-in angle parking are no different than for parallel parking: like parallel parking, the driver enters the stall by stopping and backing; however, the movement is simpler and faster not requiring the front of the vehicle to be maneuvered against the curb)
- Most cars have more overhang on the rear, so with narrow sidewalks, the sidewalks will appear narrower (issue can be remedied by using a landscape buffer of 3-4 feet between the curb and sidewalk or use parking blocks within the stalls to limit the vehicle overhang allowed)
- Since all cars have exhaust pipes at the rear, consideration should be given as to whether or not to located back-in diagonal parking next to sidewalk cafes or other areas where people may linger (the Adams Morgan District of Washington, DC has back-in angle parking that runs for several blocks on one of the great eatery rows and works well; people do not leave their cars idling)
- Makes it harder to cut the grass in the adjacent buffer strip if provided
- Drivers looking back may not see street furniture as easily (a consideration is to have more clear space along the curb so that trees, poles, etc. are not struck by motorists backing in; also, parking blocks within the parking stalls help to appropriately set the backing limit)
The Courthouse area projects propose to use valley gutters to help visually distinguish the parking areas from the travel lanes. These gutters will be extended between curb extensions along the edges of the parking areas and
also used as the borders of the parking areas on the outside edges in each of the four quadrants of the Courthouse roundabout.
- The proposed roundabout markings consist of two items:
- A wide dotted line across the lane entering the roundabout placed at the edge of the circulating roadway
- A yield line indicating the point behind which vehicles are required to yield at the entrance to the roundabout


## (PX-3) US 90 near Marvin St

This project is to install a mid block pedestrian crossing along US 90 in the vicinity of Marvin Street. The crossing would accommodate increased northsouth pedestrian traffic across US 90, per reports from Monticello city staff. The project would include high visibility crosswalk markings, advance yield lines, yield here to peds signs, lighting, and potentially RRFBs. While local residents could benefit from this crossing, it should be noted that an additional north-south crossing is proposed a couple blocks west of this location at the Ike Anderson Trail crossing at US 90 (PX-4). The latter crossing would accommodate both bicyclists and pedestrians utilizing the multi-use path. The County (and FDOT) will need to determine the feasibility of both locations as well as the practicability of including two such pedestrian crossings within such a limited distance along US 90.
(PX-4) US 90 at Ike Anderson Trail
At the existing trail crossing at US 90, the roadway is transitioning between a two-lane undivided roadway with on-street parking to a four-lane undivided roadway with on-street parking. This will continue to be a transition point if the proposed US 90 road diet is implemented, as just east of the crossing is where designated buffered bicycle lanes will begin in the eastbound direction and end in the westbound direction; shared lane markings are proposed to the west of the bicycle lanes termini. With a curb to curb width at the crossing point of approximately 39 feet, it is proposed to have a 10 -foot wide median island and travel lanes in each direction of 14.5 feet, which will be shared by bicyclists (see Figures $13 a$ and $13 b$ ). The crossing is proposed to incorporate a median island, high visibility crosswalk markings, advance yield lines, yield here to peds signs, lighting, and potentially RRFBs.

## (PX-5) US 19 at Cherokee St/Jefferson Square Shopping Center

With the proposed road diet on US 19 south, this section would transform from a five-lane section to a three-lane section with buffered bicycle lanes. As discussed previously, at the crossing point, the bike lanes could be transitioned towards the travel lane (removing the buffer) to allow curb extensions to shorten the exposed crossing distance for pedestrians (see Figures $14 a$ and $14 b$ ). Similar to the US 90 trail crossing, this location is proposed to have a median island (with angled crossing), high visibility crosswalk markings, advance yield lines, yield here to peds signs, lighting, and potentially RRFBs.

Figure 13a: US 90 at Ike Anderson Trail Crossing - Existing Conditions


Figure 13b: US 90 at Ike Anderson Trail Crossing - Proposed Improvements


Figure 14a: US 19 South at Cherokee St. - Existing Configuration


Figure 14b: US 19 South at Cherokee St. - Proposed Improvements

(PX-6) Trailhead at Aucilla Hwy/US 19 (SE corner)
This project would accommodate the proposed Progress Energy Rail Trail (MU-1 thru MU-5) on property near the southeast corner of US 19 and Aucilla Highway. The specific amenities and features included at this trailhead have not been determined at this point, but are anticipated to include an unpaved parking lot, picnic shelter with tables, restrooms, bike racks, staging area, lighting and signage. Also, property acquisition would be required for this project.
(PX-7) Jefferson Co ES Area at various intersections
This project consists of various minor improvements to the immediate vicinity of Jefferson County Elementary School to improve conditions for students to walk or bicycle to school from the adjacent neighborhoods, including the following:

- Reconstructing the sidewalk on Rocky Branch Road between Mamie Scott Drive and Shady Lane to provide an standard width facility and adequate buffer to the edge of roadway
- Mark high-visibility crosswalks at all school driveways on Rocky Branch Road and Mamie Scott Drive
- Remove the existing marked crosswalk (transverse lines only) just west of the parent drop-off loop
- Change the Rocky Branch Rd/Mamie Scott Drive intersection to all-way stop control and mark high-visibility crosswalks on each approach
- Update all school crossing signs to fluorescent yellow-green
- Install MUTCD compliant school zone speed limit signs with flashing beacons and End School Zone signs on Rocky Branch Road and Mamie Scott Drive
- Install stop sign and mark stop line at northern school driveway exit onto Mamie Scott Drive
- Replace existing crosswalk markings with high-visibility crosswalk markings at Rocky Branch Road/Rhodes Street
(PX-8) Ike Anderson Trail at various cross streets
This project simply would provide high-visibility crosswalks and W11-5 combined bicycle/pedestrian warning signs at six cross street locations: Chase Drive, Poplar Street, Holly Street, Dogwood Street, Pearl Street, and York Street.


## Project Priorities

The ranking order of recommended projects was determined by an assessment of the master plan goals and strategies as well as information obtained through public input and stakeholder interviews, and a joint county-city work session (described below).

Projects were initially ranked into tiered priority groups: Tier One, Tier Two and Tier Three. Approximately one-third of the total projects were included in each tier, providing a fairly equal distribution weight among the three priority groups. With these generalized rankings in place, a joint county-city work session hosted by the Jefferson County Board of County Commissioners was held to determine the final project prioritization order. In addition, work session participants were asked to provide specific rankings to the projects included in Tier One in order to give future guidance and direction to the Board of County Commissioners and the CRTPA for the funding of future projects as revenue sources are procured. (Projects in Tiers Two and Three remain generally ranked
as listed.) The Tier One, Two and Three project priority lists, including planninglevel cost estimates, are included in Table 11, 12, and 13 on the following pages.

Table 1 1: Project Facilities - By Priority Ranking (Tier 1)

| MAP ID | ROADWAY | FROM | TO |
| :---: | :---: | :---: | :---: |
| PX-1 | Downtown Courthouse Area | US 90 from Walnut St to Dogwood St; US | S 19 from Mulberry St to Cherry St |
| PX-2 | Downtown Courthouse Area | US 90 from Olive St to Mulberry St, and 19 from Palmer Mill Rd to Walnut St, and | from Cherry St to Waukeenah St; US d from Dogwood St to Pearl St |
| SW-1 | Palmer Mills Rd | Waukeenah St | Ike Anderson Trail |
| PX-3 | US 90 | Marvin St |  |
| PS-1 | CR 257/N Salt Rd | US 90 | CR 146/Ashville Hwy |
| SW-2 | Branch St | Ike Anderson Trail | Sage Street |
| PS-2 | CR 259/Waukeenah Hwy | US 27 | US 19 |
| PS-3 | CR 158/Old Lloyd Rd | SR 59 | US 90 |
| PX-4 | US 90 | at Ike Anderson Trail |  |
| SW-3 | Waukeenah St | 200 ft north of Seminole Ave | Chase Dr |
| PX-5 | US 19 | at Cherokee St/Jefferson Square Shopping Center |  |
| PS-4 | CR $146 /$ Ashville Hwy | St. Margaret Rd | US 221 |
| MU-1 | Progress Energy Rail Trail I | GA state line | Lake Rd |
| MU-2 | Progress Energy Rail Trail II | Lake Rd | US 90 |
| MU-3 | Progress Energy Rail Trail III | US 90 | US 19 |
| MU-4 | Progress Energy Rail Trail IV | US 19 | Thompson Valley Rd |
| MU-5 | Progress Energy Rail Trail V | Thompson Valley Rd | CR 257 |
| PX-6 | Trailhead | at Aucilla Hwy/US 19 (SE corner) |  |
| PS-5 | CR 149/Boston Hwy | US 19 | GA state line |
| MU-6 | Water St Eco-Park Trail Connector | Water St at Seminole Ave | US 19 at Cherokee St |
| MU-7 | Water St Eco-Park Trail Connector | US 19 at Cherokee St | Ike Anderson Trail at Chase Dr |
| SN-1 | US 90 | Leon Co line (west) | Leon Co line (east) |
| SN-2 | CR 158/Old Lloyd Rd | Leon Co line | SR 59 |
| SN-3 | US 90 | Mahan Dr | Ike Anderson Trail |
| SW-4 | Palmer Mills Rd | 150 ft west of Water St | Water St |
| SW-5 | US 90 | 300 ft west of Holly Rd | Willow St. |
| SW-6 | Madison St | US 19 | Cherry St |
| SW-7 | Pearl St | US 19 | Cherry St |
| PS-10 | CR 259/Tram Rd | Leon Co line | SR 59 |
| SW-8 | Cherry St | Pearl St | Madison St |
| SW-9 | High St | Magnolia St | Railroad St |
| SW-10 | Magnolia St | Dogwood St | High St |
| SW-11 | Old Lloyd Road | Leon County line | Main Street (Post Office) |


| DIST (miles) | PRIORITY | CST COST | NOTES |
| :---: | :---: | :---: | :---: |
| N/A | 1 A | \$291,000 | 4 intersections; curb extensions; crosswalk enhancements; valley gutters... |
| N/A | $1 B$ | \$233,000 | 4 intersections; curb extensions; crosswalk enhancements; valley gutters... |
| 0.25 | 2 | \$38,196 | Constrained ROW; may need easement |
| N/A | 3 | \$77,000 | popular ped crossing spot, especially for school children; would replace crossing at MLK |
| 6.5 | 4 | \$1,084,915 |  |
| 0.4 | 5 | \$61,114 | Constrained ROW; shallow building setbacks |
| 9.5 | 6 | \$1,585,645 |  |
| 8.8 | 7 | \$1,468,808 |  |
| N/A | 8 | \$66,000 | Important trail crossing at major highway |
| 0.12 | 9 | \$18,334 | Constrained ROW |
| N/A | 10 | \$83,000 | Major shopping destination; challenging crossing |
| 14.1 | 11 | \$2,353,431 |  |
| 5.8 | 12A | \$2,325,701 |  |
| 5.2 | 12 B | \$2,085,1 12 |  |
| 3.8 | 12C | \$1,523,735 |  |
| 2.2 | 12D | \$882,163 |  |
| 6.9 | $12 E$ | \$2,766,783 |  |
| N/A | 12F | N/A | Unpaved parking, staging area, picnic shelter w/tables, signage |
| 8.1 | 13 | \$1,351,971 |  |
| 0.3 | 14 | \$120,295 | Multimodal connection/crossing at major highway and shopping destination |
| 0.4 | 15 | \$160,393 | Multimodal connection/crossing at major highway and shopping destination |
| 3.7 | 16 | \$2,220 | BMUFL |
| 1.2 | 17 | \$720 | BMUFL |
| 0.8 | 18 | \$1,440 | BMUFL signs (in conjunction with Shared Lane Markings) |
| 0.03 | 19 | \$4,584 | Downtown Monticello's primary pedestrian network |
| 0.23 | 20 | \$389,815 | Add to adjacent programmed sidewalk project |
| 0.06 | 21 | \$9,167 | Downtown Monticello's primary pedestrian network |
| 0.06 | 22 | \$9,167 | Downtown Monticello's primary pedestrian network |
| 5.3 | 23 | \$884,623 |  |
| 0.14 | 24 | \$21,390 | Downtown Monticello's primary pedestrian network |
| 0.15 | 25 | \$22,918 | Downtown Monticello's primary pedestrian network |
| 0.09 | 26 | \$13,751 | Downtown Monticello's primary pedestrian network |
| 1.3 | 27 | \$198,619 | South side of road; include crosswalk at SR 59; may be constrained ROW (east end) |

Table 12: Project Facilities - By Priority Ranking (Tier 2)

| MAP ID | ROADWAY | FROM | TO |
| :---: | :---: | :---: | :---: |
| PS-6 | CR 158/Rabon Rd | CR 158/Old Lloyd Rd | CR 259/Waukeenah Hwy |
| PS-7 | CR 158/Drifton-Aucilla Rd | US 19 | CR 257 |
| PS-8 | Lake Rd | Leon Co line | US 19 |
| PS-9 | CR 158B/Nash Rd | CR 259/Waukeenah Hwy | US 19 |
| SN-5 | Bassett Dairy Rd | CR 257/N Salt Rd | CR 146/Ashville Hwy |
| SN-6 | Miscellaneous Locations |  |  |
| SN-7 | Whitehouse Rd | Leon Co line | SR 59 |
| SN-8 | Lloyd Creek Road | US 27 | Old Lloyd Road |
| MU-8 | Ike Anderson Trail Northern Extension | Rocky Branch Rd | Jefferson Co Recreation Park |
| MU-9 | Ike Anderson Trail Southern Extension I | Martin Rd | US 19 at Nacoosa Rd |
| MU-10 | Ike Anderson Trail Southern Extension II | US 19 at Nacoosa Rd | US 19 at Drifton-Aucilla Rd |
| MU-1 1 | Ike Anderson Trail Southern Extension III | US 19 at Drifton-Aucilla Rd | Jefferson Co MS/HS |
| MU-12 | US 90 | Leon Co line (west) | Leon Co line (east) |
| BL-1 | US 19 | Pearl St | 0.1 mi north of Madison St |
| SL-1 | US 90 | 0.05 mi east of Mahan Dr | Ike Anderson Trail |
| SL-2 | US 19 | Courthouse Cir (south side) | Pearl St |
| SL-3 | Water St | Seminole Ave | US 90 |
| SW-12 | SR 59 | CR 158/Old Lloyd Rd | 0.25 mi south of I-10 overpass |
| SW-13 | Water St (east side) | Walnut St | Seminole Ave |
| SW-14 | King St | Martin Luther King Jr Ave | Park Ave |
| SW-15 | Martin Luther King Jr Ave | US 90 | King St |
| PX-7 | Jefferson Co ES Area | various intersections |  |
| SW-16 | US 19 | CR259/Waukeenah St | near Gulf Coast Supply |


| DIST (miles) | PRIORITY | CST COST | NOTES |
| :---: | :---: | :---: | :---: |
| 3.3 | Tier 2 | \$550,803 |  |
| 8.1 | Tier 2 | \$1,351,971 |  |
| 10.8 | Tier 2 | \$1,802,628 |  |
| 1.9 | Tier 2 | \$317,129 |  |
| 4.6 | Tier 2 | \$2,760 | BMUFL |
| 10 | Tier 2 | \$6,000 | STR signs to address documented problem locations with existing paved shoulders |
| 2.9 | Tier 2 | \$1,740 | BMUFL |
| 5.3 | Tier 2 | \$3,180 | BMUFL |
| 0.4 | Tier 2 | \$160,393 |  |
| 0.8 | Tier 2 | \$320,786 |  |
| 1.7 | Tier 2 | \$681,671 |  |
| 0.7 | Tier 2 | \$280,688 |  |
| 3.7 | Tier 2 | \$1,483,637 | One side of roadway |
| 0.25 | Tier 2 | \$2,640 | Complete as part of future resurfacing project |
| 0.8 | Tier 2 | \$6,720 | Downtown 'main street' |
| 0.15 | Tier 2 | \$1,260 | Downtown 'main street' |
| 0.5 | Tier 2 | \$2,000 | Multimodal connector between shopping/business destinations |
| 0.44 | Tier 2 | \$67,225 | Constrained ROW; shallow building setbacks |
| 0.5 | Tier 2 | \$76,392 |  |
| 0.33 | Tier 2 | \$93,070 | Constrained ROW; shallow building setbacks |
| 0.26 | Tier 2 | \$72,570 | Constrained ROW; shallow building setbacks |
| N/A | Tier 2 | \$86,000 | Mostly minor crossing improvements |
| 0.66 | Tier 2 | \$100,837 |  |

Table 13: Project Facilities - By Priority Ranking (Tier 3)

| MAP ID FROM |  |  |  |
| :---: | :--- | :--- | :--- |
| SN-9 | Natural Bridge Road <br> / Fanlew Road | Leon Co line | SR 59 |
| SN-10 | Casa Bianca Road | CR 259/Waukeenah Hwy | CR 158/Old Lloyd Road |
| SN-11 | Oetinger Road | Lake Rd | US 19 |
| SN-12 | Tyson Road | CR 259/Waukeenah Hwy | US 19 |
| SN-13 | Blue Lake Road | CR 257 | US 90 |
| SN-14 | Connell Road / Brooks <br> Road/CR 206 | SR 59 | CR 259/Tram Road |
| SN-15 | Limestone Road/CR 205 | Brooks Road/CR 206 | SR 59 |
| SN-16 | Springfield Road | SR 59 | Lloyd Creek Road |
| MU-13 | Elliot Dr Connector | Elliot Dr at Melrose Dr | Ike Anderson Trail |
| RD-1 | US 19 | 0.1 mi north of Madison St | Texas Hill Rd |
| RD-2 | US 19 | 0.25 mi south of E. Cherokee St | Courthouse Circle |
| RD-3 | US 90 | Ike Anderson Trail | 0.1 mi west of St. Margaret Rd |
| PX-8 | Ike Anderson Trail | at various cross streets |  |


| DIST (miles) | PRIORITY | CST COST |  |
| :---: | :---: | :---: | :--- |
| 2.3 | Tier 3 | $\$ 1,380$ | BMUFL (dirt roads programmed to be paved) |
| 2.4 | Tier3 | $\$ 3,180$ | BMUFL (dirt roads programmed to be paved) |
| 1.1 | Tier3 | $\$ 660$ | BMUFL (dirt roads programmed to be paved) |
| 2.2 | Tier3 | $\$ 1,320$ | BMUFL (dirt roads programmed to be paved) |
| 2.6 | Tier3 | $\$ 1,560$ | BMUFL (dirt roads programmed to be paved) |
| 3.8 | Tier3 | $\$ 2,280$ | BMUFL (dirt roads programmed to be paved) |
| 1.7 | Tier3 | $\$ 1,020$ | BMUFL (dirt roads programmed to be paved) |
| 1.5 | Tier3 | $\$ 900$ | BMUFL (dirt roads programmed to be paved) |
| 0.04 | Tier 3 | $\$ 16,039$ | Feasibility: easement, acquisition? |
| 0.6 | Tier 3 | $\$ 595,989$ | From 4LU + parking to 3LU+bike lanes |
| 0.9 | Tier 3 | $\$ 893,984$ | From 4/5LU+some parking to 3LU+bike lanes |
| 0.6 | Tier 3 | $\$ 695,321$ | From 4LU + parking to 3LU+bike lanes |
| N/A | Tier 3 | $\$ 12,000$ | Enhanced crosswalk and signs at 6 minor street crossings |



Local policies and programs can he/p to grow an active bicycle and pedestrian culfure.

## Overview

This chapter describes the programs and policies recommended in this Master Plan using the six "Es" of bicycle and pedestrian planning as a guide; Education, Encouragement, Enforcement, Engineering, Equity, and Evaluation. These policy and program elements serve as the basis for a comprehensive bicycle and pedestrian strategy that contributes to:

- Enhanced community mobility options.
- Improved livability and quality of life for residents.
- Environmental justice for transportation disadvantaged individuals.
- Economic development benefits for individuals, business and public agencies.
- Economic development possibilities related to recreation and eco-tourism.
- Increased regional mobility and recreational opportunities.
- Increased community physical fitness and health.
- Reduced pollution and improved air quality.

The Bicycle and Pedestrian Master Plan proposes a combination of facility improvements, including:

- Installing sidewalks and completing sidewalk gaps.
- Installing roadway shoulders.
- On-road bicycle lanes.
- Shared-use paths.
- Roadway diets.
- Bikes May Use Full Lane signage.
- Other non-motorized mobility enhancements.

Such improvements are anticipated to complement the County's existing resources and provide connections to desired destinations, such as downtown Monticello, schools, parks and recreation facilities, commercial areas, and future potential economic development areas. The following sections outline the program and policy elements that support the master plan.

## Education

With different modes using the same right-of-way, it is imperative that each user has at least a basic understanding of the rights and responsibilities of all users on the roadway. Bicyclists and pedestrians must understand their rights within the right-of-way and how to safety travel alongside vehicular traffic. Motorists also need to understand the legal rights and responsibilities of bicyclists and pedestrians. A wide variety of agencies and organizations may provide education programs targeted at bicyclists, pedestrians, and motorists of various ages.

## Public Education Initiatives

A variety of media, both traditional and new/social, can be used to educate the public about bicyclist and pedestrian safety, sharing the road, courtesy, economy and efficiency, including:

- A Safe Routes to School program in coordination with the Florida Traffic and Bicycle Safety Education Program, local schools, and school districts and incorporation of traffic and pedestrian safety into school curricula at various grade levels.
- Share the Road/bicycling public education campaigns in local newspapers, TV, radio, and other media.
- Coordination with utility providers to include information in utility bills (mailed and emailed) regarding bicycle and pedestrian activity.
- Public education campaigns for all ages of the general public regarding the rights and responsibilities of all roadway users.
- A program to provide bicycle safety equipment, including helmets, lights, reflectors, vests, other gear, and educational materials to all residents who are interested and successfully complete a safety training or orientation program.


## Education, Training, and Coordination for Local Government Staff

In order for the Master Plan to be effectively implemented, Jefferson County and City of Monticello staff from various departments should review the plan to gain a better understanding of how their departments can help with plan implementation. A comprehensive education program in coordination with the American Association of State Highway and Transportation Officials guidelines, the Jefferson County Health Department, the Jefferson County Community Traffic Safety Team and other community service organizations could be established to teach safe, courteous and useful practices in all situations and conditions. Educational efforts can serve to:

- Identify and provide training opportunities for County, City, and other agency staff on best practices in roadway facilities design and programs.
- Provide a comprehensive understanding of the needs of bicyclists and pedestrians and how to create a safe, multimodal transportation network within the region.
- Training opportunities should include both classroom sessions on on-road handling/traffic cycling skills and pedestrian safety precautions for staff members.
- Ensure interdepartmental coordination within and among Jefferson County and City of Monticello departments and others when planning and implementing roadway projects and programs to ensure that multimodal uses are incorporated and that public awareness of multi-modal opportunities are available.


## Encouragement

Bicycling and walking are legitimate modes of transportation and important forms of personal mobility and independence. Having a connected network of on-street bicycle facilities and sidewalks that allows people to travel from one place to another without driving is the first step toward an active and healthy community. While some enthusiasts are more likely to use facilities once they have been installed, others tend to need a bit more encouragement and confidence-building before they are comfortable. Encouragement activities promote and raise awareness of multi-modal options and events. An important key to success of these activities is having a coordinated approach, a consistent message, and focused activities.

## Bicycle and Pedestrian Advisory Committee

A county-level Bicycle and Pedestrian Advisory Committee (BPAC) would ideally represent multiple facets of the community and coordinate between Jefferson County and City of Monticello staff on a wide range of bicycle and pedestrian issues facing the region, including implementation of the Bicycle and Pedestrian Master Plan. The committee would be charged with representing the needs and opinions of local residents, businesses, and others related to bicycle and
pedestrian issues, plans, programs, policies, and project implementation. Goals of the committee should include:

- Developing guidelines and a process for establishing a Bicycle and Pedestrian Advisory Committee, including committee composition, appointment process, purpose and responsibilities, staff liaison and coordination roles, and other details to ensure committee effectiveness.
- Monitoring planned facility implementation.
- Helping organize events and programs.


## Bicycle and Pedestrian Coordinator

A Bicycle and Pedestrian Coordinator would be the single point of contact for bicycle- and pedestrian-related initiatives, programs, policies, and projects within the County. While many departments and organizations will be involved in implementing and supporting various elements of the Master Plan, it is essential that a staff position be identified to coordinate and guide implementation. The Coordinator would work with Jefferson County and City of Monticello staff, the Bicycle and Pedestrian Advisory Committee, other governmental agencies, the business community, and the general public to create partnerships and fulfill the vision represented in this Master Plan. Considerations for establishing the position should include:

- Identification of key responsibilities of the Bicycle and Pedestrian Coordinator, such as to ensure that all facilities comply with the Americans with Disabilities Act, and identification of the appropriate department to house the position.
- Depending on budget constraints, the County may initially choose to reassign an existing position to focus on bicycle and pedestrian issues at least $50 \%$ of the time, moving to a full-time position over time when appropriate.
- Raise awareness of the position and responsibilities through City publications and electronic media.


## Safe Routes to School Programs

Safe Routes to School (SRTS) programs focus on a comprehensive approach to encouraging bicycling and walking to school. These programs are sustained efforts by parents, schools, community leaders and local, state, and federal governments to improve the health and well-being of children by enabling and encouraging them to walk and bicycle to school. This may be accomplished through the provision of infrastructure (engineering) or via non-infrastructure programs (education, encouragement, enforcement). These programs make bicycling and walking to school a safer and more appealing transportation choice and encourage life-long healthy and active lifestyles. To promote this program, the City should incorporate the following procedures:

- Work with all Independent School Districts (ISD) that cover the City to establish comprehensive SRTS programs.
- Support the creation of SRTS programs at local elementary and middle schools, including school transportation assessments and walking/biking plans.
- Work with local schools to provide appropriate bicycling activities for children of different age groups.
- Assist with funding applications for SRTS projects identified through the programs.


## Bicycle and Pedestrian Events

Providing a wide range of opportunities for persons of all ages and abilities to walk or ride is essential to increasing multimodal awareness within the County. Community or social events provide opportunities for both new and experienced bicyclists and walkers to ride to the store, school, library, work, park, or just for fun. When combined with safety education materials and programs, the following events and informational materials can increase comfort and safety for all roadway users:

- The Seminole Cycling Classic is an opportunity to highlight the County's regional bikeway network and focus positive attention on the City of Monticello.
- Bicycling-related activities that support bicycling to promote healthy lifestyles such as Bike to Work Week, Bike Month, and/or Bike-In Movies.
- A wayfinding map of the City of Monticello and vicinity, regional routes and trails (online and fold-out brochure) showing existing bike routes, destinations, and links to the hike and bike trail network, once facilities are installed.
- The Watermelon Festival in the City of Monticello has many outdoor activities including beauty pageants, street dance, a melon run, sports events, and a parade, which expose festival goers to Monticello's pedestrian friendly environment.
- A county website illustrating future regional connection and planned facilities in collaboration with links to County and Monticello departments and organizations that are supporting new facilities.


## Local Businesses

Public-private partnerships, whether formal or informal, can help encourage residents to walk or ride bicycles for short shopping trips or for work trips. Partnership opportunities include:

- Creating partnerships with local bicycle businesses and community organizations to promote bicycle and pedestrian-friendly events, such as the Watermelon Festival and the Seminole Cycling Classic.
- Seek sponsorship opportunities for safety, education, and awareness materials such as wayfinding maps and informative brochures.
- Encouraging employers to include quality/secure bicycle parking, showers, and lockers for employees who wish to walk, run, or bicycle to work. Consider modifications to the development standards to require or provide incentives for incorporation of these facilities in new development or redevelopment.


## Enforcement

A strong enforcement program is critical in Jefferson County, where many of the County's bicycle and, to a lesser degree, pedestrian facilities will be located on existing, and highly trafficked, regional roadways. Enforcement activities should strive toward three important objectives:

- Protect the bicyclist's right to operate on the roadway.
- Protect bicyclists and pedestrians from motorists.
- Ensure that bicyclists and pedestrians follow the rules and operate safely.

Taken together, activities that achieve these objectives represent a comprehensive enforcement program that sends a "share the road" message to all roadway users.

The Monticello Police Department can play a key role in creating a supportive atmosphere in the City through constant contact with other Jefferson County staff, City staff, and residents from all areas of the community. Law enforcement officers and other Police Department staff who interact with the public are familiar with traffic and bicycle laws and local traffic patterns. Officers will be able to reinforce correct motorist, bicyclist, and pedestrian behaviors and send a strong message to the community that walking and riding is a viable and accepted means of transportation.

## Coordination Efforts

As mentioned earlier, no one department has full responsibility for improving pedestrian and bicycle conditions. Law enforcement officials can provide linkages between other various County enforcement agencies, City departments, and community organizations to support education, encouragement and enforcement activities through:

- Coordination with other law enforcement agencies in the area to provide training and interpretation of bicycling and traffic laws and practices.
- Communication with other law enforcement agencies and bicycle advocacy groups to ensure understanding and agreement on existing bicyclingrelated regulations and practices.
- Sponsorship of and/or support of bicycling education programs and bicycling events with other County and City departments and private/ community organizations.


## Enforcement Activities

Enforcement of traffic laws may incorporate a range of activities focused on raising awareness, improving behavior of all roadway users, and improving comfort and safety for bicyclists and pedestrians. Bicyclists, pedestrians, and motorists must be made aware of these rights and responsibilities and encouraged to act within the law. Enforcement efforts can include:

- Ensuring law enforcement staff (officers and other people who interact with the public) are aware of current rules of the road and bicycle-related laws.
- Conducting enforcement campaigns to encourage both motorists and bicyclists to follow laws and improve safety for all. These campaigns may include issuing citations or warnings, rewarding behavior that indicates awareness and consideration for the safety and rights of all roadway users, and should identify specific behaviors to target.
- Developing partnerships within community and business organizations to promote compliance with traffic laws and encourage considerations for all users.


## Crash Locations

There may be locations within the Jefferson County and the City of Monticello that experience greater numbers of bicycle- or pedestrian-related crashes. It is these locations that should be singled out for safety-related countermeasures. County staff is encouraged to undertake an examination of available crash statistics (types and locations) to determine possible interventions and strategies to reduce crashes.

## Engineering

The physical structure of the built environment is an important factor that influences whether walking and/or bicycling can be successful forms of transportation in a community. Lane widths, speed limits, pavement/sidewalk conditions, and crosswalks and intersection characteristics will affect perceptions of roadway safety and comfort for various users. Jefferson County's regional roadway system is currently used, and has many future opportunities, as a bikeway network. At both the county and city scale, it is important to adopt streetscape standards that ensure the safety of multimodal users on all roadways.

## Complete Streets

The goal of Complete Streets is to create a better environment for users of most modes of transportation: automobiles, bicyclists, pedestrians, and transit. Special attention should be given to designing facilities that accommodate the special needs of children, the elderly, and people with physical and visual disabilities. Florida Statute 335.065 states that, with noted exceptions:
"Bicycle and pedestrian ways shall be given full consideration in the planning and development of transportation facilities, including the incorporation of such ways into state, regional, and local transportation plans and programs. Bicycle and pedestrian ways shall be established in conjunction with the construction, reconstruction, or other change of any state transportation facility, and special emphasis shall be given to projects in or within 1 mile of an urban area."

Adopting a county-wide Complete Streets policy will ensure that all applicable modes (automobile, bicycle, pedestrian, and transit) are included in roadway and community design. Successful Complete Streets policies include ten key elements:

- Includes a vision for how and why the community wants to complete its streets.
- Specifies that 'all users' includes pedestrians, bicyclists and transit passengers of all ages and abilities, as well as trucks, buses, emergency vehicles, and automobiles.
- Encourages street connectivity and aims to create a comprehensive, integrated, connected network for all modes.
- Is understood by all agencies to cover all roads.
- Applies to both new and retrofit projects, including design, planning, maintenance, and operations, for the entire right of way.
- Makes any exceptions specific and sets a clear procedure that requires high-level approval of exceptions.
- Directs the use of the latest and best design criteria and guidelines while recognizing the need for flexibility in balancing user needs.
- Directs that Complete Streets solutions will complement the context of the community.
- Establishes performance standards with measurable outcomes.
- Includes specific next steps for implementation of the policy.


## Bicycle Facility Design and Capital Improvements Planning

Many of Jefferson County's roads are currently being used for bicycling, but are lacking best practices for bicyclist and pedestrian safety. Reconstruction, retrofit, and rehabilitation projects are those roadway projects that do not involve the creation of a brand new road. One way to ensure good overall

Complete Street projects provide safe access for all users.
facility design is to accommodate multi-modal planning at the beginning of a
transportation improvement project so that it is integrated into the total design of the project at the outset, instead of being added at a later date and at a greater cost. City plans and policies can incorporate these goals by:

- Using national and state standards, as applicable, to guide design and installation of bicycle facilities and treatments. The American Association of State Highway and Transportation Office (AASHTO) and Florida State Greenbook standards and guidelines all provide detailed guidance for bicycle and pedestrian facilities design and usage.
- Integrating bikeways and sidewalks in typical sections and design standards will assist in the construction of these facilities.
- Evaluating key roadway resurfacing, reconstruction, and design projects for opportunities to incorporate multi-modal facilities and treatments, improve intersection crossings, and provide connectivity to the bicycle network and trail facilities.
- Installing appropriate bicycle and pedestrian facilities and treatments, including resurfacing, re-striping, right-of-way adjustments, and share-the-road signage, on roadways identified in the Bicycle and Pedestrian Concept Plan.
- Creating a wayfinding network of signed bicycle routes leading to key destinations within the community such as parks, community facilities, trails, schools, and shopping centers.
- Evaluating the success of new or modified roadway designs is an important aspect for the Engineering Department to consider when evaluating future projects. Recommendations for evaluation and performance measures can be found at the end of the Evaluation section.


## Bicycle and Pedestrian Supporting Facilities

Bicycle and pedestrian-related facilities that make it easier for residents to arrive at their destinations can be provided through a number of programs and policies. It is important to incorporate supporting facilities into programming, design, and construction at key locations, at regional destinations, and within downtown Monticello. The County should consider the following initiatives:

- Encourage the development of end-of-trip and bicycle parking facilities, especially at community resources (parks, cultural centers, schools, transit facilities), and other desired destinations (employment centers, shopping destinations) through development requirements and incentives.
- Install bicycle parking at destinations throughout the City, including libraries, parks, shopping centers, business districts, and transit stops.
- Install pedestrian-friendly streetscape furnishings, such as benches, waste receptacles, and lighting, along key corridors.


Supporting facilities add comfort, safety, and improved aesthetic quality to streetscapes.

## Evaluation

A key component to the successful implementation of the Master Plan is being able to evaluate the performance of programs, new or improved facilities, and other policy-based decisions. The County and City of Monticello should also be enabled to assess the progress of the Master Plan and its ability to meet future goals and objectives and make corrections as needed to support a bicycle and pedestrian-friendly community.

## Baseline Data

It is impossible to determine success without first knowing where you started. By collecting and compiling existing conditions information, the County and Monticello can determine whether conditions have improved over time. Baseline data, and performance measures used to track progress, may also be required for obtaining financial support from grants or other sources. Data collection includes establishment of baseline conditions for each of the Master Plan's objectives in order to establish updated conditions and evaluate progress against performance/evaluation measures at least every five years. Use this conditions update and evaluation to revise project lists, program delivery, and update the Master Plan over time.

## City Policies and Regulations

Adopting the Bicycle and Pedestrian Master Plan is just the first step toward creating a more bicycle-friendly community. Identifying potential locations for countermeasures and facilities complemented by changes to associated land development regulations, long-range planning policies, and other planning documents, will lead to the long-term success of the Master Plan and improved safety for bicyclists and pedestrians. Evaluating existing planning documents for opportunities to include proactive bicycle and pedestrian-oriented policies ensures future development and redevelopment efforts will incorporate humanscale development patterns and urban design characteristics that will encourage healthy and active behaviors. Policy consideration includes:

- Revisions to Comprehensive Plan policies and corresponding land development regulations/ordinances to encourage land use patterns and site design that support bicycling and walking.
- Development of form-based development regulations to maximize the comfort and safety of non-motorized users.
- Clearly defining responsibilities for ongoing implementation and coordination of the Master Plan (projects, programs, and policies) across County and Monticello departments and with various community organizations and stakeholders.


## Performance Measures

It is through the implementation and evaluation of policy and program objectives that Jefferson County and the City of Monticello will create a clear, comprehensive, and implementable approach to fully incorporate multimodal opportunities into the fabric of the community. A summary of recommended performance measures for each of the six "Es" are shown in the table below:

Table 14 : Summary of Policy and Program Performance Measures

| FOCUS AREA | PERFORMANCE MEASURES |
| :---: | :---: |
| Education | Number or percentage of key staff attending training of various types (by department, agency, etc.) |
|  | Number of bicycle/motorist education programs offered to citizens, including those located in non-native English speaking neighborhoods, schools in low-income communities, and elderly citizens |
|  | Number of attendees at bicycle/motorist safety education programs |
|  | Number of school-age students receiving bicycle/traffic safety education |
|  | Number of educational brochures/materials distributed to citizens |
|  | Number of persons receiving bicycle safety gear |
| Encouragement | Number of bicycling-related new events initiated in the County |
|  | Number of schools participating in Safe Routes to School programs |
|  | Reduction in the Countywide obesity and diabetes rates, especially among youth |
|  | Implementation of pedestrian- and bicycle-supportive maps and other public media |
|  | Number of bike racks installed and subsequent usage |
|  | Number of bike racks installed at various locations around the County by private entities |
| Enforcement | Reduced number of pedestrian- and bicycle-related crashes as a proportion of all crashes in the County |
|  | Percentage of law enforcement officers receiving specific bicycle-related training |
|  | Number of persons who received education and/or citations regarding pedestrian- and bicycle-related incidents |
| Engineering | Reduction in the number of pedestrian and bicycle network gaps throughout the County |
|  | Adoption of pedestrian- and bicycle-friendly design guidelines into the County and City policies and standards |
|  | Number of connectivity points between on-street facilities and off-road paths |
|  | Miles of sidewalk, bicycle lanes/paved shoulders and pathway facilities installed |
|  | Safety improvements at key intersections |
|  | Number of bicycle parking spaces installed in the County at appropriate locations (and usage of these parking facilities) |
|  | Number of businesses that install bicycle racks or other end-of-trip facilities |
| Equity | Workshops, training, and education sessions held, and the number of people from identified neighborhoods or community groups who attend |
|  | Proportion of bicycle and pedestrian facilities, treatments, and wayfinding routes designated and installed by geographic area |
|  | Number of mobility-related education events and programs offered to lower income, seniors, and other special needs populations within the County |
| Evaluation \& Planning | Changes to County and City policies and plans to support implementation of the Bicycle and Pedestrian Master Plan |
|  | Amount of funding identified and allocated toward Bicycle and Pedestrian Master Plan implementation |



## Cost Estimating

Planning-level cost estimates are included for each recommended project (with the exception of PX-6: Trailhead at Aucilla Highway/US 19). Estimates are based on typical development practices, depending on the project type recommended, and standard cost estimating figures commonly used. More detailed cost breakdowns are provided for pedestrian crossing enhancement projects PX-1 thru PX-5, PX-7 and PX-8, as these projects are more detailed in scope. General project unit cost estimates assumed for the majority of recommended projects are included in the table below.

Detailed project cost estimate breakdowns provided for pedestrian crossing enhancement projects PX-1 thru PX-5, PX-7 and PX-8, as mentioned above, can be found in the appendix to this master plan.

Table 15: General Unit Cost Estimates

| PROJECT | ASSUMPTIONS | CST COST |  | SOURCE |
| :---: | :---: | :---: | :---: | :---: |
| Sidewalk (1 side) | 5' width, 1 side | \$ | 152,784 | 1 |
| Sidewalk (2 sides) | 5' width, both sides | \$ | 302,293 | 1 |
| Paved Shoulder | 5' paved shoulder, both sides | \$ | 166,910 | 1 |
| Trail | 12' multi-use trail, 1 side of roadway | \$ | 400,983 | 1 |
| Pedestrian Signal | Pedestrian activated signal per intersection, 4-way | \$ | 11,264 | 1 |
| Crosswalk | Pedestrian crosswalk per intersection, 12 " white stripe (paint/thermo), $5 \times 12$ ' lanes all quadrants | \$ | 2,645 | 1 |
| Restripe | Milling \& resurfacing (4L roadway) 5' sidewalk \& curb \& gutter, undivided, includes L \& R turn lanes | \$ | 993,315 | 1 |
| BMUFL Signs | 1 sign per mile per direction; \$300/sign | \$ | 600 | 2 |
| BMUFL Signs (urban) | 3 signs per mile per direction; \$300/sign | \$ | 1,800 | 2 |
| Bike Lane Stripe | 6" white stripe; \$1/If | \$ | 10,560 | 2 |
| Shared Lane Marking Park | 1 marking every 250' adjacent to on-street parking; \$200/marking | \$ | 8,400 | 3 |
| Shared Lane Marking | 1 marking every 500' (approx. 0.1 mi) with no onstreet parking; \$200/marking | \$ | 4,000 | 3 |

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## Funding Sources

Following the adoption of this master plan, the County and CRTPA will be in a better position to seek and procure funding for priority bicycle- and pedestrian-related projects in Jefferson County. The following is a list of potential funding sources for consideration in pursuit of accomplishing the project recommendations.

## Local/State level Funding sources:

VISIT FLORIDA Grants
VISIT FLORIDA is the state's official tourism marketing corporation created in 1996. VISIT FLORIDA is not a government agency, but rather a not-for-profit corporation that carries out the work of the Florida Commission on Tourism, which was created as a public-private partnership by the Florida Legislature in 1996. VISIT FLORIDA maintains the following grant programs:

- Cultural Heritage and Nature Tourism Grant Program: The Cultural Heritage and Nature Tourism (CHNT) Grant Program is a reimbursement program designed to provide funding for multi-county and multipartner marketing projects for the promotion of Florida's cultural heritage and nature tourism and education efforts.
- Advertising Matching Grants Program: VISIT FLORIDA administers an advertising matching grants program to publicize the tourism advantages of the State of Florida. This program is administered on behalf of the Florida Commission on Tourism, in cooperation with the Governor's Office of Tourism, Trade, and Economic Development. Notices of the grants program are sent out by the second Friday in March. The total for all grants under this program shall not exceed $\$ 40,000$ per year.

Office of Greenways and Trails - The Recreational Trails Program (RTP) The Recreational Trails Program (RTP) is coordinated by the Office of Greenways and Trails. The RTP is a competitive program that provides grants for projects that provide, renovate, or maintain recreational trails, trailheads, or trail side facilities. The Florida Department of Environmental Protection (FDEP) administers the program in coordination with the U.S. Department of Transportation and the Federal Highway Administration (FHWA). Municipal or county governments, state or federal governmental agencies, recognized state and federal Indian tribal governments, and organizations approved by the State are eligible to apply. RTP grants have a minimum 20 percent local match. Applications must be submitted between March 15 and March 30 of the application year.

## Small Cities Community Development Block Grant Program

The Community Development Block Grant Program is a federal program that provides funding for housing and community development. The U. S. Department of Housing and Urban Development distributes money to states participating in the Small Cities Community Development Block Grant program based on a formula developed by Congress. Florida has received between $\$ 18$ and $\$ 35$ million each year since 1983. The program has five preliminary categories:

- Housing
- Neighborhood Revitalization
- Commercial Revitalization
- Economic Development
- Section 108 Loan Guarantee Program

Applications for Economic Development grants may be submitted at any time. Applicants may apply for Housing, Neighborhood, or Commercial grants only if they have no open grants. Grant contracts are written for two-year periods. Applications must meet certain eligibility and national objective requirements, as listed below:

- To qualify under the Low-Moderate National Objective, at least 51 percent of the beneficiaries must be low and moderate income persons. The U. S. Department of Housing and Urban Development has defined a low and moderate income person as one whose total family income is at or below 80 percent of the area's median income.
- Under the Slum and Blight National Objective, the area must be a slum or blighted area as defined by state or local law.
- Activities funded under the Urgent Needs National Objective must alleviate existing conditions that pose a serious and immediate threat to those living in the area and are 18 months or less in origin. Additionally, the local government must demonstrate that it is unable to finance the activity on its Grants can help fund the own, and that other funding is not available.


## Florida Community Trust's Florida Forever Grant Program

Florida Communities Trust is a state land acquisition grant program that provides funding to local governments and eligible non-profit environmental organizations for acquisition of community-based parks, open space, and greenways that further outdoor recreation and natural resource protection needs as identified in local government comprehensive plans.

## Florida Department of Transportation Enhancements

The Transportation Enhancement Program (TEP) is a federal program administered by the Florida Department of Transportation (FDOT). This funding is intended for projects or features that go beyond what has been customarily provided with transportation improvements. This program is for projects that are related to the transportation system, but are beyond what is required through normal mitigation or routinely provided features for transportation improvements. TEP is not a grant program; rather, projects are undertaken by project sponsors and eligible costs are reimbursed. These funds can be used for streetscapes, signage, and roadway improvements.

## Bikes Belong Coalition Grant Program

This program assists in the development of bicycle facility projects by providing $\$ 180,000$ in grants each year. This program is administered by the Bikes Belong Coalition, which is a bicycle advocacy organization aimed at "putting more people on bikes more often."

## Florida Recreation and Development Assistance Grant Program

The Florida Recreation and Development Assistance Program provides grants for the acquisition or development of land for public outdoor use or for the construction or renovation of recreational trails. This program is administered by the Florida Department of Environmental Protection, Bureau of Design and Recreation Services.

## Bike Florida Mini-Grants

This small-scale grant program is established through the sale of "Share the Road" specialty license plates to provide funds for bicycle and pedestrian programs. These grants provide assistance in the purchasing of equipment (such as road or trail signage, bike repair for educational programs), print materials (printing of bicycle safety information, safety signage for bicycle events, trail maps, etc.), or other safety-related projects. Helmet giveaway programs are not considered eligible. The program website can be found at www.bikeflorida. org.

## National/Federal level funding sources:

## National Highway System Funding

Funding Entity / Administrator: National Highway System Funding
Website: http://www.fhwa.dot.gov/safetealu/factsheets/nhs.htm
Eligibility: Funds may be used to construct bicycle transportation facilities and pedestrian walkways on land adjacent to any highway on the National Highway System, including Interstate highways.

Match Requirements: No.
Other Requirements: May be spent on any public highway or trail.

## Surface Transportation Program (STP) <br> Funding Entity / Administrator: FHWA

Website: http://www.fhwa.dot.gov/safetealu/factsheets/stp.htm
Eligibility: Funds may be used for either the construction of bicycle transportation facilities and pedestrian walkways (including ADA compliance projects), or non-construction projects (such as maps, brochures, and public service announcements) related to safe bicycle use and walking; 10 percent of annual funds are dedicated to TE projects

Match Requirements: Most Federal-aid highway funding programs require a 20 percent State match of Federal funds

Other Requirements: State and/or local funds used to match Federal-aid highway projects may include in-kind contributions (such as donations). Projects need to be in the North Central Texas Council of Governments (NCTCOG) TIP to be eligible (http://www.nctcog.org/trans/tip/)

## Transportation Enhancement (TE) Program (subset of STP)

 Funding Entity / Administrator: FHWAWebsite: http://www.fhwa.dot.gov/environment/transportation_enhancements Eligibility: Program is run through a state-level TE Office. Competitive selection process, funds are distributed directly by the state TE Office.

Match Requirements: Individual TE projects under the STP can have a match higher or lower than 80 percent; typical local match is 20 percent; Funds from other Federal programs may also be used to match TE program funds.

Other Requirements: Projects may exceed the 80 percent Federal share provided the State program overall matches at the 80/20 level; Projects need to be in the NCTCOG TIP to be eligible; May be used on local roads.

Congestion Mitigation and Air Quality Improvements (CMAQ)' Program (subset of STP)
Funding Entity / Administrator: FHWA
Website: http://www.fhwa.dot.gov/environment/air_quality/cmaq/
Eligibility: Only for local governments in non-attainment areas; Funds may be used for either the construction of bicycle transportation facilities and pedestrian walkways, or non-construction projects (such as maps, brochures, and public service announcements) related to safe bicycle use.
Match Requirements: CMAQ typically covers 80 percent of the project cost, with the remaining 20 percent coming from the state, MPO or public/private partners.

Other Requirements: Coordination with MPO (NCTCOG) is strongly recommended to coordinate the application process; May be used on local roads.

## Safe Routes to School Program

Funding Entity / Administrator: Safe Routes to School Program
Website: http://www.txdot.gov/safety/safe_routes/default.htm
Eligibility: Statewide competitive process; cost-reimbursement; Funds are apportioned to states based on their relative shares of total enrollment in primary and middle schools, but no state will receive less than $\$ 1$ million.
Match Requirements: No.
Other Requirements: 70-90\% to Infrastructure projects; remainder to noninfrastructure

State and Community Highway Safety Grant (Section 402 funds)
Funding Entity / Administrator: State and Community Highway Safety Grant (Section 402 funds)
Website: http://safety.fhwa.dot.gov/policy/section402/
Eligibility: Section 402 grants are provided to support state highway safety programs designed to reduce traffic crashes and resulting deaths, injuries, and property damage
Match Requirements: 100 percent federally funded
Other Requirements: State must submit a Performance Plan to be eligible for funds.

## Transit Enhancement Activity Program

Funding Entity / Administrator: Transit Enhancement Activity Program
Website: http://www.fta.gov
Eligibility: One percent set-aside of Urbanized Area Formula Grant funds designated for, among other things, pedestrian access and walkways, and "bicycle access, including bicycle storage facilities and installing equipment for transporting bicycles on mass transportation vehicles." 49 USC Section 5307(k)

Match Requirements: Bicycle-related transit projects are 90 percent Federal and may increase to 95 percent Federal for bicycle-related transit enhancement projects

Other Requirements: No.

Website: http://www.fta.dot.gov/grants/13093_3550.html
Eligibility: State and public bodies; Capital, planning and operating expenses for projects that transport low income individuals to and from jobs and activities related to employment, and for reverse commute projects - includes bicyclerelated services

Match Requirements: The Federal share of eligible capital and planning costs may not exceed 80 percent of the net cost of the activity ( 50 percent for operating costs). Recipients may use up to 10 percent to support program administrative costs including administration, planning, and technical assistance, which may be funded at 100 percent Federal share. The local share of eligible capital and planning costs shall be no less than 20 percent of the net cost of the activity, and the local share for eligible operating costs shall be no less than 50 percent of the net operating costs.
Other Requirements: Funds pass from FTA to NCTCOG; Project must be in TIP to be funded

Transportation, Community, and System Preservation Program (discretionary grants)
Funding Entity / Administrator: FHWA
Website: http://www.fhwa.dot.gov/tcsp/
Eligibility: States, metropolitan planning organizations, local governments, and tribal governments are eligible for TCSP Program discretionary grants to plan and implement strategies which improve the efficiency of the transportation system, reduce environmental impacts of transportation, reduce the need for costly future public infrastructure investments, ensure efficient access to jobs, services and centers of trade, and examine development patterns and identify strategies to encourage private sector development patterns which achieve these goals.
Match Requirements: The Federal share payable shall be 80 percent.
Other Requirements: Applicants are strongly encouraged to coordinate applications with the State department of transportation and metropolitan planning organization to ensure proposals are consistent with statewide and metropolitan planning requirements.

## Conclusion

The Jefferson County Bicycle and Pedestrian Master Plan is the culmination of extension data collection, review and analysis. It was formulated with extensive municipal, public and stakeholder input and involvement. As a result, this Master Plan provides the framework for a robust bicycle and pedestrian network, to be implemented over time, which will increase transportation mobility options for all population segments of the County. The bicycle and pedestrian conceptual network, project recommendations, and project prioritization schedule give practical direction to local municipal leaders to implement the plan and realize a more complete and diverse transportation system for Jefferson County.

## Jefferson County Bicycle and Pedestrian Master Plan

## Stakeholder Interview Notes

## 1. Roy Schleicher/County Administrator, Alan Wise/Preble-Rish (County Engineer), another Henry Gohlke, Assistant County Administrator

Issues

- Fatality at post office (US 19 north)
- No traffic lights in County
- Too many signs

Opportunities

- Potential Connections - new park at end of Water Street, connections to/from Leon County
- Bulb-outs in core 6 blocks, improved crossings
- Paved shoulders on 259 north of 27, Lake Micc, US90, Waukeenah Highway
- Connections to destinations

2. City of Monticello - Emily Anderson/City Clerk, Steve Wingate/City Manager, Raymond Clark, Supervisor

Issues

- Visibility issues with plants/trees at US90 crossing
- Very few people walk to school
- Curb issues at US 90

Opportunities

- Coordinate improvements with new development, such as Monticello Pines
- Improve crosswalks with ladder striping
- Gateway improvements
- Potential connections to Eco-park and north to GA (via Cotton Trail)
- Improvements to US 19
- Improvements to US90
- US 90 E - consider road diet as 2035 volumes are less than 10,000 vpd
- Improve crossing at the US90 trail
- Change to share the road/sharrows


## 3. Planning/ED - Bill Tellefsen/County Planning Director, Julie Conley/EDC, Nancy Wideman/TDC

Development opportunities include - Monticello Pines, Wacissa, some commercial development at US19/27, US 27 at 59 and US19

Past planning efforts (such as the future land use plan and FSU vision plan) have not been wellreceived. There is an economic development plan in the works.

Future transportation improvements could include 6 laning US 27 and US 19 to route truck traffic off I-75. This would include a bypass.

## 4. County Roads Department - David Harvey

Issues

- SR 59 may not have paved shoulder
- Lamont has existing sidewalk at the post office
- Concern about sharing road - signage helps, but don't have money for signs all over

Potential Future Facilities:

- Look at Seminole Cycling Routes northeast of town
- Develop Whitehouse Rd with a separate bicycle route to/from Leon Co. There are issues with ROW, which would need coordination with land owners.
- "Goose Pasture" has potential for trailhead areas
- Abandoned RR ROWs from Lamont to GA.
- Add Share the road on Cherry/Lloyd Creek and SR59


## 5. Police Chief and two Sheriff's Deputies

Issues:

- narrow roads,
- topography,
- golf carts
- kids not permitted to ride to school
- need to educate cyclists on how to ride
- Need pedestrian enforcement at courthouse

6. Winston Lee, AICP, ASLA, local resident/business owner (walk around downtown, no notes)
7. Jefferson Co. Schools - Superintendent Brumfield

Title 1 District
No Kids bike or walk to school (posted speed is 65 mph on US 19), though some might use trail if extended south. Kids who live within 2 blocks of the school are bussed.

Trail crossing at US 90 used to include a school speed zone, but it was removed.
Can't afford crossing guards
Hazardous walking conditions. Sidewalk is needed from Courthouse west to City limits.

## JEFFERSON COUNTY BICYCLE \& PEDESTRIAN MASTER PLAN

## PUBLIC WORKSHOP



A master plan for the future of bicycling and walking in Jefferson County is in progress. The master plan will identify safe and efficient locations to connect bicyclists and walkers to key destinations such as historic downtown Monticello, parks, schools, natural and historical sites, and more.

The master plan will include the following components:

- Detailed maps of recommended bicycle lanes, sidewalks, trails, and more
- Policies that support bicycling and walking
- Programs to increase awareness and safety
- Priorities for plan implementation


## Public Workshop

At this workshop, preliminary recommendations to improve conditions for bicycling and walking in Jefferson County will be shared with the community. These concepts build on the existing Regional Mobility Plan and are based on stakeholder interviews and extensive field review. We need your input on the needs and priorities for bicycle and pedestrian facilities and programs. You are encouraged to attend and to bring a friend.

What places do you walk or bike?
What route do you want to use to get there?

## TUESDAY, MAY 15, 2012 5:00 pm - 7:30 pm

Drop in anytime. Presentation at 6:00 pm. Jefferson County R.J. Bailar Public Library Community Room 375 South Water Street, Monticello, FL

For More Information:
Contact Lynn Barr, CRTPA, (850) 891-6801 or lynn.barr@talgov.com or Jennifer Carver, Renaissance Planning Group, (850) 270-1926 x 402 or jcarver@citiesthatwork.com

## www.crtpa.org

Sponsored by:

## CRIPA



# Jefferson County Bicycle and Pedestrian Master Plan Public Workshop 

FOR IMMEDIATE RELEASE

May x, 2012

For more information contact:

| Lynn Barr | (name) |
| :--- | :--- |
| Mobility Coordinator | (title) |
| $850-891-6800$ | (phone \#) |

Lynn.barr@talgov.com (email)

## May 15 public workshop to focus on bicycle and pedestrian areas

Monticello - Jefferson County invites all residents, businesses, and stakeholders to attend a public workshop to provide input on the needs and priorities for bicycle and pedestrian facilities and programs. This public workshop will be held in an informal open house format with a presentation at 6:00 pm. Citizens attending the workshop will be able to review the materials, ask questions and submit comments. The public workshop is as follows:

> Tuesday, May 15, 2012
> 5:00 pm - 7:30 pm
> Drop in anytime. Presentation at 6:00 pm. Jefferson County R.J. Bailar Public Library Community Room 375 South Water Street, Monticello, FL

The Capital Region Transportation Planning Agency (CRTPA), in coordination with Jefferson County and the City of Monticello, is developing the Jefferson County Bicycle and Pedestrian Master Plan. Emphasis will be placed on safe and efficient locations to connect bicyclists and walkers to key destinations. This plan will feature the following components:

- Detailed maps of recommended bicycle lanes, sidewalks, trails, and more
- Policies that support bicycling and walking
- Programs to increase awareness and safety
- Priorities for plan implementation

What would make Jefferson County \& Monticello more bicycle- and pedestrian-friendly? What are the key bicycling/walking destinations in the County for families, commuters, or others? Where would you most like to see bicycle routes/trails, sidewalks, and crosswalks? What concerns do you have about bicycling and walking in the County?

Please visit the CRTPA web site at http://www.crtpa.org/Jefferson_County_Bike_Ped.html to participate in a short questionnaire.

This public meeting is being held in compliance with the Americans with Disabilities Act (ADA). Anyone requesting special accommodations may call (850) 891-6800, at least 48 hours prior to the meeting. For more information on the CRTPA and local transportation planning initiatives, please visit www.crtpa.org or call (850) 891-6800.

## Jefferson County Bicycle and Pedestrian Master Plan

Web Survey Results

| RespondentID | Collector ID | StartDate | EndDate | What would make Jefferson County \& Monticello more bicycle- and pedestrian-friendly? | What are the key bicycling/walking destinations in the County for families, commuters, or others? | Where would you most like to see bicycle routes/trails, sidewalks, and crosswalks? | What concerns do you have about bicycling and walking in the County? |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Open-Ended Response | Open-Ended Response | Open-Ended Response | Open-Ended Response |
| 1841643960 | 26281359 | 05/15/2012 | 05/15/2012 | first, a leash law. we are always being chased by dogs, once by 5! a $2-$ ft plus shoulder on some designated bike-friendly roads would also be very helpful. the dogs keep me from riding there more than the lack of shoulders tho. | Not familiar enough with the county. I just love the countryside there. | on 90 , so we could ride easily from our home at baum and buck lake. Canopy roads, | Dogs, lack of shoulders. |
| 1828588683 | 26281359 | 05/06/2012 | 05/06/2012 | More Bicycle and Pedestrian friendly paths. Lots of Bicycle path signs. Wider bicycle paths on the roads. lots and lots of Advertisement detailing Eco-Tours. | There is a brochure made by the TDC in Monticello that details a Historic Monticello Walking Tour. There should also be made available a Brochure for Historic Biking Tours. I would like that question above answered as well. We have no advertisement detailing any of these destinations in Monticello. How are people to know if it is not put out there. | 19N, 19S, 90E, and 90W. | Safety. No bicycle paths to follow, save for one already designated, and is hidden out of the way. Need more Bicycle and Pedestrian Friendly commercial signs on streets and everything. I love the new Pedestrian crosswalk signs. We need more of these kind of signs to make people aware of what we have. |
| 1823997829 | 26281359 | 05/02/2012 | 05/02/2012 | Highway 90 in Jefferson County is the only part of 90 without shoulders. Any time a road is resurfaced, it really helps to have shoulders or bike lanes. Stop dangerous drivers and if a driver ever his a cyclists or pedestrian charge make them accountable. Last time I bicycled from Tallahassee to Greenville on a few cars passed me. But one on an empty roads missed me from behind by inches and gunned his engine to make his point. The rule of the road should be that those with the bigger vehicles should be held most accountable. Cars over bikes, bikes over pedestrians. The Bike Florida Ride brought $\$ 10,000$ 's to many small towns this year. We have to stop the few dangerous drivers making these big rides afraid to come here. | Wacissa River, Aucilla, Florida Hiking Trail, Courthouse, Opra House are great destinations. This may be the only county that stretches across Florida. Would be a great marketing tool to say "ride across Florida" bike ride....in one day. Lots of history tung oil, Spanish, Lloy train station, Mahan tree lined 90... Historic markers would help promote these things if placed all along bike routes. | The ones we use now are good. The Speghetti 100 has a great dirt ride from Miccusuki to Boston... | Bad drivers are not held accountable when the hit cyclists or pedestrians. They don't appreciate all the potential tourists dollars a big group ride could bring to the county. Get a Backroads or Vermont bicycling tour book. People pay $\$ 300 /$ day to bike ride in nice safe areas. Our area is as nice as anything in those brochures!!!!!!! |
| 1823860810 | 26281359 | 05/02/2012 | 05/02/2012 | 1) a 4 "E" type bike/ped program that includes, education, encouragement, enforcement and engineering (facilities) with adequate funding 2) a full time bike/ped advocate on staff 3) paved shoulders on 2 lane roads where feasible (particularly continuous paved shoulders on Hiway 90, 59, 19, etc.) 4) sharrows on 2 lane roads that don't have bike lanes or paved shoulders 5) a bike shop in town/county 6) continuous sidewalks throughout downtown Monticello 7) curb cut ramps at all downtown intersections 8) a detailed map of bike friendly routes \& internet mapping app to help cyclists map a route in County 9) school based bike/ped safety education program 10) bike law education program for enforcement officers 11) bike facility design education for ALL County \& City staff who deal with roadway design 12) a "bike friendly Jefferson County" citizens' committee (include CoC and other civic orgs) 13) regular bike rides through the County to provide both exercise and business opportunities 14) encouragement of "green guide" type eco-tours that interface biking, hiking and river/lake boating | Wacissa \& Aucilla Rivers, downtown locations, Lake Miccosukee, the dog track, parks, coast, most rural roads, etc | see above | none - its ALL good. Some improvements in facilities would be nice... |

# Jefferson County Bicycle and Pedestrian Master Plan 

## Recommended Bicycle and Pedestrian Facility Improvements

We appreciate your attendance and participation in today's meeting. Your comments are important to us and a valuable component of a strong master plan that adequately represents the interests of the community. Please take a moment to leave us your comments in the space provided below.
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$\qquad$
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$\qquad$


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Train to become a Medical Office Assistant. NO EXPERIENCE NEEDED! Online training gets you Job ready ASAP. HS Diploma/GED \& PC/Internet needed! (888)374-7294

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$\$ 1000$ Bonus (1st 30 Hired) Up to 47 cpm . New Equipment. Need CDL Class A Driving Exp. (877)258-8782 www.ad-drivers.com

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Drivers - HIRING EXPE-RIENCED/INEXPERIENCED TANKER DRIVERS! Earn up to $\$ .51$ per Mile! New Fleet Volvo Tractors! 1 Year OTR Exp. Req. - Tanker Training Available. Call Today: (877)882-6537 www.OakleyTransport.com

NOTICE
In accordance with Florida Statue a public auction will be held on February 6, 2013 at 9:00 A.M.
For: 1998 Plymouth VIN \# IP3ES47C8WD602721
To be sold AS IS for towing and storage charges, conditions and terms at auction. Monticello Towing 16 Lonnie Rd. Monticello, FL 32344 Phone: 850/997-0607

1/04/13, pd

## NOTACE

THE SCHOOL BOARD OF JEFFERSON COUNTY will meet in Regular Session on Monday, Jan. 14, 2013 at 6:00 p.m. The meeting will be held in the Board Room located at 1490 W. Washington Street, Monticello, FL. An agenda may be viewed by visiting the District website at www.edline.net/pages/jcsb, or by visiting the District Office located at 575 S . Water Street, Monticello, FL. Any questions regarding the agenda may be directed to the office at $850-342$. 0100.

1/4/13.

## NOTICE

THE JEFFERSON COUNTY BOARD OF COUNTY COMMISSIONERS WILL HOLD A WORKSHOP ON JANUARY 8TH AT 3 PMAT THE ANNEX TO DISCUSS THE MINE/DRAGLINE AND RELATED ROAD SCENARIOS; AS WELLAS SOLID WASTE SERVICES PROPOSALS.

1/4/13

## NOTICE

THE JEFFERSON COUNTY BOARD OF COUNTY COMMISSIONERS WILL HOLD A WORKSHOP ON JANUARY 22ND AT 4 PM AT THE ANNEX TO DISCUSS ROAD BOND RELATED CONSTRUCTION 1/4/13

## NOTICE OF PUBLIC HEARING

THE JEFFERSON COUNTY BOARD OF COUNTY COMMISSIONERS WILL HOLD A PUBLIC HEARING AT THEIR REGULAR SESSION ON JANUARY 17, 2013 AT THE COURTHOUSE ANNEX AT 7 PM TO ACCEPT PUBLIC COMMENT AND TO APPROVE THE JEFFERSON COUNTY BICYCLE AND PEDESTRIAN MASTER PLAN. THE PLAN WILL BE AVAILABLE FROM THE CLERK'S OFFICE BEGINNING JANUARY 11, 2013.

1/4/13

## NOTICE

The Wilderness Coast Public Libraries' (WLLD) Governing Board will meet on Monday, January 14, 2013 at $1: 30$ p.m. at the Wakulla County Public Library at 4330 Crawfordville Highway; Crawfordville, FL. The meeting is open to the public. For more information, please call (850) 997-7400.

1/4/13

## ADVERTISEMENT TO BID

JEFFERSON COUNTY, FLORIDA
Those pre-qualified General and Building Contractors are invited to bid on a General Contract for the Historic Lamont School House Renovations and Repairs in Lamont, Florida on January 22, 2013 at 2:00p.m. in ac-cordance with Contract Documents. All bids must be a lump sum basis; segregated Bids will not be accepted.

PROJECT: Historic Lamont School House Renovations and Repairs.
BID DATE: January 22, 2013
TIME: 2:00 p.m. local time
Contractors must be pre-qualified to bid the project. Prequalification packéts can be obtained from MLD Architects, Inc: 211 John Knox Road, Suite 105, Tallahassee, Florida (850)385-9200. Pre-qualification packets. must be completed and submitted at the Pre-bid conference.

A mandatory Pre-Bid conference will be held on January 8, 2013 at 2:00 p.m. at the Project Site, 9941 South Salt Road, Lamont, FL 32336 and all bidders or their representatives are required to be in attendance. The Pre-Bid Conference date is subject to change:

Jefferson County, Florida will receive sealed bids until 2:00 p.m. local time on January 22,2013. Bids receeived after this time will not be accepted. All pre-qualified bidders are invited to attend the Bid Opening; Bids will be opened publicly and read aloud at the following location:

## Jefferson County Courthouse

1 Courthouse Circle
Monticello, FL 32344
Drawings and Specifications may be obtained at the office of MLD Architects, Inc., 211 John Knox Road, Suite 105, Tallahassee, Florida (850) 385-9200, and will be available at the mandatory pre-bid meeting January 8,2013 , on site, in accordance with the Instructions to Bidders upon receipt of $\$ 50.00$ deposit per hard copy set and $\$ 15.00$ per digital set. All materials

## Jefferson County Bicycle \& Pedestrian Master Plan -- General Unit Cost Estimates

| Project | Assumptions | CST Cost |  | Source |
| :---: | :---: | :---: | :---: | :---: |
| Sidewalk_1 | 5' width, 1 side | \$ | 152,784 | 1 |
| Sidewalk_2 | $5{ }^{\prime}$ width, both sides | \$ | 302,293 | 1 |
| Pvd_Shld | 5' paved shoulder, both sides | \$ | 166,910 | 1 |
| Trail | 12' multi-use trail, 1 side off roadway | \$ | 400,983 | 1 |
| Ped_Sig | Ped activated signal per intersection, 4-way | \$ | 11,264 | 1 |
| Xwalk | Ped crosswalk per intersection, 12" white stripe (paint/thermo), $5 \times 12$ lanes all quadrants | \$ | 2,645 | 1 |
| Restripe | Milling \& resurfacing (4L roadway) 5' sidewalk \& curb \& gutter, undivided, includes L \& R turn lanes | \$ | 993,315 | 1 |
| STR_Signs | 1 sign per mile per direction; \$300/sign | \$ | 600 | 2 |
| STR_Signs_Urban | 3 signs per mile per direction; \$300/sign | \$ | 1,800 | 2 |
| BL_Stripe | 6 " white stripe; \$1/If | \$ | 10,560 | 2 |
| SLM_Park | 1 marking every 250' adjacent to on-street parking; \$200/marking | \$ | 8,400 | 3 |
| SLM_No_Park | 1 marking every 500' (approx. 0.1 mi ) with no on-street parking; \$200/marking | \$ | 4,000 | 3 |

1. FDOT D-3 Preliminary Estimates Section Transportation Costs Annual Roadway Construction Cost, Revised December 2011. CEI (normally 15\% of the construction cost) is not included.
2. Unit costs per FDOT Area 7 averages (07/2011-06/2012).
3. Based on unit cost per marking from City of Winter Park, FL project on Palmer Avenue.

LONG RANGE ESTIMATE
Project PX-1: Downtown Courthouse Area Project Phase 1
Prepared by HDR Engineering, Inc.

| ITEM NO. | ITEM DESCRIPTION |  |  | Fiscal Year 2012 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | QUANTITY | UNIT | UNIT PRICE | TOTAL COST |
| 101-1 | MOBILIZATION | 1 | LS | \$32,000.00 | \$32,000.00 |
| 102-1 | MAINTENANCE OF TRAFFIC | 1 | LS | \$25,000.00 | \$25,000.00 |
| 104-20 | EROSION CONTROL | 1 | LS | \$1,000.00 | \$1,000.00 |
|  | DESIGN SURVEY | 1 | LS | \$10,000.00 | \$10,000.00 |
|  | SIGNING \& PAVEMENT MARKING | 1 | LS | \$5,000.00 | \$5,000.00 |
| 522-1 | CONCRETE SIDEWALK, 4" THICK | - | SY | \$30.00 | \$0.00 |
| 523-2 | PATTERNED PAVEMENT, NON-VEHICULAR AREAS | 609 | SY | \$80.00 | \$48,746.67 |
| 110-1-2 | CLEARING \& GRUBBING | 1 | LS | \$5,000.00 | \$5,000.00 |
| 520-2-4 | CONCRETE CURB, TYPE D | 844 | LF | \$13.00 | \$10,972.00 |
| 120-6 | EMBANKMENT | 45 | CY | \$10.38 | \$468.51 |
| 0711-11-122 | 12" White Stripe (Crosswalk Outside Stripe) | 1,320 | LF | \$1.75 | \$2,310.00 |
| 0711-11-125 | 24" White Stripe (Crosswalk Inside Stripe) | 1,120 | LF | \$3.86 | \$4,323.20 |
| 0711-11-151 | 6" White Stripe | 200 | LF | \$1.00 | \$200.00 |
|  | Concrete Valley Gutter | 430 | LF | \$13.00 | \$5,590.00 |
|  | Drainage inlet at Curb Extension | 16 | EA | \$4,500.00 | \$72,000.00 |
| 0527-1 | Detectable Warning Pad | 56 | EA | \$350.00 | \$19,600.00 |
|  | SUB- TOTAL |  |  |  | \$242,210.38 |
|  | CONTINGENCY (20\%) |  |  |  | \$48,442.08 |
|  | DESIGN FEES (10\%) |  |  |  | \$29,065.25 |
|  | CEI FEES (10\%) |  |  |  | \$31,971.77 |
|  | TOTAL ESTIMATED CONSTRUCTION COST (2012) : |  |  |  | \$290,652.45 |

## ESTIMATE BASIS AND ASSUMPTIONS:

- Estimate does not include utility relocation costs.
- The mobilization costs are based on $15 \%$ of the construction cost
- Embankment to 1 ft depth
- No R/W Impact
- No specialized landscaping (beyond sodding)
- Utility relocations by others

SOURCE: Unit Costs per FDOT Lake County (Area 7) averages (07/2011-06/2012)

LONG RANGE ESTIMATE
Project PX-2: Downtown Courthouse Area Project Phase 2
Prepared by HDR Engineering, Inc.

| ITEM NO. | ITEM DESCRIPTION | Fiscal Year 2012 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | QUANTITY | UNIT | UNIT PRICE | TOTAL COST |
| 101-1 | MOBILIZATION | 1 | LS | \$25,000.00 | \$25,000.00 |
| 102-1 | MAINTENANCE OF TRAFFIC | 1 | LS | \$20,000.00 | \$20,000.00 |
| 104-20 | EROSION CONTROL | 1 | LS | \$1,000.00 | \$1,000.00 |
|  | DESIGN SURVEY | 1 | LS | \$10,000.00 | \$10,000.00 |
|  | SIGNING \& PAVEMENT MARKING | 1 | LS | \$5,000.00 | \$5,000.00 |
| 522-1 | CONCRETE SIDEWALK, 4" THICK | - | SY | \$30.00 | \$0.00 |
| 523-2 | PATTERNED PAVEMENT, NON-VEHICULAR AREAS | 396 | SY | \$80.00 | \$31,644.44 |
| 110-1-2 | CLEARING \& GRUBBING | 1 | LS | \$5,000.00 | \$5,000.00 |
| 520-2-4 | CONCRETE CURB, TYPE D | 636 | LF | \$13.00 | \$8,268.00 |
| 120-6 | EMBANKMENT | 29 | CY | \$10.38 | \$304.14 |
| 0711-11-122 | 12" White Stripe (Crosswalk Outside Stripe) | 864 | LF | \$1.75 | \$1,512.00 |
| 0711-11-125 | 24" White Stripe (Crosswalk Inside Stripe) | 800 | LF | \$3.86 | \$3,088.00 |
| 0711-11-151 | 6" White Stripe | 760 | LF | \$1.00 | \$760.00 |
|  | Concrete Valley Gutter | 640 | LF | \$13.00 | \$8,320.00 |
|  | Drainage inlet at Curb Extension | 14 | EA | \$4,500.00 | \$63,000.00 |
| 0527-1 | Detectable Warning Pad | 32 | EA | \$350.00 | \$11,200.00 |
|  | SUB- TOTAL |  |  |  | \$194,096.58 |
|  | CONTINGENCY (20\%) |  |  |  | \$38,819.32 |
|  | DESIGN FEES (10\%) |  |  |  | \$23,291.59 |
|  | CEI FEES (10\%) |  |  |  | \$25,620.75 |
|  | TOTAL ESTIMATED CONSTRUCTION COST (2012) : |  |  |  | \$232,915.90 |

## ESTIMATE BASIS AND ASSUMPTIONS:

- Estimate does not include utility relocation costs.
- The mobilization costs are based on $15 \%$ of the construction cost
- Embankment to 1 ft depth
- No R/W Impact
- No specialized landscaping (beyond sodding)
- Utility relocations by others

SOURCE: Unit Costs per FDOT Lake County (Area 7) averages (07/2011-06/2012)

## LONG RANGE ESTIMATE

## Project PX-3: Midblock Crossing of US 90 at Marvin St

## Prepared by HDR Engineering, Inc.

| ITEM NO. | ITEM DESCRIPTION | QUANTITY | UNIT | Fiscal Year 2012 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | UNIT PRICE | TOTAL COST |
| 101-1 | MOBILIZATION | 1 | LS | \$8,000.00 | \$8,000.00 |
| 102-1 | MAINTENANCE OF TRAFFIC | 1 | LS | \$3,000.00 | \$3,000.00 |
| 104-20 | EROSION CONTROL | 1 | LS | \$1,000.00 | \$1,000.00 |
|  | DESIGN SURVEY | 1 | LS | \$2,000.00 | \$2,000.00 |
| 522-1 | CONCRETE SIDEWALK, 4" THICK | - | SY | \$30.00 | \$0.00 |
| 523-2 | PATTERNED PAVEMENT, NON-VEHICULAR AREAS | 31 | SY | \$80.00 | \$2,480.00 |
| 110-1-2 | CLEARING \& GRUBBING | 1 | LS | \$5,000.00 | \$5,000.00 |
| 520-2-4 | CONCRETE CURB, TYPE D | 68 | LF | \$13.00 | \$884.00 |
| 120-6 | EMBANKMENT | - | CY | \$10.38 | \$0.00 |
| 0527-1 | Detectable Warning Pad | 2 | EA | \$350.00 | \$700.00 |
|  | Rectangular Rapid Flashing Beacons | 1 | EA | \$15,000.00 | \$15,000.00 |
| 0700-20-11 | Single Post Sign | 2 | EA | \$300.00 | \$600.00 |
|  | Overhead Lighting | 2 | EA | \$8,000.00 | \$16,000.00 |
|  | Drainage inlet at Curb Extension | 2 | EA | \$4,500.00 | \$9,000.00 |
| 0711-11-122 | 12" White Stripe (Crosswalk Outside Stripe) | 196 | LF | \$1.75 | \$343.00 |
| 0711-11-125 | 24" White Stripe (Crosswalk Inside Stripe) | 90 | LF | \$3.86 | \$347.40 |
|  | SUB- TOTAL |  |  |  | \$64,354.40 |
|  | CONTINGENCY (20\%) |  |  |  | \$12,870.88 |
|  | DESIGN FEES (10\%) |  |  |  | \$7,722.53 |
|  | CEI FEES (10\%) |  |  |  | \$8,494.78 |
|  | TOTAL ESTIMATED CONSTRUCTION COST (2012) : |  |  |  | \$77,225.28 |

## ESTIMATE BASIS AND ASSUMPTIONS:

- Estimate does not include utility relocation costs.
- The mobilization costs are based on $15 \%$ of the construction cost
- Embankment to 1 ft depth
- No R/W Impact
- No specialized landscaping (beyond sodding)
- Utility relocations by others

SOURCE: Unit Costs per FDOT Lake County (Area 7) averages (07/2011-06/2012)

## LONG RANGE ESTIMATE

## Project PX-4: Midblock Crossing of US 90 at Ike Anderson Trail

Prepared by HDR Engineering, Inc.

| ITEM NO. | ITEM DESCRIPTION |  |  | Fiscal Year 2012 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | QUANTITY | UNIT | UNIT PRICE | TOTAL COST |
| 101-1 | MOBILIZATION | 1 | LS | \$7,000.00 | \$7,000.00 |
| 102-1 | MAINTENANCE OF TRAFFIC | 1 | LS | \$3,000.00 | \$3,000.00 |
| 104-20 | EROSION CONTROL | 1 | LS | \$1,000.00 | \$1,000.00 |
|  | DESIGN SURVEY | 1 | LS | \$2,000.00 | \$2,000.00 |
| 522-1 | CONCRETE SIDEWALK, 4" THICK | - | SY | \$30.00 | \$0.00 |
| 523-2 | PATTERNED PAVEMENT, NON-VEHICULAR AREAS | 40 | SY | \$80.00 | \$3,200.00 |
| 110-1-2 | CLEARING \& GRUBBING | 1 | LS | \$5,000.00 | \$5,000.00 |
| 520-2-4 | CONCRETE CURB, TYPE D | 84 | LF | \$13.00 | \$1,092.00 |
| 120-6 | EMBANKMENT | 3 | CY | \$10.38 | \$31.14 |
| 0527-1 | Detectable Warning Pad | 2 | EA | \$350.00 | \$700.00 |
|  | Rectangular Rapid Flashing Beacons | 1 | EA | \$15,000.00 | \$15,000.00 |
| 0700-20-11 | Single Post Sign | 2 | EA | \$300.00 | \$600.00 |
|  | Overhead Lighting | 2 | EA | \$8,000.00 | \$16,000.00 |
| 0711-11-122 | 12" White Stripe (Crosswalk Outside Stripe) | 108 | LF | \$1.75 | \$189.00 |
| 0711-11-125 | 24" White Stripe (Crosswalk Inside Stripe) | 60 | LF | \$3.86 | \$231.60 |

SUB- TOTAL
\$55,043.74

| CONTINGENCY (20\%) | $\$ 11,008.75$ |
| ---: | ---: |
| DESIGN FEES (10\%) | $\$ 6,605.25$ |
| CEI FEES (10\%) | $\$ 7,265.77$ |

## TOTAL ESTIMATED CONSTRUCTION COST (2012)

## ESTIMATE BASIS AND ASSUMPTIONS:

[^1]
## LONG RANGE ESTIMATE

Project PX-5: Midblock Crossing of US 19 at Cherokee St/Jefferson Square Shopping Center

## Prepared by HDR Engineering, Inc.

| ITEM NO. | ITEM DESCRIPTION |  |  | Fiscal Year 2012 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | QUANTITY | UNIT | UNIT PRICE | TOTAL COST |
| 101-1 | MOBILIZATION | 1 | LS | \$9,000.00 | \$9,000.00 |
| 102-1 | MAINTENANCE OF TRAFFIC | 1 | LS | \$3,000.00 | \$3,000.00 |
| 104-20 | EROSION CONTROL | 1 | LS | \$1,000.00 | \$1,000.00 |
|  | DESIGN SURVEY | 1 | LS | \$2,000.00 | \$2,000.00 |
| 522-1 | CONCRETE SIDEWALK, 4" THICK | - | SY | \$30.00 | \$0.00 |
| 523-2 | PATTERNED PAVEMENT, NON-VEHICULAR AREAS | 69 | SY | \$80.00 | \$5,520.00 |
| 110-1-2 | CLEARING \& GRUBBING | 1 | LS | \$5,000.00 | \$5,000.00 |
| 520-2-4 | CONCRETE CURB, TYPE D | 150 | LF | \$13.00 | \$1,950.00 |
| 120-6 | EMBANKMENT | 3 | CY | \$10.38 | \$31.14 |
| 0527-1 | Detectable Warning Pad | 2 | EA | \$350.00 | \$700.00 |
|  | Rectangular Rapid Flashing Beacons | 1 | EA | \$15,000.00 | \$15,000.00 |
| 0700-20-11 | Single Post Sign | 2 | EA | \$300.00 | \$600.00 |
|  | Overhead Lighting | 2 | EA | \$8,000.00 | \$16,000.00 |
|  | Drainage inlet at Curb Extension | 2 | EA | \$4,500.00 | \$9,000.00 |
| 0711-11-122 | 12" White Stripe (Crosswalk Outside Stripe) | 108 | LF | \$1.75 | \$189.00 |
| 0711-11-125 | 24" White Stripe (Crosswalk Inside Stripe) | 60 | LF | \$3.86 | \$231.60 |
|  | SUB- TOTAL |  |  |  | \$69,221.74 |
|  | CONTINGENCY (20\%) |  |  |  | \$13,844.35 |
|  | DESIGN FEES (10\%) |  |  |  | \$8,306.61 |
|  | CEI FEES (10\%) |  |  |  | \$9,137.27 |
|  | TOTAL ESTIMATED CONSTRUCTION COST (2012) : |  |  |  | \$83,066.09 |

## ESTIMATE BASIS AND ASSUMPTIONS:

- Estimate does not include utility relocation costs.
- The mobilization costs are based on $15 \%$ of the construction cost
- Embankment to 1 ft depth
- No R/W Impact
- No specialized landscaping (beyond sodding)
- Utility relocations by others

SOURCE: Unit Costs per FDOT Lake County (Area 7) averages (07/2011-06/2012)

## LONG RANGE ESTIMATE

Project PX-7: Jefferson County Elementary School Area Improvements

| ITEM NO. | ITEM DESCRIPTION | Fiscal Year 2012 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | QUANTITY | UNIT | UNIT PRICE | TOTAL COST |
| 101-1 | MOBILIZATION | 1 | LS | \$9,000.00 | \$9,000.00 |
| 102-1 | MAINTENANCE OF TRAFFIC | 1 | LS | \$3,000.00 | \$3,000.00 |
| 104-20 | EROSION CONTROL | 1 | LS | \$1,000.00 | \$1,000.00 |
|  | DESIGN SURVEY | 1 | LS | \$2,000.00 | \$2,000.00 |
| 522-1 | CONCRETE SIDEWALK, 4" THICK | 1,111 | SY | \$30.00 | \$33,330.00 |
| 523-2 | PATTERNED PAVEMENT, NON-VEHICULAR AREAS | - | SY | \$80.00 | \$0.00 |
| 110-1-2 | CLEARING \& GRUBBING | 1 | LS | \$5,000.00 | \$5,000.00 |
| 520-2-4 | CONCRETE CURB, TYPE D | - | LF | \$13.00 | \$0.00 |
| 120-6 | EMBANKMENT | - | CY | \$10.38 | \$0.00 |
| 0527-1 | Detectable Warning Pad | 20 | EA | \$350.00 | \$7,000.00 |
| 0700-20-11 | Single Post Sign w/ Flashing Beacon | 4 | EA | \$500.00 | \$2,000.00 |
| 0700-20-11 | Single Post Sign | 13 | EA | \$300.00 | \$3,900.00 |
|  | Overhead Lighting |  | EA | \$8,000.00 | \$0.00 |
| 0711-11-122 | 12" White Stripe (Crosswalk Outside Stripe) | 1,100 | LF | \$1.75 | \$1,925.00 |
| 0711-11-125 | 24" White Stripe (Crosswalk Inside Stripe) | 900 | LF | \$3.86 | \$3,474.00 |
|  | SUB- TOTAL |  |  |  | \$71,629.00 |
|  | CONTINGENCY (20\%) |  |  |  | \$14,325.80 |
|  | DESIGN FEES (10\%) |  |  |  | \$8,595.48 |
|  | CEI FEES (10\%) |  |  |  | \$9,455.03 |
|  | TOTAL ESTIMATED CONSTRUCTION COST (2012) : |  |  |  | \$85,954.80 |

## ESTIMATE BASIS AND ASSUMPTIONS:

[^2]
## LONG RANGE ESTIMATE

## Project PX-8: Ike Anderson Trail Crossing at Various Minor Streets

Prepared by HDR Engineering, Inc.

| ITEM NO. | ITEM DESCRIPTION | Fiscal Year 2012 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | QUANTITY | UNIT | UNIT PRICE | TOTAL COST |
| 101-1 | MOBILIZATION | 1 | LS | \$1,000.00 | \$1,000.00 |
| 102-1 | MAINTENANCE OF TRAFFIC | 1 | LS | \$3,000.00 | \$3,000.00 |
| 104-20 | EROSION CONTROL | - | LS | \$1,000.00 | \$0.00 |
|  | DESIGN SURVEY | - | LS | \$2,000.00 | \$0.00 |
| 522-1 | CONCRETE SIDEWALK, 4" THICK | - | SY | \$30.00 | \$0.00 |
| 523-2 | PATTERNED PAVEMENT, NON-VEHICULAR AREAS | - | SY | \$80.00 | \$0.00 |
| 110-1-2 | CLEARING \& GRUBBING | - | LS | \$5,000.00 | \$0.00 |
| 520-2-4 | CONCRETE CURB, TYPE D | - | LF | \$13.00 | \$0.00 |
| 120-6 | EMBANKMENT | - | CY | \$10.38 | \$0.00 |
| 0527-1 | Detectable Warning Pad | 2 | EA | \$350.00 | \$700.00 |
| 0700-20-11 | Single Post Sign | 12 | EA | \$300.00 | \$3,600.00 |
|  | Overhead Lighting | - | EA | \$8,000.00 | \$0.00 |
| 0711-11-122 | 12" White Stripe (Crosswalk Outside Stripe) | 288 | LF | \$1.75 | \$504.00 |
| 0711-11-125 | 24" White Stripe (Crosswalk Inside Stripe) | 300 | LF | \$3.86 | \$1,158.00 |
|  | SUB- TOTAL |  |  |  | \$9,962.00 |
|  | CONTINGENCY (20\%) |  |  |  | \$1,992.40 |
|  | DESIGN FEES |  |  |  | \$5,000.00 |
|  | CEI FEES |  |  |  | \$2,500.00 |
|  | TOTAL ESTIMATED CONSTRUCTION COST (2012) : |  |  |  | \$11,954.40 |

## ESTIMATE BASIS AND ASSUMPTIONS:

- Estimate does not include utility relocation costs.
- The mobilization costs are based on $15 \%$ of the construction cost
- Embankment to 1 ft depth
- No R/W Impact
- No specialized landscaping (beyond sodding)
- Utility relocations by others

SOURCE: Unit Costs per FDOT Lake County (Area 7) averages (07/2011-06/2012)

## Agenda ITEM 4

Committee Agenda Item 5 A

## Fiscal Year 2013 - Fiscal Year 2017 Transportation Improvement Program Amendment

Requested by: FDOT
Type of Item: Hand Vote

## Statement of Issue

The purpose of this item is to amend the CRTPA Fiscal Year (FY) 2013 - FY 2017 Transportation Improvement Program (TIP) to reflect the following:

- CR 12 (Fairbanks Ferry Road) Study (Project \#4333891): Add new project related to the study and preliminary design of CR 12 (located in Gadsden County) from 5th Street (Havana) to the Leon County line to address lane departure crashes (Total funding: $\$ 220,000$ in FY 2013).
- StarMetro Section 5310 Funding (Project \#4336851): Add new project related to use of Federal Transit Administration (FTA) Section 5310 funds (Total funding: $\$ 200,000$ in FY 2013).
- Capital Circle, Southwest (Crawfordville Road to Springhill Road) (Project \#2197492): Add this project to TIP to reflect the receipt of design funding (Total funding: $\$ 1,969,500$ in FY 2013).


## CRTPA COMMITTEE ACTIONS

On January 15, 2013, the CRTPA's two (2) committees (Citizens Multimodal Advisory Committee and Technical Advisory Committee) recommended CRTPA approval of the amendments to the TIP.

## RECOMMENDED ACTION

Option 1: Authorize the Executive Director to transmit documentation to the FDOT reflecting the following amendment of the FY 2013 - FY 2017 Transportation Improvement Program:

- ADD PROJECT: CR 12 (Fairbanks Ferry Road) Study (Project \#4333891): Add new project to the TIP to study and conduct preliminary design related to lane departures along this roadway $(\$ 220,000)$ in FY 2013.
- ADD PROJECT: StarMetro Section 5310 Funding (Project \#4336851): Add this project into the TIP to reflect addition of StarMetro capital funding $(\$ 200,000)$ in FY 2013.
- ADD PROJECT: Capital Circle, Southwest (Crawfordville Road to Springhill Road) (Project \#2197492): Add this project to TIP to reflect the receipt of design funding $(\$ 1,969,500)$ in FY 2013.


## HISTORY and ANALYSIS

The CRTPA's Transportation Improvement Program is adopted annually and identifies those projects in the region that have received state and federal funding. Frequently, the TIP needs to be formally amended to reflect project changes such as the addition or deletion of a project, changes in project funding and changes in project scope.

The following projects are proposed to be amended in the FY 2013 - FY 2017 TIP:
CR 12 (limits: $5^{\text {th }}$ St (Havana) to Leon County line) Study (Project \#4333891)
Provides Highway Safety Program (HSP) funding to address lane departure crashes on Fairbanks Ferry Road (CR 12). Funding will be utilized for both the study and preliminary design of improvements along the corridor (\$220,000 in FY 2013) (Gadsden County).

StarMetro Section 5310 Funding (Project \#4336851)
This project has been added to the TIP in order to allow StarMetro to access FTA Section 5310 funding in the current year associated with capital expenses that support transportation to meet the special needs of older adults and persons with disabilities. A total of \$200,000 (\$160,000 in FTA funds and $\$ 40,000$ in local government match funding)

## Capital Circle, Southwest (Crawfordville Road to Springhill Road) Design Funding (Project \#2197492)

This project has been added to the TIP to reflect the receipt of funding for the design of this roadway. The design funds became available due to recent bid savings on other projects in FDOT District 3. A total of \$1,960,500 (state funds: District In-House (DIH) \& District Dedicated Revenue (DDR)) in FY 2013 has been placed on this project.

## OPTIONS

Option 1: Authorize the Executive Director to transmit documentation to the FDOT reflecting the following amendment of the FY 2013 - FY 2017 Transportation Improvement Program:

- ADD PROJECT: CR 12 (Fairbanks Ferry Road) Study (Project \#4333891): Add new project to the TIP to study and conduct preliminary design related to lane departures along this roadway $(\$ 220,000)$ in FY 2013.
- ADD PROJECT: StarMetro Section 5310 Funding (Project \#4336851): Add this project into the TIP to reflect addition of StarMetro capital funding $(\$ 200,000)$ in FY 2013.
- ADD PROJECT: Capital Circle, Southwest (Crawfordville Road to Springhill Road) (Project \#2197492): Add this project to TIP to reflect the receipt of design funding (\$1,969,500) in FY 2013.
(RECOMMENDED)
Option 2: Provide other direction.


## ATTACHMENT

Attachment 1 provides the TIP replacement pages reflecting the addition of the above projects.
CRTPA Transportation Improvement Program - FY 2012/13-2016/17

## City of Tallahassee StarMetro

Total



200,000
CRTPA Transportation Improvement Program - FY 2012/13-2016/17

This project provides funding for the study and preliminary design of CR 12 (Gadsden County) to address lane departure crashes. Note: This project was added to the TIP at the January 28, 2013 CRTPA Board meeting.
CRTPA Transportation Improvement Program - FY 2012/13-2016/17

| 2197492 | SR 263 Capital Circle |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Type of Work: |  | PRELIMINARY ENGINEERING |  | From: Crawfordville Road |  |  |  |
|  | LRTP Project \#: |  | RMP page 79 |  | To: Springhill Road |  |  |  |
|  |  |  |  |  | Lead Ag | FDOT |  |  |
| No MOD | Project Type: |  | State Managed |  |  |  |  |  |
| Available | Phase | Fund Source | 2012/13 | 2013/14 | 2014/15 | 2015/16 | 2016/17 | Total |
|  | PE (31) | DIH | 19,500 | 0 | 0 | 0 | 0 | 19,500 |
|  | PE (32) | DDR | 1,950,000 | 0 | 0 | 0 | 0 | 1,950,000 |
|  | Total |  | 1,969,500 | 0 | 0 | 0 | 0 | 1,969,500 |

ATTACHMENT 1
Provides funding for the design of Capital Circle from Crawfordville Road to Springhill Road. Note: This project was added to the TIP by an amendment approved at the January 28, 2013 CRTPA Board meeting

Project Description:

## AGENDA ITEM 6 <br> CRTPA DISCUSSION

## Agenda Item 6 A

## Capital City to the Sea Trail CONSULTANT SELECTION

Requested by: CRTPA Staff
Type of Item: Discussion

## Statement of Issue

This item seeks to have the CRTPA Select a consultant for the Capital City to the Sea Trail Study.

## Recommended Action

Option 1: Approve the Consultant Selection Committee recommendation of Kimley-Horn and Associates to perform the Capital City to the Sea Master Plan and Project Development and Environment (PD\&E) Study.

## Previous Agenda Items

November 16, 2009 - Agenda Item 4E - Capital City to the Sea Loop June 18, 2012 - Agenda Item 2D - Capital City to the Sea Trail Local Agency Program (LAP) Agreement Authorization

## History and Analysis

For several years there has been discussion regarding a multi-use trail connecting Leon County and Wakulla County with additional connections to existing trails. The Capital City to the Sea Trail Feasibility Study is intended to collectively pull these efforts together under one umbrella to create a single document or Master Plan that will address the creation of a multiuse trail.

To date the CRTPA has executed the Local Agency Program (LAP) agreements, finalized the Scope-ofServices (SOS) and released the Request for Proposals (RFP). The final component is to hire a consultant to perform the Master Plan and Project and Development and Environment Study (PD\&E) Study.

To that end, CRTPA released the RFP on November 8, 2012 and received three (3) proposals on December 13, 2012 from:

- Alta/Greenways
- EMO Architects
- Kimley-Horn and Associates

CRTPA staff convened a Consultant Selection Committee (CSC) that included members from the City of Tallahassee - Parks and Recreation, Leon County - Parks and Recreation, Wakulla County Planning and Community Development, and two members from CRTPA staff.

The CSC met on January 10, 2013 to discuss and score the proposals. The scores were averaged and ranked as follows:

1. Kimley-Horn and Associates - 87.4 points
2. Alta/Greenways - 70.0 points
3. EMO Architects - 64.2 points

Based on the RFP, this score accounted for $50 \%$ of the overall score for the consultant.
On January 17, 2013, the CSC met again for the second part of the selection process which was an interview with each consultant. The interview last 45 minutes and dealt specifically with the "Approach" to the project, and this portion also accounted for $50 \%$ of the overall score of the consultant. These scores were as follows:

1. Kimley-Horn and Associates - 86.6 points
2. EMO Architects - 71.2 points
3. Alta/Greenways - 69.6 points

When combined the consultant with the highest score was Kimley-Horn and Associates. The final total for all three proposals are shown below:

1. Kimley-Horn and Associates - 174.0 points
2. Alta/Greenways - 139.6 points
3. EMO Architects - 135.4 points

Based on these scores, the CSC is recommending approval of Kimley-Horn and Associates for the Capital City to the Sea Trail Master Plan and Project Development and Environment (PD\&E) Study.

## NExT STEPS

Upon approval by the CRTPA Board, staff will begin the negotiating process and working on the contract to begin work on this project. The negotiated contract will be brought back to the CRTPA Board for approval.

## OPTIONS

Option 1: Approve the Consultant Selection Committee recommendation of Kimley-Horn and Associates to perform the Capital City to the Sea Master Plan and Project Development and Environment (PD\&E) Study. (Recommended)

Option 2: Provide other direction.

## Agenda Item 6 B

Monroe Street Access Management and Lake Ella IMPLEMENTATION STUDY

APPROVAL

Requested by: CRTPA Staff
Type of Item: Discussion

## STATEMENT OF ISSUE

Staff is seeking approval of The Monroe Street Access Management and Lake Ella Implementation Study. Specifically, the study's Action Plan and the preferred median concept ("Alternative B") for the Lake Ella portion (Tharpe Street to Seventh Avenue) of the corridor have been developed for Board approval.

## CRTPA SUBCOMMITTEE ACTIONS

On January 15, 2013, the CRTPA's Citizens Multimodal Advisory Committee (CMAC) recommended approval of the study and requested that the Florida Department of Transportation consider the addition of signage along the Lake Ella portion of the corridor noting that it is a high pedestrian area.

On January 15, 2013 the CRTPA's Technical Advisory Committee (TAC) recommended CRTPA approval of the study.

## RECOMMENDED ACTION

Option 1: Approve the study's Action Plan and the Lake Ella (Tharpe Street to Seventh Avenue) preferred median concept ("Alternative B") associated with the Monroe Street Access Management and Lake Ella Implementation Study.

## Previous Project Agenda Items

- January 23, 2012 - Agenda Item 6 A - "Monroe Street Access Management and Lake Ella Implementation Study"
- May 21, 2012 - Agenda Item 5 C - "Monroe Street Access Management and Lake Ella Implementation Study Update"
- September 24, 2012 - Agenda Item 6 C - "Monroe Street Access Management and Lake Ella Implementation Study - Work Order Request and Project Update"


## History and Analysis

At the January 23, 2012 CRTPA Board meeting, the Monroe Street Access Management and Lake Ella Implementation Study was formally kicked off. The study is comprised of the following two (2) components:

- Evaluate the Monroe Street corridor from John Knox Road (in the north) to just south of Magnolia Drive to study the potential for the future installation of medians along the corridor through the development of an Action Plan.
- Complete the first funded phase ("Planning Study") of the Monroe/Lake Ella pedestrian project (Tharpe Street to E. Seventh Avenue) by developing a detailed access recommendation (Lake Ella Implementation Plan) from which the funded project can proceed to its next phase (design). Funds for the design of this project are programmed in FY 2013 ( $\$ 172,200$ ); construction funds are programmed for FY $2015(\$ 1,083,000)$.


## PROJECT BACKGROUND:

The identification of improvements to the Monroe Street corridor in Tallahassee has been an agency focus of the Capital Region Transportation Planning Agency (CRTPA) for a number of years. This focus includes:

- North Monroe Street Corridor Management Study, approved by the Tallahassee-Leon County MPO (predecessor to the CRTPA) in 1999, recommended the installation of a median at Lake Ella to provide pedestrians a mid-block refuge;
- Tallahassee-Leon Bicycle and Pedestrian Master Plan, adopted by the Tallahassee-Leon County MPO in 2004, identifying North Monroe Street at Lake Ella as a "pedestrian emphasis intersection";
- CRTPA Transportation Systems Management (TSM) Priority Project List designation in 2009 \& 2010 of pedestrian safety improvements on N. Monroe at Lake Ella as the agency's number one TSM priority (funding for the installation of medians, scheduled to be constructed in 2015, was ultimately identified in 2010 and is part of the study associated with this agenda item);
- North Monroe Street Design and Safety Study, accepted by the CRTPA in September 2010, was developed for the agency by Florida State University Department of Urban and Regional Planning Master's students and provides student recommendations/ideas for the North Monroe corridor;
- E. Sixth Avenue Sidewalk Project, identified for funding in 2010, this project was included in the agency's Regional Mobility Plan and will improve pedestrian connectivity between Monroe Street and Gadsden Street (scheduled to be constructed in 2016).

In addition to the CRTPA, other transportation partners and agencies have identified projects and initiatives in the Monroe Street corridor, these include:

- Sense of Place initiatives (Midtown and Monroe-Adams) initiated in 2010 and 2011 by the Tallahassee-Leon County Planning Department include the Monroe corridor and identify support for improvements to facilitate increased pedestrian safety and economic development;
- Frenchtown/Southside Redevelopment Area and Downtown Redevelopment Area are both located along part of the Monroe corridor. The community redevelopment areas have funded improvements in the corridor including facade, streetscape and sidewalk improvements;
- Downtown Tallahassee Pedestrian Connectivity Plan was prepared for the Downtown Improvement Authority and completed in 2005. The plan identifies proposed improvements in downtown Tallahassee, including proposed medians for a portion Monroe Street in downtown Tallahassee where right-of-way is sufficient.

The Monroe Street Access Management and Lake Ella Implementation Study built upon the above Monroe Street corridor efforts through development of a comprehensive assessment to address both vehicular and pedestrian safety.

Benefits of access management, which include the installation of medians, include:

- Safety - Improved pedestrian safety due to reduced automobile/pedestrian conflicts; improved automobile safety (fewer and less severe accidents) as a result of reduced vehicular conflicts;
- Efficiency - Higher corridor level of service for automobiles; less stop and go traffic;
- Aesthetics - Access management results in less asphalt and more attractive corridors. The installation of medians allows for the addition of increased landscaping along the corridor. With regards to Monroe Street, a more attractive corridor assists with furthering the redevelopment efforts currently occurring along the corridor.

A key aspect of the study has been public involvement. Three (3) public meetings associated with the project were conducted (detailed below under "PUBLIC MEETINGS"). Furthermore, the Monroe Street Access Management and Lake Ella Study was guided by a project team that included the agency's transportation partners and corridor stakeholders.

## PUBLIC MEETINGS

Three (3) public meetings have been conducted as part of the Study. The first meeting occurred on March 6, 2012 at Tallahassee City Hall Commission Chambers. A total of forty-one (41) people signed in at this meeting and ten (10) written comments were received. The comments included concerns related to maintaining left turn access into businesses, support for pedestrian safety improvements (including a pedestrian refuge) and as well as support for landscaping any constructed medians. The second public meeting was held on Thursday, June 28, 2012 ( $5 \mathrm{pm}-7 \mathrm{pm}$ ) at Tallahassee City Hall Chambers and was attended by twenty-five (25) people. The third (and final) public meeting was held on November 28, 2012 ( $5 \mathrm{pm}-7 \mathrm{pm}$ ) at the Northwood Mall and was attended by twenty-nine (29) people.

Additionally, two (2) small group public meetings (focused on the North Monroe/Lake Ella and South Monroe segments of the Monroe Street corridor) occurred on May 16 \& May 17, 2012, respectively. Invitations to attend these focused meetings were sent to the attendees of the March 6, 2012 public meeting who expressed interest in participating in a more refined segment specific discussion.

## PROJECT WEBPAGE

A project webpage (http://www.crtpa.org/Monroe_Median_Project.html) was created in March 2012 to provide project information and resources. The webpage provides project information related to upcoming meetings as well as a source for the presentations and documentation from previous meetings. The page also contains a comments link from which citizens can leave comments or questions about the study. Furthermore, resources related to access management including links to information about its impact on corridor businesses is provided. The webpage has been regularly updated to include the project's latest information and presentations.

## PROJECT TEAM

The project team that guided the Monroe Street project met nine (9) times. The team included representation from the Midtown Merchants Association, Downtown Improvement Authority, City of Tallahassee Economic and Community Development, Lafayette Park Neighborhood Association, Levy Park Neighborhood Association, Florida Department of Transportation, Knight Creative Communities, Tallahassee Public Works Department and the Tallahassee-Leon County Planning Department.

## TRAFFIC SIGNAL WARRANT STUDY

As project development activities proceeded, the CRTPA received requests to investigate the need for a traffic signal at Lake Ella Drive (North)/Lake Ella Publix Plaza and/or Legion Street/On the Border intersection. To that end, a traffic signal warrant study, approved by the CRTPA Board at its September 24, 2012 meeting, was developed by the project consultant. The study identified that the Lake Ella Drive (North)/Lake Ella Publix Plaza location met two (2) traffic signal warrants. Specifically, the 4 hour vehicular demand and peak hour warrants were met. The findings of the traffic signal warrant study have been incorporated into the study's recommendations for the Lake Ella (Tharpe Street to Seventh Avenue) Preferred Median Concept.

## STUDY RECOMMENDATIONS

As discussed above, the Monroe Street Access Management and Lake Ella Implementation Study is comprised of two components resulting in the development of the following two work products:

- Action Plan: The Monroe Street corridor from John Knox Road (in the north) to just south of Magnolia Drive (south of downtown Tallahassee) evaluated for the potential for the future installation of medians along the corridor.

NOTE: Attachment 1 contains the Action Plan (134 pages) and can be viewed on the agency's website (www.crtpa.org) as part of the Board Meeting's agenda PDF file.

- Lake Ella Preferred Median Concept: This portion of the study developed a detailed access management recommendation at Lake Ella (Tharpe Street to Seventh Avenue) from which the next funded phases of the project (design and construction) can proceed.

NOTE: Attachment 2 contains the Lake Ella Implementation Study (403 pages) and can be viewed on the agency's website (www.crtpa.org) as part of the Board Meeting's agenda PDF file.

## ACTION PLAN

This portion of the study provides a broad analysis of the study's entire corridor (shown as Attachment 3). The purpose of the analysis is address the need and potential for future implementation of medians along Monroe Street. Specifically, the Action Plan identifies locations where:

- The future installation of a median is feasible and warranted
- Where a median is feasible but not warranted based upon previous crash history
- The installation of a median is not feasible based upon existing roadway characteristics, traffic operations or other constraints

Unlike the Lake Ella portion, no funding has been identified for further activities along this portion of the corridor.

## LAKE ELLA PREFERRED MEDIAN CONCEPT

The Lake Ella Median Implementation Study evaluated three (3) potential median concepts for the Lake Ella corridor (Tharpe Street to Seventh Avenue)(shown as Attachment 4). Each of these concepts differs only in the proposed median treatment at Legion Street/On the Border:

- Alternative A: Provides no median opening at Legion Street/On the Border

Pros: Provides maximum corridor safety to motorists and pedestrians by limiting conflicts.

Cons: Limits business access at Legion Street/On the Border by requiring Monroe motorists desiring to make a left to access business to make a U-turn.

- Alternative B: Provides a directional opening in front of Legion Street/On the Border (businesses on the east and west side of Monroe will receive left-in access but not left out)

Pros: Balances corridor safety and business access; close proximity to the Lake Ella South and Lake Ella North (which includes the proposed signalized intersection) allows for safe and convenient U-turns.

Cons: Does not provide maximum business access at Legion Street/On the Border by requiring motorists desiring to make a left turn out from the side streets to make a U-turn.
(Note: Alternative B, above, is the study's recommended preferred median concept)

- Alternative C: Provides a full median opening at Legion Street/On The Border

Pros: Allows for full vehicular access (ingress/egress) at this location.
Cons: Does not maximize corridor safety for motorists and pedestrians.

## Next STEPS

Upon approval of the Study, implementation activities will be initiated associated with the Lake Ella (Tharpe Street to Seventh Avenue) portion of the study. Specifically, the design of the medians for this portion of the corridor will be initiated by the Florida Department of Transportation. Construction of the improvements is currently scheduled to occur in fiscal year 2015.

## OPTIONS

Option 1: Approve the study's Action Plan and the Lake Ella (Tharpe Street to Seventh Avenue) preferred median concept ("Alternative B") associated with the Monroe Street Access Management and Lake Ella Implementation Study. (RECOMMENDED)

Option 2: Provide other direction.

## ATTACHMENT

Attachment 1: Action Plan (NOTE: This attachment is 134 pages in length and can be viewed on the agency's website (www.crtpa.org) as part of the Board Meeting's agenda PDF file)

Attachment 2: Lake Ella Implementation Study (NOTE: This attachment is 403 pages in length and can be viewed on the agency's website (www.crtpa.org) as part of the Board Meeting's agenda PDF file)

Attachment 3: Action Plan Recommendations for Monroe Corridor (Future Median Installation Feasibility)

Attachment 4: Lake Ella Median Alternative Concepts (including recommended "Alternative B")

## ATTACHMENT 1

## ACTION PLAN

NOTE: Attachment 1 can be viewed on the agency's website (www.crtpa.org) included as part of the Board Meeting's agenda PDF file. The Action Plan contains 134 pages.

# Monroe Street Median Feasibility Study 

## Corridor Action Plan

This study was completed for:


The Capital Region Transportation Planning Agency
(CRTPA)


January 2013
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## Executive Summary

An initial median feasibility concept was developed for the Monroe Street corridor and modified throughout the public involvement process. Median feasibility was determined based on the existing right-of-way, traffic operational characteristics, and the need to improve safety. Implementation of medians throughout segments within the corridor were identified as "Warranted", referring to the implementation of medians to improve safety, or "Feasible", referring to the implementation of medians given current physical and operational characteristics. The recommendation for median implementation for each segment is described in the following sections.

## North Magnolia Drive to CSX Railroad Bridge (South Monroe)

Within the segment from N. Magnolia Drive to the CSX Railroad Bridge, it was determined that medians are not warranted based on historic crash records. Medians are feasible, but not warranted for safety purposes at this time. However, as Placemaking efforts continue in the South Monroe-South Adams District, installation of medians may be incorporated to contribute to an overall sense of place in the District. Additionally, as proximal projects including Cascades Park and the FAMU Way extension are completed, medians may become necessary along South Monroe to provide pedestrian refuges and increase safety throughout the corridor. See sheet 1 through sheet 5 of Appendix A for the median feasibility south of the CSX Railroad Bridge.

## CSX Railroad Bridge to Thomasville Road (Downtown)

Within the section from CSX Railroad Bridge to Thomasville Road, median implementation is warranted but not feasible. The right of way (ROW) within the downtown area is extremely limited. There is a large amount of pedestrian activity that may benefit from a raised median to assist with mid-block crossings. The block lengths through the downtown area are quite short and the value of the existing on-street parking is instrumental for the current business owners. The inability to widen the road due to ROW restrictions makes medians in this area not feasible. Sheet 5 through Sheet 10 of Appendix A depict the results of the feasibility study for this segment.

## Thomasville Road to John Knox Road

Within the segment between Thomasville Road and John Knox Road, median implementation is both feasible and warranted except in the area between $5^{\text {th }}$ Avenue and $7^{\text {th }}$ Avenue. In this area, medians are warranted but not feasible due to the extended queuing for the left turn lanes. The current volume of left-turning vehicles within this segment is very high. Queue lengths of left turning vehicles were observed to verify that medians are not feasible. It was found that the implementation of a median in this area would decrease the left turn lane storage and cause the queue to spill into the through lanes thus further degrading the overall operation of Monroe Street. The remainder of this segment has detailed median recommendations illustrated in the concept plans, sheet 11 through sheet 17 of Appendix A. The Lake Ella area, $7^{\text {th }}$ Avenue to Tharpe Street, had a more in depth study with three median alternatives. The study in its entirety can be found in Appendix B.

## 1. Introduction

Recognizing the need for integrated and inclusive planning for the Monroe Street corridor, the Capital Region Transportation Planning Agency (CRTPA) conducted the Monroe Street Access Management and Lake Ella Implementation Study. The corridor study grew out of the need to develop a uniform strategy for the overall corridor that incorporates median implementation, safety enhancements and enhancing community character while providing multimodal accessibility to activity centers along Monroe Street. The implementation study at Lake Ella focused on enhancing pedestrian safety through the implementation of medians and/or other pedestrian crossing aides.

Monroe Street is a critical component of the regional transportation system and plays a vital role in the movement of people and goods through and within the area. It is one of the larger north south connectors in Tallahassee. It also provides access to Interstate 10. The study focused on approximately 4 miles of Monroe Street from just south of Magnolia Drive to John Knox Road which can be seen in Figure 1.1.

The Monroe Street Corridor is a State maintained roadway within the city limits of Tallahassee. As part of the effort, an advisory project team, consisting of municipal staff, business owners and other stakeholders, was identified to provide guidance to both planning efforts. Understanding the inherent relationships between transportation and almost every other community element provided the foundation for this comprehensive approach to planning transportation improvements within the corridor. The study resulted in specific recommended improvements to address the feasibility of medians throughout the entire corridor in addition to the implementation plan for medians in the Lake Ella area.

The Florida Department of Transportation (FDOT) categorizes roadways based on Access Class. Access Management can be viewed as a balance between access to adjacent properties and mobility of people and goods through a corridor.



The FDOT Classes of access management range from Class 1, which is the most restrictive and includes the Interstate system, to Class 7, which allows for the most access to land use and has the greatest impact on mobility. There are two access classes in the Monroe Street Corridor. Class 7, from North Magnolia Drive to Thomasville Road, includes both restrictive and non-restrictive medians. Full median openings have a minimum spacing of 660 feet and directional median openings have a minimum spacing of 330 feet for Class 7 . From Thomasville Road to John Knox Road is Access Class 5. Class 5 includes restrictive medians with a minimum spacing of 1,320 feet for full median openings where posted speeds are less than 45 mph , and a minimum spacing of 660 feet for directional median openings.

Many businesses depend on trucks for deliveries and drop-offs during various times throughout the business day. Trucks and buses require an extremely large median to accommodate their turning radius while executing a U-turn. Median widths to accommodate these large U-turns were determined infeasible due to the density of development in the corridor. Median opening placement considered the need for truck and other large vehicle access. Although great care was taken to develop medians to serve adjacent businesses, sometimes trucks may be required to follow a slightly different route to arrive at the property.

### 1.1. Literature Review

Access management studies have found that the reduction of conflict points reduces the number of crashes. Access management also reduces the severity of crashes by reducing the number of left turn crashes.

A study completed on Apalachee Parkway (U.S. 90), in Tallahassee found that the implementation of access management reduced overall crashes by $38 \%$ and reduced leftturn crashes by $82 \%$.

Safe Access is Good for Business found that medians can have a profound effect on driver safety compared to two-way left-turn lanes. Adding a median to a road that previously had a continuous two-way left turn lane can reduce the crash rate about $37 \%$ and the injury rate about $48 \%$. For example, when a continuous two-way left turn lane was replaced with a median on Atlanta's Memorial Drive, the crash rate was cut in half. It also states that
making a U-turn at a median opening to get to the opposite side of a busy highway is about $25 \%$ safer than a direct left turn from a side street or other access point. Research also shows that:

- Medians may reduce pedestrian crashes by $46 \%$ and motor vehicle crashes by up to $39 \%$,
- Medians may decrease delays (by greater than $30 \%$ ) for motorists,
- Medians allow pedestrians a safe place to stop at the mid-point of the roadway before crossing the remaining distance,
- Medians enhance the visibility of pedestrian crossings, particularly at unsignalized crossing points,
- Medians can reduce the speed of vehicles approaching pedestrian crossings,
- Medians can be used for access management for vehicles (allowing only right-in/right-out turning movements), and
- Medians provide space for supplemental signage on multi-lane roadways.


### 1.2. Ongoing Area Projects

Several on-going studies have been completed throughout the corridor:

- FSU Department of Urban and Regional Planning (DURP) Study
- Midtown Action Plan
- Apalachee Parkway
- Downtown Connectivity Plan
- Placemaking Areas
- South Monroe Sector Plan
- Multi-modal Transportation
- State of the Southern Strategy

District
These studies were reviewed and components from each study were combined into the Monroe Street Access Management and Lake Ella Implementation Study to ensure a uniform strategy is adopted for access management.

The FSU DURP Study focused on pedestrian safety issues on Monroe Street from Thomasville Rd to Tharpe St. It addresses many of the cumbersome physical features pedestrians encounter while traveling along Monroe St. For example, there are utility and traffic poles that restrict the width of the sidewalk, as well as many non-ADA compliant curbs. FSU DURP made numerous suggestions for improvements that included obstruction
free sidewalks, clearly identifiable pedestrian crosswalks, as well as a newly implemented pedestrian crosswalk in the Lake Ella area. The recommendations for the Lake Ella area were a particular focus in order to provide appropriate safety improvements that best serve the needs of the community.

## Apalachee Parkway

The Downtown Connectivity Plan analyzes and explains how Downtown is connected to the Tallahassee metropolitan area and its accessibility and utilization by the community. Pedestrian and vehicle safety was addressed, as well as how Downtown interacts with the rest of Tallahassee. Physical characteristics that inhibit pedestrian traffic were addressed while roadway geometry that encourages slower speeds was recognized. Downtown is unique in that it is such a pedestrian utilized community. The Tallahassee Downtown Improvement Authority recognized that connecting Downtown to the rest of Tallahassee through effective mass transit options and personal vehicle parking was essential to the health growth of the area. Since Monroe St. runs through the heart of Downtown, access management needs to be thoroughly researched in order to positively impact the businesses, residents, and commuters of the area.

## Multi-modal Transportation District

The Midtown Action Plan addresses the existing conditions that contribute to Midtown's sense of place, along with goals and improvements to increase the walkability of the community. The Midtown Merchant Association and surrounding neighborhood associations identified that its existing smaller blocks, street grid network and open area shopping is ideal for a walkable community. However, improvements such as a visual brand, parking solutions, and reclaimed public spaces would improve the sense of place in Midtown. Lake Ella is a major focus with the Midtown community and is a major component of the median implementation plan. It is important to address the existing needs and incorporate the desires of the community to move towards achieving the overall vision for the area.

The Placemaking Areas document identifies roadway segments that have need for improvements and the Placemaking area they impact. Recognizing and understanding the planned future improvements for these areas is vital as Monroe Street connects the Gaines

Street, Downtown and Midtown areas. The South Monroe Sector Strategy acknowledges the need for an economic and central vision for the South Monroe area. The beautification and aesthetic improvements to the area would promote economic development and attract people. Specific improvements to Monroe Street were also listed, such as the installation of a median, better curb definition and access, and property buffer areas to separate the street from the businesses. The median access study begins in heart of this community and recognizes the need for improved pedestrian safety which could increase the attractiveness of the businesses.

The State of Southern Strategy Report details the history of comprehensive planning in the southern region of Tallahassee (South of Gaines Street and Pensacola Street). As part of the recommendations, the report proposes that medians be implemented on South Monroe Street. This recommendation is not consistent with the current Monroe Street Access Management Feasibility Study, which recommends that medians are not needed for safety improvement on South Monroe at this time.

## 2. Data Collection and Geographic Information Systems

The identification of physical features and extraction of operational data was the first task in the effort. Geographic Information Systems (GIS) data was collected for data pertinent to the facility and the surrounding corridor area. These data include the physical attributes and operational characteristics of the facility. The data were collected from existing sources and include the following elements:

### 2.1. Physical Attribute Data

- Existing access points
- Rights of Way
- Railroads and railroad crossings
- School zones
- Emergency management locations
- Traffic control devices
- Intersection location and dimensions
- Sidewalks
- Bicycle facilities
- On-street parking
- Bus routes/stops
- Existing buffers
- Existing parallel facilities
- Cross section with pavement width; existing median treatments; shoulder types

It was also critical to identify the types of land uses that generate access directly onto the facility, as well as major attractions or generators that are located within the corridor area. This area extended $1 / 4$ mile on either side of the corridor. Land uses, such as educational institutions and governmental agencies that generate or attract significant traffic were identified. It was also critical to identify any emergency management facilities, such as fire stations, within the corridor area that may require special considerations with regard to access and turning radii. Emergency management personnel were invited to a part of the Project Team, which is discussed in later sections of this report.

RS\&H conducted a windshield survey of those properties adjacent to the facility, identifying types of use as well as access points and their location. Within the corridor area, those properties not adjacent were identified through a desk audit, with field verification when necessary. Additional or supplemental information regarding the location of emergency management facilities, schools, and other facilities/uses were gathered from the coordination effort described below.

In addition, community resources and specific character areas were also be identified. Examples of these types of resources and areas include the Lake Ella area and the downtown district that may require special treatments or considerations. Any historic, environmental, or cultural resources adjacent to the facility or within the corridor area were also identified.

### 2.2. Operational Data

Speed limits, traffic volumes, traffic composition (truck percentages), and accident data were collected as part of the operation data for this study. The Florida Traffic Online (FTI) (2011) DVD was used to access traffic volumes, truck percentages and speed limits. Speed limits through the corridor range from 25 mph in the downtown district, to 35 mph on the north and south ends of the project limits. The posted speed limit in the Lake Ella area is 35 mph .

### 2.2.1. Traffic Data

Traffic data was utilized from the City of Tallahassee website, as well as FDOT's 2011 Florida Traffic Information and Highway Data DVD. No additional traffic data was collected for this project. The traffic monitoring site number, site description and heavy truck data were analyzed for each segment throughout the corridor. The Annual Average Daily Traffic (AADT) for each monitoring site can be found in Table 2.1.

Table 2.1: 2011 Traffic Data

| Segment | Site | Description | \% Heavy <br> Trucks | AADT |
| :---: | :---: | :--- | :---: | :---: |
| North <br> Magnolia to <br> CSX <br> Railroad | 555060 | Monroe Street 300' North of Orange Avenue | 5.10 | 23,500 |
|  | 555002 | SR 61 150' North of Seaboard Coastline R/R | 2.80 | $21,500^{*}$ |
| CSX <br> Railroad to | 555003 | SR 61 300' South of Apalachee Parkway | 5.10 | 30,500 |
|  | 555004 | SR 61 100' North of Apalachee Parkway | 5.10 | 37,000 |
|  | 553002 | Monroe Street 400' South of Tennessee Street | 5.10 | 31,500 |
|  | 555008 | Monroe Street 150' North of Tennessee Street <br> Road | 2.20 | 32,000 |
| Thomasville <br> Road to | 555009 | Monroe Street 200' North of Thomasville <br> Road | 555011 | Monroe Street 150' South of Tharpe Street |
|  | 555012 | Monroe Street 300' North of Tharpe Street | 3.20 | 3.20 |
|  | 30,500 |  |  |  |
| John Knox <br> Road | 553003 | Monroe Street 300' South of Silver Slipper <br> Lane | 2.20 | 41,500 |
|  | 555108 | Monroe Street 150' South of Allen Road | 3.20 | 37,500 |

*Even though site lies 150 feet north of the Segment 1 boundary, traffic pattern still closely relates to Segment 1 due to geographical restrictions. Therefore it was included in Segment 1's average AADT calculation.

The composite AADT for each segment is listed in Table 2.2. The AADT of the FTI 2011 sites within each segment were averaged when multiple were available.

Table 2.2: Composite AADT by Segment

| Segment | Average AADT |
| :---: | :---: |
| North Magnolia to CSX Railroad | 22,500 |
| CSX Railroad to Thomasville Road | 34,000 |
| Thomasville Road to John Knox Road | 35,500 |

## 3. Assessment of Existing and Future Conditions

Based on the collected data, any operational deficiencies and safety issues were identified. The technical analysis included an assessment of crash data, access points, existing right-of-way, typical turning movements and multimodal access/connectivity.

In addition to the technical analysis, issues were identified through community, public and stakeholder input. This input from property owners and the users of the facility provided valuable information that was not identified through the data assessment.

The existing community characteristics were documented. This effort examined and incorporated in the analyses any existing plans or programs that are focused on enhancing/preserving the sense of place or community. This information was important in the development of the final recommendations to ensure coordination with overall community goals and objectives.

As an arterial roadway, the section of Monroe Street involved in the Monroe Street Median Feasibility Study contains a high density of cross street intersections and access points to local businesses. Approximately 0.2 miles (5\%) of the 3.9 mile corridor contains a raised median. The only sections currently with raised medians are from East Gaines Street to just south of East Bloxham Street, Apalachee Parkway to East Madison Street, and two island medians located at Thomasville Road. The remainder of the corridor features a two ${ }^{-}$ way left-turn lane that both directions of traffic utilize for left-turns and queue storage.

### 3.1. Crash Analysis

The focus of this section is to identify high crash locations and determine whether the installation of a median would act as an effective countermeasure that can be implemented through alternative designs to increase safety within the corridor. Crash data over a 5-year period for the Monroe Street corridor was collected, obtained from the City of Tallahassee Police Department. All crash data was analyzed to help understand where crashes occur within the roadway corridor and to identify problem areas. The crash information was summarized to determine the number of accidents, identify crash trends, and identify crash-prone locations.
3.1.1. Crash Data Collection

The crash data for the Monroe Street Median Feasibility Study includes historic crash data provided by the City of Tallahassee Police Department. This crash data ranges from Yaeger Street to John Knox Road for the five year period from January 2007 through December 2011. The historic crash data was evaluated to determine the location of any significant, existing safety hazards along the study corridor. The following sections describe the basic data analysis and include tables and figures of the crash data within the study corridor.

### 3.1.2. Data Analysis

The crash data was analyzed based on the address/intersection of a crash and the number of crashes at each site. The mid-segment crashes are represented as unlabeled bars in between the bars labeled with an intersecting street in Error! Reference source not found. through Error! Reference source not found.. The number of crashes at each intersection include those that occurred within the intersection influence area of Monroe Street and the cross street. The total number of crashes along the entire corridor over 5 years is 2,881 crashes, shown in Table 3.1. Segment 1, North Magnolia Street to the CSX Railroad Bridge which is approximately Bloxham Street (but not including Bloxham Street), had 185 crashes over a distance of approximately 1 mile. Segment 2, approximately Bloxham Street to Thomasville Road (but not including Thomasville Road), reported 1,102 crashes over a distance of approximately 1.2 miles. Segment 3, Thomasville Road to John Knox Road, had approximately 1,594 crashes over a distance of approximately 1.6 miles. Error! Reference source not found. through Error! Reference source not found. show the number of crashes by within each segment.

Table 3.1: Total Crashes Over 5 Years

| Segment | Crashes |
| :--- | :---: |
| North Magnolia to CSX Railroad | 185 |
| CSX Railroad to Thomasville Road | 1,102 |
| Thomasville Road to John Knox Road | 1,594 |
| Total | 2,881 |



Figure 3.1: Segment 1 N. Magnolia Street to the CSX Railroad Bridge (Approximately)


Figure 3.2: Segment 2 The CSX Railroad Bridge (Approximately) to Thomasville Road


Figure 3.3: Segment 3 Thomasville Road to John Knox Road
A crash location map was created to analyze the intensity of crash occurrences throughout the entire study area. As shown in Figure 3.4, the crash intensity increases near the intersections of Tennessee Street, Tharpe Street, and John Knox Road. The segment of Monroe Street south of the CSX Railroad indicates that the crash occurrence is relatively minor. The crash occurrence in the form of crash rates is further analyzed in later sections.


### 3.1.3. Crash Rate Analysis

A crash rate calculation was conducted to compare the Monroe Street Corridor crash rate to that of the FDOT District-wide and State-wide crash rates. Annual Average Daily Traffic (AADT) values for specific sites along the corridor within the study limits were taken from the Florida Traffic Information (FTI) 2011, shown previously in Table 2.1, and averaged for each segment, Table 2.2.

Using the mean AADT, calculated using all sites available within the study limits, the crash rate for the Monroe Street corridor was determined to be 12.7 crashes per million vehicle-miles. The crash rate equation is shown in Equation 1, where $R$ is the crash rate per million vehicle-miles.

## Equation 1

$$
R=\frac{(\text { no.of crashes })\left(10^{6}\right)}{(A A D T)(\text { no.of years })\left(365 \frac{\text { days }}{y r}\right) L_{m i}}
$$

Table 3.2 displays the variables for each segment that are included in the crash rate equation, as well as the variables for the total corridor. Segment 1 had significantly less crashes than Segments 2 and 3, with a crash rate of 4.51 per million vehicle-miles. Segment 2 had a crash rate of 14.8 per million vehicle-miles. Segment 3 had a crash rate of 15.38 per million vehicle-miles. As noted above, the crash rate for the entire corridor was 12.7 per million vehicle-miles.

Table 3.2: Crash Rate Variables

| Segment | Number of <br> Crashes | AADT <br> (veh/day) | No. of <br> Years | Length <br> (mi) | Crash Rate <br> (per million <br> veh-miles) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| N. Magnolia to CSX <br> Railroad | 185 | 22,500 | 5 | 1 | 4.51 |
| CSX Railroad to <br> Thomasville Road | 1,102 | 34,000 | 5 | 1.2 | 14.8 |
| Thomasville Road to John <br> Knox Road | 1,594 | 35,500 | 5 | 1.6 | 15.38 |
| Total | 2,881 | $32,708^{*}$ | 5 | 3.8 | 12.7 |

*AADT was averaged across all sites available (12 sites)

As shown in Table 3.3, this rate is more than double the Statewide average of 4.70, and more than quadruple the District 3 average of 2.75 crashes per million vehicle miles for Urban 4-5 lane 2 way undivided roadways.

Table 3.3: Crash Rates

| Location | Crash Rate (per mv miles) |
| :---: | :---: |
| District 3* | 2.75 |
| Statewide* | 4.70 |
| Monroe Street Corridor | 12.7 |

*Average crash rate for Urban 4-5 Lane 2 way undivided roadways from 2007-20011

### 3.2. Access Management

As previously noted, few sections of Monroe Street are currently fitted with raised medians, occurring sporadically between Bloxham Street and Apalachee Parkway and at the Thomasville and John Knox intersections. The majority of the sections have Two-Way LeftTurn Lanes (TWLTL) that provide little protection for crossing pedestrians and pose a threat to both turning and through vehicles. The FDOT has adopted access management standards for State maintained roadways which are shown below in Table 3.4.

Table 3.4: Rule 14-97 of the Florida Administrative Code

| Access Class | Median | Median Opening Spacing Standard (feet) |  | Signal Spacing <br> Standard (feet) | Connection Spacing Standard (feet) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Full | Directional |  | Posted Speed Greater than 45 MPH | Posted Speed of 45 MPH or Less |
| 2 | Restrictive | 2,640 | 1,320 | 2,640 | 1,320 | 660 |
| 3 | Restrictive | 2,640 | 1,320 | 2,640 | 660 | 440 |
| 4 | Non-Restrictive | - | - | 2,640 | 660 | 440 |
| 5 | Restrictive | 2,640 <br> at greater than 45 <br> MPH posted speed <br> 1,320 <br> at 45 MPH or less <br> posted speed | 660 | 2,640 <br> at greater than 45 <br> MPH posted speed <br> 1,320 <br> at 45 MPH or less <br> posted speed | 440 | 245 |
| 6 | Non-Restrictive | - | - | 1,320 | 440 | 245 |
| 7 | Both Median Types | 660 | 330 | 1,320 | 125 | 125 |

### 3.3. Land Use

The Leon County Comprehensive Plan (December 2011) outlines the future land use for Leon County. The land immediately adjacent to the Monroe Street corridor varies in use. Within the southern limits of the project, from N. Magnolia Drive, to the CSX Railroad Bridge, the area is categorized as Central Urban. The segment from the CSX railroad bridge to approximately Carolina Street is categorized as Central Core; from Carolina Street to Tharpe Street transitions back to Central Urban with a mix of Government Operations and Activity Center. From Tharpe Street to the northern project limits at John Knox Road, the area is mainly suburban with a mix of activity centers. The Tallahassee Future Land Use Map can be seen in Figure 3.5.


### 3.4. Mobility

The existing traffic conditions were analyzed in three segments throughout the project area based on the annual average daily traffic (AADT) for each segment. The traffic conditions were evaluated using the 2009 FDOT Quality/Level of Service (QLOS) Handbook and Highway Capacity Manual 2000 standards and methodologies. The results of the analysis are based on total delay for the roadway segment and are expressed in a Level of Service (LOS) format; where LOS A is the best operating condition, or "free flow" and LOS F is the worst operating condition. The Leon County Comprehensive Plan (December 2011) states that the adopted LOS for Monroe Street (Principal Arterials) is D, shown in Table 3.5.

Table 3.5: Leon County Adopted Level of Service


Based on the FDOT Generalized Service Level of Service (LOS) Tables, the Monroe Street corridor was analyzed for the three segments. The 2011 AADT and resulting Level of Service for each segment are shown in Table 3.6.

Table 3.6: Segment Level of Service

| Segment | 2011 AADT | LOS |
| :--- | :---: | :---: |
| N. Magnolia to CSX Railroad | 22,500 | C |
| CSX Railroad to Thomasville Road | 34,000 | E |
| Thomasville Road to John Knox Road | 35,500 | E |

The portion of Monroe Street from the CSX Railroad to John Knox Road is not currently meeting the adopted LOS requirement.

### 3.5. Bicycle, Pedestrian and Transit Facilities

Bicycle lanes are present on Monroe Street in Segment 1, from Yeager Street to Perkins Street, where the roadway narrows and bike lanes are no longer present. The entire Monroe Street corridor is currently comprised of sidewalks on both sides of the road. Pedestrian demand was observed in the major pedestrian activity centers, including the downtown portion of Monroe Street which has the highest observed pedestrian demand, as well as in the Lake Ella area. Transit facilities and operations are provided by StarMetro through the Big Bend Route and a portion of the Gulf Route. On-street parking is currently present near the Capital Cascades Park and in the downtown area from East College Avenue to East Georgia Street.

### 3.6. Right of Way

The existing right-of-way map from FDOT was reviewed throughout the study area. South Monroe has approximately 150 feet of right-of-way from North Magnolia Drive to Perkins Street, where the right-of-way narrows to approximately 66 feet. The right-of-way is approximately 66 feet from Perkins Street north to Silver Slipper Lane, where the right-ofway widens to accommodate the additional traffic lanes.

## 4. Public Involvement

The public involvement process for this median feasibility study goes beyond informing the public about the project process and alternatives being considered. The public had an opportunity to assist the CRTPA in the decision making process. There were multiple opportunities for the public to comment on all aspects of the project and median components throughout the process. The public involvement efforts also allowed the study team to respond to public concerns and incorporate individual's ideas

### 4.1. Project Team Meetings

In an effort to ensure seamless communication and efficient coordination, a Project Team was created. The Project Team met on a monthly basis throughout the life of the project. Median concepts and public concerns were discussed at each meeting. Project Team
members received information regarding specific updates to the Median Feasibility Study, as well as information regarding median implementation in general.

The Project Team consisted of representatives from local organizations, city, county and state government representatives, emergency service representatives, and stakeholders within the project area. A full list of the agencies represented is shown below:

| - City of Tallahassee | - StarMetro | - FDOT Safety Projects |
| :---: | :---: | :---: |
| - FDOT District 3 | - FDOT District 3 Traffic | - FDOT District 3 Design |
| Planning | Operations |  |
| - Levy Park Neighborhood | - Midtown Business | - Knight Creative |
| Association | Association | Communities |
| - Lafayette Park | - Community | - Tallahassee-Leon County |
| Neighborhood | Redevelopment Agency | Planning |
| Association |  |  |
| - Downtown Improvement | - Tallahassee Fire | - CRTPA |
| Authority | Department |  |

### 4.2. Project Webpage

The CRTPA maintained a project specific webpage throughout the life of the Median Feasibility Study. The webpage, www.crtpa.org/monroe-median-project.html, provided information regarding the benefits of medians, access management criteria, how access management positively impacts business, and local access management studies.

The project record is also available for review and includes the public meeting information, small group meeting documentation, and the presentations that were given throughout the life of the project. Citizens also have the opportunity to comment, communicate ideas, or voice concerns via the website.

### 4.3. Open House Meetings

Stakeholder and public involvement was a major focus for the Monroe Street Median Feasibility Study. Understanding concerns from the public and specifically, property owners along the facility, was the largest component of the open house meetings. Three open house meetings were held during various stages of the median feasibility study.

The Public Meetings were advertised at least 14 days in advance of the meeting date. Display advertisements were placed in the Tallahassee Democrat and letters were mailed to each business along the corridor with an announcement regarding the meeting purpose, meeting time, location, and a brief description about the project.

### 4.3.1. Meeting \#1

The first public open house was held on March 6 ${ }^{\text {th }}$, 2012 in the City Hall, City Commission Chambers and had 41 attendees. Project information was displayed on static display boards and plan sets depicting the existing conditions were shown with an aerial background. Each business along the corridor was identified and labeled to assist concerned business owners with locating their property. The meeting was advertised in the Tallahassee Democrat on April 28 ${ }^{\text {th }}$, 2012, a media release was published on March $3^{\text {rd }}$, 2012, and email announcements were provided to those that had requested notification through the project website.

The purpose of Public Meeting \#1 was to introduce the project to the interested stakeholders. The Project Team was able to speak individually with interested parties regarding median location, type, and design. Citizens commented on daily traffic patterns, high pedestrian crossing locations, and the issues that they observe on a daily basis.

### 4.3.2. Meeting \#2

The second public open house was held on June $28^{\text {th }}$, 2012 in the City Hall, City Commission Chambers and had 25 attendees. Plan sets depicting the proposed median placement for the entire corridor were displayed on tables and the participants had the opportunity to edit the proposed medians and place comments or concerns directly on the plan sets. Members of the consultant team and CRTPA staff were available to assist
participants and answer any questions. The meeting was advertised in the Tallahassee Democrat on June $22^{\text {nd }}$, and email announcements were provided to those that had requested notification through the project website. Hard copy letters were prepared for distribution to the businesses along the corridor. These paper notifications were hand delivered to all of the businesses along Monroe Street the week of the meeting due to a malfunction in the mailing process.

The purpose of the second public meeting was to present the draft locations, type, and size of the medians. Those that attended the meeting were given the opportunity to comment on the proposed median design, which was shown on plan sets for the entire corridor. Consultant and CRTPA staff members were available to discuss median advantages and disadvantages and discuss alternative median configurations.

### 4.3.3. Meeting \#3

The third public open house was held on November $28^{\text {th }}, 2012$ in the atrium of the Northwood Center and had 29 attendees. The study recommendations were shown on plan sets for the entire corridor. The plans displayed the proposed median placement and recommended median opening configurations. The public had the opportunity to make suggestions to median configurations, and place comments and concerns directly on the plans, as well as speak with RS\&H associates and CRTPA staff. The meeting was advertised in the Tallahassee Democrat on November 23 ${ }^{\text {rd }}$, and email announcements were provided to those that had requested notification through the project website. Hard copy letters were also distributed to the businesses along the corridor.

### 4.4. Small Group Meetings

As part of the involvement effort, smaller focus groups were identified based on the geography of the Monroe Street corridor. Four area specific groups were identified, including South Monroe, Downtown, Lake Ella, and North Monroe. Prior to the first small group meeting, the North Monroe and Lake Ella groups were combined due to their common interests.

Those interested in attending the small group meetings were provided notice of the meetings via email a few days prior to the meetings. The South Monroe small group
meeting was held on May $17^{\text {th }}$, 2012 in the corridor area at Dawg Et Al and five people were in attendance. The North Monroe and Lake Ella small group meeting was held on May 16 ${ }^{\text {th }}$, 2012 at Krewe de Gras and nine people were in attendance. There was no interest expressed in holding a Downtown small group meeting.

### 4.4.1. South Monroe Small Group Meeting

The meeting opened with a presentation of the project which included updates from the project team meetings and the alternatives presented at those meetings. Concerns were expressed about vehicular access into businesses and motorists inability to execute safe $U$ turns if medians are constructed. Attendees also expressed concerns regarding delivery trucks and their ability to safely access business to make deliveries and pickups.

The project team shared examples of median retrofitted roadways that have been successful, including the Apalachee Parkway project in Tallahassee. The project team explained that medians were not recommended where through streets existed and that if medians were recommended, they would help to reduce conflicts for vehicles and pedestrians, as well as the potential for landscaped medians to provide beautification opportunities within the corridor.

### 4.4.2. North Monroe \& Lake Ella Small Group Meeting

The meeting opened with a presentation of the project which included updates from the project team meetings and the alternatives presented at those meetings. Concerns were expressed about northbound left turns into the Sonic Restaurant. The Project Team noted that they had not heard from Sonic regarding the median study.

The vehicular access to Legion Street and Lake Ella was also a point of concern. The Project Team explained the FDOT medina standards and how median opening spacing is regulated. Concerns were also raised about the volume of pedestrian traffic crossing in the Lake Ella area, especially those using the StarMetro bus stops near Legion Street. The Project Team shared the results of an April $12^{\text {th }}, 2012$ study showing pedestrian crossing locations and the number of pedestrians crossing within the Lake Ella area. Based on the data collected, a mid-block signal would not be warranted.

Bill Ekwall, from the Tallahassee Fire Department, noted that the medians are not a problem for the fire trucks as long as they are designed properly. He stated the medians that have the rolled curbs work for fire truck access and the 4 " curb with the straight face cause issues.

### 4.5. Public Comments

Public comments were accepted throughout the duration of the project. Appendix C contains all of the public comments received throughout the life of the project. A summary of comments is shown in bullet format below:

- Medians will limit vehicular traffic to my business
- Median islands with left turn bays would make the corridor safer
- Any change is vehicular access will hurt my business
- Consider a traffic light at Lake Ella/ Legion Street
- Medians should be landscaped for beautification
- Medians will limit the left turn queuing and block through traffic
- Coordinate with the City on other infrastructure improvements prior to construction
- Raised medians with pedestrian crossings would benefit the Lake Ella area
- We oppose medians between $5^{\text {th }}$ and $8^{\text {th }}$ Avenue
- Do not alter the access to "The Cottages" at Lake Ella


## 5. Recommended Median Configuration

An initial median feasibility concept was developed for the Monroe Street corridor and modified throughout the public involvement process. Median feasibility was determined based on the existing right-of-way, traffic operational characteristics, and the need to improve safety. Implementation of medians throughout segments within the corridor were identified as "Warranted", referring to the implementation of medians to improve safety, or "Feasible", referring to the implementation of medians given current physical and operational characteristics. The recommended median feasible and warranted segments are shown in Figure 5.1.


A detailed median implementation plan was developed for roadway segments that identified medians as both feasible and warranted. An aerial view of the median recommendations can be seen in Appendix A. In these areas, it is recommended that 12 foot travel lanes are narrowed to 11 feet to reduce vehicular speeds and increase the available roadway for median implementation. A 17 foot landscaped median is recommended with "Type E" curb and gutter to facilitate stormwater runoff. Typical roadway sections showing these improvements are shown in Figure 5.2 and Figure 5.3.

Where median openings and turn lanes are recommended, the final design should comply with the current FDOT Design Standard. For urbanized areas, turn lane queue lengths should be designed to accommodate four passenger cars, or approximately 100 feet, unless site specific turning movement data is available. The length of 25 feet is an average distance, front bumper-to bumper of a queue. If the queue is comprised mostly of passenger cars, this distance provides for an average distance between vehicles of about one-half car length. Designs for turn lane taper and deceleration lengths should comply with the FDOT Design Standard Index 301, or the designer should apply for the applicable design variation if appropriate turn lane deceleration standards cannot be achieved.


TYPICAL SECTION
MONROE STREET (US 27)
** TREES, WHERE THE DIAMETER IS OR IS EXPECTED TO bE GREATER THAN 4" (MEASURED 6" ABOVE THE GROUND) SHALL BE LOCATED NO CLOSER THAN 6' FRON THE EDGE OF INSIDE TRAFFIC LANE, PER PPM VOL. I, TABLE $2 . I I .5$



The recommendation for median implementation for each segment is described in the following sections.

### 5.1. North Magnolia Drive to CSX Railroad Bridge (South Monroe)

Within the segment from North Magnolia Drive to the CSX Railroad Bridge, it was determined that medians are not warranted based on historic crash records. Medians are feasible, but not warranted for safety purposes at this time. However, as Placemaking efforts continue in the South Monroe-South Adams District, installation of medians may be incorporated to contribute to an overall sense of place in the District. Additionally, as proximal projects including Cascades Park and the FAMU Way extension are completed, medians may become necessary along South Monroe to provide pedestrian refuges and increase safety throughout the corridor. See sheet 1 through sheet 5 of Appendix A for the median feasibility south of the CSX Railroad.

### 5.2. CSX Railroad Bridge to Thomasville Road (Downtown)

Within the section from CSX Railroad Bridge to Thomasville Road, median implementation is warranted but not feasible. The right of way within the downtown area is extremely limited. There is a large amount of pedestrian activity that may benefit from a raised median to assist with mid-block crossings. The block lengths through the downtown area are quite short and the value of the existing on-street parking is instrumental for the current business owners. The inability to widen the road due to ROW restrictions makes medians in this area not feasible. Sheet 5 through Sheet 10 of Appendix A depict the results of the feasibility study for this segment.

### 5.3. Thomasville Road to John Knox Road

Within the segment between Thomasville Road and John Knox Road, median implementation is both feasible and warranted except in the area between $5^{\text {th }}$ Avenue and $7^{\text {th }}$ Avenue. In this area, medians are warranted but not feasible due to the extended queuing for the left turn lanes. The current volume of left-turning vehicles within this segment is very high. Queue lengths of left turning vehicles were observed to verify that medians are not feasible. It was found that the implementation of a median in this area would decrease the left turn lane storage and cause the queue to spill into the through
lanes thus further degrading the overall operation of Monroe Street. The remainder of this segment has detailed median recommendations illustrated in the concept plans, sheet 11 through sheet 17 of Appendix A. The Lake Ella area, $7^{\text {th }}$ Avenue to Tharpe Street, had a more in depth study with three median alternatives. The study in its entirety can be found in Appendix B.


Figure 5.4: Median Rendering at Lake Ella

Appendix A: Preferred Median Implementation Plan


















Appendix B: Lake Ella Median Implementation Plan Report

## Lake Ella

## Median Implementation Study



This study was completed for:


The Capital Region Transportation Planning Agency
(CRTPA)
By:

January 2013

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## Executive Summary

This study examines the safety of the existing roadway features relative to pedestrian crossings along Monroe Street in the Lake Ella area. Marked and unmarked crosswalks, as well as other improvements, such as pedestrian activated signals and median improvements will be considered to improve pedestrian safety. Midblock crosswalks are intended to improve pedestrian connectivity and reduce instances of pedestrians crossing at random, unpredictable locations.

Evaluating the likelihood of an uncontrolled midblock crossing being used once it is marked is difficult. The existing crossing volume may use alternative midblock crossing locations when a new midblock crosswalk is marked. However, with the existing pedestrian traffic in the Lake Ella area, a midblock crossing is not warranted according to the Manual of Uniform Traffic Control Devices (MUTCD) or the Florida Department of Transportation (FDOT) Traffic Engineering Manual. However, the implementation of a raised median will assist pedestrians in a two stage crossing. A signal warrant study at North Lake Ella Drive found that a traffic signal is warranted. This signal controlled intersection will provide a closer signalized crosswalk than the Tharpe Street intersection, which is an improvement for pedestrians.

The preferred alternative for the Lake Ella Area is Alternative B, shown in Figure 0.1 and Figure 0.2, with a directional opening only in front of Legion Street. The businesses on the east and west side of Monroe Street will receive left-in access but with only right out.

A full median opening at Legion Street and On the Border Restaurant was considered, but due to the proximity of the nearest signalized intersection, it was determined that a safer alternative would be a directional median opening. Motorists exiting the Legion Street area will have the opportunity to make a right turn, then a U-turn at the North Lake Ella signalized intersection.

It is further recommended that additional signage be included as part of the new signalized intersection. To safely perform a U-turn on Monroe Street, motorists must be clear of rightturning vehicles from North Lake Ella Drive and the Lake Ella Plaza Shopping Center. Therefore, a sign stating that right turns must yield the right of way to U-turns should be installed.

Pedestrian timings must also be adjusted to allow for U-turning vehicles so that motorists and pedestrian conflicts are avoided.



### 1.0 Introduction

The Lake Ella area is a robust activity center for pedestrian and bicycle activity. The amenities include a 12 foot wide walking path around the lake, picnic pavilions and picnic tables, public restrooms and a playground area. Parking for vehicular access can be found at cluster locations around the lake and in the form of parallel parking on Lake Ella Drive surrounding the lake.

This study examines the safety of the existing roadway features relative to pedestrian crossings. Marked and unmarked crosswalks, as well as other improvements such as pedestrian activated signals and median improvements, will be considered to improve pedestrian safety. Midblock crosswalks are intended to improve pedestrian connectivity and reduce instances of pedestrians crossing at random, unpredictable locations. A location map can be seen in Figure 1.1.

The need for refuge areas is related to street widths, pedestrian walking speed, and vehicle gaps. This study includes detailed information including; crash history, pedestrian and traffic volumes, number of lanes, speed limit, type of median, type and condition of crosswalk markings, and crosswalk locations. Basic traffic engineering principals and intersection design procedures were applied to enhance the safety of pedestrians while balancing the mobility of the motoring public.

1.1. Previous Studies

Previous studies have identified a need for improved pedestrian safety in the Monroe Street area near Lake Ella. The FSU Department of Urban and Regional Planning (DURP) completed the North Monroe Design and Safety Study, which provided an evaluation of existing conditions in the Lake Ella area, from $7^{\text {th }}$ Avenue to Tharpe Street, as well as recommendations for improved pedestrian and bicycle safety.

Existing Conditions:

- Dual left turn lanes (center turning lane) cause hazards for pedestrians and drivers
- Lack of crosswalks at almost every side street in the area, including the Lake Ella entrance, reduces connectivity for pedestrians
- Long stretches between traffic signals and lack of pedestrian crossing distance between some intersections
- Lack of midblock crossing to Lake Ella increases risk of pedestrians being struck by automobiles when trying to access the park between Tharpe Street and $7^{\text {th }}$ Avenue.

Recommendations:

- Reduce automobile lanes from 12 -feet to 11 -feet to accommodate medians, buffers and sidewalk width improvements
- Raised medians with landscaping to improve safety and aesthetics
- Pedestrian midblock crossing at Lake Ella

Previous studies have identified a need for a midblock crossing at Lake Ella. This study analyzes potential treatments and implementation strategies. Treatments considered include installation of a median, installation of a mid-block crosswalk with a painted crosswalk and advanced signage to alert motorists, as well as the installation of a pedestrian activated signal, such as the High-Intensity Activated crossWalK beacon (HAWK.).

In recent years, there has been much debate surrounding the safety implications of marking crosswalks at uncontrolled intersections. Previous research results were contradictory in terms of whether pedestrian vehicle crashes were occurring with more, less, or the same frequency at marked and unmarked crosswalks. The contradictory

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findings can be attributed to limitations of the research project designs, which contained many confounding variables and small, potentially biased sample sizes and sites.

Previous research has found the following:

- The presence of a median decreased the pedestrian crash risk;
- Marked crossings had a higher incidence of pedestrian crashes on multi-lane (4 or more lanes) roads with high average daily traffic (ADTs);
- Marked and unmarked crossings had similar incidences of pedestrian crashes on all $2^{-}, 3$-, and multi-lane roads with lower ADTs;
- Pedestrians ages 65 and above were over represented in crashes;
- The installation of marked crossings did not alter motorist behavior (e.g., stop or yield to pedestrians) or pedestrian behavior (e.g., crossing without looking).
- An overall higher risk as the number of lanes or ADT rate increases regardless of markings;
- Recognition that multi-lane roadways with high ADT rates represent the most difficult scenarios for pedestrian crossings, and
- The fact that marked crossings draw pedestrians to cross in that location, particularly in areas where the crossing is perceived to be difficult.


### 2.0 Existing Conditions

Monroe Street in the Lake Ella area is a 5 lane roadway with a Two-Way Left-Turn Lane (TWLTL) where there are not dedicated left turn lanes. There are no raised medians. The posted speed limit is 35 mph . The existing lane configuration can be seen in Figure 2.1and Figure 2.2.


Figure 2.1: Sample of Lane Configuration; Lake Ella Drive


Figure 2.2: Sample of Lane Configuration; Legion Street

### 2.1. Nearest Crossing Locations

The current crossing locations exist at $7^{\text {th }}$ Avenue and Tharpe Street. Both locations consist of signalized intersections, marked crosswalks and pedestrian activated crossing signals. The distance between $7^{\text {th }}$ Avenue and Tharpe Street is approximately 2,500'.

### 2.2. Access Management Classification

Access management is practiced to improve the safety of a roadway or corridor by reducing the number of conflict points a vehicle can encounter and balance it with mobility. A conflict point is a location where two vehicles' paths can legally cross. For example, any time a left turning vehicle must cross an opposing lane to complete its turning movement, it has the potential to conflict with through moving vehicles. If the number of times a vehicle can come into conflict with another is reduced, the overall roadway safety is increased.

The proposed median improvements for Lake Ella area most closely represent a Class 5 roadway which allows for full median openings every 1,320 feet and directional median openings every 660 feet. Table 2.1 lists all roadway classifications as recommended by FDOT.

Table 2.1: Rule 14-97 of the Florida Administrative Code

| Access Class | Median | Median Opening Spacing Standard (feet) |  | Signal Spacing <br> Standard (feet) | Connection Spacing Standard (feet) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Full | Directional |  | Posted Speed Greater than 45 MPH | Posted Speed of 45 MPH or Less |
| 2 | Restrictive | 2,640 | 1,320 | 2,640 | 1,320 | 660 |
| 3 | Restrictive | 2,640 | 1,320 | 2,640 | 660 | 440 |
| 4 | Non-Restrictive | - | - | 2,640 | 660 | 440 |
| 5 | Restrictive | 2,640 <br> at greater than 45 <br> MPH posted speed <br> 1,320 <br> at 45 MPH or less <br> posted speed | 660 | 2,640at greater than 45MPH posted speed $\|$1,320 <br> at 45 MPH or less <br> posted speed | 440 | 245 |
| 6 | Non-Restrictive | - | - | 1,320 | 440 | 245 |
| 7 | Both Median Types | 660 | 330 | 1,320 | 125 | 125 |

### 3.0 Data Collection

### 3.1. Pedestrian Demand

A pedestrian volume count study was performed on Thursday, April 12, 2012, from 10:30 AM to 4:30 PM. Pedestrians that crossed Monroe Street between 8th Avenue and Tharpe Street were documented, as well as their approximate crossing location. The weather conditions were dry and sunny with a high level of activity observed at the Lake Ella park facilities. The hourly pedestrian activity observed is shown in Table 3.1 and the pedestrian volume and approximate crossing locations is shown in Figure 3.1. Appendix A contains pedestrian count raw data.

Table 3.1: Pedestrian Data

| Starting <br> Time | Number <br> of Ped. | Number of Ped. <br> Per Hour |
| :---: | :---: | :---: |
| $10: 30$ | 1 |  |
| $10: 45$ | 4 |  |
| $11: 00$ | 1 |  |
| $11: 15$ | 2 | 8 |
| $11: 30$ | 1 | 8 |
| $11: 45$ | 1 | 5 |
| $12: 00$ | 3 | 7 |
| $12: 15$ | 4 | 9 |
| $12: 30$ | 1 | 9 |
| $12: 45$ | 2 | 10 |
| $13: 00$ | 1 | 8 |
| $13: 15$ | 2 | 6 |
| $13: 30$ | 2 | 7 |
| $13: 45$ | 2 | 7 |
| $14: 00$ | 1 | 7 |
| $14: 15$ | 1 | 6 |
| $14: 30$ | 6 | 10 |
| $14: 45$ | 3 | 11 |
| $15: 00$ | 2 | 12 |
| Total | 40 |  |

*Italicized number indicates an interpolated value due to a break in data collection

The FDOT Traffic Engineering Manual Section 3.8.5(3) describes the pedestrian volume demand required to warrant a midblock crossing. A minimum of 20 pedestrians during any four consecutive 15-minute periods and a minimum of 60 pedestrians during any 4 hours of the day, not necessarily consecutive hours, are required. No hours of traffic met or

surpassed 20 pedestrians per hour or 60 pedestrians during any 4 hours of the day. The MUTCD Pedestrian Volume Signal Warrant is also discussed in detail later in this report.


Figure 3.1: Pedestrian Crossing Locations in the Lake Ella Area

### 3.2. Vehicle Gap Size Study

A vehicle gap size study was completed on Thursday, April 12, 2012. This type of study is used to determine the size and frequency of gaps in vehicular traffic to facilitate safe and adequate pedestrian crossings. Data was collected for four time periods, each time period corresponding to the Pedestrian Volume Count Study that was completed concurrently. Table 3.2 contains a summary of the gap size data collected. Appendix A contains the gap size raw data.

Table 3.2: Gap Size Summary

| Adequate <br> Gap Size <br> $(\mathrm{s})$ | Number of Gaps |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $10: 30 \mathrm{AM}-$ <br> $11: 30 \mathrm{AM}$ | $11: 30 \mathrm{AM}-$ <br> $12: 30 \mathrm{PM}$ | $12: 30 \mathrm{PM}-$ <br> $1: 30 \mathrm{PM}$ | $1: 30 \mathrm{PM}-$ <br> $2: 30 \mathrm{PM}$ | Total |
| 8 | 5 | 1 | 2 | 4 | 12 |
| 9 | 3 | 0 | 3 | 1 | 7 |
| 10 | 1 | 0 | 1 | 1 | 3 |
| 11 | 4 | 1 | 1 | 2 | 8 |
| 12 | 2 | 1 | 0 | 1 | 4 |
| 13 | 1 | 0 | 0 | 0 | 1 |
| 14 | 1 | 1 | 0 | 1 | 3 |
| 15 | 2 | 0 | 0 | 0 | 2 |
| 16 | 1 | 0 | 0 | 0 | 1 |
| 17 | 0 | 1 | 0 | 0 | 1 |
| 18 | 0 | 0 | 0 | 0 | 0 |
| 19 | 0 | 0 | 0 | 0 | 0 |

The crossing distance is currently 65 feet across the four travel lanes and two-way left-turn lane and, with no median refuge, pedestrians are required to cross the entire facility. An adequate gap was determined to be 19 seconds, which would allow a pedestrian with an average speed ( 3.5 feet per second) to safely cross Monroe Street. No gap size recorded met the required 19 seconds to cross Monroe Street in one attempt.

It was observed, however, that all crossing pedestrians did so in a two stage process, crossing two lanes of oncoming Monroe Street traffic and then waiting in the two-way leftturn lane until the opposing two lanes of Monroe Street became free of traffic. The addition of a raised median in the Lake Ella area would provide the existing pedestrian traffic a safer refuge while crossing Monroe Street. Drivers along Monroe Street would be more alert and less surprised to the presence of pedestrians crossing in two stages.

### 3.3. Traffic Volumes

The 2011 average annual daily traffic (AADT) along the proposed crossing location is 35,500 vehicles per day as recorded by the Florida Transportation Information (FTI) 2011 DVD. The FTI AADT Report is in Appendix B.

### 4.0 Crash Analysis

### 4.1. Crash Data Collection

The City of Tallahassee Police Department (TPD) provided historic crash data for a one year period from September 27, 2011 and ending September 26, 2012 for the study area from East $7^{\text {th }}$ Avenue to Tharpe Street. Crash records reported by police on "Long Forms" were requested for all crashes that resulted in a vehicle being towed away, personal injury, or the death of a motorist, pedestrian, or bicyclist. They can be found in Appendix C. The Long Forms provided by the police department allow analysts to more accurately identify crash locations and causal factors of each crash. It was noted that this section of roadway reported 683 crashes over a five-year period, which is approximately 136 crashes per year, as opposed to the 53 Long Forms obtained from the TPD. This discrepancy in the data can be attributed to crashes that did not result in a vehicle being towed away, personal injury, or the death of a motorist, pedestrian, or bicyclist.

The following sections describe the basic data analysis and include tables and diagrams of the crashes at each intersection within the study corridor.

### 4.2. Crash Data Analysis

The crash data was catalogued by location, crash type and severity. The severity of each crash was categorized as "PDO", "non-fatal", and "fatal". PDO indicates a property damage only crash. Table 4.1 shows that there were a total of 53 crashes over the 1-year period. Forty-four (44) were PDO crashes. Nine (9) crashes incurred non-fatal injuries. No fatal crashes were recorded during observation period within the study limits. Also, no crashes involved pedestrians were identified. Figure 4.1 displays the crash severity of each incident and location by intersection.

Table 4.1: Crash Severity by Intersection

| Intersection | Crash Severity |  |  | Total |
| :--- | :---: | :---: | :---: | :---: |
|  | PDO | Non-Fatal | Fatal |  |
| 7th Avenue | 10 | 1 | 0 | 11 |
| 8th Avenue | 8 | 1 | 0 | 9 |
| Legion Street | 4 | 0 | 0 | 4 |
| Lake Ella Drive | 11 | 1 | 0 | 12 |
| Publix N. Entrance | 3 | 0 | 0 | 3 |
| Tharpe Street | 8 | 6 | 0 | 14 |
| Total | 44 | 9 | 0 | 53 |



Figure 4.1: Crash Severity by Intersection

### 4.2.1. Crashes by Intersection and Type

Collision diagrams were plotted by location on aerial maps. Figure 4.2 and Figure 4.3 are the crash diagrams representing the project study limits. The crash locations on the following pages are based on the accuracy of the crash reports and are open to interpretation based on the police officer's description of the incident. When conflicting information was presented in the crash reports, the crash diagram was used when sufficient information was provided in that section. Each intersection within the study limit's crash experience is summarized in the following paragraphs.



The intersection of $7^{\text {th }}$ Avenue and Monroe Street experienced a total of 11 crashes. Table 4.2 displays the number of crashes by type. The majority of crashes were rear end crashes, which, occur frequently at signalized intersections due to the fact that traffic signals interrupt the flow of traffic.

Table 4.2: $7^{\text {th }}$ Avenue Crashes

| Crash Type | Amount |
| :---: | :---: |
| Rear End | 5 |
| Side Swipe | 2 |
| HUP | 0 |
| Angle | 3 |
| Left Turn | 1 |
| Bicycle | 0 |
| Right Turn | 0 |
| Total | 11 |

The intersection of $8^{\text {th }}$ Avenue and Monroe Street experienced a total of 9 crashes. Table 4.3 displays the number of crashes by type.

Table 4.3: $8^{\text {th }}$ Avenue Crashes

| Crash Type | Amount |
| :---: | :---: |
| Rear End | 5 |
| Side Swipe | 1 |
| HUP | 0 |
| Angle | 0 |
| Left Turn | 3 |
| Bicycle | 0 |
| Right Turn | 0 |
| Total | 9 |

The intersection of Legion Street and Monroe Street experienced a total of 4 crashes. Table 4.4 displays the number of crashes by type.

Table 4.4: Legion Street Crashes

| Crash Type | Amount |
| :---: | :---: |
| Rear End | 2 |
| Side Swipe | 1 |
| HUP | 0 |
| Angle | 0 |
| Left Turn | 1 |
| Bicycle | 0 |
| Right Turn | 0 |
| Total | 4 |

The intersection of Lake Ella Drive and Monroe Street experienced a total of 12 crashes. Table 4.5 displays the number of crashes by type.

Table 4.5: Lake Ella Drive Crashes

| Crash Type | Amount |
| :---: | :---: |
| Rear End | 3 |
| Side Swipe | 4 |
| HUP | 2 |
| Angle | 1 |
| Left Turn | 1 |
| Bicycle | 0 |
| Right Turn | 1 |
| Total | 12 |

The Publix North Entrance is primarily a right-in right-out driveway. It experienced a total of 3 crashes. Table 4.6 displays the number of crashes by type.

Table 4.6: Publix N. Entrance

| Crash Type | Amount |
| :---: | :---: |
| Rear End | 2 |
| Side Swipe | 1 |
| HUP | 0 |
| Angle | 0 |
| Left Turn | 0 |
| Bicycle | 0 |
| Right Turn | 0 |
| Total | 3 |

The intersection of Tharpe Street and Monroe Street and the area just south of the intersection experienced a total of 14 crashes. Table 4.7 displays the number of crashes by type.

Table 4.7: Tharpe Street Crashes

| Crash Type | Amount |
| :---: | :---: |
| Rear End | 7 |
| Side Swipe | 2 |
| HUP | 1 |
| Angle | 1 |
| Left Turn | 2 |
| Bicycle | 1 |
| Right Turn | 0 |
| Total | 14 |

### 5.0 Overview of Alternatives Considered

### 5.1. Full Traffic Signal with Pedestrian Activation

An additional full traffic signal within the Lake Ella area would stop all vehicular traffic on Monroe Street when activated by a pedestrian. A detailed signal warrant can be found in Section 6.0: Signal Warrant Analysis.

### 5.2. High-Intensity Activated crossWalK beacon (H.A.W.K)

Also known as the Pedestrian Hybrid Beacon, the HAWK is used on a complex, high volume roadway with a high volume of pedestrian traffic. The HAWK is a pedestrian activated signal that is only enabled when a pedestrian is present. The mast arm mounted signal has a unique signal head configuration: two red lenses over a single yellow lens. Ladder-style markings designate the pedestrian crosswalk as seen in Figure 5.1. When a pedestrian activates the signal via a push-button, the light begins to flash yellow. Then a solid yellow light warns vehicles to slow down and stop. A double solid red signal indicates that all traffic should be stopped and provides pedestrians a safe window to cross. After a predetermined safe crossing time, the signal begins an alternating flashing red phase that acts like a stop sign for vehicles who must yield to pedestrians still in or entering the crosswalk. At this time pedestrians see an upraised hand symbol with a countdown display informing them of the time remaining to complete the crossing. Each vehicle must treat the flashing red signal as a stop sign until the signal is deactivated with no lights flashing.


Figure 5.1: HAWK Example (FHWA)

### 5.3. Crosswalk with Appropriate Signage

Crosswalks provide a safe area where motorists must yield the right-of-way to pedestrians. Marked crosswalks can be found at signalized intersections, midblock locations, or other high pedestrian areas. Standard yellow flashing beacons and additional warning signs can be installed to notify motorists that the area contains pedestrians that may be crossing the roadway.

### 5.3.1. MidBlock Crossing

Midblock crossings facilitate pedestrian crossings at other than the end of block locations where traffic signals or other pedestrian features are present. Midblock crossings must be designed to ensure placement, geometrics, and operations work seamlessly with both the pedestrians and the motorists. For a midblock crossing to work properly, the pedestrian demand must be present, adequate sight distance for motorists to react must be achieved, and applicable signage must be present.

Midblock crossings work well when there is a focused demand for pedestrians to cross. According to the observations made during the data collection portion of this study, several pedestrians crossed within 10's of feet of a current crosswalk, but they did not utilize the crosswalk to safely cross the street.

The FDOT Plans Preparation Manual (PPM) Chapter 8.3.3.2 provides the following criteria for installation of a midblock crossing:

1. Midblock crosswalks should not be located where the spacing between adjacent intersections is less than 660 feet,
2. Midblock crosswalks should not be located where the distance from the crosswalk to the nearest intersection (or crossing location) is less than 300 feet,
3. Midblock crosswalks shall not be provided where the crossing distance exceeds 60 feet (unless a median or a crossing island is provided),
4. Midblock crosswalks shall not be provided where the sight distance for both the pedestrian and motorist is not adequate (stopping sight distance per Table 2.7.1),
5. Midblock crosswalks shall not be located where the ADA cross slope and grade criteria along the crosswalk cannot be met (per Section 8.3.2).

The PPM also states that an engineering study must be completed to ensure that factors such as sight distance and crossing distance are examined.

### 5.3.2. Raised Crosswalk

A raised pedestrian crosswalk is a speed hump that also functions as a crosswalk (Figure 5.2). The speed hump has ladder-style markings as well as directional arrows on the roadway and appropriate signage alerting vehicles to the presence of an approaching crosswalk. Pedestrians are elevated which eliminates the need for a curb ramp when transitioning into the road. A raised crosswalk also serves as a traffic calming device. With these characteristics, this treatment is most often used on minor collectors with low speeds and high pedestrian usage or residential roadways. A raised crosswalk could be detrimental to roadways on bus routes or those with frequent emergency vehicle use.


Figure 5.2: Raised Crosswalk

### 5.4. Rectangular Rapid Flashing Beacon (RRFB)

A Rectangular Rapid Flashing Beacon (RRFB) is a pedestrian crosswalk sign accompanied by two rapid flashing LED lights that can activated manually by a push button or passively by a pedestrian detection system (Figure 5.3). RRFB's incur less cost than a traditional signal and can be powered by a solar panel. RRFB's are placed at painted crosswalks to alert vehicles of the presence of a pedestrian.


## Figure 5.3: Rectangular Rapid Flashing Beacon (RRFB)

### 5.5. Raised Medians

The following discussion on medians can be found in the Federal Highway Administration (FHWA) University Course on Bicycle and Pedestrian Transportation publication as part of lesson 12: Midblock Crossings.

## Advantages of Medians

"Medians separate conflicts in time and place. A pedestrian attempting to cross one or more lanes of traffic in each direction must determine a safe gap in two, four, or even six lanes at a time. This is a complex task that increases in difficulty with limitations in sight distance and increasing vehicle speeds. Younger and older pedestrians have reduced gap acceptance skills compared with pedestrians in other age groups. Pedestrians are faced with additional challenges judging gap size at night. Many may predict that a car is $61.0 \mathrm{~m}(200 \mathrm{ft})$ off when, in fact, it is only 30.5 m ( 100 ft ) away, far too close to attempt a crossing.

Not only do medians separate conflicts, but they also create the potential for more acceptable gaps. On a standard-width, four-lane roadway with a center left-turn lane (19.5 m ( 64 ft ) wide, with five $3.7-\mathrm{m}$ ( $12-\mathrm{ft}$ ) lanes plus two 61.0 -centimeter ( cm ) ( 24 -inch) gutter pans), it takes an average pedestrian traveling $1.2 \mathrm{~m} /$ second ( s ) ( $4 \mathrm{ft} / \mathrm{s}$ ) nearly 16 s to cross. Finding a safe 16 -second gap in four moving lanes of traffic may be difficult or impossible. In any event, an attempt to cross may require a wait of $3-5$ minutes (min). Faced with such a substantial delay, many pedestrians select a less adequate gap, run across the roadway, or stand in the center left-turn lane in hope of an additional gap. If a raised median is
placed in the center, the pedestrian now crosses $7.9 \mathrm{~m}(26 \mathrm{ft})$ instead. This requires two 8 second gaps (see figures $12-3$ and 12-4). These shorter gaps come more frequently. Based on traffic volume and the platooning effects from downstream signalization, the pedestrian may be able to find an acceptable gap in a minute or less.

## Medians Are Less Expensive To Build

The reduced construction cost of a median versus a center left-turn lane comes as a surprise to many designers. Grass medians allow natural percolation of water, thus reducing drainage and water treatment costs. Medians do not require a base or asphalt. Curbing is essential in urban sections where medians are typically raised above the level of the street. In general, however, medians average a 5 - to 10-percent reduction in materials and labor costs compared to a center left-turn lane.

## Medians Are Less Expensive To Maintain

While there is only a slight savings in cost to build a raised median versus a center left-turn lane, there is a substantial savings in maintenance. An FDOT study compared 6.4 km ( 4 mi ) of median versus center left-turn lane maintenance costs and found that medians save an average of 40 percent on maintenance costs based on a 20 -year roadway life. More frequent resurfacing, such as every 7 to 9 years, would show much greater savings. This, too, surprises many designers. During the full life of the roadway asphalt, a raised median saves costs associated with sweeping accumulated debris, repainting lines, replacing raised pavement markers, and resurfacing lanes." (FHWA Midblock Crossings 2006)

### 5.6. Concern for "Jaywalking"

Jaywalking is a commonly used term that refers to crossing a street in a manner that violates traffic laws, such as crossing a street midblock where no designated crossing exists, or acting in a reckless manner, such as crossing in front of vehicles and disregarding traffic signals. While walking recklessly is illegal, crossing between signals is allowable in certain circumstances.

The Florida Department of Transportation states that pedestrians may cross midblock under the following circumstances:

- Pedestrians may cross midblock if the nearest intersection does not have a traffic signal.
- Pedestrians may not cross between adjacent signalized intersections.
- Pedestrians must yield to all vehicles on the roadway.
- Pedestrians must cross at right angles to the roadway, or by the shortest route possible to reach the opposite side.


### 5.7. Recommended Alternatives for Further Consideration

## Raised Median Installation

- The implementation of raised medians will provide pedestrians a safe place to stop at the mid-point of the roadway before crossing the remaining distance,
- Studies show that medians reduce pedestrian crashes by 46 percent and motor vehicle crashes by up to 39 percent,
- Medians may decrease delays (by greater than 30 percent) for motorists,
- Medians enhance the visibility of pedestrian crossings, particularly at unsignalized crossing points,
- Medians can reduce the speed of vehicles approaching pedestrian crossings,
- Medians can be used for access management for vehicles (restricting turning movements),
- Medians provide space for supplemental signage on multi-lane roadways.


## Full Traffic Signal with Pedestrian Activation

A signalized intersection at the North Lake Ella and Lake Ella Plaza intersection will provide the following benefits:

- Pedestrians will have the opportunity to activate the traffic light to accomplish a conflict free crossing,
- Persons with limited mobility, such as wheel chair bound individuals, will have curb ramps and other ADA features provided,
- Motorists will have a protected left turn movement from North Lake Ella Drive and the Lake Ella Plaza Shopping Center,
- Motorists will have a protected U-turn movement on northbound and southbound Monroe Street.

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### 6.0 Signal Warrant Analysis

As part of the Median Implementation Plan, two Signal Warrant Studies based on vehicle traffic volume and one Signal Warrant Study based on pedestrian volume were completed. A signal warrant based on vehicle traffic was conducted at the intersections of Lake Ella Drive and Monroe Street and Legion Street and Monroe Street. The results of these studies showed that Lake Ella Drive and Monroe Street met two warrants (peak hour and four hour). Legion Street and Monroe Street passed none of the warrants. The complete signal warrant analysis report for each intersection can be found in Appendix D.

### 6.1. MUTCD (2009) Warrant 4, Pedestrian Volume

The pedestrian volume signal warrant is intended for application where the traffic volume on a major street is so heavy that pedestrians experience excessive delay in crossing the major street (Section 4C.05, P1). One of two requirements must be met in conjunction with an engineering study for need for a traffic control signal at an intersection or at a midblock location.
A. The first condition states that for each of any 4 hours of an average day, the plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings) all fall above the curve in Figure 6.1; (Section 4C.05, P2, A) or
B. For 1 hour (any four consecutive 15 -minute periods) of an average day, the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings) falls above the curve in Figure 6.2; (Section 4C.05, P2, B).

### 6.1.1. Pedestrian Four-Hour Volume

The Lake Ella area did not pass the Pedestrian Four-Hour Volume warrant. The lower threshold volume for this warrant is 107 pedestrians per hour as seen in Figure 6.1. The maximum number of pedestrians per hour observed was 12 as seen in Table 3.1 earlier in this report.


Figure 6.1: Pedestrian Four-Hour Volume

### 6.1.2. Pedestrian Peak Hour Volume

The Lake Ella area did not pass the Pedestrian Peak Hour Volume warrant. The lower threshold volume for this warrant is 133 pedestrians per hour as seen in Figure 6.2. The maximum number of pedestrians per hour observed was 12 as seen in Table 3.1 earlier in this report.


Figure 6.2: Pedestrian Peak Hour

### 6.2. MUTCD (2009) Pedestrian Hybrid Beacons Warrant

A Pedestrian Hybrid Beacon or HAWK, described earlier in this report, is a pedestrian activated signal that can be installed at a midblock location based on evaluation of the needs with respect to the proximity of significant generators, pedestrian demand, pedestrian-vehicle crash history, and the distance between crossing locations. No matter what the oncoming traffic volume or the length of crosswalk is, the lower threshold pedestrian volume is 20 pedestrians per hour (Figure 6.3). The maximum number of pedestrians per hour observed was 12 as seen in Table 3.1 earlier in this report. Based on this analysis, a HAWK is not warranted for the Lake Ella Area.

Figure 4F-1. Guidelines for the Installation of Pedestrian Hybrid Beacons on Low-Speed Roadways


Figure 6.3: HAWK Pedestrian Volume Requirements

### 7.0 Median Design Alternatives

Several alternative median configurations were analyzed during the median implementation study. Each median configuration was developed using the standards from the FDOT Plans Preparation Manual (PPM). A typical section was developed and reviewed by the FDOT early on in the project. The approved typical section includes narrowing the existing 12 foot travel lanes to 11 foot lanes and adding a curb and gutter median. Type "E" or mountable, curb is proposed for the median. The proposed median will consist of a combination of vegetation and hardscape. The proposed typical sections are shown in Figure 7.1 through Figure 7.3.



TYPICAL SECTION
MONROE STREET (US 27)
** TREES, WHERE THE DIAMETER IS OR IS EXPECTED TO BE GREATER THAN 4" (MEASURED 6" ABOVE THE GROUND) SHALL BE LOCATED NO CLOSER THAN 6' FROM THE EDGE OF INSIDE TRAFFIC LANE,PER PPM VOL.I, TABLE $2 . I I .5$


MONROE STREET (US 27)

The final three alternatives that were presented at the November 28 ${ }^{\text {th }}, 2012$ public meeting considered a variety of median opening options.
7.1. Alternative A - Restricted Access at Legion Street / On the Border

Alternative A, Figure 7.4 and Figure 7.5, results in the most restrictive median configuration and contains no median opening across from Legion Street. A full median opening is provided at North Lake Ella Drive / Lake Ella Plaza to accommodate the proposed traffic signal. A directional opening into South Lake Ella Drive for southbound Monroe Street motorists is also provided. A directional opening is provided at 8th Avenue with the appropriate deceleration and queue storage.

### 7.2. Alternative B - Directional Opening at Legion Street / On the Border

Alternative B, Figure 7.6 and Figure 7.7, contains a directional median opening at Legion Street allowing left turns into Legion Street and On the Border Restaurant, but left turn movements out are prohibited. A full median opening is provided at North Lake Ella Drive / Lake Ella Plaza to accommodate the proposed traffic signal. A directional opening into South Lake Ella Drive for southbound Monroe Street motorists is also provided. A directional opening is provided at 8th Avenue with the appropriate deceleration and queue storage.

### 7.3. Alternative C-Full Opening at Legion Street / On the Border

Alternative C, Figure 7.8 and Figure 7.9, is the least restrictive configuration resulting in a full median opening at Legion Street. There are no restrictions to vehicular movements at Legion Street in this configuration. A full median opening is provided at North Lake Ella Drive / Lake Ella Plaza to accommodate the proposed traffic signal. A directional opening into South Lake Ella Drive for southbound Monroe Street motorists is also provided. A directional opening is provided at $8^{\text {th }}$ Avenue with the appropriate deceleration and queue storage.







### 8.0 Public Involvement

The public involvement process for this median implementation study was paired with the overall Monroe Street Median Feasibility Study and goes beyond informing the public about the project process and alternatives being considered. The public had an opportunity to assist the CRTPA in the decision making process. There were multiple opportunities for the public to comment on all aspects of the project and median components throughout the process. The public involvement efforts also allowed the study team to respond to public concerns and incorporate their ideas.

As part of the public involvement process, renderings of potential recommendations at key locations were generated. Renderings of project results proved to be an efficient tool in communicating the potential effects of a median implemented in the Lake Ella area. The renderings depicting the "before and after" scenarios can be seen in Figure 8.1 and Figure 8.2, respectively.

### 8.1. Project Team Meetings

In an effort to ensure seamless communication and efficient coordination, a Project Team was created. The Project Team met on a monthly basis throughout the life of the project. Median concepts and public concerns were discussed at each meeting. Project Team members received information regarding specific updates to the Median Implementation Study, as well as information regarding median implementation in general.

The Project Team consisted of representatives from local organizations, city, county and state government representatives, emergency service representatives, and stakeholders within the project area. A full list of the agencies represented is shown below:

| - City of Tallahassee <br> - FDOT District 3 Planning <br> - Levy Park Neighborhood Association <br> - Lafayette Park Neighborhood Association <br> - Downtown Improvement Authority | - StarMetro <br> - FDOT District 3 Traffic Operations <br> - Midtown Business Association <br> - Community Redevelopment Agency <br> - Tallahassee Fire Department | - FDOT Safety Projects <br> - FDOT District 3 Design <br> - Knight Creative Communities <br> - Tallahassee-Leon County Planning <br> - CRTPA |
| :---: | :---: | :---: |




### 8.2. Project Webpage

The CRTPA maintained a project specific webpage throughout the life of the Median Feasibility Study. The webpage, www.crtpa.org/monroe-median-project.html, provided information regarding the benefits of medians, access management criteria, how access management positively impacts business, and local access management studies.

The project record is also available for review and includes the public meeting information, small group meeting documentation, and the presentations that were given throughout the life of the project. Citizens also had the opportunity to comment, communicate ideas, or voice concerns via the website.

### 8.3. Open House Meetings

Stakeholder and public involvement was a major focus for the Monroe Street Median Feasibility Study. Understanding concerns from the public and specifically, property owners along the facility, was the largest component of the open house meetings. Three open house meetings were held during various stages of the median feasibility study.

The Public Meetings were advertised at least 14 days in advance of the meeting date. Display advertisements were placed in the Tallahassee Democrat and letters were mailed to each business along the corridor with an announcement regarding the meeting purpose, meeting time, location, and a brief description about the project.

### 8.3.1. Meeting \#1

The first public open house was held on March 6 ${ }^{\text {th }}$, 2012 in the City Hall, City Commission Chambers and had 41 attendees. Project information was displayed on static display boards and plan sets depicting the existing conditions were shown with an aerial background. Each business along the corridor was identified and labeled to assist concerned business owners with locating their property. The meeting was advertised in the Tallahassee Democrat on April $28^{\text {th }}$, 2012, a media release was published on March $3^{\text {rd }}$, 2012, and email announcements were provided to those that had requested notification through the project website.

The purpose of Public Meeting \#1 was to introduce the project to the interested stakeholders. The Project Team was able to speak individually with interested parties regarding median location, type, and design. Citizens commented on daily traffic patterns, high pedestrian crossing locations, and the issues that they observe on a daily basis.
8.3.2. Meeting \#2

The second public open house was held on June $28^{\text {th }}, 2012$ in the City Hall, City Commission Chambers and had 25 attendees. Plan sets depicting the proposed median placement for the Lake Ella area were displayed on tables and the participants had the opportunity to edit the proposed medians and place comments or concerns directly on the plan sets. Members of the consultant team and CRTPA staff were available to assist participants and answer any questions. The meeting was advertised in the Tallahassee Democrat on June $22^{\text {nd }}$, and email announcements were provided to those that had requested notification through the project website. Hard copy letters were prepared for distribution to the businesses within the Lake Ella area. These paper notifications were hand delivered to all of the businesses in the area due to a malfunction in the mailing process.

The purpose of the second public meeting was to present the draft location, type, and size of the medians. Those that attended the meeting were given the opportunity to comment on the proposed median design, which was shown on plan sets for the Lake Ella area. Consultant and CRTPA staff members were available to discuss median advantages and disadvantages and discuss alternative median configurations.

### 8.3.3. Meeting \#3

The third public open house was held on November $28^{\text {th }}, 2012$ in the atrium of the Northwood Center and had 29 attendees. The study recommendations were shown on plan sets for the entire corridor. The plans displayed the proposed median placement and recommended median opening configurations. The public had the opportunity to make suggestions to median configurations, and place comments and concerns directly on the plans as well as speak with RS\&H associates and CRTPA staff. The meeting was advertised in the Tallahassee Democrat on November 23rd and email announcements were provided to those that had requested notification through the project website. Hard copy letters were also distributed to the businesses along the corridor.

### 8.4. Small Group Meetings

As part of the involvement effort, a small focus group was created for the Lake Ella Median Implementation Study and the North Monroe portion of the concurrent Median Feasibility Study. Those interested in attending the small group meetings were provided notice of the

IMPROVING YOUR WORLD
meetings via email a few days prior to the meetings. The North Monroe and Lake Ella small group meeting was held on May $16^{\text {th }}, 2012$ and nine people were in attendance.

The meeting opened with a presentation of the project which included updates from the project team meetings and the alternatives presented at those meetings. Concerns were expressed about northbound left turns into the Sonic Restaurant. The Project Team noted that they had not heard from Sonic regarding the median study.

The vehicular access to Legion Street and Lake Ella was also a point of concern. The Project Team explained the FDOT median standards and how median opening spacing is regulated. Concerns were also raised about the volume of pedestrian traffic crossing in the Lake Ella area, especially those using the StarMetro bus stops near Legion Street. The Project Team shared the results of an April $12^{\text {th }}, 2012$ study showing pedestrian crossing locations and the number of pedestrians crossing within the Lake Ella area. Based on the data collected, a mid-block signal would not be warranted.

Bill Ekwall from the Tallahassee Fire Department noted that the medians are not a problem for the fire trucks as long as they are designed properly. He stated the medians that have the rolled curb work for fire truck access while the 4 " curb with the straight face cause issues.

### 8.5. Public Comments

Public comments were accepted throughout the duration of the project. Appendix E contains all of the public comments received throughout the life of the project. A summary of comments is shown in bullet format below:

- Medians will limit vehicular traffic to my business
- Median islands with left turn bays would make the corridor safer
- Any change is vehicular access will hurt my business
- Consider a traffic light at Lake Ella/ Legion Street
- Medians should be landscaped for beautification
- Medians will limit the left turn queuing and block through traffic
- Coordinate with the City on other infrastructure improvements prior to construction
- Raised medians with pedestrian crossings would benefit the Lake Ella area
- Do not alter the access to "The Cottages" at Lake Ella


### 9.0 Preferred Alternative and Implementation Plan

Evaluating the likelihood of an uncontrolled midblock crossing being used once it is marked is difficult. The existing crossing volume may use alternative midblock crossing locations when a new midblock crosswalk is marked. However, with the existing pedestrian traffic, a midblock crossing is not warranted according to the MUTCD or the FDOT Traffic Engineering Manual. A raised median will assist pedestrians in a two stage crossing. A signal warrant study at Lake Ella Drive found that a traffic signal is warranted. This traffic light controlled intersection will provide a closer signal controlled crosswalk than the Tharpe Street intersection, which is an improvement.

The preferred alternative for the Lake Ella area is Alternative B with a directional opening only in front of Legion Street. The businesses on the east and west side of Monroe Street will receive left-in access and right out access. The Preferred Alternative can be seen in Figure 9.1 and Figure 9.2.

A full median opening at Legion Street and On the Border Restaurant was considered, but due to the proximity of the nearest signalized intersection, it was determined that a safer alternative would be directional median opening. Motorists exiting the Legion Street area will have the opportunity to make a right turn, then a U turn at the North Lake Ella signalized intersection.

It is further recommended that additional signage be included as part of the new signalized intersection. To safely perform a U-turn on Monroe Street, motorists must be clear of right-turning vehicles from North Lake Ella Drive and the Lake Ella Plaza Shopping Center. Therefore, a sign stating that right turns must yield the right of way to U-turns should be installed.

Pedestrian timings must also be adjusted to allow for U -
 turning vehicles so that motorists and pedestrian conflicts are avoided.



## Appendix C: Public Comments



# Comment Form <br> Monroe Street Median Feasibility \& Lake Ella Median Implementation Study Public Information Meeting \#1 <br> March 6, 2012 

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.

IT SRR MANY PROBLRMS WITHTHSS PLAN AS
IT APPLSRS TO SOUTK MONROR SOUTH OF TAR RASC ROAD TRACIK, WR ARR ACRUADY SHONT ON SPACR AND ARE DRPRENDRAT OA TAR SOUTA BOUND CANRS
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Comment Form
Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public Information Meeting \#1
March 6, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.



Prone Number $850 \quad 228 \quad 3762$
Email


Please place in the Comment Box or Return by March 14, 2012

To:
Mr. Nick Arnio Reynolds, Smith and Hills, Inc. 1701 Hermitage Blvd.
Suite 101
Tallahassee, FL 32308
Phone:
(850) 558-2800

Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

Capital Region
Transportation Planning Agency
CRIT PA

Comment Form
Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public Information Meeting \#1
March 6, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.
$\qquad$
and tan pause money, It will
$\qquad$
now, I may not make it if you naut traffic
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$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$


Address


City, State, Zip
32303

Phone Number
$850385-2100$
Email
Phone:
Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

Capital region
Transportation Planning Agency
CRITPA

Comment Form
Monroe Street Median Feasibility \& Lake Ella Median Implementation Study Public Information Meeting \#1

March 6, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.

At Lake Ella, Consider a light across Legion Street. It might even be
$\qquad$
Also, please lower the speed
$\qquad$
$\qquad$ sidewalk a foot and revamping
the sidewalks in this area.
$\qquad$
$\qquad$ $\bar{\square}$


Please place in the Comment Box or Return by March 14, 2012

To:
Mr. Nick Arnio Reynolds, Smith and Hills, Inc. 1701 Hermitage Blvd.
Suite 101
Tallahassee, FL 32308
Phone: (850) 558-2800
Fax:
(800) 276-0715

Email:
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Comment Form

Transportation Planning Agency
CRITPA

Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public Information Meeting \#1
March 6, 2012

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Tallahassee has been my home for over 10 years.
Here I finished college and started bussiness. This
town represents many things I imagined capitalism do be...Orrinualy I am from Russia and remember the times when the "man", would make critical desssions for the small/everyday working goy. Recently I have put all of my savings to stat a restaurant on North Monroe. We heavily depend on Northbound traffic, coming from downtown if they cant tum into "The Creperine", I will go broke. And my American Dream will Between $6^{\text {th }}+7^{\text {th }}$ on North Mourree


Please place in the Comment Box or Return by March 14, 2012

To:
Mr. Nick Arnio Reynolds, Smith and Hills, Inc. 1701 Hermitage Blvd.
Suite 101
Tallahassee, FL 32308
Phone: (850) 558-2800
Fax: (800) 276-0715
Email:
Nicholi.Arnio@rsandh.com

Comment Form

Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public Information Meeting \#1
March 6, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.

- Attractive Signage welcoming butt motunisis is
pedestrians into Neighborhoods Along Munres st-
$\qquad$
$\qquad$
$\qquad$
- A water Feature, ie - Large fountain at Some point along Route
$\qquad$
- Dramatic + appealing median Landscaping
$\qquad$
$\qquad$ myrtles

Address $\qquad$
City, State, Zip
32308
Phone Number
545-9836
Email $\qquad$

Please place in the Comment Box or
Return by March 14, 2012
To:
Mr. Nick Arno Reynolds, Smith and Hills, Inc. 1701 Hermitage Blvd.
Suite101
Tallahassee, FL 32308
Phone:
Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

Capital Region
Transportation Planning Agency
CRTPA

Comment Form
Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public Information Meeting \#1
March 6, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.
$\qquad$
I am the land lord of $1304+1318$
N. Monroe and a median would distroy my tenants (Cropevine, Sakura, Krewe de Eras, J. Michaels, Urban Threads and other surrounding users including BambooHouset House of style.

In also redeveloping 1307 N. Mon roe into 5 retail bays that also need 2 way access,
midtown is the only positive growth area dont change what is working.


Please place in the Comment Box or Return by March 14, 2012

To:
Mr. Nick Arno Reynolds, Smith and Hills, Inc. 1701 Hermitage Blvd.
Suite 101
Tallahassee, FL 32308
Phone:
(850) 558-2800

Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

## Comment Form

Monroe Street Median Feasibility \& Lake Ella Median Implementation Study Public Information Meeting \#1

March 6, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.

$\qquad$


Please place in the Comment Box or
Return by March 14, 2012
To:
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Reynolds, Smith and Hills, Inc.
1701 Hermitage Blvd.
Suite 101
Tallahassee, FL 32308
Phone: (850) 558-2800
Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

Capital Region
Transportation Planning Agency
(

Comment Form
Monroe Street Median Feasibility \& Lake Ella Median Implementation Study Public Information Meeting \#1 March 6, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.
$\qquad$
$\qquad$ a roused median with dedicated pedestrian aossing/retuge at or near Lake Ella.

of either a pedestrian octivated crossing beacon)
$\qquad$


ized pedestrian crossing in this location would significantly increase pedestrian and commercial detivity al both sides of


Please place in the Comment Box or
Return by March 14, 2012
To:
Mr. Nick Arnio
Reynolds, Smith and Hills, Inc.
1701 Hermitage Blvd.
Suite 101
Tallahassee, FL 32308
Phone:
Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

Comment Form
Monroe Street Median Feasibility \& Lake Ella Median Implementation Study Public Information Meeting \#1 March 6, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.

I am opposed to the idea of Medians on north morose between $5^{\text {th }}: 7^{\text {th }}$ Hue. the traffic that turns left off monroe conto Lith is very busy; the turning lane often backs up to $7^{\text {th }}$ Ave. Also, many small businesses just moved to the area trying to create a unique midtown area. These medians could potencidly cripple the growth of twat we are all trying to create. most of our small businesses twould tumble with the loss of business for eden a couple weeks. The road construction that happened on Gaines st put may businesses out of business : many others are holdingon
by a thread.
Name Michelle Torregrosa

| Address 1300 N. Monroe St. |
| :--- |
| City, State, zip Tallahassee FL 32303 |
| Phone Number $850-580-666 \mathrm{Z}$ |
| Email divasand devilse gmail.com |

Please place in the Comment Box or
Return by March 14, 2012
To:
Mr. Nick Arnio Reynolds, Smith and Hills, Inc. 1701 Hermitage Blvd. Suite 101
Tallahassee, FL 32308
Phone:
(850) 558-2800

Fax:
Nicholi.Arnio@rsandh.com

#  <br> CRIT PA 

## Comment Form

## Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

I'm am requesting that the City of Tallahassee and all others involved with the Median Project on Monroe, would consider NOT altering or changing the access (northbound and southbound) that property known as The Cottages at Lake Ella and the businesses known as On The Border, Golden Corral, U-Haul and Sonic currently have.

I am fortunate to be part owner of this property. My grandfather, Gilbert Sewell Chandler, Sr., purchased this property in the 1920's and built the lovely cottages that generations of family have enjoyed as their "home away from home" when it was a tourist camp. Then our family made the decision to try and share this wonderful location as a unique shopping center. We are privileged to have some of the most incredible independent business owners in the Tallahassee area as our tenants. Any changes to the access to this unique shopping location could most definitely affect these businesses in the most detrimental way. Access is critical.

The same situation exists on the west side of Monroe Street where our tenants currently have northbound and southbound access. These restaurants cater to large parties often using buses as their mode of transportation. Access is critical-U-turns are NOT feasible for these tenants.

I implore you to please make absolutely no changes to this stretch of Monroe Street, from $7^{\text {th }}$ Avenue to Tharpe Street. These businesses and our livelihood will not survive. This decision will have a direct negative impact on the future of these businesses.

If you must make any changes to this section of Monroe, please, please only consider alternative plan C .

Virginia Chandler Weeks 1101 Hays Street Tallahassee, FL 32301


Transportation Planning Agency
( ) D

Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered. It is my understanding that the city of Tallahrsie intends to create a median from pith ave
to ike calla drive in order to lon al increase pedestrian
 the leglorstr. Region Reponedly, thane is nosiudy deryonsinativg a cuspest problem with accidents in this a sea. Pedenncian have wafer Acred do hakealla via the hanafic light is 7 th sue and other sonnets.

The Lake flo cottier has a Rich history seaviap the Community vie multiple fruity owned busimesres. Doer the city unsent to deviroy these companove by resineratims access? This req has become syn omprouir with beauty and Thllaborvec Charm, I helene the unintended cionseguencer will have winch A deleterious input tr to vephtivh ALe this Invarcope toreven. Pest necouviden these phons.

Please Print


Please drop in the Comment Box or return to:
Mr. Nick Amnio Reynolds, Smith and Hills, Inc.

Address: 1701 Hermitage Blvd. Ste., 101 Tallahassee, FL 32308
Phone: (850) 558-2800
Fax: (800) 276-0715

City / State / Zip:

Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.

FOR The Past 25+ years our family has
INVESTED OUR PROPERTY WITH THE SMAL BUSINESS (MOM + POP) TENANTS, WE HAVE AT THE COTTAGES AT LAKE ELLA. WE CANNOT ALLOW
$\qquad$ CUSTOMERS TO BE ALTER IN ANY WAYTHEY WIN NOT SURVIVE. PLEASE DO NOT
$\qquad$ FROM THARPE STREET TO ETh AVENUE.
$\qquad$
$\qquad$
$\qquad$

Please Print
Name: Beulah M. Chandler

Address:
$\qquad$ 2004 WINTHROP WAY Taulhashee, Fl.


City / State / Zip:

Please drop in the Comment Box or return to:
Mr. Nick Arno Reynolds, Smith and Hills, Inc.

Address: 1701 Hermitage Blvd. Ste., 101
Phone: (850) 558-2800
Fax: (800) 276-0715

Comment Form

Transportation Planning Agency
CRTPA

Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.

I understand that the City of Tallahassee is planning to put medians dour momoe Street from $8^{\text {th }}$ to Thorpe. These changes will decrease traffic into locally owned stores and read to the deteriation of the shops at lake Ella. If you must make changes, I vil support plan "C" anode would love a pedestiom walkway for customers to would over from Golden Corral of On The Border.
$\qquad$
$\qquad$

Please Print


Address:S06 Collins Drive
$\qquad$
City / State / Zip: TaMahasser, FL

Please drop in the Comment Box or return by December 10, 2012 to:

Mr. Nick Arno Reynolds, Smith and Hills, Inc.

Address: 1701 Hermitage Blvd. Ste., 101 Tallahassee, FL 32308
Phone: (850) 558-2800
Fax: (800) 276-0715

Comment Form
Monroe Street Median Feasibility \& Lake Ella Median Implementation Study Public Information Meeting \#3 November 28, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.
As the owner of a business at late Ella for 23 years, I am very concerned about access to the businesses at Lake Ella and to the Park. Every day we get customers who drive by,
see something of interest and poll in to shop. If there is no access torn lane from southbound traffic, T will most certainly lose business. In a dilution to my oun concerns for my financial stability. I see that Lake Ella Park is a beloved park and a central place in our community or people to meet, walk, picnic + play. We should
not limitaccessibility from any direction.

to our community and my businesse t the


Em en wend aquarternoon imports. con

Comment Form

Compansacton Planning Agency
CRTPA

Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public Information Meeting \#3
November 28, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.
 monroe st ont Legion. A solid median would restrict this access and would be detrimental to the locally owned business at Lake Ella.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
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Please place in the Comment Box or
Return by December 10, 2012
To:
Mr. Nick Arnio
Reynolds, Smith and Hills, Inc. 1701 Hermitage Blvd.
Suite 101
Tallahassee, FL 32308
Phone:
(850) 558-2800

Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

Comment Form

Transportation Planning Agency
CRTPA

Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public Information Meeting \#3
November 28, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.


Morroestrect Revisions. Monroe Street has

$\qquad$
$\qquad$
$\qquad$


Phone Number \& $850-385-4331$
Email minowingtonosohoo.com

Please place in the Comment Box or Return by December 10, 2012

To:
Mr. Nick Arno
Reynolds, Smith and Hills, Inc. 1701 Hermitage Blvd.
Suite 101
Tallahassee, FL 32308
Phone: (850) 558-2800
Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

Contra beach
Transportation Planing Agency
CRTDA

Comment Form
Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public Information Meeting \#3
November 28, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.
I am writing to express my opine abut the median project on roth monroe, where of support the melian
do not support Plan $A$ which restricts Southbound lift turn oo to Leger Street. say this because such a restriction would purely limit access to Toke rel and the busonemes that purrould it.
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Please place in the Comment Box or
Return by December 10, 2012
To:
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Return by December 10, 2012
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Email:
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Co nd
Transportation Planning Agency
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Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public Information Meeting \#3
November 28, 2012

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$\qquad$
$\qquad$

Mane JEFFREY MANDE
addresses. 1641 LAKKEEUA $P R$.
city, State, Zip TALLAHASSEE FL 32303
Phone Number $850391-9320$
Email SENDME@ARIDICULOUS:COM

Please place in the Comment Box or
Return by December 10, 2012
To:
Mr. Nick Arno Reynolds, Smith and Hills, Inc. 1701 Hermitage Blvd.
Suite 101
Tallahassee, FL 32308
Phone:
Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

Comment Form

Transportation Planing Agency
CRTPA

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November 28, 2012

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Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

Conical lego
Transportation Planning Agency
CRTPA

Comment Form
Monroe Street Median Feasibility \& Lake Ella Median Implementation Study Public Information Meeting \#3

November 28, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.
$\qquad$
median ow North Morroe near lake Ella for pedestrian
However, I advocate that the median project allow for both worth and south-bornd
turns int Lake Ella and The Cottages via
Legion drive
We can definitely support the goals of pedestrian safety, movement of traffic, and access to local businesses simultaneously.
thank you.
$\qquad$
$\qquad$



Please place in the Comment Box or
Return by December 10, 2012
To:
Mr. Nick Arnio
Reynolds, Smith and Hills, Inc. 1701 Hermitage Blvd.
Suite 101
Tallahassee, FL 32308
Phone: (850) 558-2800
Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

## Arnio, Nicholi

From:
Sent:
To:
Cc:
Subject:

Burke, Greg [Greg.Burke@talgov.com](mailto:Greg.Burke@talgov.com)
Wednesday, November 28, 2012 12:50 PM
'Delaney, Kristina'
Chung, Suzanne; Reed, Harry; Arnio, Nicholi
RE: Walgreens \#3374 Tallahassee, FL - Monroe Street Median Feasibility and Lake Ella median Implementation study

Hi Kristina. I will make sure that my agency keeps you informed regarding the status of this project. For your information, we have added a project page to the agency's website that is updated as the study progresses (http://www.crtpa.org/Monroe Median Project.html).

Sincerely,

Greg T. Burke, AICP
Transportation Planner
Capital Region Transportation Planning Ageney
408 N. Adams Street, 4th Floor
Tallahassee, FL 32301
850/891.6802 Fax/891.6832
Email: greg.hurke@talgov.com
web site: www.crtpa.org

Mailing Address:
300 S. Adams Street, M.S. A-19
Tallahassee, FL 32301

From: Delaney, Kristina [mailto:kristina.delaney@walgreens.com]
Sent: Wednesday, November 28, 2012 12:25 PM
To: Burke, Greg
Cc: Chung, Suzanne
Subject: Walgreens \#3374 Tallahassee, FL - Monroe Street Median Feasibility and Lake Ella median Implementation study

Hi, Greg,

Following our telephone conversation earlier, please keep up informed periodically about the status of this project. Thank you.

Be well,
Kristina
Kristina Delaney
Walgreen Co.
104 Wilmot Road, MS\#1420
Deerfield, IL 60015
p 847-315-4658
f 847-315-4825
(0)

Every day I helpp piecole get, stay and live well.
This e mail message, includirg attachme nts, may contain information that is proprietary, conf ilent ial, privileged and/orexempt fromdisclos ure. Please hold it in confide re to protect privilege and confide ntiality. If you are not the intended recipient, then please not ify the se marand de lete this message . Any viewing, copying, publishing, disclos ure, distribution ofthis information, orthe taking of any action inreliance on the contents oft his message by unintended rec ipients is prohibited and may constitute aviolation of the Electronic co mmunikatiors Privacy Act. Unintendedtrarsmissiondoes not cre ate an attomey-client relatiorshiporconstitute wainerofany kgal privile ge.

## Arnio, Nicholi

## From:

## Sent:

To:
Subject:
Attachments:

Burke, Greg [Greg.Burke@talgov.com](mailto:Greg.Burke@talgov.com)
Wednesday, November 28, 2012 12:16 PM
Arnio, Nicholi
FW: Median Project at Lake Ella
median.jpg
-----Original Message-----
From: Mitchell, Yulonda
Sent: Wednesday, November 28, 2012 12:10 PM
To: Burke, Greg
Subject: FW: Median Project at Lake Ella

Yulonda Mitchell
Capital Region Planning Agency
Mailing Address: 300 South Adams Street, Box A-19 Physical Address: 408 North Adams Street Tallahassee, FL 32301
Phone: 850.891.6800
Fax: 850.891.6832
-----Original Message-----
From: Ingram, M'Lisa
Sent: Wednesday, November 28, 2012 11:20 AM
To: Reed, Harry
Cc: Mitchell, Yulonda
Subject: FW: Median Project at Lake Ella

FYI
------Original Message-----
From: Wendy [mailto:wendy@quartermoonimports.com]
Sent: Tuesday, November 27, 2012 4:57 PM
To: Gillum, Andrew; Miller, Nancy; Ziffer, Gil; Marks, John
Cc: Minor, Rick
Subject: Median Project at Lake Ella

Dear Commisioners and Rick Minor,
I am writing to ask your support in advocating for an opening in the planned Monroe Street median at Lake Ella. I am concerned that if or when the state gains control of the project, their goal will be to move traffic swiftly rather than preserve public access to one of the most beloved parks in our city. Monroe Street is more than a highway. It is the artery connecting neighborhoods to each other and people to local businesses and the beloved Lake Ella Park. The businesses at Lake Ella would be impacted severely if there was not access from southbound traffic. Please see the attached draft of Plan A. Please help us at the CRTPA meeting tomorrow (Wednesday 11/28 at the Northwood Centre Atrium, 1940 N. Monroe from 5pm-7pm. ) We are collecting comment forms from our customers and staff, but we know that we need your voice to address the state. Please help us to preserve easy and safe access to Lake Ella.

I have attached a copy of Draft of Plan A. This would be the worst case scenerio.

There are other options (Plan C is preferred with Plan B as a second) we would support that allow access from both traffic directions.

Thank you,
Wendy Halleck
Quarter Moon Imports@talgov.com
1641 N. Monroe
Tallahassee Florida 32303
Shop (850) 222-2254
Cell (850) 222-2254
www.quartermoonimports.com

Coridmegon
Transportation Planning Agency
CRTPA

## Comment Form <br> Monroe Street Median Feasibility \& Lake Ella Median Implementation Study <br> Public Information Meeting \#3 <br> November 28, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.

Monroe Steet is not a highway, it is a major street that connects neighborhoods to the most central and beloved park of Tallahassee and many long established locally owned businesses.

We oppose any plan that limits access to Lake Ella or the businesses located there. We feel that making pedestrian traffic safer is great, but we simply oppose a median that does not
allow entry access to Lake Ella and to local businesses from both directions of traffic. We prefer other plans, which include Medians, but which allow access from both the north and south
directions of traffic. We also feel that Lake Ella truly is a beautiful centerpiece to our town. We should not impede people from easy and safe access. We are frequent customers of the local
businesses that surround Lake Ella and the Wednesday Farmer's Market and we also love to visit the park itself. Please consider incorporating a plan that takes these issues into account.

Thank you for your time and efforts to make Tallahassee a better, safer, and small business friendly city!


## ATTACHMENT 2

## LAKE ELLA IMPLEMENTATION STUDY

NOTE: Attachment 2 can be viewed on the agency's website (www.crtpa.org) included as part of the Board Meeting's agenda PDF file. The Lake Ella Implementation Study contains 403 pages.

## Lake Ella

## Median Implementation Study



This study was completed for:


The Capital Region Transportation Planning Agency
(CRTPA)
By:

January 2013

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## Executive Summary

This study examines the safety of the existing roadway features relative to pedestrian crossings along Monroe Street in the Lake Ella area. Marked and unmarked crosswalks, as well as other improvements, such as pedestrian activated signals and median improvements will be considered to improve pedestrian safety. Midblock crosswalks are intended to improve pedestrian connectivity and reduce instances of pedestrians crossing at random, unpredictable locations.

Evaluating the likelihood of an uncontrolled midblock crossing being used once it is marked is difficult. The existing crossing volume may use alternative midblock crossing locations when a new midblock crosswalk is marked. However, with the existing pedestrian traffic in the Lake Ella area, a midblock crossing is not warranted according to the Manual of Uniform Traffic Control Devices (MUTCD) or the Florida Department of Transportation (FDOT) Traffic Engineering Manual. However, the implementation of a raised median will assist pedestrians in a two stage crossing. A signal warrant study at North Lake Ella Drive found that a traffic signal is warranted. This signal controlled intersection will provide a closer signalized crosswalk than the Tharpe Street intersection, which is an improvement for pedestrians.

The preferred alternative for the Lake Ella Area is Alternative B, shown in Figure 0.1 and Figure 0.2, with a directional opening only in front of Legion Street. The businesses on the east and west side of Monroe Street will receive left-in access but with only right out.

A full median opening at Legion Street and On the Border Restaurant was considered, but due to the proximity of the nearest signalized intersection, it was determined that a safer alternative would be a directional median opening. Motorists exiting the Legion Street area will have the opportunity to make a right turn, then a U-turn at the North Lake Ella signalized intersection.

It is further recommended that additional signage be included as part of the new signalized intersection. To safely perform a U-turn on Monroe Street, motorists must be clear of rightturning vehicles from North Lake Ella Drive and the Lake Ella Plaza Shopping Center. Therefore, a sign stating that right turns must yield the right of way to U-turns should be installed.

Pedestrian timings must also be adjusted to allow for U-turning vehicles so that motorists and pedestrian conflicts are avoided.



### 1.0 Introduction

The Lake Ella area is a robust activity center for pedestrian and bicycle activity. The amenities include a 12 foot wide walking path around the lake, picnic pavilions and picnic tables, public restrooms and a playground area. Parking for vehicular access can be found at cluster locations around the lake and in the form of parallel parking on Lake Ella Drive surrounding the lake.

This study examines the safety of the existing roadway features relative to pedestrian crossings. Marked and unmarked crosswalks, as well as other improvements such as pedestrian activated signals and median improvements, will be considered to improve pedestrian safety. Midblock crosswalks are intended to improve pedestrian connectivity and reduce instances of pedestrians crossing at random, unpredictable locations. A location map can be seen in Figure 1.1.

The need for refuge areas is related to street widths, pedestrian walking speed, and vehicle gaps. This study includes detailed information including; crash history, pedestrian and traffic volumes, number of lanes, speed limit, type of median, type and condition of crosswalk markings, and crosswalk locations. Basic traffic engineering principals and intersection design procedures were applied to enhance the safety of pedestrians while balancing the mobility of the motoring public.

1.1. Previous Studies

Previous studies have identified a need for improved pedestrian safety in the Monroe Street area near Lake Ella. The FSU Department of Urban and Regional Planning (DURP) completed the North Monroe Design and Safety Study, which provided an evaluation of existing conditions in the Lake Ella area, from $7^{\text {th }}$ Avenue to Tharpe Street, as well as recommendations for improved pedestrian and bicycle safety.

Existing Conditions:

- Dual left turn lanes (center turning lane) cause hazards for pedestrians and drivers
- Lack of crosswalks at almost every side street in the area, including the Lake Ella entrance, reduces connectivity for pedestrians
- Long stretches between traffic signals and lack of pedestrian crossing distance between some intersections
- Lack of midblock crossing to Lake Ella increases risk of pedestrians being struck by automobiles when trying to access the park between Tharpe Street and $7^{\text {th }}$ Avenue.

Recommendations:

- Reduce automobile lanes from 12 -feet to 11 -feet to accommodate medians, buffers and sidewalk width improvements
- Raised medians with landscaping to improve safety and aesthetics
- Pedestrian midblock crossing at Lake Ella

Previous studies have identified a need for a midblock crossing at Lake Ella. This study analyzes potential treatments and implementation strategies. Treatments considered include installation of a median, installation of a mid-block crosswalk with a painted crosswalk and advanced signage to alert motorists, as well as the installation of a pedestrian activated signal, such as the High-Intensity Activated crossWalK beacon (HAWK.).

In recent years, there has been much debate surrounding the safety implications of marking crosswalks at uncontrolled intersections. Previous research results were contradictory in terms of whether pedestrian vehicle crashes were occurring with more, less, or the same frequency at marked and unmarked crosswalks. The contradictory

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findings can be attributed to limitations of the research project designs, which contained many confounding variables and small, potentially biased sample sizes and sites.

Previous research has found the following:

- The presence of a median decreased the pedestrian crash risk;
- Marked crossings had a higher incidence of pedestrian crashes on multi-lane (4 or more lanes) roads with high average daily traffic (ADTs);
- Marked and unmarked crossings had similar incidences of pedestrian crashes on all $2^{-}, 3$-, and multi-lane roads with lower ADTs;
- Pedestrians ages 65 and above were over represented in crashes;
- The installation of marked crossings did not alter motorist behavior (e.g., stop or yield to pedestrians) or pedestrian behavior (e.g., crossing without looking).
- An overall higher risk as the number of lanes or ADT rate increases regardless of markings;
- Recognition that multi-lane roadways with high ADT rates represent the most difficult scenarios for pedestrian crossings, and
- The fact that marked crossings draw pedestrians to cross in that location, particularly in areas where the crossing is perceived to be difficult.


### 2.0 Existing Conditions

Monroe Street in the Lake Ella area is a 5 lane roadway with a Two-Way Left-Turn Lane (TWLTL) where there are not dedicated left turn lanes. There are no raised medians. The posted speed limit is 35 mph . The existing lane configuration can be seen in Figure 2.1and Figure 2.2.


Figure 2.1: Sample of Lane Configuration; Lake Ella Drive


Figure 2.2: Sample of Lane Configuration; Legion Street

### 2.1. Nearest Crossing Locations

The current crossing locations exist at $7^{\text {th }}$ Avenue and Tharpe Street. Both locations consist of signalized intersections, marked crosswalks and pedestrian activated crossing signals. The distance between $7^{\text {th }}$ Avenue and Tharpe Street is approximately 2,500'.

### 2.2. Access Management Classification

Access management is practiced to improve the safety of a roadway or corridor by reducing the number of conflict points a vehicle can encounter and balance it with mobility. A conflict point is a location where two vehicles' paths can legally cross. For example, any time a left turning vehicle must cross an opposing lane to complete its turning movement, it has the potential to conflict with through moving vehicles. If the number of times a vehicle can come into conflict with another is reduced, the overall roadway safety is increased.

The proposed median improvements for Lake Ella area most closely represent a Class 5 roadway which allows for full median openings every 1,320 feet and directional median openings every 660 feet. Table 2.1 lists all roadway classifications as recommended by FDOT.

Table 2.1: Rule 14-97 of the Florida Administrative Code

| Access Class | Median | Median Opening Spacing Standard (feet) |  | Signal Spacing <br> Standard (feet) | Connection Spacing Standard (feet) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Full | Directional |  | Posted Speed Greater than 45 MPH | Posted Speed of 45 MPH or Less |
| 2 | Restrictive | 2,640 | 1,320 | 2,640 | 1,320 | 660 |
| 3 | Restrictive | 2,640 | 1,320 | 2,640 | 660 | 440 |
| 4 | Non-Restrictive | - | - | 2,640 | 660 | 440 |
| 5 | Restrictive | 2,640 <br> at greater than 45 <br> MPH posted speed <br> 1,320 <br> at 45 MPH or less <br> posted speed | 660 | 2,640at greater than 45MPH posted speed $\|$1,320 <br> at 45 MPH or less <br> posted speed | 440 | 245 |
| 6 | Non-Restrictive | - | - | 1,320 | 440 | 245 |
| 7 | Both Median Types | 660 | 330 | 1,320 | 125 | 125 |

### 3.0 Data Collection

### 3.1. Pedestrian Demand

A pedestrian volume count study was performed on Thursday, April 12, 2012, from 10:30 AM to 4:30 PM. Pedestrians that crossed Monroe Street between 8th Avenue and Tharpe Street were documented, as well as their approximate crossing location. The weather conditions were dry and sunny with a high level of activity observed at the Lake Ella park facilities. The hourly pedestrian activity observed is shown in Table 3.1 and the pedestrian volume and approximate crossing locations is shown in Figure 3.1. Appendix A contains pedestrian count raw data.

Table 3.1: Pedestrian Data

| Starting <br> Time | Number <br> of Ped. | Number of Ped. <br> Per Hour |
| :---: | :---: | :---: |
| $10: 30$ | 1 |  |
| $10: 45$ | 4 |  |
| $11: 00$ | 1 |  |
| $11: 15$ | 2 | 8 |
| $11: 30$ | 1 | 8 |
| $11: 45$ | 1 | 5 |
| $12: 00$ | 3 | 7 |
| $12: 15$ | 4 | 9 |
| $12: 30$ | 1 | 9 |
| $12: 45$ | 2 | 10 |
| $13: 00$ | 1 | 8 |
| $13: 15$ | 2 | 6 |
| $13: 30$ | 2 | 7 |
| $13: 45$ | 2 | 7 |
| $14: 00$ | 1 | 7 |
| $14: 15$ | 1 | 6 |
| $14: 30$ | 6 | 10 |
| $14: 45$ | 3 | 11 |
| $15: 00$ | 2 | 12 |
| Total | 40 |  |

*Italicized number indicates an interpolated value due to a break in data collection

The FDOT Traffic Engineering Manual Section 3.8.5(3) describes the pedestrian volume demand required to warrant a midblock crossing. A minimum of 20 pedestrians during any four consecutive 15-minute periods and a minimum of 60 pedestrians during any 4 hours of the day, not necessarily consecutive hours, are required. No hours of traffic met or

surpassed 20 pedestrians per hour or 60 pedestrians during any 4 hours of the day. The MUTCD Pedestrian Volume Signal Warrant is also discussed in detail later in this report.


Figure 3.1: Pedestrian Crossing Locations in the Lake Ella Area

### 3.2. Vehicle Gap Size Study

A vehicle gap size study was completed on Thursday, April 12, 2012. This type of study is used to determine the size and frequency of gaps in vehicular traffic to facilitate safe and adequate pedestrian crossings. Data was collected for four time periods, each time period corresponding to the Pedestrian Volume Count Study that was completed concurrently. Table 3.2 contains a summary of the gap size data collected. Appendix A contains the gap size raw data.

Table 3.2: Gap Size Summary

| Adequate <br> Gap Size <br> $(\mathrm{s})$ | Number of Gaps |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $10: 30 \mathrm{AM}-$ <br> $11: 30 \mathrm{AM}$ | $11: 30 \mathrm{AM}-$ <br> $12: 30 \mathrm{PM}$ | $12: 30 \mathrm{PM}-$ <br> $1: 30 \mathrm{PM}$ | $1: 30 \mathrm{PM}-$ <br> $2: 30 \mathrm{PM}$ | Total |
| 8 | 5 | 1 | 2 | 4 | 12 |
| 9 | 3 | 0 | 3 | 1 | 7 |
| 10 | 1 | 0 | 1 | 1 | 3 |
| 11 | 4 | 1 | 1 | 2 | 8 |
| 12 | 2 | 1 | 0 | 1 | 4 |
| 13 | 1 | 0 | 0 | 0 | 1 |
| 14 | 1 | 1 | 0 | 1 | 3 |
| 15 | 2 | 0 | 0 | 0 | 2 |
| 16 | 1 | 0 | 0 | 0 | 1 |
| 17 | 0 | 1 | 0 | 0 | 1 |
| 18 | 0 | 0 | 0 | 0 | 0 |
| 19 | 0 | 0 | 0 | 0 | 0 |

The crossing distance is currently 65 feet across the four travel lanes and two-way left-turn lane and, with no median refuge, pedestrians are required to cross the entire facility. An adequate gap was determined to be 19 seconds, which would allow a pedestrian with an average speed ( 3.5 feet per second) to safely cross Monroe Street. No gap size recorded met the required 19 seconds to cross Monroe Street in one attempt.

It was observed, however, that all crossing pedestrians did so in a two stage process, crossing two lanes of oncoming Monroe Street traffic and then waiting in the two-way leftturn lane until the opposing two lanes of Monroe Street became free of traffic. The addition of a raised median in the Lake Ella area would provide the existing pedestrian traffic a safer refuge while crossing Monroe Street. Drivers along Monroe Street would be more alert and less surprised to the presence of pedestrians crossing in two stages.

### 3.3. Traffic Volumes

The 2011 average annual daily traffic (AADT) along the proposed crossing location is 35,500 vehicles per day as recorded by the Florida Transportation Information (FTI) 2011 DVD. The FTI AADT Report is in Appendix B.

### 4.0 Crash Analysis

### 4.1. Crash Data Collection

The City of Tallahassee Police Department (TPD) provided historic crash data for a one year period from September 27, 2011 and ending September 26, 2012 for the study area from East $7^{\text {th }}$ Avenue to Tharpe Street. Crash records reported by police on "Long Forms" were requested for all crashes that resulted in a vehicle being towed away, personal injury, or the death of a motorist, pedestrian, or bicyclist. They can be found in Appendix C. The Long Forms provided by the police department allow analysts to more accurately identify crash locations and causal factors of each crash. It was noted that this section of roadway reported 683 crashes over a five-year period, which is approximately 136 crashes per year, as opposed to the 53 Long Forms obtained from the TPD. This discrepancy in the data can be attributed to crashes that did not result in a vehicle being towed away, personal injury, or the death of a motorist, pedestrian, or bicyclist.

The following sections describe the basic data analysis and include tables and diagrams of the crashes at each intersection within the study corridor.

### 4.2. Crash Data Analysis

The crash data was catalogued by location, crash type and severity. The severity of each crash was categorized as "PDO", "non-fatal", and "fatal". PDO indicates a property damage only crash. Table 4.1 shows that there were a total of 53 crashes over the 1-year period. Forty-four (44) were PDO crashes. Nine (9) crashes incurred non-fatal injuries. No fatal crashes were recorded during observation period within the study limits. Also, no crashes involved pedestrians were identified. Figure 4.1 displays the crash severity of each incident and location by intersection.

Table 4.1: Crash Severity by Intersection

| Intersection | Crash Severity |  |  | Total |
| :--- | :---: | :---: | :---: | :---: |
|  | PDO | Non-Fatal | Fatal |  |
| 7th Avenue | 10 | 1 | 0 | 11 |
| 8th Avenue | 8 | 1 | 0 | 9 |
| Legion Street | 4 | 0 | 0 | 4 |
| Lake Ella Drive | 11 | 1 | 0 | 12 |
| Publix N. Entrance | 3 | 0 | 0 | 3 |
| Tharpe Street | 8 | 6 | 0 | 14 |
| Total | 44 | 9 | 0 | 53 |



Figure 4.1: Crash Severity by Intersection

### 4.2.1. Crashes by Intersection and Type

Collision diagrams were plotted by location on aerial maps. Figure 4.2 and Figure 4.3 are the crash diagrams representing the project study limits. The crash locations on the following pages are based on the accuracy of the crash reports and are open to interpretation based on the police officer's description of the incident. When conflicting information was presented in the crash reports, the crash diagram was used when sufficient information was provided in that section. Each intersection within the study limit's crash experience is summarized in the following paragraphs.



The intersection of $7^{\text {th }}$ Avenue and Monroe Street experienced a total of 11 crashes. Table 4.2 displays the number of crashes by type. The majority of crashes were rear end crashes, which, occur frequently at signalized intersections due to the fact that traffic signals interrupt the flow of traffic.

Table 4.2: $7^{\text {th }}$ Avenue Crashes

| Crash Type | Amount |
| :---: | :---: |
| Rear End | 5 |
| Side Swipe | 2 |
| HUP | 0 |
| Angle | 3 |
| Left Turn | 1 |
| Bicycle | 0 |
| Right Turn | 0 |
| Total | 11 |

The intersection of $8^{\text {th }}$ Avenue and Monroe Street experienced a total of 9 crashes. Table 4.3 displays the number of crashes by type.

Table 4.3: $8^{\text {th }}$ Avenue Crashes

| Crash Type | Amount |
| :---: | :---: |
| Rear End | 5 |
| Side Swipe | 1 |
| HUP | 0 |
| Angle | 0 |
| Left Turn | 3 |
| Bicycle | 0 |
| Right Turn | 0 |
| Total | 9 |

The intersection of Legion Street and Monroe Street experienced a total of 4 crashes. Table 4.4 displays the number of crashes by type.

Table 4.4: Legion Street Crashes

| Crash Type | Amount |
| :---: | :---: |
| Rear End | 2 |
| Side Swipe | 1 |
| HUP | 0 |
| Angle | 0 |
| Left Turn | 1 |
| Bicycle | 0 |
| Right Turn | 0 |
| Total | 4 |

The intersection of Lake Ella Drive and Monroe Street experienced a total of 12 crashes. Table 4.5 displays the number of crashes by type.

Table 4.5: Lake Ella Drive Crashes

| Crash Type | Amount |
| :---: | :---: |
| Rear End | 3 |
| Side Swipe | 4 |
| HUP | 2 |
| Angle | 1 |
| Left Turn | 1 |
| Bicycle | 0 |
| Right Turn | 1 |
| Total | 12 |

The Publix North Entrance is primarily a right-in right-out driveway. It experienced a total of 3 crashes. Table 4.6 displays the number of crashes by type.

Table 4.6: Publix N. Entrance

| Crash Type | Amount |
| :---: | :---: |
| Rear End | 2 |
| Side Swipe | 1 |
| HUP | 0 |
| Angle | 0 |
| Left Turn | 0 |
| Bicycle | 0 |
| Right Turn | 0 |
| Total | 3 |

The intersection of Tharpe Street and Monroe Street and the area just south of the intersection experienced a total of 14 crashes. Table 4.7 displays the number of crashes by type.

Table 4.7: Tharpe Street Crashes

| Crash Type | Amount |
| :---: | :---: |
| Rear End | 7 |
| Side Swipe | 2 |
| HUP | 1 |
| Angle | 1 |
| Left Turn | 2 |
| Bicycle | 1 |
| Right Turn | 0 |
| Total | 14 |

### 5.0 Overview of Alternatives Considered

### 5.1. Full Traffic Signal with Pedestrian Activation

An additional full traffic signal within the Lake Ella area would stop all vehicular traffic on Monroe Street when activated by a pedestrian. A detailed signal warrant can be found in Section 6.0: Signal Warrant Analysis.

### 5.2. High-Intensity Activated crossWalK beacon (H.A.W.K)

Also known as the Pedestrian Hybrid Beacon, the HAWK is used on a complex, high volume roadway with a high volume of pedestrian traffic. The HAWK is a pedestrian activated signal that is only enabled when a pedestrian is present. The mast arm mounted signal has a unique signal head configuration: two red lenses over a single yellow lens. Ladder-style markings designate the pedestrian crosswalk as seen in Figure 5.1. When a pedestrian activates the signal via a push-button, the light begins to flash yellow. Then a solid yellow light warns vehicles to slow down and stop. A double solid red signal indicates that all traffic should be stopped and provides pedestrians a safe window to cross. After a predetermined safe crossing time, the signal begins an alternating flashing red phase that acts like a stop sign for vehicles who must yield to pedestrians still in or entering the crosswalk. At this time pedestrians see an upraised hand symbol with a countdown display informing them of the time remaining to complete the crossing. Each vehicle must treat the flashing red signal as a stop sign until the signal is deactivated with no lights flashing.


Figure 5.1: HAWK Example (FHWA)

### 5.3. Crosswalk with Appropriate Signage

Crosswalks provide a safe area where motorists must yield the right-of-way to pedestrians. Marked crosswalks can be found at signalized intersections, midblock locations, or other high pedestrian areas. Standard yellow flashing beacons and additional warning signs can be installed to notify motorists that the area contains pedestrians that may be crossing the roadway.

### 5.3.1. MidBlock Crossing

Midblock crossings facilitate pedestrian crossings at other than the end of block locations where traffic signals or other pedestrian features are present. Midblock crossings must be designed to ensure placement, geometrics, and operations work seamlessly with both the pedestrians and the motorists. For a midblock crossing to work properly, the pedestrian demand must be present, adequate sight distance for motorists to react must be achieved, and applicable signage must be present.

Midblock crossings work well when there is a focused demand for pedestrians to cross. According to the observations made during the data collection portion of this study, several pedestrians crossed within 10's of feet of a current crosswalk, but they did not utilize the crosswalk to safely cross the street.

The FDOT Plans Preparation Manual (PPM) Chapter 8.3.3.2 provides the following criteria for installation of a midblock crossing:

1. Midblock crosswalks should not be located where the spacing between adjacent intersections is less than 660 feet,
2. Midblock crosswalks should not be located where the distance from the crosswalk to the nearest intersection (or crossing location) is less than 300 feet,
3. Midblock crosswalks shall not be provided where the crossing distance exceeds 60 feet (unless a median or a crossing island is provided),
4. Midblock crosswalks shall not be provided where the sight distance for both the pedestrian and motorist is not adequate (stopping sight distance per Table 2.7.1),
5. Midblock crosswalks shall not be located where the ADA cross slope and grade criteria along the crosswalk cannot be met (per Section 8.3.2).

The PPM also states that an engineering study must be completed to ensure that factors such as sight distance and crossing distance are examined.

### 5.3.2. Raised Crosswalk

A raised pedestrian crosswalk is a speed hump that also functions as a crosswalk (Figure 5.2). The speed hump has ladder-style markings as well as directional arrows on the roadway and appropriate signage alerting vehicles to the presence of an approaching crosswalk. Pedestrians are elevated which eliminates the need for a curb ramp when transitioning into the road. A raised crosswalk also serves as a traffic calming device. With these characteristics, this treatment is most often used on minor collectors with low speeds and high pedestrian usage or residential roadways. A raised crosswalk could be detrimental to roadways on bus routes or those with frequent emergency vehicle use.


Figure 5.2: Raised Crosswalk

### 5.4. Rectangular Rapid Flashing Beacon (RRFB)

A Rectangular Rapid Flashing Beacon (RRFB) is a pedestrian crosswalk sign accompanied by two rapid flashing LED lights that can activated manually by a push button or passively by a pedestrian detection system (Figure 5.3). RRFB's incur less cost than a traditional signal and can be powered by a solar panel. RRFB's are placed at painted crosswalks to alert vehicles of the presence of a pedestrian.


## Figure 5.3: Rectangular Rapid Flashing Beacon (RRFB)

### 5.5. Raised Medians

The following discussion on medians can be found in the Federal Highway Administration (FHWA) University Course on Bicycle and Pedestrian Transportation publication as part of lesson 12: Midblock Crossings.

## Advantages of Medians

"Medians separate conflicts in time and place. A pedestrian attempting to cross one or more lanes of traffic in each direction must determine a safe gap in two, four, or even six lanes at a time. This is a complex task that increases in difficulty with limitations in sight distance and increasing vehicle speeds. Younger and older pedestrians have reduced gap acceptance skills compared with pedestrians in other age groups. Pedestrians are faced with additional challenges judging gap size at night. Many may predict that a car is $61.0 \mathrm{~m}(200 \mathrm{ft})$ off when, in fact, it is only 30.5 m ( 100 ft ) away, far too close to attempt a crossing.

Not only do medians separate conflicts, but they also create the potential for more acceptable gaps. On a standard-width, four-lane roadway with a center left-turn lane (19.5 m ( 64 ft ) wide, with five $3.7-\mathrm{m}$ ( $12-\mathrm{ft}$ ) lanes plus two 61.0 -centimeter ( cm ) ( 24 -inch) gutter pans), it takes an average pedestrian traveling $1.2 \mathrm{~m} /$ second ( s ) ( $4 \mathrm{ft} / \mathrm{s}$ ) nearly 16 s to cross. Finding a safe 16 -second gap in four moving lanes of traffic may be difficult or impossible. In any event, an attempt to cross may require a wait of $3-5$ minutes (min). Faced with such a substantial delay, many pedestrians select a less adequate gap, run across the roadway, or stand in the center left-turn lane in hope of an additional gap. If a raised median is
placed in the center, the pedestrian now crosses $7.9 \mathrm{~m}(26 \mathrm{ft})$ instead. This requires two 8 second gaps (see figures $12-3$ and 12-4). These shorter gaps come more frequently. Based on traffic volume and the platooning effects from downstream signalization, the pedestrian may be able to find an acceptable gap in a minute or less.

## Medians Are Less Expensive To Build

The reduced construction cost of a median versus a center left-turn lane comes as a surprise to many designers. Grass medians allow natural percolation of water, thus reducing drainage and water treatment costs. Medians do not require a base or asphalt. Curbing is essential in urban sections where medians are typically raised above the level of the street. In general, however, medians average a 5 - to 10-percent reduction in materials and labor costs compared to a center left-turn lane.

## Medians Are Less Expensive To Maintain

While there is only a slight savings in cost to build a raised median versus a center left-turn lane, there is a substantial savings in maintenance. An FDOT study compared 6.4 km ( 4 mi ) of median versus center left-turn lane maintenance costs and found that medians save an average of 40 percent on maintenance costs based on a 20 -year roadway life. More frequent resurfacing, such as every 7 to 9 years, would show much greater savings. This, too, surprises many designers. During the full life of the roadway asphalt, a raised median saves costs associated with sweeping accumulated debris, repainting lines, replacing raised pavement markers, and resurfacing lanes." (FHWA Midblock Crossings 2006)

### 5.6. Concern for "Jaywalking"

Jaywalking is a commonly used term that refers to crossing a street in a manner that violates traffic laws, such as crossing a street midblock where no designated crossing exists, or acting in a reckless manner, such as crossing in front of vehicles and disregarding traffic signals. While walking recklessly is illegal, crossing between signals is allowable in certain circumstances.

The Florida Department of Transportation states that pedestrians may cross midblock under the following circumstances:

- Pedestrians may cross midblock if the nearest intersection does not have a traffic signal.
- Pedestrians may not cross between adjacent signalized intersections.
- Pedestrians must yield to all vehicles on the roadway.
- Pedestrians must cross at right angles to the roadway, or by the shortest route possible to reach the opposite side.


### 5.7. Recommended Alternatives for Further Consideration

## Raised Median Installation

- The implementation of raised medians will provide pedestrians a safe place to stop at the mid-point of the roadway before crossing the remaining distance,
- Studies show that medians reduce pedestrian crashes by 46 percent and motor vehicle crashes by up to 39 percent,
- Medians may decrease delays (by greater than 30 percent) for motorists,
- Medians enhance the visibility of pedestrian crossings, particularly at unsignalized crossing points,
- Medians can reduce the speed of vehicles approaching pedestrian crossings,
- Medians can be used for access management for vehicles (restricting turning movements),
- Medians provide space for supplemental signage on multi-lane roadways.


## Full Traffic Signal with Pedestrian Activation

A signalized intersection at the North Lake Ella and Lake Ella Plaza intersection will provide the following benefits:

- Pedestrians will have the opportunity to activate the traffic light to accomplish a conflict free crossing,
- Persons with limited mobility, such as wheel chair bound individuals, will have curb ramps and other ADA features provided,
- Motorists will have a protected left turn movement from North Lake Ella Drive and the Lake Ella Plaza Shopping Center,
- Motorists will have a protected U-turn movement on northbound and southbound Monroe Street.

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### 6.0 Signal Warrant Analysis

As part of the Median Implementation Plan, two Signal Warrant Studies based on vehicle traffic volume and one Signal Warrant Study based on pedestrian volume were completed. A signal warrant based on vehicle traffic was conducted at the intersections of Lake Ella Drive and Monroe Street and Legion Street and Monroe Street. The results of these studies showed that Lake Ella Drive and Monroe Street met two warrants (peak hour and four hour). Legion Street and Monroe Street passed none of the warrants. The complete signal warrant analysis report for each intersection can be found in Appendix D.

### 6.1. MUTCD (2009) Warrant 4, Pedestrian Volume

The pedestrian volume signal warrant is intended for application where the traffic volume on a major street is so heavy that pedestrians experience excessive delay in crossing the major street (Section 4C.05, P1). One of two requirements must be met in conjunction with an engineering study for need for a traffic control signal at an intersection or at a midblock location.
A. The first condition states that for each of any 4 hours of an average day, the plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings) all fall above the curve in Figure 6.1; (Section 4C.05, P2, A) or
B. For 1 hour (any four consecutive 15 -minute periods) of an average day, the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings) falls above the curve in Figure 6.2; (Section 4C.05, P2, B).

### 6.1.1. Pedestrian Four-Hour Volume

The Lake Ella area did not pass the Pedestrian Four-Hour Volume warrant. The lower threshold volume for this warrant is 107 pedestrians per hour as seen in Figure 6.1. The maximum number of pedestrians per hour observed was 12 as seen in Table 3.1 earlier in this report.


Figure 6.1: Pedestrian Four-Hour Volume

### 6.1.2. Pedestrian Peak Hour Volume

The Lake Ella area did not pass the Pedestrian Peak Hour Volume warrant. The lower threshold volume for this warrant is 133 pedestrians per hour as seen in Figure 6.2. The maximum number of pedestrians per hour observed was 12 as seen in Table 3.1 earlier in this report.


Figure 6.2: Pedestrian Peak Hour

### 6.2. MUTCD (2009) Pedestrian Hybrid Beacons Warrant

A Pedestrian Hybrid Beacon or HAWK, described earlier in this report, is a pedestrian activated signal that can be installed at a midblock location based on evaluation of the needs with respect to the proximity of significant generators, pedestrian demand, pedestrian-vehicle crash history, and the distance between crossing locations. No matter what the oncoming traffic volume or the length of crosswalk is, the lower threshold pedestrian volume is 20 pedestrians per hour (Figure 6.3). The maximum number of pedestrians per hour observed was 12 as seen in Table 3.1 earlier in this report. Based on this analysis, a HAWK is not warranted for the Lake Ella Area.

Figure 4F-1. Guidelines for the Installation of Pedestrian Hybrid Beacons on Low-Speed Roadways


Figure 6.3: HAWK Pedestrian Volume Requirements

### 7.0 Median Design Alternatives

Several alternative median configurations were analyzed during the median implementation study. Each median configuration was developed using the standards from the FDOT Plans Preparation Manual (PPM). A typical section was developed and reviewed by the FDOT early on in the project. The approved typical section includes narrowing the existing 12 foot travel lanes to 11 foot lanes and adding a curb and gutter median. Type "E" or mountable, curb is proposed for the median. The proposed median will consist of a combination of vegetation and hardscape. The proposed typical sections are shown in Figure 7.1 through Figure 7.3.



TYPICAL SECTION
MONROE STREET (US 27)
** TREES, WHERE THE DIAMETER IS OR IS EXPECTED TO BE GREATER THAN 4" (MEASURED 6" ABOVE THE GROUND) SHALL BE LOCATED NO CLOSER THAN 6' FROM THE EDGE OF INSIDE TRAFFIC LANE,PER PPM VOL.I, TABLE $2 . I I .5$


MONROE STREET (US 27)

The final three alternatives that were presented at the November 28 ${ }^{\text {th }}, 2012$ public meeting considered a variety of median opening options.
7.1. Alternative A - Restricted Access at Legion Street / On the Border

Alternative A, Figure 7.4 and Figure 7.5, results in the most restrictive median configuration and contains no median opening across from Legion Street. A full median opening is provided at North Lake Ella Drive / Lake Ella Plaza to accommodate the proposed traffic signal. A directional opening into South Lake Ella Drive for southbound Monroe Street motorists is also provided. A directional opening is provided at 8th Avenue with the appropriate deceleration and queue storage.

### 7.2. Alternative B - Directional Opening at Legion Street / On the Border

Alternative B, Figure 7.6 and Figure 7.7, contains a directional median opening at Legion Street allowing left turns into Legion Street and On the Border Restaurant, but left turn movements out are prohibited. A full median opening is provided at North Lake Ella Drive / Lake Ella Plaza to accommodate the proposed traffic signal. A directional opening into South Lake Ella Drive for southbound Monroe Street motorists is also provided. A directional opening is provided at 8th Avenue with the appropriate deceleration and queue storage.

### 7.3. Alternative C-Full Opening at Legion Street / On the Border

Alternative C, Figure 7.8 and Figure 7.9, is the least restrictive configuration resulting in a full median opening at Legion Street. There are no restrictions to vehicular movements at Legion Street in this configuration. A full median opening is provided at North Lake Ella Drive / Lake Ella Plaza to accommodate the proposed traffic signal. A directional opening into South Lake Ella Drive for southbound Monroe Street motorists is also provided. A directional opening is provided at $8^{\text {th }}$ Avenue with the appropriate deceleration and queue storage.







### 8.0 Public Involvement

The public involvement process for this median implementation study was paired with the overall Monroe Street Median Feasibility Study and goes beyond informing the public about the project process and alternatives being considered. The public had an opportunity to assist the CRTPA in the decision making process. There were multiple opportunities for the public to comment on all aspects of the project and median components throughout the process. The public involvement efforts also allowed the study team to respond to public concerns and incorporate their ideas.

As part of the public involvement process, renderings of potential recommendations at key locations were generated. Renderings of project results proved to be an efficient tool in communicating the potential effects of a median implemented in the Lake Ella area. The renderings depicting the "before and after" scenarios can be seen in Figure 8.1 and Figure 8.2, respectively.

### 8.1. Project Team Meetings

In an effort to ensure seamless communication and efficient coordination, a Project Team was created. The Project Team met on a monthly basis throughout the life of the project. Median concepts and public concerns were discussed at each meeting. Project Team members received information regarding specific updates to the Median Implementation Study, as well as information regarding median implementation in general.

The Project Team consisted of representatives from local organizations, city, county and state government representatives, emergency service representatives, and stakeholders within the project area. A full list of the agencies represented is shown below:

| - City of Tallahassee <br> - FDOT District 3 Planning <br> - Levy Park Neighborhood Association <br> - Lafayette Park Neighborhood Association <br> - Downtown Improvement Authority | - StarMetro <br> - FDOT District 3 Traffic Operations <br> - Midtown Business Association <br> - Community Redevelopment Agency <br> - Tallahassee Fire Department | - FDOT Safety Projects <br> - FDOT District 3 Design <br> - Knight Creative Communities <br> - Tallahassee-Leon County Planning <br> - CRTPA |
| :---: | :---: | :---: |




### 8.2. Project Webpage

The CRTPA maintained a project specific webpage throughout the life of the Median Feasibility Study. The webpage, www.crtpa.org/monroe-median-project.html, provided information regarding the benefits of medians, access management criteria, how access management positively impacts business, and local access management studies.

The project record is also available for review and includes the public meeting information, small group meeting documentation, and the presentations that were given throughout the life of the project. Citizens also had the opportunity to comment, communicate ideas, or voice concerns via the website.

### 8.3. Open House Meetings

Stakeholder and public involvement was a major focus for the Monroe Street Median Feasibility Study. Understanding concerns from the public and specifically, property owners along the facility, was the largest component of the open house meetings. Three open house meetings were held during various stages of the median feasibility study.

The Public Meetings were advertised at least 14 days in advance of the meeting date. Display advertisements were placed in the Tallahassee Democrat and letters were mailed to each business along the corridor with an announcement regarding the meeting purpose, meeting time, location, and a brief description about the project.

### 8.3.1. Meeting \#1

The first public open house was held on March 6 ${ }^{\text {th }}$, 2012 in the City Hall, City Commission Chambers and had 41 attendees. Project information was displayed on static display boards and plan sets depicting the existing conditions were shown with an aerial background. Each business along the corridor was identified and labeled to assist concerned business owners with locating their property. The meeting was advertised in the Tallahassee Democrat on April $28^{\text {th }}$, 2012, a media release was published on March $3^{\text {rd }}$, 2012, and email announcements were provided to those that had requested notification through the project website.

The purpose of Public Meeting \#1 was to introduce the project to the interested stakeholders. The Project Team was able to speak individually with interested parties regarding median location, type, and design. Citizens commented on daily traffic patterns, high pedestrian crossing locations, and the issues that they observe on a daily basis.
8.3.2. Meeting \#2

The second public open house was held on June $28^{\text {th }}, 2012$ in the City Hall, City Commission Chambers and had 25 attendees. Plan sets depicting the proposed median placement for the Lake Ella area were displayed on tables and the participants had the opportunity to edit the proposed medians and place comments or concerns directly on the plan sets. Members of the consultant team and CRTPA staff were available to assist participants and answer any questions. The meeting was advertised in the Tallahassee Democrat on June $22^{\text {nd }}$, and email announcements were provided to those that had requested notification through the project website. Hard copy letters were prepared for distribution to the businesses within the Lake Ella area. These paper notifications were hand delivered to all of the businesses in the area due to a malfunction in the mailing process.

The purpose of the second public meeting was to present the draft location, type, and size of the medians. Those that attended the meeting were given the opportunity to comment on the proposed median design, which was shown on plan sets for the Lake Ella area. Consultant and CRTPA staff members were available to discuss median advantages and disadvantages and discuss alternative median configurations.

### 8.3.3. Meeting \#3

The third public open house was held on November $28^{\text {th }}, 2012$ in the atrium of the Northwood Center and had 29 attendees. The study recommendations were shown on plan sets for the entire corridor. The plans displayed the proposed median placement and recommended median opening configurations. The public had the opportunity to make suggestions to median configurations, and place comments and concerns directly on the plans as well as speak with RS\&H associates and CRTPA staff. The meeting was advertised in the Tallahassee Democrat on November 23rd and email announcements were provided to those that had requested notification through the project website. Hard copy letters were also distributed to the businesses along the corridor.

### 8.4. Small Group Meetings

As part of the involvement effort, a small focus group was created for the Lake Ella Median Implementation Study and the North Monroe portion of the concurrent Median Feasibility Study. Those interested in attending the small group meetings were provided notice of the

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meetings via email a few days prior to the meetings. The North Monroe and Lake Ella small group meeting was held on May $16^{\text {th }}, 2012$ and nine people were in attendance.

The meeting opened with a presentation of the project which included updates from the project team meetings and the alternatives presented at those meetings. Concerns were expressed about northbound left turns into the Sonic Restaurant. The Project Team noted that they had not heard from Sonic regarding the median study.

The vehicular access to Legion Street and Lake Ella was also a point of concern. The Project Team explained the FDOT median standards and how median opening spacing is regulated. Concerns were also raised about the volume of pedestrian traffic crossing in the Lake Ella area, especially those using the StarMetro bus stops near Legion Street. The Project Team shared the results of an April $12^{\text {th }}, 2012$ study showing pedestrian crossing locations and the number of pedestrians crossing within the Lake Ella area. Based on the data collected, a mid-block signal would not be warranted.

Bill Ekwall from the Tallahassee Fire Department noted that the medians are not a problem for the fire trucks as long as they are designed properly. He stated the medians that have the rolled curb work for fire truck access while the 4 " curb with the straight face cause issues.

### 8.5. Public Comments

Public comments were accepted throughout the duration of the project. Appendix E contains all of the public comments received throughout the life of the project. A summary of comments is shown in bullet format below:

- Medians will limit vehicular traffic to my business
- Median islands with left turn bays would make the corridor safer
- Any change is vehicular access will hurt my business
- Consider a traffic light at Lake Ella/ Legion Street
- Medians should be landscaped for beautification
- Medians will limit the left turn queuing and block through traffic
- Coordinate with the City on other infrastructure improvements prior to construction
- Raised medians with pedestrian crossings would benefit the Lake Ella area
- Do not alter the access to "The Cottages" at Lake Ella


### 9.0 Preferred Alternative and Implementation Plan

Evaluating the likelihood of an uncontrolled midblock crossing being used once it is marked is difficult. The existing crossing volume may use alternative midblock crossing locations when a new midblock crosswalk is marked. However, with the existing pedestrian traffic, a midblock crossing is not warranted according to the MUTCD or the FDOT Traffic Engineering Manual. A raised median will assist pedestrians in a two stage crossing. A signal warrant study at Lake Ella Drive found that a traffic signal is warranted. This traffic light controlled intersection will provide a closer signal controlled crosswalk than the Tharpe Street intersection, which is an improvement.

The preferred alternative for the Lake Ella area is Alternative B with a directional opening only in front of Legion Street. The businesses on the east and west side of Monroe Street will receive left-in access and right out access. The Preferred Alternative can be seen in Figure 9.1 and Figure 9.2.

A full median opening at Legion Street and On the Border Restaurant was considered, but due to the proximity of the nearest signalized intersection, it was determined that a safer alternative would be directional median opening. Motorists exiting the Legion Street area will have the opportunity to make a right turn, then a U turn at the North Lake Ella signalized intersection.

It is further recommended that additional signage be included as part of the new signalized intersection. To safely perform a U-turn on Monroe Street, motorists must be clear of right-turning vehicles from North Lake Ella Drive and the Lake Ella Plaza Shopping Center. Therefore, a sign stating that right turns must yield the right of way to U-turns should be installed.

Pedestrian timings must also be adjusted to allow for U -
 turning vehicles so that motorists and pedestrian conflicts are avoided.



## Appendix A: Raw Pedestrian Count and Gap Size Data






## Appendix B: FTI AADT Report



## Appendix C: Crash Long Form Reports

## FLORIDA TRAFFIC CRASH REPORT


MAIL TO: DEPARTMENT OF HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS, NEIL KIRKMAN BUILDING TALLAHASSEE, FL 32399-0537
WAS DOT PROPERTY INVOLVED IN THIS CRASH?

TOTAL \# OF VEHICLE SECTIONS) TOTAL \# OF PERSON SECTIONS) TOTAL \# OF NARRATIVE SECTIONS)



WITNESSES


ION VEHICLE PROPERTY DAMAGE




PERSON \#




I responded to the above location in reference to a 2 vehicle accident. Upon arrival I made contact with Hall (DV1) and Plaskelt (DV2). Both DV1 and DV2 were identified by their valid Florida photo DL's. Neither DV1, DV2 or his passenger had report of injury as a result of this crash.

According to DV1, she was traveling southbound on N. Monroe Street in the innermost lane. While traveling, DV1 advised that DV2 was coming to stop in front of her. DV1 said that she attempted stop but was unable to do so before crashing into the rear end of DV2. Upon contact with DV2, he agreed with DV1's accounts of this crash.

Based on the above information, I determined DV1 to be at faulf for this crash. Due to minimal damage to DV2, there was no citation issued. Prior to leaving the scene, DV1 and DV2 were given case information on a Driver's Exchange of information form.

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of ${ }^{8}$

FLORIDA TRAFFIC CRASH REPORT
HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS
NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537

## - LONG FORM

$\square$ SHORT FORM X UPDATE $\square$
位




| rash Date$4 / 20 / 12$$\|$Reporting Agency Case Number <br> 0012010603 |  | HSMV Crash Report Number |  |
| :---: | :---: | :---: | :---: |
| NARRATVE |  |  |  |
| [V1, V2, and V3 were west bound in the right thru-lane of E 7th Ave., approaching the |  |  |  |
| Jintersection with N Monroe St. V1 was behind V2. V2 was behind V3. The three vehicles |  |  |  |
| stopped as traffic backed up from the upcoming intersection. When the light turned green V1 |  |  |  |
| believed that the traffic in front of her was free flowing. She looked down momentarily. When she looked up traffic was at a standstill. V1 braked, but was unable to fully stop prior to |  |  |  |
|  |  |  |  |
| bumping V2. V2, in turn, bumped V3. |  |  |  |
| No injuries were reported. Damage was minimal. No damage was observed on V1. V2 had no |  |  |  |
| visible new damage to its rear bumper. There were minor abrasions to the center of its front |  |  |  |
| bumper. V3 had the imprint of $\mathrm{V} 2^{\prime} \mathrm{s}$ front vanity plate holder, minor abrasions, and visiblestress maxks on its rear bumper. Tow services were not required. |  |  |  |
|  |  |  |  |
| V1 was found to be at fault for careless driving. No citation was issued due to the minor damage and the requests of V2 and V3. |  |  |  |
| REPORTING OFFICER |  |  |  |
| H/Badge Number | Rank and Name | Department |  |
| 10850 | Officer DANIEL BUIE 703 | Pallahassee Police Department | 2 POLICE [ |


FLORIDA TRAFFIC CRASH REP
LONG FORM $X$ SHORT FORM $\square$ UPDATE $\square$

HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS
NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537

## (Electronic Version)






FLORIDA TRAFFIC CRASH REPORT
LONG FORM $\square$ SHORT FORM $X$ UPDATE $\square$

HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS NEIL. KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537
(Electronic Version)


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| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Road System Identifier |  |  | Type of Shoulder ${ }^{\text {T }}$ Type of Intersection |  |  |  |





# FLORIDA TRAFFIC CRASH REPORT 




Crash Date
$12 / 19 / 11$
DIAGRAM $\left|\begin{array}{l}\text { Reporting Agency Case Number } \\ 0011034533\end{array}\right|$ HSMV Crash Report Number

DIAGRAM

HIGHWAY SAFETY \& MOTOR VEHICLES

## TRAFFIC CRASH RECORDS

NEIL. KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537
LONG FORM $[\mathrm{X}$ SHORT FORM $\square$ UPDATE $\square$

## (Electronic Version)







## (Electronic Version)






| REPORTING |  |  |
| :---: | :---: | :---: |
| ID/Radge Number | Rank and Name | epartment Thpe of Department |
| 32408 | Officer ANNETTE GARRETT 640 | Tallahassee Police Department 2 POLICE I |



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# This Traffic Crash Report can be purchased online at www．buycrash．com <br> FLORIDA TRAFFIC CRASH REPORT <br> LONG FORM $⿴ 囗 十$ <br> <br> MAIL TO：DEPARTMENT OF HIGHWAY SAFETY \＆MOTOR VEHICLES <br> <br> MAIL TO：DEPARTMENT OF HIGHWAY SAFETY \＆MOTOR VEHICLES TRAFFIC CRASH RECORDS，NEIL KIRKMAN BUILDING TRAFFIC CRASH RECORDS，NEIL KIRKMAN BUILDING TALLAHASSEE，FL 32399－0537 

 TALLAHASSEE，FL 32399－0537}

TOTAL \＃OF VEHICLE SECTIONS）
TOTAL \＃OF PERSON SECTIONS）
TOTAL \＃OF NARRATIVE SECTIONS）


CRASH OCCURRED ON STREET，ROAD，HIGHWAY




ATSIREET ADDRESS \＃

ATFROM INTERSECTION WTH STREET，ROAD，HIGHWAY


At LATITUDE AND LONGITUDE THANE


OR FROM MILEPOST：\＃






First Harmful Event Relation to

Contributing Circumstances：Road 9 Won，TravetPorished Surface 10 Rad Surface Condition（wet， fy．Snow，slush，etc．）
11 Obstruction in Roadway
12 Debris
13 Traffic Control Device inoperative，Missing or Obscured 14 Non－Highway Work
77 Other，Explain in Narrative
th Fixed Object
30 Concrete
31 Other Traffic Barrier
32 Tree（standing）
14
First Harmful Event within Interchange

Non－Collision
10verturnRolover



WITNESSES


NON VEHICLE PROPERTY DAMAGE




V -1 was traveling northbound in the inside lane on N . Monroe St . approaching the intersection of W . 7th Ave.
V -2 was traveling westbound in the middle lane on W. 7th Ave. approaching the intersection of N . Monroe St .
Winess Campbell advised that he was in the southern most lane on 7th Ave. 3-4 car lengths behind V-2. Campbell advised the traffic signal for 7 th Ave. was green. He observed $\mathrm{V}-1$ continue northbound and the front of $\mathrm{V}-1$ crashed into the left side rear door of $\mathrm{V}-2$.

D-1 advised he believed he had a green traffic signal prior to the crash. D- 2 advised she had the green light prior to the crash. While on scene, the traffic signal was working properly.

Based on the witness statement, I found V-1 to be at fault and was cited for the crash.
D-2 was experiencing neck and shoulder pain after the crash and was transported to TMH via ambulance. Unknown extent of any injury at this time.


ADDITIONAL VIOLATIONS


REPORTING OFFICER

| ID/BADGE \# | RANK | OFFICER NAME | DEPARTMENT <br> 727 |
| :--- | :--- | :--- | :--- |
| OFC. | D. DONALDSON OF DEPT. |  |  |
| POLICE DEPARTMENT |  |  |  |


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FLORIDA TRAFFIC CRASH REPORT


HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS
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FLORIDA TRAFFIC CRASH REPORT
LONG FORM $\square$ SHORT FORM $X$ UPDATE $\square$





| $\begin{aligned} & \text { Crash Date } \\ & 12 / 09 / 11 \end{aligned}$ | Reporting Agency Case Number 10011033577 | HSAV Crash Report Number |
| :---: | :---: | :---: |

DIAGRAM
Reporting Agency Case Number HSMV Crash Report Number
$\qquad$ UPDATE

HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS
(Electronic Version)




| $\begin{aligned} & \text { Crash Date } \\ & 07 / 11 / 12 \end{aligned}$ | Reporting Agency Case Number 0012018432 | HSMV Crash Report Number $71907101$ |
| :---: | :---: | :---: |



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# FLORIDA TRAFFIC CRASH REPORT 

## (Electronic Version)






## (Electronic Version)






## RE

# FLORIDA TRAFFIC CRASH REPORT 

HIGHWAY SAFETY \& MOTOR VEHICLES

## LONG FORM <br> $\square$

 SHORT FORM X UPDATE $\square$TRAFFIC CRASH RECORDS NEIL. KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537

## (Electronic Version)






| Crash Date <br> $08 / 08 / 12$\left\lvert\,Reporting Agency Case Number <br> 0012021082$\quad$HSMV Crash Report Number\right. |  |  |
| :---: | :---: | :---: |
|  (North Mon'roe Street). All three vehicles wexe traveling on the inside lane. Vehicle \# 1 was traveling behind vehicle $\# 2$. Vehicle $\#$ was traveling behind vehicle $\# 3$. <br> Vehicle \# 3 came to a complete stop for stopped vehicular traffic on U.S. 27 and 8th Ave. Vehicle \# 2 came to a complete stop behind vehicle \# 3. Driver of vehicle \# 1 was not paying attention and did not realize traffic had come to a stop. Vehicle $\# 1$ rear ended vehicle $H^{\#} 2$ Vehicle 2 got pushed into vehicle \# 3 . <br> Driver of vehicle 1 was found at fault for the accident. Driver of vehicle 1 had a suspended/revoked Restricted Florida Drivers License. She had 23 suspensions on her drivers license. She was issued a Criminal Court date of Sept. 20 at 8:30 am in courtroom 2E of the Leon County Court House. |  |  |
|  |  |  |
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|  |  |  |
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Located $\quad$ FI. $\quad$ Miles
VIOLATION
Did unlawfully COmmit the following Offense, In violation of State-Statute,
DL-OPERATE WHILE DL REVOKED FOR
HABITUAL TRAFFIC
OFFENDER

| d: Posted Sp |  |  |  |
| :---: | :---: | :---: | :---: |
| Crash: Y | Prop. Dam.: $Y$ | Prop. Dam. Am | 10000 Aggressive Driv: N |
| Injury: N | Ser. injury: N | Fatal: N | Red LighUStop Sign: $\mathbf{N}$ |
| Companion Citation Number(s): |  |  |  |
| Driving Under the Influence of Alcoholic Beverages, Chemical, or Controlled Substances, Driving/Actual Physical Control White Impaired, or |  |  |  |
| COURT INFORMATION |  |  |  |
| CRIMINAL VIOLATION. COURT REQUIRED |  |  |  |
| LEON COUNTY COURTHOUSE |  |  |  |
| 301 S. MONROE STREET - COURTROOM 2E TALLAHASSEE, FL 32303 |  |  | Court Date: 09/20/2012 <br> Court Time: 8:30 A.M. |
| Arrest Delivered To: On: |  |  |  |
| SIGNATURE |  |  |  |
| IAGREE AND PROMISE TO COMPLY AND ANSWER TO THE CHARGES AND NSTRUCTIONS SPECIFIEDIN THIS CITATION. WIL LIUL ERSTAND MY |  |  |  |
|  |  |  |  |
| AIGNATUREIS NOTAN ADMISSION OF GUILTOR WAIVEROF RIGHTS. <br> IF YOU NEED REASNABEE FACHITY.GCCOMMODATIONS TO COMPLY WITH |  |  |  |
| THIS CITATION, CONTACT THE CLERK OF THE COURT. |  |  |  |
| Signature of Defendant: $k$ (0) $0221012.011_{2}$ |  |  |  |
| Signature of Officer: \& ENDARA 266 |  |  |  |
| [XI CERTIFY THIS CITATION WAS DELIVERED TO THE PERSON CITED ABOVE |  |  |  |
| Officer name: ENDARA Officer ID: 766 |  |  |  |
| Case num | er: 12-21082 | roop/Unit: | Misc: |
| Agency Name: TALLAHASSEE PD |  |  |  |
| Agency \#: 2. |  |  |  |
| 7 |  |  |  |







This Traffic Crash Report can be purchased online at wwibuycrach com
FLORIDA TRAFFIC CRASH REPORT
LONG FORM $\square$ SHORT FORM $\square$ UPDATE $\square$
MAIL TO: DEPARTMENT OF HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS, NEIL KIRKMAN BUILDING TALLAHASSEE, FL 32399-0537

WAS DOT PROPERTY INVOLVED IN THIS CRASH?

TOTAL \# OF VEHICLE SECTION(S) TOTAL \# OF PERSON SECTIONS)

TOTAL \# OF NARRATIVE SECTION(S)






WONVERICLE PROPERTY DATNKGE





| Non-thotorist Description 1 Pedestran 2 Other Pedestrian (wiectchani, person in a butdong, skater, pedestrian conteyance, etc. 3 Bicyctis! <br> 4 Other Cycerst <br> 5 Occupant of Hotor Venicie Not in Transport (parked, elc) <br> 6 Occupant of a Non-3totor Vehiclo Transportation Device 7 Unknosm Type of Aton Hiotorist |
| :---: |
| 1 None Salety Equtpment <br> 5 Lighting  <br> 2 Hetmel 6 Not Applicable <br> 3 Protective Pads Used 77 Other, Explain <br> (elbows, knees, shins, etc.) in Narative <br> 4Reflective Clothing (jackel, 88 Unknown |



Non-Motorist location At Time of Crash

| 8 Sidewalk | $\square$ Action Prior to Crash |
| :---: | :---: |
| 9 MedranVCrossing istand $\square$ |  |
| 10 Driveway Access |  |
| 11 Shared Uso Path or Trat |  |
| 12 Non-Traficyay Area | 1 Crossing Roarvay 2 Waiting lo Cross Roabinay |
| 77 Olber, Explain in | 3 Walking'Cycling Alorg |
| Nasrative | Roadvay with Traffic (in or adjacent to travel lane) |
| 88 Unknown |  |
|  | 4 Watking Cycing Atong |
|  | Roadnay Agains! Tralfic (in or adjacent to travel lane) |

5 Wolking Cyoting on Sidewa洮 6 In Roadray - Othe (wating playing, etc.)
7 Adgacent to Raodway (e.g. shoulder, median)
8 Going to or from School (K-12 8 Going to or from Schood (K-12) 9 Working in Trafficuray (incident response) 10 None
77 Other, Explain in Narrative 88 Unknown 1No impoper Action 2 Datiosesh 3 Farure to Yiedd Right-of-Way 4 FaRue to Obey Traffic Signs 7 EnferingFxiting Parked/Stanking 10 Imploper JumAMerge Signals, of Officer Venity (standing Exiting Parked/Stanking il impoper Passing 5 in Roadnay impoperty (standing, 8 Inatientive (taging, eating, eic) lying, working, playing) Disabled Vo 9 Nof Visible (dark clothing no on, pushing, bavinglapproaching fighting, etc.)

12 Wrong-Way Riding or Waliking
77 Other, Explain in Harrative 88 Uaknoom
-




V 1 and V 2 were south bound on N Monroe St., approaching the intersection with 8 th Ave. V1 was behind V2. V2 stopped as traffic backed up from the traffic signal at the 7th Ave intersection. V1 braked but was unable to fully stop prior to bumping the rear of V2.

No injuries were reported. V1 had no visible damage. V2 had damage to its rear bumper resulting from contact with tow rings on V1's front bumper. Tow Services were not required. V1 was found to be at faulf for following too close. No citation was issued at V2's request.

of 8
$\square$


(Electronic Version)






V2, V3, and V4 were all traveling south on US 27 , approaching $8 t h$ Ave. V2, V3, and V4 had all stopped for traffic in the inside lane. V1 was also traveling south on US 27 , approaching the stopped vehicles. $D-1$ advised she did not realize the vehicles were stopped and when she did, there was not enough stopping distance. V1's front end crashed into the rear of V2, which caused the front of $V 2$ to impact the rear of $V 3$, and then the front of V3 to crash into the rear of V4.

Witness Holbrook advised he was in his vehicle just south on the crash site. He witnessed v2-4 stopped in traffic and V1 fail to stop, causing the crashes.

D2 advised she was 5 months pregnant and was not feeling well after the crash. She was transported to TMH for evaluation. D3 advised he was experiencing neck and back pain but would seek medical treatment on his own.

D1 was found at fault in the crash and cited for careless driving.




## $V R E$

## FLORIDA TRAFFIC CRASH REPORT

## HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537

## LONG FORM $X$ SHORT FORM $\square$ UPDATE $\square$

(Electronic Version)




DIABAKINOTO SOLE

## FLORIDA TRAFFIC CRASH REPORT






## $\checkmark A$

FLORIDA TRAFFIC CRASH REPORT
HIGHWAY SAFETY \& MOTOR VEHICLES
TRAFFIC CRASH RECORDS
NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537
LONG FORM $\square$ SHORT FORM $X$ UPDATE $\square$

## (Electronic Version)





| Crash Date 11/10/11 | Reporting Agency Case Number 10011030970 | HSMV Cfash Report Number |
| :---: | :---: | :---: |

DIAGRAM


## RE

FLORIDA TRAFFIC CRASH REPORT
HIGHWAY SAFETY \& MOTOR VEHICLES
TRAFFIC CRASH RECORDS
LONG FORM SHORT FORM X UPDATE $\qquad$
(Electronic Version)







# FLORIDA TRAFFIC CRASH REPORT 





| Crash Oate | Reportins Agency Case Number | HSMV Crash Report Number |
| :---: | :---: | :---: |
| 10/29/11 | 10011029834 |  |

DIAGRAM


Brabe dins WITH ARBOW

## FLORIDA TRAFFIC CRASH REPORT

LONG FORM $\square$ SHORT FORM $\square$ UPDATE $\square$ (Strised Ae ass)
MAIL TO: DEPARTMENT OF HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS, NEIL KIRKMAN BUILDING TALLAHASSEE, FL 32399-0537

TOTAL \# OF VEHICLE SECTION(S) TOTAL \# OF PERSON SECTION(S) TOTAL \# OF NARRATIVE SECTION(S)






| VEH. ${ }^{\text {\% }}$ | PERA | PROPERTY DAMAGE OTHER THAN VEH | AST | OWMEER'S NAME | (CHECK IF BUSINESS) | ADORESS | CITY \& STATE | ZIP CODE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VEH.\# | EER\#: | PROPERTY DASAGGE - OTHER THANVEH. | 814 | OWNERS NAME | (CHECK F BUSINESS) | ADDRESS | CTY \& SIAIE | ZIP COOE |

8


| PERSON\# | NAME OF VIOLAIOR |  |
| :---: | :---: | :---: |
| PERSON\# | NAME OF VIOLATOR |  |
| PERSONH | NAME OF VIOLATOR |  |



| CHARGE | CITATION NUMBER |
| :---: | :---: |
| CHARGE |  |
| CHARGE |  |
|  |  |

[^3]




VEHICLE \#' 2

| 1 Vehide in Transpert 2 Parked lifotor Vehicle 3 Working Vehiclo |  | 1 |
| :---: | :---: | :---: |
| $\begin{aligned} & \text { Hitand Run } \\ & \text { 2No } \\ & \text { 2Yes } \\ & 88 \text { Unkrosn } \end{aligned}$ | 1 |  |

Check if Commercial $[\square$

| Reporing Agency Caso Number 0012014738 | $\left\lvert\, \begin{aligned} & \text { HSHIV Crash Report Number } \\ & 83503543 \end{aligned}\right.$ |
| :---: | :---: |

VEHCLE UCENSE NUMBER

F889WU $\quad$| STAME |
| :--- |

REGISTRATION EXPIRES
O9/04/2012
Check if Permanent
Registration $\square$






POSTED SPEED
35
$\left\lvert\, \begin{aligned} & \text { TOT } \\ & 04\end{aligned}\right.$ 04 Most Damaged Area


## MOTOR CARRIER ADORESS

| Vehicle Body Type |  |
| :---: | :---: |
| 1 | 16 |
| 1 Passenger Car | 18 |
| 2 Passenger Van | 19 |
| 3 Pickup | (4,5 |
| 7 Woinar Home | 20 |
| 8 Bus | than |
| 11 Motorcycle | 21 |
| 12 Hoped | 77 |



1 Two-Way, Not Divided 2 Two-Way, Not Divided, with a Continuous Left Tum Lane 3 Two-Way, Divided, Unprotected (painted $>4$ feel) Median 4 Two-Way, Divided, Positive Median Bartier 5 One-Way Trafficway
 for Hazardous Materials 2 Single. Unit Truck (2-axde and GWWR more than $10,000 \mathrm{llss}(4,536 \mathrm{~kg})$ ) 3 Single Unit Tuck (3 or
4 Truck Puting Trañers) 5 Truck Tractor (bobtail) 6 Truck: Tractor/Seme-Tteser 7 Truck TractorDouble Trick

9 Truck more than 10,000 los (4,536 kg ), Cennot Classify 10 Bustarge van (seats for 9.15 occupanis, incteding dived)
11 Bus (seats for more than 15 occupants, inchuding driver) 77 Othet, Explain in Narrative B8 Unknown 2 Tandem Soni Traler 9 Towed Veticle


EST. AMOUNT $\$ 300.00$

| Comm/Non-Commerclal |
| :--- |
| 1 Interstate Carriey <br> 2 Intrastate Carier <br> 3 Not in Commerce/Govemment <br> 4 Not in Commerce/Other Truck |


| Most Harmful Event | Non-Collision <br> 1 OromurnRotiover <br> 2 Fireatexposion <br> 3 mmersion |
| :---: | :---: |

 $110,000 \mathrm{lbs}(4,536 \mathrm{~kg})$ or less
$210,001-26,000 \mathrm{bss}(4,536-11,793 \mathrm{~kg})$
3 Hore than $26,000 \mathrm{bs}(11,793 \mathrm{~kg})$ 4 Not Appricaste 25 Ditch

10 Auto Transpor or 77 Other, Explain in Nanalive 88 Unknown

## Collision Fixed Object

19 mpact AttenualoriCrash Cushion

 $\begin{array}{ll}20 \text { Bridge Overhead Sincturs } & 31 \text { Other Irsfic Barrier } \\ 21 \text { Bridge Pier or Suppori } & 32 \text { Tree (standing) }\end{array}$ 22 Bridge Ra 23 Culvert
24 Cub 25 Embankfnont 27 Guardan Face 28 Guardral End

13 Intermodal Container Chassis 14 vehicle Torin Another Vehicle
15 Nol Applicable (vehicle $10,000 \mathrm{bs}$ disotaying HM placard 77 Other, Explain in Narative 88 Unkrosm Emergency
Vehicle Use


## Traffic Control Device For

|  | This Vehtcle |
| :---: | :---: |
| 1 | 8 Flashing Signal 9 Railuay Crossing |
| 4 School Zone Sign | Derice |
| Device | 10 Person (including |
| 5 Tratfic Control | Ftagman, Officer, |
| Signal | Guard, elc.) |
| 6 Stop Sign | 77 Other, Expain in |
| 7 Yeid Sign | 88 Unknost |


| 1 |  |
| :---: | :---: |
| 2 Brakes | 13 Wheels |
| 3 Tres | 14 Windors |
| 4 Lights (hesd, | Whashield |
| signal, tail) | 15 Ritrors |
| 6 Steering | 16 Thick Coupling |
| 7 Wpers | Traser Hitch |
| 9 Exhaust System | Safety Chains |
| 10 Body, Doors | is Unta, 대Rast |
| 11 Pomer Train | Narative |
| 12 Suspension | 88 Unknos |

VIOLATIONS

| PERSONH | NAME OF VIOLATOR |  |  |
| :--- | :---: | :---: | :---: |
| PERSONA | NARE OF VIOATOR |  |  |
|  |  | $\ddots$ |  |
| PERSONA | NAME OF VIOLATOR |  |  |
|  |  |  |  |


| FLSTATUTE NUMBER |  |
| :---: | :---: |
| FLSTATUIE NUURBER |  |
|  |  |
|  |  |


| CHARGE | CTATONNURBER |  |
| :---: | :---: | :---: |
| OHARGE |  |  |
| $\because$ |  |  |



# FLORIDA TRAFFIC CRASH REPORT 

## HIGHWAY SAFETY \& MOTOR VEHICLES

 TRAFFIC CRASH RECORDS NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537
## LONG FORM

$\qquad$ SHORT FORM $X$ UPDATE $\square$
(Electronic Version)






# FLORIDA TRAFFIC CRASH REPORT 

HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS
NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537
LONG FORM X SHORT FORM UPDATE

## (Electronic Version)






Page 4 of 4

# FLORIDA TRAFFIC CRASH REPORT 

HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS
LONG FORM $X$ SHORT FORM $\square$ UPDATE $\square$

## (Electronic Version)






Page 4 of 4

# HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS 

 NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537 LONG FORM SHORT FORM X UPDATE $\qquad$(Electronic Version)





## VSS

## FLORIDA TRAFFIC CRASH REPORT

HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS
LONG FORM $X$ SHORT FORM $\square$ UPDATE $\square$

## (Electronic Version)





Vehicle 1 and vehicle 2 were both headed south on North Monroe Street in the inside lane. Vehicle 2 entered into the left turn lane at the beginning of the turn lane in order to turn east onto Lake Ella Drive. As vehicle 2 was passing by vehicle 1 , vehicle 1 changed lanes to enter the turn lane that vehicle 2 was already occupying. Vehicle 1 struck vehicle 2 in the right rear door with its left front bumper. Vehicle 1 had a broken left headight and dents to the left front bumper. Vehicle 2 had dents and paint transfer to the right front and rear doors.

The driver of vehicle 2 did not have proof of insurance on scene. The insurance information was gained via DHSIMV records.

The driver of vehicle 2 complained of neck pain and stated that her neck was injured in a previous crash and may be injured again. The driver of vehicle 2 refused medical treatment. No other injuries were reported on scene.

The driver of vehicle 1 was found at fault and cited for an improper lane change.

## REPORTING OFFICER

94051 Officer EVAN ALWINE 679
\(\left|\begin{array}{l}Department <br>

TaIlahassee Police Department\end{array}\right|\)| Type of Department |
| :---: |
| 2 |
| POLICE I |


(Electronic Version)



$V 2$ hit $V_{1}$ when $V_{1}$
pulled op on the RT
side of V2 cunknown to
$V_{2}$ )


## (Electronic Version)





| Craslioate |  |  |
| :---: | :---: | :---: |
| 04/18/12 | 0012010437 | 71906099 |



Page 4 of 4

# FLORIDA TRAFFIC CRASH REPORT 

Hit pole to avoid duck
HIGHWAY SAFETY \& MOTOR VEHICLES
TRAFFIC CRASH RECORDS
NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537
(Electronic Version)



 WAS DOT PROPERTY INVOLVED IN THIS CRASH?

TOTAL\# OF VEHICLE SECTION(S) TOTAL \# OF PERSON SECTION(S) TOTAL \# OF NARRATIVE SECTION(S)

| CRASH DATE | TIME OF CRASH | DATE OF REPORT | REPORIING AGENCY CASE NUMBER: | HSMV CRASHREPORT NUMBER |
| :---: | :---: | :---: | :---: | :---: |
| 09/07/2012 | 9:32 PM | 09/07/2012 | 0012024143 | 83590463 |

CRASH IDENTIFIERS


CRASH INFORMATION (CHECK IF PICTURES TAKEN) []



VIOLATIONS

| PERSON\# | NAME OF MOLATOR |
| :---: | :---: |
| PERSON\# | NAME OF VHOLATOR |
| PERSON\# | NAME OF VIOLATOR |


| FL STATUIE NUMBER | CHARGE |
| :---: | :---: |
| ELSTATUTENUMBER | CHARGE |
| F. STATUTE NUMBER | CHARGE |


| CITATION NUMBER |
| :--- |
| CITATION NUMBER |
| CITATION NUMBER |



On $9 / 7 / 12$ I was traveling north on N . Monroe St. at Lake Ella Dr. I saw several people standing around a vehicle that appeared to have hit a city utility pole. V1 was attached to the city utility pole. D1 advised he was traveling north on N. Monroe St. He was new the area and was using a GPS for directions to Lake Ella Park. He advised he tumed al the last minule and lost control of the vehicle while making the right turn into the park. No other vehicles were involved. All individuals in the vehicle gave the same account of the incident and advised they were not injured and did not want any medical attention. The vehicle was towed by Whites Towing. The ulility pole sustained minor damages.


ADDITIONAL VIOLATIONS


$\qquad$ of ${ }^{5}$

HIGHWAY SAFETY \& MOTOR VEHICLES
TRAFFIC CRASH RECORDS
NEIL. KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537



Crash Date



LONG FORM SHORT FORM X UPDATE

HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS NEIL. KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537
(Electronic Version)






## REPORTING OFFICER

ID/Badge Number Rank and Name
Department Type of Department
$36084 \quad$ Officer DEBORAH DONALDSON $727 \quad$ Tallahassee Police Department 2 POLICE I

# FLORIDA TRAFFIC CRASH REPORT 

## HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS

## LONG FORM

SHORT FORM X UPDATE $\qquad$
(Electronic Version)




| Crash Date $11 / 04 / 11$ | Reporting Agency Case Number 0011030456 | WSMV Crash Report Number |
| :---: | :---: | :---: |

DAGRAM

## RE

FLORIDA TRAFFIC CRASH REPORT




| REPORTINGOFFICER |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { D/Badge Number } \\ & 06364 \end{aligned}$ | Rank and Name Officer | MALAFRONTE | 719 | Department Tallahassee | Police | Department | Type of Department 2 POTICE |



# LONG FORM $\mathbb{V} \underset{\substack{\text { (Shafted Areas) }}}{\substack{\text { SHORT FORM } \\ \text { UPDATE } \\ \hline}}$ (Shaded Areas) <br> MAIL TO: DEPARTMENT OF HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS, NEIL KIRKMAN BUILDING 

WAS DOT PROPERTYINYOLVED IN THIS CRASH? $\square$
TOTAL \# OF VEHICLE SECTIONS)
TOTAL \# OF PERSON SECTIONS)
TOTAL.\# OF NARRATIVE SECTIONS)



CRASH INFORMATION (CHECK IF PICTURES TAKEN)


NON VEHICLE PROPERTY DAMAGE





## DRIVER OR PASSENGER

| Non-Motorist Description <br> 1 Pedestrian <br> 2 Other Pedestrian (wheelchari, person in a building, skater, pedestrian conveyance, etc. <br> 3 Bicyclis? <br> 4 Other Cyctist <br> 5 Occupant of Motor Vehicle Not in <br> Transport (parked, etc.) <br> 6 Occupant of a Non-Motor Vehtice <br> Transportation Device <br> 7 Unknown Type of Non-Motofist |
| :---: |
| i None Safety Equipment <br> 2 Lighting  <br> 2 Hetmet 6 Not Appicable <br> 3 Protective Pads Used 77 Oher, Explain <br> (elbows, knees, shins, etc.) in Nartative <br> AReflective Clothing (jacket, 88 Unknown <br> backpack, etc.)  |



Non-Motorist Location At Time of Crash
8 Sidewalk $\quad \square$ Action Prior to Crash


1 Not Applicable (non-motorisi) 2 None Used - Motor Vehide Occupant 3 Shoulder and Lap Belt Used 4 Shoutder Belt Only Used 5 Lap Bell Only Used
6 Restraint Used - Type Unknown 7 Child Restraint System - Fonward Facing Chid Restraini System - Rear Facing 9 Booster Seat
10 Child Restraint Type Unknown 77 Other, Explain in Narrafive



V i was stopped at a stop sign in the parking lot of 1700 N . Monroe St , preparing to exit the parking lot by making a right turn onto Monroe Street.
V2 was directly behind V1
D1 attempted to back up because he thought he was to far into the roadway. As V1 backed up it struck V2 on the front center bumper.
D1 was found at fault.
D1's supervisor, Richard Coyler, responded to the scene and advised that he had contacted risk management and they had declined to respond to the scene.
Based off driver statements and vehicle damage this officer finds D1 al faull for this accident.


REPORTING OFFICER

| IDBADGE |
| :--- | :--- | :--- | :--- | :--- |
| 711 |$\quad$| RANK |
| :--- |
| OFFICER |$\quad$| OFICER NAME |
| :--- |
| CLEMONS |

5 of ${ }^{8}$




# FLORIDA TRAFFIC CRASH REPORT 

(Electronic Version)





# / FLORIDA TRAFFIC CRASH REPORT 

HIGHWAY SAFETY \& MOTOR VEHICLES
TRAFFIC CRASH RECORDS
NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537
(Electronic Version)




| $\left\|\begin{array}{l}\text { Crash oate } \\ 07 / 23 / 12\end{array}\right\|$Reporting Agency Case Number <br> 0012019596 |  |  |  |
| :---: | :---: | :---: | :---: |
| Vehicle 2 (V2) was southbound in the easternmost lane of $N$. Monroe St. approaching its intersection with E . Tharpe St. |  |  |  |
|  |  |  |  |
| Vehicle 1 (V1) was stopped northbound in the turn lane for traffic turning westbound onto E.Tharpe St. from N. Monroe St. |  |  |  |
| According to drivers of both vehicles, the traffic signal was solid green for north and southbound traffic with no green turn signal. |  |  |  |
| V1 proceeded into the intersection and into the path of V2. V2 was unable to stop and struck V1. |  |  |  |
| Both vehicles sustained significant, disabling damage to the front |  |  |  |
| EMTS White and Martel responded for Leon County EMS and checked the occupants of both vehicles. |  |  |  |
| Driver of V1 was cited for Violation of Right of Way - Left Turn. |  |  |  |
|  |  |  |  |
| $\begin{aligned} & \text { 10/Badge Number } \\ & 59404 \end{aligned}$ | Rank and Name Officer CARL.A WHITLEY 339 | Department <br> Tallahassee Police Department | $\left\lvert\, \begin{gathered}\text { Yype of Department } \\ 2 \text { POIIICE I }\end{gathered}\right.$ |

Crash Date
$07 / 23 / 12$\(\left|\begin{array}{l}Reporting Agency Case Number <br>

0012019596\end{array}\right|\)| HSMV Crash Report Number |
| :--- | :--- | :--- |
| 71907335 |



# FLORIDA TRAFFIC CRASH REPORT 

HIGHWAY SAFETY \& MOTOR VEHICLES
TRAFFIC CRASH RECORDS
NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537
(Electronic Version)



| $\begin{aligned} & \text { Crash Date } \\ & 04 / 14 / 12 \end{aligned}$ |  | $\begin{aligned} & \text { Reportin Agency Case Number } \\ & 0012010024 \end{aligned}$ |  |  |  | HSMV Crash Report Number 171906041 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non-Matorist Actions/Cicumstances (First) |  |  | Nor-Motatist Actions/Ctrumstances (Second) |  |  | Non-Matorist Safety Equloment (one) |  | Non-Motorist Safety Equipment (two) |  |  |  |
| Suspected Alcohol Use NO | Alcoho: Tested | Alcohol Test Type |  | Acohol Test Resuit |  | Suspected Drug Use NO | Drug Tested | Dug Test Type | Crug | St Result |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| VIOLATIONS $\begin{array}{r}\text { Person } \#\left\|\begin{array}{l}\text { Name } \\ 1\end{array}\right\| \text { Samuel Brett Stuyverson } \\ \hline\end{array}$ |  |  |  | $\begin{aligned} & \text { A Statute Number } \\ & 316.122 \end{aligned}$ |  | Fail To Yield Left Turn 316.122 |  |  | Citation Number |  |  |
| WITNESSES |  |  |  | Address |  | City \& State |  |  |  |  | 2ip CO |
| NON VEHICLE PROPERTY DAMAGE |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| On April 14, 2012, I was traveling southbound in the inside lane on N Monroe Street when I observed a traffic crash at the intersection of Monroe and Tharpe Street. The light was green at the above intersection. |  |  |  |  |  |  |  |  |  |  |  |
| I spoke with the driver of vehicle1, and he initially stated that he was traveling westbound on Tharpe Street. He later changed his story and advised me that he was actually traveling northbound on Monroe Street in the left turning lane. V 1 attempted to make a left hand turn onto Tharpe Street and struck the left driver side door of vehicle 2 . |  |  |  |  |  |  |  |  |  |  |  |
| I made contact with the driver of vehicle 2, and she stated that she was traveling in the outside lane on Monroe Street enroute to work when V 1 attempted to make a left hand turn onto Tharpe Street and struck her driver side door. |  |  |  |  |  |  |  |  |  |  |  |
| I observed damage to the front bumper of V 1, and I observed damage to the driver side door of V 2. I observed no visible injuries. The driver of $V 2$ complained of shoulder pain. TFD responded and treated the driver of $V 2$ on scene. |  |  |  |  |  |  |  |  |  |  |  |
| Based on the above information, I found the driver of V 1 the at fault driver of the traffic crash. The driver was issued a non criminal citation for failure to yield to oncoming (7283-GXK). |  |  |  |  |  |  |  |  |  |  |  |
| REPORTING OFFICER |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { D/Badge Number Ra } \\ & 93851 \end{aligned}$ | Rankand NameOfficer TYESHA GATES |  |  |  |  | DepartmentTallahassee Police Department |  |  |  | $\begin{array}{\|c} \text { Type of De } \\ 2 \end{array}$ | partment <br> ICE I |



# This traffic Crash Report can be purchased online at wwibtycrash.com <br> FLORIDA TRAFFIC CRASH REPORT 

# LONG FORM $\square$ SHORT FORM $\square$ UPDATE <br> (ShadedAveas) <br> <br> MAIL TO: DEPARTMENT OF HIGHWAY SAFETY \& MOTOR VEHICLES <br> <br> MAIL TO: DEPARTMENT OF HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS, NEIL KIRKMAN BUILDING TRAFFIC CRASH RECORDS, NEIL KIRKMAN BUILDING TALLAHASSEE, FL 32399-0537 

 TALLAHASSEE, FL 32399-0537}


CRASH IDENTIFIERS





NON VEHICLE PROPERTY DAMAGE



| Vehicle Body Type 15 Low Speed Vehicle |  |  |
| :---: | :---: | :---: |
|  | 16 (Sport) Utity Vehicte |  |
| 16 | 17 Cargo Van ( 10,000 ibs $(4,536 \mathrm{~kg})$ or less) |  |
| 1 Passenger Car | 18 Motor Coach |  |
| 2 Passenger Van | 19 Other Light Trucks ( 10,0 |  |
| 3 Pickup | ( $4,536 \mathrm{~kg}$ ) or less) |  |
| 7 Motor Home | $20 \mathrm{Medum/Heavy}$ Tucks |  |
| 8 Bus | than 10,000 lbs ( $4,536 \mathrm{~kg}$ ) |  |
| 11 Hotorcycle | 21 Farm Labor Vehide |  |
| 12 Moped <br> 13 Ag Terrain Vehicda (ATV) | 77 Other, Explain in Narrat 88 Unknom |  |




$\qquad$ 7

## NARRATIVE

V -2 was fraveling southbound on Monroe St in the inside lane (left lane) at the intersection of Monroe St and Tharpe St. V-1 was on W Tharpe Si stopped at the red light for eastbound iraffic, in the straight lane, at Tharpe St and Monroe St . V -1 suddenly began moving forward, through the red light. The front left fender/door of $\mathrm{V}-1$ impacted the right front bumper of $\mathrm{V}-2$. V -2 airbags did deploy as a result of the collision. V - 1 airbags did not deploy.
D-1 stated he thought he saw the light turn green, so he proceeded to drive forward. D-1 stated he saw the other vehicle but was unable to stop. V-2 stated she was driving through the intersection, with a green light, when she saw V-1 pulling out towards her. D-2 hit the brakes and tried to turn to avoid V-1 but was unable to stop in time. $V$-2s passenger had been sitting in the front passenger seat. She stated they were driving through the intersection when she saw $V-1$ coming right towards them.
The witness stated she was in the right turn only (no turn on red) lane to turn south onto Monroe St. She was waiting for the light to turn green when she saw V-1, who was at a complete stop in the lane to her left, start to go forward. V-1 entered the intersection as $V-2$ was entering the intersection al a normal speed. She honked her horn to try and warn $\mathrm{V}-1$, but he kept driving until the vehicles collided.
Upon my arrival TFD (Engine 1) was already on scene attending to D-2 and V-2s passenger. D-2 and passenger both complained of back and neck pain. Med 20 (run \#12022467) wilh EMTs Peacock and McKee responded and transported V-2 occupants to CRMC. D-1 complained of his left shoulder being sore but refused EMS.
D-1, D-2, and D-2s passenger were all wearing their seatbelt.
Both vehicles had extensive damage to the front ends and could not be driven. Neither driver had a preference regarding which tow company was used, so 1 called for a tow by rotation. Capilal City Collision Center responded and towed both vehicles.
After clearing the scene I went to CRMC to check on D-2 and the passenger. The ER Dr. Blount said D-2 complained of right hip pain, right leg pain, upper and lower back pain. The Dr did not expect any serious injuries but had ordered x-rays. The passenger said she had arm, neck, back, and leg pain. I determined the dniver of $\mathrm{V}-1$ to be at fault and issued him a citation for Failure to Obey \#5732-GYO.
ADDITIONAL VIOLATIONS


## REPORTING OFFICER

| IDBADGE\# | RANK | OFFICER NAME | DEPARTMENT |
| :--- | :--- | :--- | :--- | :--- |
| 569 | OFFICER |  |  |$\quad$ STAATS $\quad$ TYPE OF DEPT. $\quad$| POLICE DEPARTMENT |
| :--- |
| (PD) |

## Not To Scale


indicate north WITH ARROW

$\qquad$


VIOLATIONS

| PERSON\#: | NAME OF VIOLATOR |
| :---: | :---: |
| PERSON\# | NAME OF VIOLATOR |
| PERSON \#: | NAME OF VIOLATOR |



| CITATHON NUMBER |
| :---: |
| CITATHN NUMBER |
| CTAAONNUMBER |





$\qquad$

## LONG FORM $\square \underset{\substack{\text { (Shadef Aeas) }}}{\text { SHORT FORM }} \square$ UPDATE $\square$

MAIL TO: DEPARTMENT OF HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS, NEIL KIRKMAN BUILDING TALLAHASSEE, FL 32399-0537

WAS DOT PROPERTY INVOLVED IN THIS CRASH?
TOTAL \# OF VEHICLE SECTION(S) TOTAL \# OF PERSON SECTION(S)

TOTAL \# OF NARRATIVE SECTION(S)


REPORTING AGENCY CASE NUMBER 0012023401

| CRASH OCCURRED ON STREET, ROAD, HIGHWAY |  |  |  |  | $1^{\text {AT STREETAODRESSA }}$ |  | $2 \text { AT LATTUUDE }$ | AND LONGIUDE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { AT FEET } \\ & 400 \text {, } \end{aligned}$ | $3$ | $\operatorname{MHES}, \square{ }^{\mathrm{H}}$ |  |  | HSTRE |  |  | 4 ORFROMMILEPOST\# |
| $3$ | $\quad$ Road 1 interstate 2 U.S. 3 State | d System Identiffer <br> 4 County <br> 5 Local <br> 6 TumpikefTol |  7 Ferest Road <br>  8 Priate Roatriay <br>  9 Parking Lot <br>  7 Other, Exptain in <br>   <br> Narative  | 3 | Shoulder <br> 1 Paved <br> 2 Unpaved <br> 3 Curb | 1 | Type of intersection <br> 1 Not at intersection <br> 2 Four-Way intersection <br> 3 T-Intersection <br> 4 Y - m tersection | 5 Traffic Cicle <br> 6 Roundabout 7 Fre-Pont, or Pitare <br> 77 Other, Explain in Naretive |

## CRASHTNFORTAAIION (CHECK TF PICTURES TAKEN




| VEH.\# | PER\# | PROPERTY DAMAGE- OTHER THAN VEH. |  | OWNER'S NAME | (CHECK IF BUSINESS) | ADDRESS | CTY 8 STATE | $\angle 1 P C O D E$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| VEH.\# | PER\# | PROPERTY DAMAGE OTHER THANVEH: | $\underset{\Delta x, \pi}{\operatorname{Los}}$ | OWIER'S NABE | (CHECK IF BUSINESS) | ADDRESS | CITr'\& STATE | $\triangle P \operatorname{CODE}$ |



PERSONA.

| $\begin{aligned} & \text { PERSONH } \\ & 1 \end{aligned}$ | CIERRA OF | YIOLATOR SHABRIK <br> A | SPARROW | FI STATUIE NUMBER $316.85$ | MPROPER LANE CHANGE CHARGE | CTATION NUTMBER 2247WGB |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PERSON ${ }^{\text {P }}$ | NAME OF | VIOLATOR SHABRIK <br> A | SPARROW | - A - STATUTE NUBEER | FAILURE TO REPORT TRAFFIC CRASH | CITATIONNUMBER 2248WGB |
| PERSONA |  |  |  | A STATUTE NUMBER | CHARGE | CTATONNUMBER |




Vehicle \# 1 and vehicle \# 2 were both traveling East bound on West Tharpe Street. Vehicle \# 1 was traveling on the cutside lane. Vehicle \# 2 was traveling on the inside lane. Both vehicdes were approaching the intersection of North Monroe Street.

Vehicle \# 1 got into the right turn lane only. Traffic was backed up due to a red traffic light. Driver of vehicde \# 1 decided to switch lanes withoul clearing the inside lane. At the same time, vehicle \# 2 was approaching vehice \# 1. Vehicle \# 2 continued traveling straight in its right of way. Vehicle \# 1 began to switch lanes and side swiped vehicle \#2.

Both vehicles stopped after the impact on the roadway. As the driver of vehicde \# 2 was caling the police for help, driver of vehicle \# 1 decided to flee the accident scene East bound on West Tharpe Street. Witness \# 1 observed the accident and was wailing for both cars to nove off the roadway. He realized vehicle \# 1 was fleeing the accident scene. Witness \# 1 followed vehicle \# 1 South on North Monroe Street. He was able to get a Florida plate of 356 JYL on a gold, four door, Pontiac Grand Prix. This information was provided to me on scene. A check of the Florida plate provided showed it registered on a gold Ponliac four door. The registration had a phone number for one of the registered owners. I contacted the primary registered owner. He was able to get me in touch with the driver of yehicle \#1. She is the co-owner on the registration.

At approx. 2:30 pm this date, diver of vehicle \# 1 contacted me by cell phone. She agreed to meet me at the police department. Driver of vehicle \# 1 was identified via DAVID. She was read Oath/Perjury Waming in front of my incar camera system \# 100502. Driver of vehicle \# 1 staled that she was the driver of vehicle \# 1 al the time of the accident. She left the scene because, the diver of vehicle \# 2 never got out of her car after the accident. She was in a hurry because, she was moving apartments. She decided to leave the scene of the accident and report the incident to police fater.

Based on the information gathered, I was able to find the driver of vehicle \# 1 at faulf for the accident. She was issued an additional citation for failing to report the incident. This Hit and Run Investigation in closed.


REPORTING OFFICER

| IDBADGE \# <br> 766 | ORANK | SFFICER NAME | OEPARTMENT | TYPE OF DEPT. POLICE DEPARTMENT (PD) |
| :---: | :---: | :---: | :---: | :---: | 8








Crash Date
$06 / 04 / 12$\(\quad\left|\begin{array}{l}Reporing Agency Case Number <br>

0012014939\end{array}\right|\)| HSMV Crash Report Number |
| :--- | :--- | :--- |

DIAGRAM

## FLORIDA TRAFFIC CRASH REPORT

HIGHWAY SAFETY \& MOTOR VEHICLES
40 TRAFFIC CRASH RECORDS
LONG FORM $\square$ SHORT FORM X UPDATE $\qquad$ (Electronic Version)



| $\begin{aligned} & \text { Crash Date } \\ & 04 / 26 / 12 \end{aligned}$ |  | Reporting Agency Case Number 0012011176 |  |  |  | HSMV Crash Report Number |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non-Motorist Actions/ | Circumstances (Fi |  | Non-Motorlst Actiors/Circumstances (Second) |  |  | (Non-Mototist Safety Equipment (one) |  | [Non-Motorist Safety Equiprrent (ivo) |  |  |  |
| Suspected Alcohol Use NO | Alcoho! Tested |  | Test Type | Alcohol Test Result | 8AC | Suspected Drug Use No | Drug Tested | Drug Test Type |  | Test Result |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| VIOLATIONS <br> Person \# Name |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| NON VEHICLE PROPERTY DAMAGE |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| I responded to the aforementioned location in reference to a vehicle crash involving Hartley (DV1) and O'Brien (DV2). Once I was on scene I verified that neither driver was injured. Both DV1 and DV2 were identified by their FLA photo DL's. |  |  |  |  |  |  |  |  |  |  |  |
| According to DV1, she was eastbound on W. Tharpe Street approaching the red light at the intersection of $N$. Monroe. As DV1 attempted to stop, her brakes failed and this resulted in her rear-ending DV2 who was stopped in the lane in front of her. Upon making contact with DV2, he agreed with DV1's accounts of the accident. |  |  |  |  |  |  |  |  |  |  |  |
| DV1 was found to be at fault for the accident and due to very minimal damage, there was no citation issued. I presented both DV1 and DV2 with case information on a Driver's exchange of information form. |  |  |  |  |  |  |  |  |  |  |  |
| REPORTING OFFICER |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{ll} \text { D/Badge Number } \\ 39306 & \mathrm{R} \end{array}$ | Rank and Name Officer S |  |  |  |  | $\left\|\begin{array}{l}\text { Department } \\ \text { Tallahassee Police Department }\end{array}\right\|$Type of Department <br> 2 POLICE I |  |  |  |  |  |


| $\begin{aligned} & \text { Crash oate } \\ & 04 / 26 / 12 \end{aligned}$ | $\begin{aligned} & \text { Reporting Agency Case Number } \\ & 0012011176 \end{aligned}$ | HSMV Crash Report Number |
| :---: | :---: | :---: |
| DIAGRAM |  |  |

# FLORIDA TRAFFIC CRASH REPORT 


MAIL TO: DEPARTMENT OF HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS, NEIL KIRKMAN BUILDING TALLAHASSEE, FL 32399-0537

TOTAL \# OF VEHICLE SECTION(S) TOTAL \# OF PERSON SECTION(S) TOTAL \# OF NARRATIVE SECTION(S)


VIOLATIONS

| $\begin{aligned} & \text { PERSONH: } \\ & 1 \end{aligned}$ | PARRIS | VOLATOR <br> KEAVIN | CRAWFORD | J | FL. STATUTE NUMBER <br> 316.1925(1) | CARELESS DRIVING CHARGE | CITATION NUMBER 6565GYO |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NAMEOF | VIOLATOR KEAVIN |  |  | F. STATUIE NUMBER | CHARGE | CITATION NUMBER |
| 1 | PRRRIS | KEAVIN | CRAWFORD | J | $322.34(2) \because$ | OPERATING WHIL DL SUSPENDEDICANCELEDREVOKED | 6566GYO |
| PERSONA | NAME OF V | VIOLATOR: |  |  | FLSTATUTE NUMBER | CHARGE | CITATION NUMBER |

[^4]



## NARRATIVE

A traffic crash occurred On W. Tharpe Street, approximately 200 feet west of $N$. Monroe Street. This crash consisted of two vehicles, vehicle \#1(v-1) and vehicle \#2(v-2).
Both $v-1$ driver and $v-2$ driver were traveling eastbound on W. Tharpe Street, within the oulside lane of traffic. V-2 driver came to a stop within traffic. V-1 driver failed to stop and crashed into the rear of $\mathrm{v}-2$.

V-1 driver reported that $v-1$ was experiencing a vehicle malfunction issue, resulting in him not properly stopping the vehicle.
No injuries were reported.
Additional Note: V-1 dtiver initially left the scene on foot, then returned moments later. He reportedly walked to where his friend / vehicle owner was located at, and returned with her.

V-1 driver reported that his license is suspended, providing knowledge of the suspension. He presented a Florida ID Card only.




VIOLATIONS

| PERSON\#: | NAME OF YOLATOR |
| :---: | :---: |
| PERSON 7 | NAME OF MOLATOR |
| PERSON $F$ | NAME OF VIOLATOR |


| FLSTATUTE NUMBER |
| :---: | :---: |
| FLSTATUTE NUMBER |
| ( FLSTATUTE NUMBER |


$\qquad$ 8

# FLORIDA TRAFFIC CRASH REPORT 

## highway safety \& MOtor vehicles TRAFFIC CRASH RECORDS

 LONG FORM $\square$ SHORT FORM $X$ UPDATE $\square$(Electronic Version)



| Crash Date |
| :--- |
| $12 / 12 / 11$ |

Non-Motorist Actions/Citcumstances (First)
(Reporting Agency Case Number

| Crash Date 12/12/11 | Reporting Agency Case Number 0011034002 | HSMV Crash Report Number |
| :---: | :---: | :---: |
| $12 / 12 / 11$ | $0011034002$ | $1$ |

DIAGRAM

## -RE

FLORIDA TRAFFIC CRASH REPORT

## HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS NEIL. KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537

LONG FORM $X$ SHORT FORM $\square$ UPDATE $\square$

Reporting Agency Case Number
0011033726

HS MV Crash Report Number
71904524
Crash Date
$12 / 10 / 11$
CRASHIDENTIFIERS

## CRASHIDENTIEIERS

| County Code | City Code County of Crash |  | Place or City of Crash <br> 13 |
| ---: | :---: | :---: | :---: |
| Tallahassee |  |  |  |

Time on Scene Time Cleared Scene Completed Reason (If Investigation NOT Complete)
06:17 PM 07:21 PM 2 YES
ROADWAY INFORMATION (CHOOSE ONLY 1 OF 4 OPTIONS)
 Direction Wham Intersection With Street, Road, Highway WEST

- NORTH Monroe St

|  |  |
| :--- | :--- |
| Type of Shoulder |  |
| 3 CURB |  |$|$| Type of intersection |
| :--- |
| 1 NOT AT INTERSECTION |

## CRASH INFORMATION (CHECK IF PICTURES TAKEN)

5 LOCAL


$\left\lvert\, \begin{aligned} & \text { Manner Of Collision } \\ & \text { I FRONT TO REAR }\end{aligned}\right.$
Within Interchange First Harmful Event Relation To Junction

| First Harmful Event location | Within Interchange | Fir |
| :--- | :--- | :--- |
| 1 ON ROADWAY | NO |  |



Or From Milepost H

Contributing Circumstances: Road


Contributing Circumstances: Environment








Page 4 of 4

# FLORIDA TRAFFIC CRASH REPORT 

HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537
(Electronic Version)




| Crash Date <br> $12 / 05 / 11$$\|$Reporting Agency Case Number <br> NARRATIVE |  | [HSMV Crash Report Number |  |
| :---: | :---: | :---: | :---: |
|  |  | $\mathrm{V}-3$ was traveling westbound on Tharpe St . $\mathrm{V}-2$ was directly behind $\mathrm{V}-3$. $\mathrm{V}-1$ was directly behind V-2. Traffic was almost at a stop due to rush hour traffic. V-1 stated she hit her brakes, but still struck the rear of $\mathrm{V}-2$. This caused $\mathrm{V}-2$ to slide into the rear of $\mathrm{V}-3$. |  |  |  |
|  |  |  |  |  |  |
| V-1 had front end damage. <br> $V-2$ had rear end and front end damage. V-3 had no damage. |  |  |  |
| No one involved in the crash complained of injuries. D-1 was at fault for the crash and issued a citation. |  |  |  |
| REPORTING OFFICER |  |  |  |
| iofbadge Number $94581$ | Rank and Name 1 Officer ANDREV LYONS 762 | Department <br> Tallahassee Police Department | Type of Department 2 POLICE I |
| DIAGRAM |  |  |  |

FLORIDA TRAFFIC CRASH REPORT
HIGHWAY SAFETY \& MOTOR VEHICLES
TRAFFIC CRASH RECORDS
NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537

(Electronic Version)





# FLORIDA TRAFFIC CRASH REPORT 

## HIGHWAY SAFETY \& MOTOR VEHICLES

TRAFFIC CRASH RECORDS
NEIL KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537

# (Electronic Version) 

Crash Date
$10 / 08 / 11$

| Time of Crash | Date of Report |
| :--- | ---: |
| $03: 45 \mathrm{AM}$ | $10 / 08 / 11$ |

Reporting Agency Case Number
0011027576
 Place or city of Crash Place or City of Crash
Tallahassee Tallahassee




DIAGRAM

Hit Utility pole

This Traffic Crash Report can be purchased online at www.buycrash.com <br> \section*{FLORIDA TRAFFIC CRASH REPORT <br> \section*{FLORIDA TRAFFIC CRASH REPORT <br> <br> MAIL TO: DEPARTMENT OF HIGHWAY SAFETY \& MOTOR VEHICLES <br> <br> MAIL TO: DEPARTMENT OF HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS, NEIL KIRKMAN BUILDING TRAFFIC CRASH RECORDS, NEIL KIRKMAN BUILDING TALLAHASSEE, FL 32399-0537} TALLAHASSEE, FL 32399-0537}









HSMV 90010 S


2 of 6


$\qquad$

| Reporting Agency Case Number:,$~$ | HSMV Crash Report Number |
| :--- | :--- |

Vehicle \#1 was in the parking lot of the Circle K on N. Monroe St at 7th Ave. Driver \#1 stated he waited for traffic and when someone stopped to let him in he furned right onto N. Monroe St. Driver \#1 pulled into the far inside lane and started traveling North on N. Monroe St.

Driver \#1 said when he pulled into the lane a vehicle in the outside lane had to suddenly come to a stop and that made the driver very angry. Driver \#1 stated he continued traveling north on N . Monroe and this vehicle which was a 4dr gray Saturn followed him in the lane next to him. When Driver \#1 would slow the Saturn would slow, when Driver \#1 would speed up the Saturn would speed up.

Driver \#1 stated he was about 100 ft from the stop light at $N$. Monroe and E. Tharpe St when the Salurn suddenly speed up and cut in front of him and applied its brakes hard. Driver \#1 said he had to suddenly change lanes to the outside lane the Saturn had been in. Driver \#1 said when he pulled into that lane there was a van in front of him that had applied his brakes to stop. Driver $\# 1$ said he did not want to run into the rear of the van so he swerved to the right and the front passenger side door of Vehicle \#1 hit A City Ulility pole. Driver \#1 continued north after hitting the pole and pulled over onto the sidewalk.
Driver \#1 said he exited his vehicle and went over to the Saturn that was stopped at the red light. He observed the vehicle was a 4dr that was Silver it had a Hatch back and an unknown Texas Tag. Driver \#1 observed the front passenger was a black male in his late twenties but that is all he was able to see. The light tumed green and the Saturn continued North on N. Monroe St.

Driver \#1 then responded back to his vehicle and that is when he realized his grandson was injured. His grandson stated he could not feel his legs and he was hyperventilating. I had EMS respond and I was able to get the passenger to calm down and tell me that he legs hurt but he could feel them, he also had neck and back pain. When EMS arrived they started to work on passenger \#1 Driver \#1 grabbed his chest. Driver \#1 stated he was having pain in his chest and was having difficulty breathing. Driver \#1 told me he has a pacemaker and he is not sure if it went off. I assisted Driver \#1 into the ambulance and he and his grandson were transported to Tallahassee Memorial Hospital by Leon County EMS.

The front and rear passenger doors of Vehicle \#1 were damaged. They were dented in so that the door could not be opened. The Tallahassee Fire Department had to pry both doors open to get passenger \#1 out. The vehicle was towed by Lake Jackson.
The City Utility Pole \# 47969 was struck at the base of the pole. The only damage done was red paint transfer left on the pole from Vehicle \#1.


Bicyde @ Publix entrance on Tharpe

## FLORIDA TRAFFIC CRASH REPORT

HIGHWAY SAFETY \& MOTOR VEHICLES TRAFFIC CRASH RECORDS
NEIL. KIRKMAN BUILDING, TALLAHASSEE, FL 32399-0537
(Electronic Version)




The driver of V1 stated that she was leaving the parking lot of 1700 N Monroe St and was at a complete stop waiting to turn left (east) onto $W$ Tharpe St. The driver of vi stated that while she was watching oncoming traffic, she observed Shahed Baniahmad riding a bicycle (P1) on the sidewalk towards her vehicle. As P1 got closer to V1, it appeared that P1 was not going to stop so the driver of $V 1$ honked the horn. P1 then impacted with the front driver's side of V1.
$P 1$ stated that he could not remember if he was riding on the sidewalk or the road. pl stated the he thinks he was on the road. P1 stated that V1 pulled out right in front of him and he applied the brakes, but the bicycle did not stop fast enough to avoid a collision. P1 stated that the right hand side of his body impacted with the vehicle.

I made contact with witness Brooke Powell by telephone. Powell stated that she was traveling east on $W$ Tharpe $S t$ and observed V1 at a complete stop at the exit for 1700 N Monroe St.
Powell observed P1 riding a bicycle on the sidewalk and ride into the side of V1.
V1 had a large dent located on the front driver's side fender and white scratches on the front driver's side bumper. Pi stated that the seat on his bicycle was turned to the side, but he was able to turn it back to the proper position. The bicycle had scratches located on the right hand side that he believes may have new damage. Photographs of V1 and the bicycle were taken with camera \#785.

P1 complained of pain in his right hip and stated that he had a headache. p1 refused medical treatment.

Fault could not be determined because the positions of V1 and P1 at the time of the collision could not be determined. Photographs of the incident location were taken with camera \#785.



## Appendix D: Lake Ella Signal Warrant Report

# Traffic Signal Warrant Analysis SR 63 (US 27) \& Lake Ella Drive 

## Prepared for:



Prepared by:


IMPROVING YOUR WORLD

November 2012

## PROFESSIONAL ENGINEER CERTIFICATION

I hereby certify that I am a registered professional engineer in the State of Florida practicing with Reynolds, Smith, and Hills, Inc., a Florida corporation authorized to operate as an engineering business (EB No. EB0005620) by the State of Florida Department of Professional Regulation, Board of Professional Engineers, and that I have supervised the preparation and approve the evaluation, findings, opinions, conclusions, and technical advice hereby reported for:

Project: Lake Ella Median Implementation Study
Location: Tallahassee, Florida

Report: Lake Ella Drive and Lake Ella Plaza Signal Warrant Analysis

This report includes a summary of data collection efforts, traffic analysis, signal warrant analysis, and summary of conclusions. I acknowledge that the procedures and references used to develop the results contained in this report are standard to the professional practice of transportation engineering and planning as applied through professional judgment and experience.

Name: Nicholi A. Arnio, PE

Florida PE Registration No.: 67530

Signature:

Traffic Signal Warrant Analysis
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### 1.0 Introduction

RS\&H has prepared a traffic signal warrant analysis report for the intersection of State Road 63 (Monroe Street) and Lake Ella Drive in Tallahassee, Florida. Figure 1.1 shows the intersection location. This study includes assessment of applicable traffic signal warrants detailed in the Manual on Uniform Traffic Control Devices (MUTCD).

The Capital Region Transportation Planning Agency (CRTPA) has initiated a median implementation study on SR 63 (Monroe Street) in the Lake Ella area to aid in safe pedestrian crossings. During the Lake Ella Implementation Study, it became apparent that the intersection of Monroe Street and Lake Ella Drive deserved further inspection in order to provide the most complete set of recommendations to the CRTPA. Per the Manual on Uniform Traffic Control Devices (MUTCD) 2009 Edition, this report shows that existing volumes at Monroe Street and Lake Ella Drive warrant the placement of a traffic signal. The details of the analysis that arrives at this conclusion are shown on the following pages.


### 2.0 Site Conditions

The existing geometric configuration of the intersection at Monroe Street and Lake Ella Drive is shown in Figure 2.1. Monroe Street in the Lake Ella area is a four lane undivided principal urban arterial with a Two-Way-Left-Turn-Lane (TWLTL). The northbound approach of Monroe Street has a left turn lane with a 100 foot queue storage length while the southbound approach has a left turn lane with a 50 foot queue storage. The eastbound minor approach provides access to the Lake Ella Plaza shopping center with various businesses such as Publix, Patients First Medical Center, and other restaurants and retail areas. This approach currently has a dedicated left turn lane and a dedicated right turn lane. The westbound minor approach is Lake Ella Drive and accesses the Lake Ella amenities as well as residential neighborhoods. This approach currently has one lane that services all movements.

The posted speed limit on Monroe Street is 35 mph . The posted speed limit on Lake Ella Drive is 25 mph and the business entrance west of Monroe Street immediately accesses a large parking lot. Since the posted speed limit is less than 40 mph for the major street, the $100 \%$ factor columns and graphs were used during analysis.

There is no on-street parking in the intersection area. Sight distance triangles for all approaches at the intersection of Monroe Street and Lake Ella Drive indicate adequate sight distance is available.


Figure 2.1: Existing Site Conditions

### 3.0 Access Management

The proposed addition of a traffic signal at Lake Ella Drive may cause concern with the spacing between the existing signals and median openings. The FDOT Access Management Standards call for Access Class 5 roadways to require 1,320 feet between signalized intersections, 1,320 feet between full median openings and 600 feet between directional median openings.

Tharpe Street is a signalized intersection approximately 500 feet north of Lake Ella Drive. The median treatment at Lake Ella Drive is currently a full access opening with a painted median. Left turn lanes currently exist on the northbound and southbound approaches. Approximately 375 feet south of Lake Ella is Legion Street. The median treatment at Legion Street is currently a full access painted opening with left turn lanes on the northbound and southbound approaches. Since these three intersections are so closely spaced, the Monroe Street corridor was researched to determine a precedent for signal spacing within the corridor.

Two existing situations were found on the Monroe Corridor that are similar to the spacing of Tharpe Street, Lake Ella Drive and Legion Street.

The first location is the signalized intersection of Calloway Road and Monroe Street which is located just south of I-10. Calloway Road is approximately 575 feet north of Lakeshore Drive, another signalized intersection, as shown in Figure 3.1. Calloway Road has a northbound left turn lane that abuts Lakeshore Drive's southbound left turn lane. The turn lanes are separated by a two foot raised median. This situation is similar to the proposed signal at Lake Ella Drive and its proximity to Tharpe Street. In addition, there is a full access median opening approximately 420 feet south of Lakeshore Drive with a northbound and southbound left turn lane separated from traffic with a two foot raised median. This situation is similar to the proposed signal at Lake Ella Drive and its proximity to Legion Street.


Figure 3.1: Calloway Road and Lakeshore Drive Intersections

The second location is the signalized intersection of Martin Luther King Jr. Boulevard and Monroe Street located approximately 1,580 feet north of Tharpe Street. This section of Monroe Street currently has painted pavement markings separating northbound and southbound traffic. Northwood Center Boulevard and Monroe Street is a signalized intersection approximately 500 feet south of Martin Luther King Jr. Boulevard, shown in Figure 3.2. This situation is similar to the proposed signal at Lake Ella Drive and its proximity to Tharpe Street. In addition, there is a full access painted opening approximately 360 feet south of Northwood Center Boulevard with a southbound left turn lane and Two Way Left Turn Lane (TWLTL) on the south side of the intersection. This situation is similar to the proposed signal at Lake Ella Drive and its proximity to Legion Street.


Figure 3.2: Martin Luther King Jr. Boulevard and Northwood Center Boulevard Intersections

### 4.0 Data Collection

### 4.1. Traffic Data

Existing traffic volumes were recorded at the intersection of Monroe Street and Lake Ella Drive. 24 -hour machine counts were collected on each approach for a typical week. The northbound and southbound approaches were collected from 10/2/2012-10/6/2012 (Week 41). The eastbound approach was collected from 10/2/2012-10/4/2012 while the westbound approach was counted from 10/9/2012-10/11/2012 (Week 42) due to a machine malfunction during the first attempt. Appendix A contains all raw volume counts. Turning Movement Counts (TMCs) were also collected on 10/4/2012 (weekday) and 10/6/2012 (Saturday). The daily volume counts, in 15-minute increments, were averaged across Tuesday, Wednesday, and Thursday of the week counted to achieve an average day of traffic on each approach.

The 15 -minute increments were then seasonally adjusted with a Seasonal Factor (SF) as found in Florida Traffic Online 2011. The Monroe Street volume counts were additionally adjusted by an axle correction factor as found in Florida Traffic Online 2011. Volumes were analyzed for the twelve hour period from 7:00 am to 7:00 pm because the majority of traffic occurs between these hours. Appendix B contains volume counts with the appropriate seasonal factor applied as well as the seasonal factor and axle correction factor tables used. Appendix C contains the raw and seasonally adjusted TMC data.

The Saturday traffic data was used to determine if the peak traffic occurred during the weekend. The weekday average had higher hours of peak traffic than the weekend; therefore the weekday average was analyzed for each warrant. Table 4.1 shows the weekday counts summarized by hour and by direction. Appendix D contains the weekday average and Saturday traffic used for comparison in 15 minute increments.

Table 4.1: Existing Weekday Traffic Volumes

| Time | Major Street <br> Northbound <br> Monroe <br> Street | Major Street <br> Southbound <br> Monroe Street | Major Street <br> Total of Both <br> Approaches | Minor Street <br> Eastbound <br> Business <br> Entrance | Minor Street <br> Westbound <br> Lake Ella <br> Drive |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 7:00 AM - 8:00 AM | 580 | 1571 | 2151 | 46 | 45 |
| 8:00 AM - 9:00 AM | 677 | 1379 | 2056 | 59 | 53 |
| 9:00 AM - 10:00 AM | 676 | 1026 | 1702 | 70 | 52 |
| 10:00 AM - 11:00 AM | 772 | 908 | 1680 | 85 | 65 |
| 11:00 AM - 12:00 PM | 1026 | 1007 | 2033 | 115 | 70 |
| 12:00 PM - 1:00 PM | 1126 | 1199 | 2325 | 134 | 100 |
| 1:00 PM - 2:00 PM | 1111 | 1207 | 2318 | 105 | 94 |
| 2:00 PM - 3:00 PM | 1127 | 1033 | 2160 | 89 | 88 |
| 3:00 PM - 4:00 PM | 1194 | 1014 | 2208 | 96 | 87 |
| 4:00 PM - 5:00 PM | 1417 | 1060 | 2477 | 115 | 97 |
| 5:00 PM - 6:00 PM | 1625 | 1153 | 2778 | 138 | 120 |
| 6:00 PM - 7:00 PM | 1204 | 971 | 2175 | 126 | 139 |

### 4.2. Crash History

Crashes reported by the City of Tallahassee were assessed for the most recent 12 month period available starting September 27, 2011 and ending September 26, 2012. The discussion of Warrant 7, Crash History, includes a summary of the crashes that are likely to be affected by installation of a traffic signal.

### 5.0 Traffic Signal Warrant Analysis

Traffic data collection showed that an average of $90 \%$ of the eastbound traffic on the business entrance turns right. Right-turning vehicles on the minor road incur less delay than the left-turn or through vehicles due to the fact that they may often complete their movement easily without a traffic signal. The MUTCD states that "engineering judgment should be used to determine what, if any, portion of the right-turn traffic is subtracted from the minor-street traffic count." A right turn reduction was applied on the minor approaches where applicable.

Since right- turners on the eastbound approach do not experience any sight distance issues while completing the right turn, all right-turning vehicles were removed for analysis. The eastbound approach, Lake Ella Drive, has only one lane to accommodate all movements. Therefore all traffic collected on this approach should be considered during analysis. Table 5.1 displays the traffic used for analysis after the appropriate right turn reduction was taken. See Appendix E for traffic used for analysis broken up into 15 minute increments.

With all of the right turning vehicles being removed from the eastbound business entrance, the westbound Lake Ella Drive traffic became the consistent maximum volume on the minor approach. For warrants 1,2 , and 3 , the ' 2 or more lanes and 1 lane' category was used for analysis.

Table 5.1: Existing Traffic Volumes after Right Turn Reduction

| Time | Major Street <br> Northbound <br> Monroe <br> Street | Major Street <br> Southbound <br> Monroe Street | Major Street <br> Total of Both <br> Approaches | Minor Street <br> Eastbound <br> Business <br> Entrance | Minor Street <br> Westbound <br> Lake Ella <br> Drive |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 7:00 AM - 8:00 AM | 580 | 1571 | 2151 | 4 | 45 |
| 8:00 AM - 9:00 AM | 677 | 1379 | 2056 | 6 | 53 |
| 9:00 AM - 10:00 AM | 676 | 1026 | 1702 | 8 | 52 |
| 10:00 AM -11:00 AM | 772 | 908 | 1680 | 8 | 65 |
| 11:00 AM -12:00 PM | 1026 | 1007 | 2033 | 16 | 70 |
| 12:00 PM - 1:00 PM | 1126 | 1199 | 2325 | 17 | 100 |
| 1:00 PM -2:00 PM | 1111 | 1207 | 2318 | 8 | 94 |
| 2:00 PM - 3:00 PM | 1127 | 1033 | 2160 | 9 | 88 |
| 3:00 PM -4:00 PM | 1194 | 1014 | 2208 | 10 | 87 |
| 4:00 PM -5:00 PM | 1417 | 1060 | 2477 | 12 | 97 |
| $5: 00 \mathrm{PM}-6: 00 \mathrm{PM}$ | 1625 | 1153 | 2778 | 11 | 120 |
| 6:00 PM -7:00 PM | 1204 | 971 | 2175 | 19 | 139 |

## Traffic Signal Warrant Analysis

## Warrant 1. Eight-Hour Vehicular Volume

The Minimum Vehicular Volume, Condition A, is intended for application where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal.

The Interruption of Continuous Traffic, Condition B, is intended for application where Condition A is not satisfied and where the traffic volume on a major street is so heavy that traffic on a minor intersecting street suffers excessive delay or conflict in entering or crossing the major street.

It is intended that Warrant 1 be treated as a single warrant. If Condition A is satisfied, then Warrant 1 is satisfied and analyses of Condition B and the combination of Conditions A and B are not needed. Similarly, if Condition B is satisfied, then Warrant 1 is satisfied and an analysis of the combination of Conditions A and B is not needed.

With existing traffic and reduced right-turns, Warrant 1 is not satisfied. Table 5.2 contains the required volumes to meet Warrant 1.

Both Condition A and Condition B are not satisfied for the twelve hours observed using the $100 \%$ column.

Table 5.3 displays which hours of traffic pass Conditions A and B. The traffic on the major street, Monroe Street, far exceeded the necessary volumes for Condition A and B. For the minor street, Lake Ella Drive, no hour of traffic exceeds the required 150 vph for Condition A while only four hours of traffic meet or exceed the required 75 vph for Condition B. Since neither Condition A nor Condition B meets the $100 \%$ column, one may compare the traffic to the $80 \%$ columns. If eight hours of traffic satisfy the $80 \%$ columns for both Condition A and Condition B for the same hour then the warrant is met. Only two hours of traffic met the $80 \%$ columns for both Condition A and Condition B which does not satisfy the warrant.

## Table 5.2: Table 4C-1 from MUTCD

Condition A - Minimum Vehicular Volume

| Number of lanes for moving <br> traffic on each approach |  | Vehicles per hour on major street <br> (total of both approaches) |  |  | Vehicles per hour on higher-volume <br> minor-street approach (one dir. only) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major Street | Minor Street | $100 \%^{\mathrm{a}}$ | $80 \%^{\mathrm{b}}$ | $70 \%^{\mathrm{d}}$ | $56 \%^{\mathrm{d}}$ | $100 \%^{\mathrm{a}}$ | $80 \%^{\mathrm{b}}$ | $70 \%^{\mathrm{c}}$ | $56 \%^{\mathrm{d}}$ |
| 1 | 1 | 500 | 400 | 350 | 280 | 150 | 120 | 105 | 84 |
| 2 or more | 1 | 600 | 480 | 420 | 336 | 150 | 120 | 105 | 84 |
| 2 or more | 2 or more | 600 | 480 | 420 | 336 | 200 | 160 | 140 | 112 |
| 1 | 2 or more | 500 | 400 | 350 | 280 | 200 | 160 | 140 | 112 |

Condition B - Interruption of Continuous Traffic

| Number of lanes for moving <br> traffic on each approach |  | Vehicles per hour on major street <br> (total of both approaches) |  |  | Vehicles per hour on higher-volume <br> minor-street approach (one dir. only) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Major Street | Minor Street | $100 \%^{\mathrm{a}}$ | $80 \%^{\mathrm{b}}$ | $70 \%^{\mathrm{c}}$ | $56 \%^{\mathrm{d}}$ | $100 \%^{\mathrm{a}}$ | $80 \%^{\mathrm{b}}$ | $70 \%^{\mathrm{c}}$ | $56 \%^{\mathrm{d}}$ |
| 1 | 1 | 750 | 600 | 525 | 420 | 75 | 60 | 53 | 42 |
| 2 or more | 1 | 900 | 720 | 630 | 504 | 75 | 60 | 53 | 42 |
| 2 or more | 2 or more | 900 | 720 | 630 | 504 | 100 | 80 | 70 | 56 |
| 1 | 2 or more | 750 | 600 | 525 | 420 | 100 | 80 | 70 | 56 |

Note: Green shade indicates minimum vph required for study area
a Basic minimum hourly volume
b Used for combination of Conditions $A$ and $B$ after adequate trial of other remedial measures
c May be used when the major-street speed exceeds 40 mph or in an isolated community with a pop. of less than 10,000
d May be used for combination of Conditions $A$ and $B$ after adequate trial of other remedial measures when the major street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

Table 5.3: Evaluation of Existing Traffic for Warrant 1

| 8 Hour Vehicular Volume |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Minimum Base <br> Volumes: | Condition A |  | Condition B |  |
| Time period | 600 <br> VPH on major <br> street, both <br> approaches | VPH on higher- <br> volume minor street | VPH on major <br> street, both <br> approaches | VPH on higher- <br> volume minor street |
| $7: 00-8: 00$ | 2151 | 45 | 2151 | 45 |
| 8:00-9:00 | 2056 | 53 | 2056 | 53 |
| 9:00-10:00 | 1702 | 52 | 1702 | 52 |
| 10:00-11:00 | 1680 | 65 | 1680 | 65 |
| 11:00-12:00 | 2033 | 70 | 2033 | 70 |
| 12:00-13:00 | 2325 | 100 | 2325 | 100 |
| 13:00-14:00 | 2318 | 94 | 2318 | 94 |
| 14:00-15:00 | 2160 | 88 | 2160 | 88 |
| $15: 00-16: 00$ | 2208 | 87 | 2208 | 87 |
| 16:00-17:00 | 2477 | 97 | 2477 | 97 |
| 17:00-18:00 | 2778 | 120 | 2778 | 120 |
| 18:00-19:00 | 2175 | 139 | 2175 | 139 |

With existing traffic and reduced right-turns, Section 4C. 02 Warrant 1 is not satisfied.

## Traffic Signal Warrant Analysis

## Warrant 2. Four-Hour Vehicular Volume

The Four-Hour Vehicular Volume signal warrant conditions are intended to be applied where the volume of intersecting traffic is the principal reason to consider installing a traffic control signal.

Warrant 2 is satisfied. Using Figure 4C-2, Figure 5.1 in this report, the existing traffic volumes satisfy the warrant for six hours of traffic. Table 5.4 shows the hours of traffic used for analysis. Six data points lie above the required 80 vph threshold for intersections with 2 or more lanes on approach and 1 lane on the other approach.

Table 5.4: Peak Hourly Traffic Passing Warrant 2

| Beginning <br> Time | End <br> Time | VPH on major street, <br> both approaches | VPH on higher- <br> volume minor street |
| :---: | :---: | :---: | :---: |
| $18: 00$ | $19: 00$ | 2175 | 139 |
| $17: 00$ | $18: 00$ | 2778 | 120 |
| $12: 15$ | $13: 15$ | 2354 | 109 |
| $16: 00$ | $17: 00$ | 2477 | 97 |
| $13: 45$ | $14: 45$ | 2173 | 94 |
| $15: 00$ | $16: 00$ | 2208 | 87 |
| $11: 15$ | $12: 15$ | 2129 | 79 |
| $10: 15$ | $11: 15$ | 1728 | 66 |
| $9: 15$ | $10: 15$ | 1654 | 54 |
| $8: 15$ | $9: 15$ | 1973 | 55 |

Note: Green shading indicates hours of traffic that satisfy Warrant 2


Figure 5.1: Figure 4C-2 from the MUTCD

## Traffic Signal Warrant Analysis

## Warrant 3. Peak Hour

The Peak Hour signal warrant is intended for use at a location where traffic conditions are such that for a minimum of 1 hour of an average day, the minor-street traffic suffers undue delay when entering or crossing the major street.

Warrant 3 (Category B) is satisfied. For three hours, existing traffic volumes exceed the threshold of 100 vph shown in Figure 4C-4, Figure 5.2 in this report. Table 5.4 show the hours of traffic used for analysis.

Table 5.5: Peak Hourly Traffic Passing Warrant 3

| Beginning <br> Time | End <br> Time | VPH on major street, <br> both approaches | VPH on higher- <br> volume minor street |
| :---: | :---: | :---: | :---: |
| $18: 00$ | $19: 00$ | 2175 | 139 |
| $17: 00$ | $18: 00$ | 2778 | 120 |
| $12: 15$ | $13: 15$ | 2354 | 109 |
| $16: 00$ | $17: 00$ | 2477 | 97 |
| $13: 45$ | $14: 45$ | 2173 | 94 |
| $15: 00$ | $16: 00$ | 2208 | 87 |
| $11: 15$ | $12: 15$ | 2129 | 79 |
| $10: 15$ | $11: 15$ | 1728 | 66 |
| $9: 15$ | $10: 15$ | 1654 | 54 |
| $8: 15$ | $9: 15$ | 1973 | 55 |

Note: Green shading indicates hours of traffic that satisfy Warrant 3


Figure 5.2: Figure 4C-4 from the MUTCD

## Warrant 4. Pedestrian Volume

The Pedestrian Volume signal warrant is intended for application where the traffic volume on a major street is so heavy that pedestrians experience excessive delay in crossing the major street.

Warrant 4 was not assessed because pedestrian delay is not currently a concern at the intersection.

## Warrant 5. School Crossing

Warrant 5 is intended for application where the fact that schoolchildren cross the major street is the principal reason to consider installing a traffic control signal.

Warrant 5 was not assessed because there is no school crossing in the intersection area.

## Warrant 6. Coordinated Signal System

Progressive movement in a coordinated signal system sometimes necessitates installing traffic control signals at intersections where they would not otherwise be needed in order to maintain proper platooning of vehicles.

Field observations confirmed that adequate platooning of vehicles is provided with the existing signal system. Warrant 6 was not satisfied.

## Warrant 7. Crash Experience

The Crash Experience signal warrant conditions are intended for application where the severity and frequency of crashes are the principal reasons to consider installing a traffic control signal.

Standard: The need for a traffic control signal shall be considered if an engineering study finds that all of the following criteria are met:
A. Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency; and
B. Five or more reported crashes, of types susceptible to correction by a traffic control signal, have occurred within a 12 -month period, each crash involving personal injury or property damage apparently exceeding the applicable requirements for a reportable crash; and
C. For each of any 8 hours of an average day, the vehicles per hour (vph) given in both of the 80 percent columns of Condition A in Table 4C-1, or the vph in both of the 80 percent columns of Condition B in Table 4C-1 exists on the major-street and the higher-volume minor-street approach, respectively, to the intersection, or the volume of pedestrian traffic is not less than 80 percent of the requirements specified in the Pedestrian Volume warrant. These major-street and minor-street volumes shall be for the same 8 -hours. On the minor street, the higher volume shall not be required to be on the same approach during each of the 8 hours.

With existing traffic and crash history, Warrant 7 is not satisfied.
The study team reviewed crash data for a 12 month period, starting September 27, 2011 and ending September 26, 2012. Crashes that are not likely to be corrected by a traffic signal were not included in the crash experience summary. For example, left turn or angle crashes can be corrected with the installation of a traffic signal while rear end or side swipe crashes generally cannot be. The study period has only two crashes correctable by a traffic signal and does not satisfy criteria B, having 5 or more crashes. Table 5.6 displays a

## Traffic Signal Warrant Analysis

summary of the crash history within the study period. Appendix F contains the overall crash data for the intersection.

## Table 5.6: Crash History

| Type of <br> Crash | Occurrences |
| :---: | :---: |
| Angle | 1 |
| Left turn | 1 |
| Total | 2 |

## Warrant 8. Roadway Network

Section 4C. 09 Warrant 8 applies to the intersection of two or more major routes where a traffic control signal might be justified to encourage concentration and organization of traffic flow on a roadway network.

Warrant 8 is not applicable.

## Warrant 9. Intersection Near a Grade Crossing

Warrant 9 is intended for use at a location where none of the other eight warrants are satisfied, but the proximity to the intersection of a grade crossing on an intersection approach controlled by a STOP or YIELD sign is the principal reason to consider installing a traffic control signal.

Warrant 9 is not applicable.

### 6.0 Conclusion and Recommendations

Based on the existing traffic, the study team recommends the intersection of SR 63 and Lake Ella Drive for a traffic control signal. Three hours of traffic exceeded the required one hour for Warrant 3, Peak Hour. Six hours of existing traffic exceeded the required four hours for Warrant 2, Four-Hour Vehicular Volume. Existing traffic volumes did not satisfy Warrant 1, Eight-Hour Vehicular Volume. Warrant 6, Coordinated Signal System, was not satisfied due to the fact that adequate platooning of vehicles is provided with the existing signal system. In addition Warrant 7, Crash Experience, was not fulfilled due to not enough crashes susceptible to correction by a traffic control signal existing. Table 6.1 provides a summary of the warrant analysis.

Table 6.1: Warrant Analysis Summary

|  | Warrant | Result |
| :--- | :--- | :--- |
| 1 | 8 -Hour Vehicular Volume | Not Satisfied |
| 2 | 4 -Hour Vehicular Volume | Satisfied |
| 3 | Peak Hour | Satisfied |
| 4 | Pedestrian Volume | N/A |
| 5 | School Crossing | N/A |
| 6 | Coordinated Signal System | Not Satisfied |
| 7 | Crash Experience | Not Satisfied |
| 8 | Roadway Network | N/A |
| 9 | Intersection Near a Grade <br> Crossing | N/A |

# Appendix A: Raw Volume Counts 

HSA Consulting Group, Inc.
1315 Country Club Road
Gulf Breeze, Florida 32563

| Location: | Monroe Street north of N. Lake Ella Drive |  |  |
| :--- | :--- | :--- | :--- |
| County: | $\frac{\text { Leon }}{2-O c t-12}$ | Start Time: | $0: 00$ |
| Start Date: |  |  |  |


| Time | Northbound |  |  |  |  | Southbound |  |  |  |  | Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st | 2nd | 3rd | 4th | Hour Tot. | 1st | 2nd | 3rd | 4th | Hour Tot. | Total |
| 0:00 | 44 | 36 | 31 | 39 | 150 | 45 | 37 | 42 | 39 | 163 | 313 |
| 1:00 | 26 | 23 | 19 | 9 | 77 | 19 | 11 | 18 | 17 | 65 | 142 |
| 2:00 | 21 | 22 | 15 | 14 | 72 | 11 | 17 | 22 | 18 | 68 | 140 |
| 3:00 | 9 | 6 | 16 | 10 | 41 | 11 | 8 | 12 | 11 | 42 | 83 |
| 4:00 | 8 | 11 | 5 | 18 | 42 | 9 | 15 | 20 | 22 | 66 | 108 |
| 5:00 | 23 | 18 | 21 | 30 | 92 | 21 | 32 | 45 | 75 | 173 | 265 |
| 6:00 | 25 | 44 | 54 | 82 | 205 | 92 | 136 | 225 | 324 | 777 | 982 |
| 7:00 | 102 | 156 | 145 | 179 | 582 | 454 | 390 | 432 | 376 | 1652 | 2234 |
| 8:00 | 181 | 176 | 178 | 173 | 708 | 373 | 365 | 349 | 304 | 1391 | 2099 |
| 9:00 | 189 | 169 | 161 | 172 | 691 | 278 | 269 | 280 | 246 | 1073 | 1764 |
| 10:00 | 193 | 165 | 215 | 193 | 766 | 215 | 217 | 232 | 229 | 893 | 1659 |
| 11:00 | 208 | 256 | 311 | 274 | 1049 | 237 | 251 | 260 | 272 | 1020 | 2069 |
| 12:00 | 269 | 277 | 296 | 282 | 1124 | 315 | 263 | 292 | 309 | 1179 | 2303 |
| 13:00 | 272 | 283 | 292 | 253 | 1100 | 336 | 342 | 301 | 294 | 1273 | 2373 |
| 14:00 | 232 | 284 | 294 | 274 | 1084 | 276 | 272 | 232 | 237 | 1017 | 2101 |
| 15:00 | 255 | 276 | 285 | 325 | 1141 | 273 | 261 | 229 | 254 | 1017 | 2158 |
| 16:00 | 344 | 361 | 360 | 378 | 1443 | 267 | 263 | 267 | 278 | 1075 | 2518 |
| 17:00 | 441 | 459 | 422 | 396 | 1718 | 319 | 274 | 301 | 281 | 1175 | 2893 |
| 18:00 | 307 | 346 | 286 | 288 | 1227 | 239 | 272 | 261 | 230 | 1002 | 2229 |
| 19:00 | 227 | 264 | 236 | 237 | 964 | 235 | 194 | 186 | 203 | 818 | 1782 |
| 20:00 | 250 | 200 | 171 | 209 | 830 | 200 | 178 | 162 | 147 | 687 | 1517 |
| 21:00 | 230 | 175 | 137 | 120 | 662 | 152 | 130 | 126 | 120 | 528 | 1190 |
| 22:00 | 133 | 119 | 82 | 78 | 412 | 100 | 93 | 85 | 64 | 342 | 754 |
| 23:00 | 90 | 75 | 58 | 56 | 279 | 60 | 71 | 46 | 45 | 222 | 501 |
| Total |  |  |  |  | 16459 |  |  |  |  | 17718 | 34177 |

Peak Hour Summary

|  | Direction: |  |
| :---: | :---: | :---: |
|  | Northbound |  |
| A.M | 815 | Volume |
| P.M | 1700 | 1718 |
| Daily | 1700 | 1718 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Volume |
| A.M | 700 | 1652 |
| P.M | 1245 | 1288 |
|  | 700 | 1652 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Combined |
| A.M | 700 | 2234 |
| P.M | 1700 | 2893 |
|  | 1700 | 2893 |

HSA Consulting Group, Inc.
1315 Country Club Road
Gulf Breeze, Florida 32563

| Location: | Monroe Street north of N. Lake Ella Drive |  |  |
| :--- | :--- | :--- | :--- |
| County: | $\frac{\text { Leon }}{3-O c t-12}$ | Start Time: | $0: 00$ |
| Start Date: |  |  |  |


| Time | Northbound |  |  |  |  | Southbound |  |  |  |  | Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st | 2nd | 3rd | 4th | Hour Tot. | 1st | 2nd | 3rd | 4th | Hour Tot. | Total |
| 0:00 | 43 | 42 | 42 | 39 | 166 | 38 | 39 | 35 | 27 | 139 | 305 |
| 1:00 | 31 | 27 | 18 | 18 | 94 | 16 | 21 | 17 | 12 | 66 | 160 |
| 2:00 | 21 | 13 | 20 | 11 | 65 | 16 | 21 | 11 | 9 | 57 | 122 |
| 3:00 | 14 | 8 | 18 | 12 | 52 | 12 | 10 | 16 | 17 | 55 | 107 |
| 4:00 | 14 | 13 | 9 | 7 | 43 | 19 | 10 | 14 | 25 | 68 | 111 |
| 5:00 | 17 | 26 | 20 | 35 | 98 | 21 | 28 | 42 | 85 | 176 | 274 |
| 6:00 | 25 | 32 | 59 | 79 | 195 | 87 | 146 | 201 | 331 | 765 | 960 |
| 7:00 | 114 | 161 | 158 | 184 | 617 | 417 | 419 | 424 | 412 | 1672 | 2289 |
| 8:00 | 188 | 196 | 163 | 178 | 725 | 387 | 387 | 389 | 333 | 1496 | 2221 |
| 9:00 | 209 | 169 | 189 | 173 | 740 | 298 | 257 | 247 | 280 | 1082 | 1822 |
| 10:00 | 178 | 196 | 212 | 211 | 797 | 269 | 229 | 226 | 228 | 952 | 1749 |
| 11:00 | 276 | 237 | 276 | 288 | 1077 | 253 | 228 | 283 | 287 | 1051 | 2128 |
| 12:00 | 325 | 333 | 353 | 330 | 1341 | 280 | 327 | 318 | 378 | 1303 | 2644 |
| 13:00 | 305 | 320 | 292 | 331 | 1248 | 321 | 327 | 318 | 294 | 1260 | 2508 |
| 14:00 | 293 | 278 | 294 | 286 | 1151 | 298 | 255 | 265 | 306 | 1124 | 2275 |
| 15:00 | 352 | 323 | 312 | 339 | 1326 | 282 | 249 | 274 | 233 | 1038 | 2364 |
| 16:00 | 371 | 375 | 375 | 394 | 1515 | 268 | 270 | 292 | 254 | 1084 | 2599 |
| 17:00 | 449 | 381 | 361 | 380 | 1571 | 314 | 326 | 309 | 237 | 1186 | 2757 |
| 18:00 | 363 | 289 | 307 | 258 | 1217 | 264 | 268 | 225 | 247 | 1004 | 2221 |
| 19:00 | 236 | 258 | 207 | 205 | 906 | 197 | 213 | 201 | 178 | 789 | 1695 |
| 20:00 | 210 | 215 | 230 | 180 | 835 | 162 | 155 | 140 | 168 | 625 | 1460 |
| 21:00 | 165 | 159 | 107 | 109 | 540 | 140 | 116 | 87 | 87 | 430 | 970 |
| 22:00 | 100 | 86 | 93 | 101 | 380 | 82 | 88 | 71 | 86 | 327 | 707 |
| 23:00 | 85 | 74 | 55 | 38 | 252 | 87 | 68 | 65 | 42 | 262 | 514 |
| Total |  |  |  |  | 16951 |  |  |  |  | 18011 | 34962 |

Peak Hour Summary

|  | Direction: |  |
| :---: | :---: | :---: |
|  | Northbound |  |
| A.M | 815 | Volume |
| P.M | 1630 | 1596 |
| Daily | 1630 | 1599 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Volume |
| A.M | 700 | 1672 |
| P.M | 1215 | 1344 |
| Daily | 700 | 1672 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Combined |
| A.M | 730 | 2336 |
| P.M | 1645 | 2788 |
| Daily | 1645 | 2788 |

HSA Consulting Group, Inc.
1315 Country Club Road
Gulf Breeze, Florida 32563

| Location: | Monroe Street north of N. Lake Ella Drive |  |  |
| :--- | :--- | :--- | :--- |
| County: $\frac{\text { Leon }}{}$ <br> Start Date: Start Time: |  | $0: 00$ |  |


| Time | Northbound |  |  |  |  | Southbound |  |  |  |  | Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st | 2nd | 3rd | 4th | Hour Tot. | 1st | 2nd | 3rd | 4th | Hour Tot. | Total |
| 0:00 | 40 | 35 | 46 | 26 | 147 | 44 | 48 | 41 | 33 | 166 | 313 |
| 1:00 | 34 | 32 | 29 | 16 | 111 | 21 | 23 | 21 | 18 | 83 | 194 |
| 2:00 | 27 | 32 | 35 | 17 | 111 | 17 | 18 | 13 | 16 | 64 | 175 |
| 3:00 | 14 | 14 | 12 | 10 | 50 | 9 | 9 | 21 | 5 | 44 | 94 |
| 4:00 | 17 | 9 | 8 | 10 | 44 | 9 | 9 | 15 | 21 | 54 | 98 |
| 5:00 | 23 | 21 | 21 | 28 | 93 | 20 | 34 | 47 | 97 | 198 | 291 |
| 6:00 | 38 | 48 | 70 | 105 | 261 | 108 | 128 | 199 | 324 | 759 | 1020 |
| 7:00 | 117 | 171 | 162 | 193 | 643 | 399 | 392 | 407 | 375 | 1573 | 2216 |
| 8:00 | 178 | 184 | 204 | 194 | 760 | 403 | 361 | 315 | 334 | 1413 | 2173 |
| 9:00 | 187 | 192 | 165 | 153 | 697 | 299 | 249 | 265 | 229 | 1042 | 1739 |
| 10:00 | 204 | 177 | 183 | 193 | 757 | 226 | 244 | 244 | 266 | 980 | 1737 |
| 11:00 | 195 | 266 | 249 | 290 | 1000 | 238 | 271 | 261 | 294 | 1064 | 2064 |
| 12:00 | 243 | 284 | 320 | 276 | 1123 | 288 | 277 | 349 | 337 | 1251 | 2374 |
| 13:00 | 287 | 286 | 297 | 316 | 1186 | 344 | 301 | 289 | 291 | 1225 | 2411 |
| 14:00 | 326 | 301 | 306 | 293 | 1226 | 302 | 260 | 247 | 265 | 1074 | 2300 |
| 15:00 | 303 | 282 | 308 | 331 | 1224 | 286 | 270 | 294 | 253 | 1103 | 2327 |
| 16:00 | 350 | 345 | 381 | 381 | 1457 | 292 | 285 | 272 | 290 | 1139 | 2596 |
| 17:00 | 412 | 430 | 424 | 353 | 1619 | 297 | 317 | 320 | 293 | 1227 | 2846 |
| 18:00 | 333 | 329 | 325 | 279 | 1266 | 239 | 293 | 249 | 235 | 1016 | 2282 |
| 19:00 | 253 | 241 | 243 | 257 | 994 | 238 | 202 | 203 | 210 | 853 | 1847 |
| 20:00 | 227 | 236 | 213 | 212 | 888 | 197 | 191 | 196 | 161 | 745 | 1633 |
| 21:00 | 210 | 180 | 166 | 162 | 718 | 155 | 146 | 136 | 133 | 570 | 1288 |
| 22:00 | 144 | 126 | 136 | 122 | 528 | 94 | 107 | 89 | 90 | 380 | 908 |
| 23:00 | 84 | 80 | 83 | 51 | 298 | 84 | 86 | 42 | 77 | 289 | 587 |
| Total |  |  |  |  | 17201 |  |  |  |  | 18312 | 35513 |

Peak Hour Summary

|  | Direction: |  |
| :---: | :---: | :---: |
|  | Northbound |  |
| A.M | 830 | Volume |
| P.M | 1645 | 1647 |
| Daily | 1645 | 1647 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Volume |
| A.M | 715 | 1577 |
| P.M | 1230 | 1331 |
| Daily | 715 | 1577 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Combined |
| A.M | 715 | 2281 |
| P.M | 1645 | 2871 |
| Daily | 1645 | 2871 |

HSA Consulting Group, Inc.
1315 Country Club Road
Gulf Breeze, Florida 32563

| Location: | Monroe St north of N. Lake Ella Dr |  |  |
| :--- | :--- | :--- | :--- |
| County: | $\frac{\text { Leon }}{5-O c t-12}$ | Start Time: | $0: 00$ |


| Time | Northbound |  |  |  |  | Southbound |  |  |  |  | Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st | 2nd | 3rd | 4th | Hour Tot. | 1st | 2nd | 3rd | 4th | Hour Tot. | Total |
| 0:00 | 46 | 60 | 42 | 39 | 187 | 41 | 57 | 39 | 25 | 162 | 349 |
| 1:00 | 35 | 38 | 26 | 27 | 126 | 42 | 31 | 18 | 28 | 119 | 245 |
| 2:00 | 27 | 20 | 18 | 23 | 88 | 24 | 32 | 6 | 15 | 77 | 165 |
| 3:00 | 27 | 18 | 11 | 10 | 66 | 16 | 14 | 30 | 10 | 70 | 136 |
| 4:00 | 16 | 9 | 12 | 12 | 49 | 9 | 13 | 16 | 20 | 58 | 107 |
| 5:00 | 28 | 21 | 28 | 29 | 106 | 20 | 25 | 53 | 61 | 159 | 265 |
| 6:00 | 27 | 35 | 69 | 92 | 223 | 94 | 142 | 193 | 305 | 734 | 957 |
| 7:00 | 113 | 165 | 138 | 188 | 604 | 376 | 398 | 428 | 359 | 1561 | 2165 |
| 8:00 | 164 | 187 | 172 | 194 | 717 | 343 | 329 | 360 | 328 | 1360 | 2077 |
| 9:00 | 190 | 161 | 177 | 199 | 727 | 303 | 290 | 255 | 289 | 1137 | 1864 |
| 10:00 | 182 | 221 | 172 | 236 | 811 | 227 | 243 | 286 | 250 | 1006 | 1817 |
| 11:00 | 222 | 255 | 283 | 292 | 1052 | 255 | 279 | 306 | 375 | 1215 | 2267 |
| 12:00 | 339 | 325 | 336 | 324 | 1324 | 344 | 328 | 328 | 357 | 1357 | 2681 |
| 13:00 | 359 | 332 | 327 | 356 | 1374 | 380 | 381 | 354 | 350 | 1465 | 2839 |
| 14:00 | 369 | 339 | 359 | 334 | 1401 | 309 | 331 | 288 | 293 | 1221 | 2622 |
| 15:00 | 368 | 344 | 386 | 341 | 1439 | 302 | 301 | 310 | 340 | 1253 | 2692 |
| 16:00 | 407 | 408 | 352 | 397 | 1564 | 328 | 301 | 337 | 316 | 1282 | 2846 |
| 17:00 | 385 | 402 | 459 | 347 | 1593 | 365 | 364 | 333 | 353 | 1415 | 3008 |
| 18:00 | 333 | 313 | 300 | 275 | 1221 | 331 | 365 | 315 | 346 | 1357 | 2578 |
| 19:00 | 300 | 311 | 275 | 330 | 1216 | 301 | 293 | 287 | 243 | 1124 | 2340 |
| 20:00 | 306 | 297 | 269 | 274 | 1146 | 247 | 245 | 196 | 228 | 916 | 2062 |
| 21:00 | 279 | 257 | 239 | 307 | 1082 | 210 | 199 | 177 | 191 | 777 | 1859 |
| 22:00 | 240 | 236 | 171 | 166 | 813 | 178 | 175 | 163 | 163 | 679 | 1492 |
| 23:00 | 141 | 143 | 148 | 123 | 555 | 148 | 164 | 142 | 118 | 572 | 1127 |
| Total |  |  |  |  | 19484 |  |  |  |  | 21076 | 40560 |

Peak Hour Summary

|  | Direction: |  | Northbound |
| :---: | :---: | :---: | :---: |
|  | Hour |  |  |
| A.M | 815 |  |  |
| P.M | 1645 |  |  |
| Daily | 743 |  |  |
|  | 1645 |  |  |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Houthbound |  |
| A.M | 700 | Volume |
| P.M | 1245 | 1561 |
| Daily | 700 | 1561 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Combined |
| A.M | 715 | 2183 |
| P.M | 1645 | 3021 |
| Daily | 1645 | 3021 |

HSA Consulting Group, Inc.
1315 Country Club Road
Gulf Breeze, Florida 32563

| Location: | Monroe St north of N. Lake Ella Dr |  |  |
| :--- | :--- | :--- | :--- |
| County: | $\frac{\text { Leon }}{6-O c t-12}$ | Start Time: |  |
| Start Date: |  |  |  |


| Time | Northbound |  |  |  |  | Southbound |  |  |  |  | Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st | 2nd | 3rd | 4th | Hour Tot. | 1st | 2nd | 3rd | 4th | Hour Tot. | Total |
| 0:00 | 119 | 76 | 76 | 74 | 345 | 86 | 107 | 84 | 85 | 362 | 707 |
| 1:00 | 78 | 66 | 72 | 61 | 277 | 66 | 56 | 40 | 63 | 225 | 502 |
| 2:00 | 76 | 77 | 46 | 52 | 251 | 42 | 47 | 43 | 42 | 174 | 425 |
| 3:00 | 37 | 33 | 30 | 35 | 135 | 28 | 17 | 30 | 33 | 108 | 243 |
| 4:00 | 27 | 20 | 23 | 27 | 97 | 19 | 20 | 25 | 28 | 92 | 189 |
| 5:00 | 16 | 11 | 12 | 21 | 60 | 24 | 17 | 21 | 56 | 118 | 178 |
| 6:00 | 18 | 24 | 31 | 44 | 117 | 33 | 62 | 84 | 99 | 278 | 395 |
| 7:00 | 43 | 53 | 77 | 97 | 270 | 101 | 86 | 114 | 147 | 448 | 718 |
| 8:00 | 89 | 101 | 90 | 113 | 393 | 127 | 136 | 188 | 201 | 652 | 1045 |
| 9:00 | 135 | 147 | 166 | 186 | 634 | 186 | 203 | 198 | 259 | 846 | 1480 |
| 10:00 | 158 | 185 | 201 | 220 | 764 | 232 | 243 | 290 | 292 | 1057 | 1821 |
| 11:00 | 183 | 234 | 238 | 273 | 928 | 243 | 279 | 299 | 307 | 1128 | 2056 |
| 12:00 | 256 | 254 | 284 | 253 | 1047 | 309 | 308 | 323 | 294 | 1234 | 2281 |
| 13:00 | 316 | 271 | 275 | 288 | 1150 | 287 | 326 | 278 | 302 | 1193 | 2343 |
| 14:00 | 294 | 289 | 278 | 291 | 1152 | 267 | 305 | 302 | 299 | 1173 | 2325 |
| 15:00 | 271 | 305 | 332 | 285 | 1193 | 242 | 268 | 251 | 271 | 1032 | 2225 |
| 16:00 | 281 | 308 | 312 | 269 | 1170 | 293 | 240 | 276 | 223 | 1032 | 2202 |
| 17:00 | 252 | 296 | 252 | 251 | 1051 | 258 | 293 | 221 | 267 | 1039 | 2090 |
| 18:00 | 269 | 255 | 262 | 241 | 1027 | 242 | 270 | 257 | 254 | 1023 | 2050 |
| 19:00 | 226 | 262 | 275 | 244 | 1007 | 245 | 255 | 226 | 223 | 949 | 1956 |
| 20:00 | 218 | 200 | 223 | 203 | 844 | 227 | 193 | 191 | 171 | 782 | 1626 |
| 21:00 | 192 | 193 | 165 | 165 | 715 | 195 | 169 | 158 | 172 | 694 | 1409 |
| 22:00 | 147 | 159 | 124 | 123 | 553 | 163 | 134 | 120 | 111 | 528 | 1081 |
| 23:00 | 109 | 100 | 103 | 147 | 459 | 101 | 146 | 112 | 138 | 497 | 956 |
| Total |  |  |  |  | 15639 |  |  |  |  | 16664 | 32303 |

Peak Hour Summary

|  | Direction: |  |
| :---: | :---: | :---: |
|  | Northbound |  |
| A.M | 845 | Volume |
| P.M | 1530 | 1206 |
| Daily | 1530 | 1206 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Houthbound |  |
| A.M | 845 | Volume |
| P.M | 1200 | 1234 |
| Daily | 1200 | 1234 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Combined |
| A.M | 845 | 1349 |
| P.M | 1230 | 2354 |
|  | 1230 | 2354 |

HSA Consulting Group, Inc.
1315 Country Club Road
Gulf Breeze, Florida 32563

| Location: | Monroe Street south of Legion Street |  |  |
| :--- | :--- | :--- | :--- |
| County: | $\frac{\text { Leon }}{2-O c t-12}$ | Start Time: | $0: 00$ |
| Start Date: |  |  |  |


| Time | Northbound |  |  |  |  | Southbound |  |  |  |  | Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st | 2nd | 3rd | 4th | Hour Tot. | 1st | 2nd | 3rd | 4th | Hour Tot. | Total |
| 0:00 | 44 | 36 | 30 | 35 | 145 | 43 | 37 | 46 | 36 | 162 | 307 |
| 1:00 | 27 | 28 | 16 | 9 | 80 | 20 | 14 | 17 | 17 | 68 | 148 |
| 2:00 | 21 | 20 | 15 | 13 | 69 | 10 | 17 | 21 | 17 | 65 | 134 |
| 3:00 | 9 | 7 | 14 | 10 | 40 | 11 | 10 | 12 | 10 | 43 | 83 |
| 4:00 | 7 | 10 | 6 | 17 | 40 | 8 | 15 | 21 | 24 | 68 | 108 |
| 5:00 | 18 | 13 | 26 | 28 | 85 | 19 | 34 | 47 | 76 | 176 | 261 |
| 6:00 | 27 | 49 | 45 | 85 | 206 | 90 | 143 | 225 | 317 | 775 | 981 |
| 7:00 | 101 | 151 | 147 | 169 | 568 | 433 | 421 | 446 | 387 | 1687 | 2255 |
| 8:00 | 172 | 183 | 166 | 176 | 697 | 371 | 355 | 335 | 303 | 1364 | 2061 |
| 9:00 | 183 | 178 | 160 | 162 | 683 | 272 | 257 | 275 | 226 | 1030 | 1713 |
| 10:00 | 194 | 167 | 205 | 213 | 779 | 208 | 210 | 240 | 226 | 884 | 1663 |
| 11:00 | 210 | 277 | 286 | 280 | 1053 | 228 | 237 | 254 | 249 | 968 | 2021 |
| 12:00 | 282 | 272 | 312 | 273 | 1139 | 308 | 271 | 287 | 323 | 1189 | 2328 |
| 13:00 | 270 | 274 | 309 | 220 | 1073 | 334 | 355 | 305 | 315 | 1309 | 2382 |
| 14:00 | 231 | 277 | 273 | 274 | 1055 | 286 | 284 | 239 | 239 | 1048 | 2103 |
| 15:00 | 257 | 270 | 294 | 322 | 1143 | 263 | 257 | 221 | 249 | 990 | 2133 |
| 16:00 | 324 | 341 | 365 | 381 | 1411 | 265 | 265 | 266 | 266 | 1062 | 2473 |
| 17:00 | 418 | 446 | 403 | 392 | 1659 | 312 | 257 | 284 | 275 | 1128 | 2787 |
| 18:00 | 289 | 341 | 273 | 284 | 1187 | 241 | 271 | 245 | 225 | 982 | 2169 |
| 19:00 | 231 | 260 | 214 | 209 | 914 | 255 | 197 | 200 | 210 | 862 | 1776 |
| 20:00 | 236 | 189 | 173 | 195 | 793 | 206 | 185 | 166 | 137 | 694 | 1487 |
| 21:00 | 213 | 163 | 121 | 111 | 608 | 169 | 144 | 126 | 123 | 562 | 1170 |
| 22:00 | 127 | 107 | 69 | 69 | 372 | 102 | 109 | 93 | 64 | 368 | 740 |
| 23:00 | 73 | 66 | 54 | 51 | 244 | 72 | 71 | 43 | 40 | 226 | 470 |
| Total |  |  |  |  | 16043 |  |  |  |  | 17710 | 33753 |

Peak Hour Summary

|  | Direction: |  |
| :---: | :---: | :---: |
|  | Northbound |  |
| A.M | 815 | Volume |
| P.M | 1700 | 1659 |
| Daily | 1700 | 1659 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Volume |
| A.M | 700 | 1687 |
| P.M | 1245 | 1317 |
| Daily | 700 | 1687 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Combined |
| A.M | 715 | 2264 |
| P.M | 1700 | 2787 |
| Daily | 1700 | 2787 |

HSA Consulting Group, Inc.
1315 Country Club Road
Gulf Breeze, Florida 32563

| Location: | Monroe Street south of Legion Street |  |  |
| :--- | :--- | :--- | :--- |
| County: | $\frac{\text { Leon }}{3-O c t-12}$ | Start Time: | $0: 00$ |
| Start Date: |  |  |  |


| Time | Northbound |  |  |  |  | Southbound |  |  |  |  | Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st | 2nd | 3rd | 4th | Hour Tot. | 1st | 2nd | 3rd | 4th | Hour Tot. | Total |
| 0:00 | 40 | 34 | 37 | 35 | 146 | 39 | 40 | 34 | 29 | 142 | 288 |
| 1:00 | 30 | 28 | 17 | 16 | 91 | 17 | 20 | 19 | 12 | 68 | 159 |
| 2:00 | 21 | 13 | 21 | 10 | 65 | 17 | 21 | 11 | 9 | 58 | 123 |
| 3:00 | 13 | 9 | 11 | 12 | 45 | 17 | 11 | 16 | 15 | 59 | 104 |
| 4:00 | 13 | 9 | 9 | 7 | 38 | 19 | 10 | 13 | 25 | 67 | 105 |
| 5:00 | 16 | 24 | 19 | 38 | 97 | 20 | 30 | 45 | 85 | 180 | 277 |
| 6:00 | 29 | 27 | 57 | 80 | 193 | 85 | 144 | 202 | 325 | 756 | 949 |
| 7:00 | 117 | 159 | 142 | 177 | 595 | 410 | 439 | 441 | 404 | 1694 | 2289 |
| 8:00 | 192 | 185 | 144 | 169 | 690 | 380 | 389 | 389 | 321 | 1479 | 2169 |
| 9:00 | 206 | 165 | 181 | 173 | 725 | 307 | 242 | 255 | 273 | 1077 | 1802 |
| 10:00 | 180 | 203 | 221 | 227 | 831 | 243 | 214 | 217 | 206 | 880 | 1711 |
| 11:00 | 287 | 255 | 264 | 285 | 1091 | 230 | 213 | 257 | 268 | 968 | 2059 |
| 12:00 | 314 | 302 | 293 | 284 | 1193 | 262 | 336 | 329 | 372 | 1299 | 2492 |
| 13:00 | 262 | 300 | 273 | 296 | 1131 | 345 | 335 | 311 | 292 | 1283 | 2414 |
| 14:00 | 291 | 271 | 278 | 272 | 1112 | 300 | 268 | 250 | 287 | 1105 | 2217 |
| 15:00 | 317 | 292 | 295 | 321 | 1225 | 275 | 235 | 255 | 216 | 981 | 2206 |
| 16:00 | 373 | 367 | 368 | 355 | 1463 | 260 | 264 | 282 | 253 | 1059 | 2522 |
| 17:00 | 430 | 416 | 400 | 388 | 1634 | 314 | 312 | 283 | 229 | 1138 | 2772 |
| 18:00 | 342 | 294 | 289 | 260 | 1185 | 248 | 274 | 216 | 242 | 980 | 2165 |
| 19:00 | 230 | 256 | 203 | 198 | 887 | 205 | 223 | 178 | 195 | 801 | 1688 |
| 20:00 | 199 | 207 | 215 | 181 | 802 | 161 | 155 | 133 | 173 | 622 | 1424 |
| 21:00 | 163 | 162 | 103 | 98 | 526 | 153 | 116 | 96 | 97 | 462 | 988 |
| 22:00 | 88 | 78 | 95 | 100 | 361 | 86 | 89 | 65 | 91 | 331 | 692 |
| 23:00 | 80 | 68 | 56 | 37 | 241 | 82 | 75 | 67 | 44 | 268 | 509 |
| Total |  |  |  |  | 16367 |  |  |  |  | 17757 | 34124 |

Peak Hour Summary

|  | Direction: |  |
| :---: | :---: | :---: |
|  | Northbound |  |
| A.M | 845 | Volume |
| P.M | 1700 | 1634 |
| Daily | 1700 | 1634 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Volume |
| A.M | 700 | 1694 |
| P.M | 1215 | 1382 |
| Daily | 700 | 1694 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Combined |
| A.M | 715 | 2334 |
| P.M | 1700 | 2772 |
| Daily | 1700 | 2772 |

HSA Consulting Group, Inc.
1315 Country Club Road
Gulf Breeze, Florida 32563

| Location: | Monroe Street south of Legion Street |  |  |
| :--- | :--- | :--- | :--- |
| County:  <br> Start Date: $\frac{\text { Leon }}{4-O c t-12}$ | Start Time: | $0: 00$ |  |


| Time | Northbound |  |  |  |  | Southbound |  |  |  |  | Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st | 2nd | 3rd | 4th | Hour Tot. | 1st | 2nd | 3rd | 4th | Hour Tot. | Total |
| 0:00 | 33 | 34 | 43 | 23 | 133 | 44 | 49 | 42 | 34 | 169 | 302 |
| 1:00 | 32 | 29 | 30 | 16 | 107 | 22 | 20 | 17 | 17 | 76 | 183 |
| 2:00 | 27 | 32 | 35 | 17 | 111 | 19 | 16 | 13 | 16 | 64 | 175 |
| 3:00 | 13 | 13 | 14 | 11 | 51 | 9 | 8 | 20 | 8 | 45 | 96 |
| 4:00 | 16 | 10 | 5 | 13 | 44 | 9 | 9 | 14 | 24 | 56 | 100 |
| 5:00 | 23 | 16 | 20 | 29 | 88 | 18 | 38 | 46 | 96 | 198 | 286 |
| 6:00 | 40 | 45 | 67 | 101 | 253 | 107 | 136 | 196 | 314 | 753 | 1006 |
| 7:00 | 124 | 164 | 162 | 180 | 630 | 386 | 406 | 398 | 371 | 1561 | 2191 |
| 8:00 | 172 | 181 | 174 | 181 | 708 | 407 | 368 | 305 | 308 | 1388 | 2096 |
| 9:00 | 172 | 194 | 157 | 149 | 672 | 298 | 256 | 260 | 221 | 1035 | 1707 |
| 10:00 | 202 | 185 | 185 | 192 | 764 | 220 | 241 | 230 | 260 | 951 | 1715 |
| 11:00 | 211 | 272 | 258 | 281 | 1022 | 227 | 257 | 228 | 281 | 993 | 2015 |
| 12:00 | 248 | 300 | 311 | 266 | 1125 | 279 | 281 | 349 | 336 | 1245 | 2370 |
| 13:00 | 280 | 279 | 282 | 299 | 1140 | 355 | 307 | 305 | 280 | 1247 | 2387 |
| 14:00 | 313 | 291 | 296 | 295 | 1195 | 307 | 253 | 249 | 265 | 1074 | 2269 |
| 15:00 | 302 | 274 | 304 | 328 | 1208 | 275 | 276 | 276 | 251 | 1078 | 2286 |
| 16:00 | 350 | 334 | 362 | 373 | 1419 | 263 | 280 | 275 | 287 | 1105 | 2524 |
| 17:00 | 415 | 437 | 427 | 361 | 1640 | 282 | 295 | 306 | 295 | 1178 | 2818 |
| 18:00 | 337 | 327 | 299 | 268 | 1231 | 233 | 285 | 235 | 241 | 994 | 2225 |
| 19:00 | 263 | 249 | 220 | 236 | 968 | 233 | 208 | 208 | 217 | 866 | 1834 |
| 20:00 | 223 | 229 | 215 | 206 | 873 | 209 | 202 | 204 | 178 | 793 | 1666 |
| 21:00 | 196 | 170 | 159 | 149 | 674 | 163 | 142 | 147 | 139 | 591 | 1265 |
| 22:00 | 129 | 117 | 125 | 108 | 479 | 107 | 123 | 86 | 99 | 415 | 894 |
| 23:00 | 76 | 75 | 72 | 47 | 270 | 92 | 90 | 52 | 85 | 319 | 589 |
| Total |  |  |  |  | 16805 |  |  |  |  | 18194 | 34999 |

Peak Hour Summary

|  | Direction: |  |
| :---: | :---: | :---: |
|  | Northbound |  |
| A.M | 830 | Volume |
| P.M | 1645 | 1652 |
| Daily | 1645 | 1652 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Volume |
| A.M | 715 | 1582 |
| P.M | 1230 | 1347 |
| Daily | 715 | 1582 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Combined |
| A.M | 715 | 2260 |
| P.M | 1645 | 2822 |
| Daily | 1645 | 2822 |

HSA Consulting Group, Inc.
1315 Country Club Road
Gulf Breeze, Florida 32563

| Location: | Monroe St south of Legion St |  |  |  |
| :--- | :--- | :--- | :---: | :---: |
| County: | $\frac{\text { Leon }}{\text { 5-Oct-12 }}$ | Start Time: |  |  |
| Start Date: |  | $0: 00$ |  |  |


| Time | Northbound |  |  |  |  | Southbound |  |  |  |  | Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st | 2nd | 3rd | 4th | Hour Tot. | 1st | 2nd | 3rd | 4th | Hour Tot. | Total |
| 0:00 | 44 | 55 | 41 | 39 | 179 | 52 | 56 | 46 | 28 | 182 | 361 |
| 1:00 | 31 | 35 | 23 | 25 | 114 | 37 | 33 | 19 | 28 | 117 | 231 |
| 2:00 | 24 | 20 | 20 | 20 | 84 | 25 | 34 | 7 | 15 | 81 | 165 |
| 3:00 | 29 | 17 | 10 | 14 | 70 | 17 | 14 | 31 | 11 | 73 | 143 |
| 4:00 | 16 | 9 | 14 | 14 | 53 | 9 | 11 | 18 | 20 | 58 | 111 |
| 5:00 | 26 | 22 | 27 | 28 | 103 | 22 | 24 | 53 | 65 | 164 | 267 |
| 6:00 | 32 | 36 | 64 | 85 | 217 | 96 | 136 | 203 | 307 | 742 | 959 |
| 7:00 | 112 | 169 | 144 | 177 | 602 | 369 | 383 | 427 | 375 | 1554 | 2156 |
| 8:00 | 160 | 178 | 176 | 188 | 702 | 343 | 327 | 362 | 323 | 1355 | 2057 |
| 9:00 | 196 | 159 | 170 | 192 | 717 | 304 | 288 | 249 | 276 | 1117 | 1834 |
| 10:00 | 177 | 208 | 171 | 231 | 787 | 221 | 228 | 270 | 244 | 963 | 1750 |
| 11:00 | 233 | 263 | 251 | 290 | 1037 | 265 | 273 | 300 | 345 | 1183 | 2220 |
| 12:00 | 333 | 317 | 340 | 318 | 1308 | 337 | 321 | 330 | 357 | 1345 | 2653 |
| 13:00 | 343 | 325 | 331 | 350 | 1349 | 363 | 352 | 361 | 351 | 1427 | 2776 |
| 14:00 | 346 | 340 | 344 | 338 | 1368 | 311 | 329 | 273 | 296 | 1209 | 2577 |
| 15:00 | 356 | 343 | 362 | 321 | 1382 | 289 | 291 | 291 | 335 | 1206 | 2588 |
| 16:00 | 423 | 393 | 364 | 384 | 1564 | 299 | 304 | 336 | 320 | 1259 | 2823 |
| 17:00 | 390 | 416 | 430 | 346 | 1582 | 342 | 354 | 321 | 330 | 1347 | 2929 |
| 18:00 | 321 | 313 | 296 | 290 | 1220 | 313 | 341 | 303 | 324 | 1281 | 2501 |
| 19:00 | 295 | 310 | 262 | 314 | 1181 | 289 | 318 | 293 | 242 | 1142 | 2323 |
| 20:00 | 275 | 294 | 263 | 249 | 1081 | 245 | 247 | 197 | 229 | 918 | 1999 |
| 21:00 | 264 | 223 | 235 | 277 | 999 | 232 | 216 | 201 | 197 | 846 | 1845 |
| 22:00 | 214 | 230 | 169 | 154 | 767 | 189 | 183 | 165 | 171 | 708 | 1475 |
| 23:00 | 135 | 126 | 134 | 109 | 504 | 150 | 171 | 150 | 118 | 589 | 1093 |
| Total |  |  |  |  | 18970 |  |  |  |  | 20866 | 39836 |

Peak Hour Summary

|  | Direction: |  |
| :---: | :---: | :---: |
|  | Northbound |  |
| A.M | 815 | Volume |
| P.M | 1645 | 1620 |
| Daily | 1645 | 1620 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Houthbound |  |
| A.M | 700 | Volume |
| P.M | 1245 | 1554 |
| Daily | 700 | 1553 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Combined |
| A.M | 715 | 2178 |
| P.M | 1645 | 2957 |
| Daily | 1645 | 2957 |

HSA Consulting Group, Inc.
1315 Country Club Road
Gulf Breeze, Florida 32563

| Location: | Monroe St south of Legion St |  |
| :--- | :--- | :--- | :--- |
| County: <br> Start Date:$\frac{\text { Leon }}{6-\text { Oct-12 }}$ | Start Time: | $0: 00$ |


| Time | Northbound |  |  |  |  | Southbound |  |  |  |  | Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st | 2nd | 3rd | 4th | Hour Tot. | 1st | 2nd | 3rd | 4th | Hour Tot. | Total |
| 0:00 | 114 | 68 | 68 | 72 | 322 | 88 | 110 | 88 | 90 | 376 | 698 |
| 1:00 | 72 | 61 | 71 | 62 | 266 | 69 | 56 | 42 | 68 | 235 | 501 |
| 2:00 | 70 | 76 | 47 | 54 | 247 | 46 | 50 | 40 | 48 | 184 | 431 |
| 3:00 | 39 | 32 | 29 | 37 | 137 | 25 | 21 | 29 | 32 | 107 | 244 |
| 4:00 | 24 | 20 | 20 | 22 | 86 | 19 | 22 | 24 | 29 | 94 | 180 |
| 5:00 | 16 | 10 | 7 | 25 | 58 | 20 | 19 | 23 | 54 | 116 | 174 |
| 6:00 | 19 | 27 | 28 | 45 | 119 | 33 | 62 | 82 | 93 | 270 | 389 |
| 7:00 | 41 | 59 | 68 | 96 | 264 | 91 | 92 | 107 | 127 | 417 | 681 |
| 8:00 | 82 | 105 | 88 | 115 | 390 | 113 | 131 | 177 | 181 | 602 | 992 |
| 9:00 | 126 | 138 | 162 | 178 | 604 | 164 | 193 | 197 | 240 | 794 | 1398 |
| 10:00 | 167 | 180 | 183 | 208 | 738 | 232 | 254 | 288 | 274 | 1048 | 1786 |
| 11:00 | 186 | 235 | 244 | 280 | 945 | 239 | 272 | 294 | 313 | 1118 | 2063 |
| 12:00 | 242 | 271 | 270 | 256 | 1039 | 298 | 319 | 321 | 300 | 1238 | 2277 |
| 13:00 | 312 | 280 | 271 | 277 | 1140 | 292 | 327 | 275 | 300 | 1194 | 2334 |
| 14:00 | 297 | 275 | 279 | 268 | 1119 | 277 | 315 | 302 | 289 | 1183 | 2302 |
| 15:00 | 288 | 313 | 311 | 255 | 1167 | 248 | 276 | 238 | 278 | 1040 | 2207 |
| 16:00 | 281 | 283 | 303 | 267 | 1134 | 299 | 253 | 267 | 235 | 1054 | 2188 |
| 17:00 | 252 | 280 | 240 | 250 | 1022 | 257 | 286 | 239 | 262 | 1044 | 2066 |
| 18:00 | 266 | 236 | 244 | 220 | 966 | 234 | 259 | 259 | 262 | 1014 | 1980 |
| 19:00 | 216 | 272 | 253 | 223 | 964 | 250 | 266 | 231 | 233 | 980 | 1944 |
| 20:00 | 219 | 186 | 213 | 185 | 803 | 214 | 190 | 203 | 183 | 790 | 1593 |
| 21:00 | 178 | 183 | 150 | 162 | 673 | 197 | 167 | 173 | 187 | 724 | 1397 |
| 22:00 | 137 | 156 | 119 | 108 | 520 | 171 | 142 | 136 | 117 | 566 | 1086 |
| 23:00 | 104 | 94 | 90 | 145 | 433 | 108 | 150 | 118 | 147 | 523 | 956 |
| Total |  |  |  |  | 15156 |  |  |  |  | 16711 | 31867 |

Peak Hour Summary

|  | Direction: |  | Northbound |
| :---: | :---: | :---: | :---: |
|  | Hour |  |  |
| A.M | 845 |  |  |
| Polume |  |  |  |
| Daily | 1445 |  |  |
|  | 1445 |  |  |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Volume |
| A.M | 845 | 735 |
| P.M | 1230 | 1240 |
| Daily | 1230 | 1240 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Combined |
| A.M | 845 | 1276 |
| P.M | 1230 | 2358 |
|  | 1230 | 2358 |

HSA Consulting Group, Inc.
1315 Country Club Road
Gulf Breeze, Florida 32563

| Location: | Lake Ella Drive East of Monroe Street |  |  |
| :--- | :--- | :--- | :--- |
| County: | $\frac{\text { Leon }}{9-O c t-12}$ | Start Time: | $0: 00$ |
| Start Date: |  |  |  |


| Time | Eastbound |  |  |  |  | Westbound |  |  |  |  | Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st | 2nd | 3rd | 4th | Hour Tot. | 1st | 2nd | 3rd | 4th | Hour Tot. | Total |
| 0:00 | 0 | 2 | 1 | 1 | 4 | 5 | 0 | 5 | 0 | 10 | 14 |
| 1:00 | 0 | 1 | 0 | 1 | 2 | 5 | 5 | 1 | 3 | 14 | 16 |
| 2:00 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 2 | 0 | 5 | 5 |
| 3:00 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| 4:00 | 0 | 1 | 0 | 1 | 2 | 1 | 0 | 0 | 3 | 4 | 6 |
| 5:00 | 0 | 0 | 0 | 2 | 2 | 3 | 1 | 2 | 7 | 13 | 15 |
| 6:00 | 2 | 0 | 1 | 4 | 7 | 0 | 6 | 2 | 9 | 17 | 24 |
| 7:00 | 3 | 2 | 2 | 3 | 10 | 12 | 6 | 10 | 12 | 40 | 50 |
| 8:00 | 6 | 11 | 8 | 3 | 28 | 13 | 9 | 15 | 18 | 55 | 83 |
| 9:00 | 12 | 3 | 11 | 6 | 32 | 7 | 10 | 19 | 8 | 44 | 76 |
| 10:00 | 4 | 8 | 9 | 4 | 25 | 11 | 11 | 16 | 18 | 56 | 81 |
| 11:00 | 6 | 12 | 16 | 8 | 42 | 15 | 19 | 17 | 17 | 68 | 110 |
| 12:00 | 21 | 12 | 22 | 19 | 74 | 21 | 30 | 25 | 31 | 107 | 181 |
| 13:00 | 13 | 17 | 8 | 19 | 57 | 22 | 19 | 15 | 23 | 79 | 136 |
| 14:00 | 9 | 18 | 14 | 12 | 53 | 17 | 20 | 29 | 13 | 79 | 132 |
| 15:00 | 10 | 10 | 13 | 17 | 50 | 18 | 14 | 30 | 12 | 74 | 124 |
| 16:00 | 14 | 14 | 16 | 19 | 63 | 22 | 25 | 13 | 24 | 84 | 147 |
| 17:00 | 23 | 11 | 19 | 19 | 72 | 29 | 40 | 22 | 27 | 118 | 190 |
| 18:00 | 16 | 20 | 23 | 20 | 79 | 27 | 30 | 38 | 35 | 130 | 209 |
| 19:00 | 21 | 15 | 12 | 11 | 59 | 30 | 25 | 29 | 19 | 103 | 162 |
| 20:00 | 12 | 8 | 11 | 17 | 48 | 26 | 9 | 12 | 20 | 67 | 115 |
| 21:00 | 6 | 6 | 7 | 8 | 27 | 20 | 25 | 16 | 15 | 76 | 103 |
| 22:00 | 4 | 5 | 6 | 4 | 19 | 25 | 22 | 16 | 7 | 70 | 89 |
| 23:00 | 3 | 3 | 3 | 2 | 11 | 7 | 7 | 5 | 5 | 24 | 35 |
| Total |  |  |  |  | 768 |  |  |  |  | 1337 | 2105 |

Peak Hour Summary

|  | Direction: |  |
| :---: | :---: | :---: |
|  | Eastbound |  |
| A.M | 815 | Volume |
| P.M | 1815 | 84 |
| Daily | 1815 | 84 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Volume |
| A.M | 800 | 55 |
| P.M | 1815 | 133 |
| Daily | 1815 | 133 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Combined |
| A.M | 800 | 83 |
| P.M | 1815 | 217 |
| Daily | 1815 | 217 |

HSA Consulting Group, Inc.
1315 Country Club Road
Gulf Breeze, Florida 32563

| $\begin{array}{ll}\text { Location: } \\ \text { County: }\end{array}$ | Lake Ella Drive East of Monroe Street |  |
| :--- | :--- | :--- |$)$


| Time | Eastbound |  |  |  |  | Westbound |  |  |  |  | Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st | 2nd | 3rd | 4th | Hour Tot. | 1st | 2nd | 3rd | 4th | Hour Tot. | Total |
| 0:00 | 2 | 3 | 1 | 0 | 6 | 4 | 4 | 3 | 0 | 11 | 17 |
| 1:00 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 1 | 5 | 5 |
| 2:00 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 1 | 5 | 5 |
| 3:00 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 1 | 2 | 5 | 6 |
| 4:00 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 2 |
| 5:00 | 0 | 0 | 2 | 3 | 5 | 0 | 1 | 3 | 2 | 6 | 11 |
| 6:00 | 0 | 1 | 4 | 4 | 9 | 1 | 8 | 3 | 10 | 22 | 31 |
| 7:00 | 4 | 5 | 3 | 6 | 18 | 6 | 12 | 13 | 19 | 50 | 68 |
| 8:00 | 9 | 7 | 8 | 13 | 37 | 9 | 9 | 15 | 12 | 45 | 82 |
| 9:00 | 12 | 11 | 8 | 8 | 39 | 15 | 15 | 14 | 7 | 51 | 90 |
| 10:00 | 6 | 6 | 8 | 6 | 26 | 14 | 13 | 26 | 11 | 64 | 90 |
| 11:00 | 14 | 15 | 11 | 16 | 56 | 11 | 16 | 22 | 24 | 73 | 129 |
| 12:00 | 21 | 23 | 17 | 19 | 80 | 30 | 16 | 21 | 31 | 98 | 178 |
| 13:00 | 20 | 20 | 11 | 23 | 74 | 38 | 19 | 17 | 27 | 101 | 175 |
| 14:00 | 24 | 14 | 17 | 13 | 68 | 26 | 18 | 20 | 24 | 88 | 156 |
| 15:00 | 17 | 21 | 22 | 17 | 77 | 27 | 30 | 25 | 21 | 103 | 180 |
| 16:00 | 25 | 22 | 24 | 19 | 90 | 34 | 26 | 30 | 28 | 118 | 208 |
| 17:00 | 29 | 37 | 22 | 21 | 109 | 31 | 36 | 36 | 29 | 132 | 241 |
| 18:00 | 22 | 24 | 17 | 13 | 76 | 43 | 44 | 43 | 45 | 175 | 251 |
| 19:00 | 11 | 15 | 18 | 13 | 57 | 18 | 46 | 27 | 25 | 116 | 173 |
| 20:00 | 18 | 8 | 11 | 12 | 49 | 20 | 22 | 23 | 14 | 79 | 128 |
| 21:00 | 7 | 12 | 9 | 5 | 33 | 21 | 18 | 33 | 6 | 78 | 111 |
| 22:00 | 4 | 8 | 5 | 3 | 20 | 12 | 17 | 15 | 5 | 49 | 69 |
| 23:00 | 0 | 3 | 1 | 2 | 6 | 13 | 7 | 8 | 4 | 32 | 38 |
| Total |  |  |  |  | 937 |  |  |  |  | 1507 | 2444 |

Peak Hour Summary

|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Volume |
| A.M | 830 | 44 |
| P.M | 1630 | 109 |
| Daily | 1630 | 109 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Volume |
| A.M | 830 | 57 |
| P.M | 1800 | 175 |
| Daily | 1800 | 175 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Combined |
| A.M | 830 | 101 |
| P.M | 1800 | 251 |
| Daily | 1800 | 251 |

HSA Consulting Group, Inc.
1315 Country Club Road
Gulf Breeze, Florida 32563

| Location: | Lake Ella Drive East of Monroe Street |  |  |
| :--- | :--- | :--- | :--- |
| County: | $\frac{\text { Leon }}{11-\text { Oct-12 }}$ | Start Time: | $0: 00$ |


| Time | Eastbound |  |  |  |  | Westbound |  |  |  |  | Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st | 2nd | 3rd | 4th | Hour Tot. | 1st | 2nd | 3rd | 4th | Hour Tot. | Total |
| 0:00 | 2 | 0 | 2 | 2 | 6 | 6 | 10 | 3 | 8 | 27 | 33 |
| 1:00 | 1 | 1 | 0 | 0 | 2 | 2 | 4 | 1 | 1 | 8 | 10 |
| 2:00 | 1 | 0 | 1 | 1 | 3 | 4 | 1 | 0 | 2 | 7 | 10 |
| 3:00 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 1 | 2 | 5 | 6 |
| 4:00 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 3 | 4 |
| 5:00 | 0 | 0 | 1 | 3 | 4 | 1 | 2 | 0 | 7 | 10 | 14 |
| 6:00 | 4 | 1 | 3 | 3 | 11 | 1 | 3 | 5 | 11 | 20 | 31 |
| 7:00 | 8 | 8 | 5 | 4 | 25 | 3 | 14 | 8 | 16 | 41 | 66 |
| 8:00 | 2 | 8 | 10 | 8 | 28 | 3 | 9 | 15 | 28 | 55 | 83 |
| 9:00 | 10 | 9 | 12 | 12 | 43 | 10 | 17 | 15 | 16 | 58 | 101 |
| 10:00 | 8 | 8 | 17 | 7 | 40 | 13 | 22 | 15 | 22 | 72 | 112 |
| 11:00 | 10 | 15 | 14 | 20 | 59 | 14 | 13 | 19 | 18 | 64 | 123 |
| 12:00 | 19 | 19 | 17 | 18 | 73 | 18 | 20 | 29 | 27 | 94 | 167 |
| 13:00 | 22 | 15 | 12 | 13 | 62 | 36 | 19 | 23 | 22 | 100 | 162 |
| 14:00 | 12 | 14 | 9 | 16 | 51 | 29 | 27 | 23 | 15 | 94 | 145 |
| 15:00 | 11 | 12 | 11 | 14 | 48 | 19 | 17 | 16 | 27 | 79 | 127 |
| 16:00 | 15 | 17 | 21 | 13 | 66 | 24 | 17 | 24 | 19 | 84 | 150 |
| 17:00 | 19 | 9 | 19 | 30 | 77 | 26 | 28 | 25 | 26 | 105 | 182 |
| 18:00 | 17 | 13 | 21 | 14 | 65 | 24 | 30 | 21 | 32 | 107 | 172 |
| 19:00 | 20 | 8 | 4 | 18 | 50 | 25 | 30 | 35 | 27 | 117 | 167 |
| 20:00 | 15 | 9 | 13 | 8 | 45 | 18 | 24 | 25 | 14 | 81 | 126 |
| 21:00 | 5 | 4 | 6 | 0 | 15 | 6 | 19 | 16 | 10 | 51 | 66 |
| 22:00 | 4 | 5 | 4 | 5 | 18 | 10 | 8 | 9 | 9 | 36 | 54 |
| 23:00 | 0 | 4 | 0 | 0 | 4 | 8 | 7 | 6 | 7 | 28 | 32 |
| Total |  |  |  |  | 797 |  |  |  |  | 1346 | 2143 |

Peak Hour Summary

|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Volume |
| A.M | 845 | 39 |
| P.M | 1745 | 81 |
| Daily | 1745 | 81 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Volume |
| A.M | 830 | 70 |
| P.M | 1845 | 122 |
| Daily | 1845 | 122 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Combined |
| A.M | 845 | 109 |
| P.M | 1215 | 188 |
| Daily | 1215 | 188 |

HSA Consulting Group, Inc.
1315 Country Club Road
Gulf Breeze, Florida 32563

| Location: | Business Entrance West of Monroe St |  |  |
| :--- | :--- | :--- | :--- |
| County: | $\frac{\text { Leon }}{2-O c t-12}$ | Start Time: | $0: 00$ |


| Time | Eastbound |  |  |  |  | Westbound |  |  |  |  | Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st | 2nd | 3rd | 4th | Hour Tot. | 1st | 2nd | 3rd | 4th | Hour Tot. | Total |
| 0:00 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| 1:00 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 1 | 1 | 3 |
| 2:00 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 3:00 | 0 | 0 | 1 | 2 | 3 | 0 | 0 | 1 | 3 | 4 | 7 |
| 4:00 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 3 | 0 | 5 | 6 |
| 5:00 | 1 | 0 | 2 | 1 | 4 | 1 | 1 | 1 | 1 | 4 | 8 |
| 6:00 | 4 | 4 | 2 | 9 | 19 | 2 | 3 | 3 | 0 | 8 | 27 |
| 7:00 | 5 | 8 | 12 | 14 | 39 | 0 | 2 | 5 | 3 | 10 | 49 |
| 8:00 | 12 | 13 | 20 | 13 | 58 | 5 | 1 | 6 | 4 | 16 | 74 |
| 9:00 | 20 | 22 | 18 | 17 | 77 | 4 | 5 | 7 | 3 | 19 | 96 |
| 10:00 | 20 | 24 | 8 | 23 | 75 | 3 | 11 | 15 | 11 | 40 | 115 |
| 11:00 | 20 | 28 | 21 | 22 | 91 | 8 | 9 | 7 | 14 | 38 | 129 |
| 12:00 | 34 | 36 | 29 | 29 | 128 | 15 | 29 | 18 | 21 | 83 | 211 |
| 13:00 | 35 | 29 | 34 | 16 | 114 | 13 | 10 | 22 | 19 | 64 | 178 |
| 14:00 | 10 | 17 | 24 | 21 | 72 | 23 | 28 | 23 | 21 | 95 | 167 |
| 15:00 | 26 | 24 | 26 | 27 | 103 | 21 | 25 | 23 | 19 | 88 | 191 |
| 16:00 | 26 | 28 | 26 | 34 | 114 | 38 | 27 | 15 | 18 | 98 | 212 |
| 17:00 | 22 | 32 | 30 | 36 | 120 | 31 | 28 | 24 | 20 | 103 | 223 |
| 18:00 | 34 | 23 | 28 | 22 | 107 | 27 | 34 | 30 | 23 | 114 | 221 |
| 19:00 | 19 | 17 | 18 | 16 | 70 | 29 | 23 | 21 | 22 | 95 | 165 |
| 20:00 | 15 | 16 | 9 | 17 | 57 | 25 | 12 | 13 | 12 | 62 | 119 |
| 21:00 | 7 | 6 | 10 | 9 | 32 | 18 | 15 | 6 | 7 | 46 | 78 |
| 22:00 | 7 | 8 | 4 | 4 | 23 | 4 | 13 | 12 | 3 | 32 | 55 |
| 23:00 | 1 | 2 | 1 | 1 | 5 | 8 | 4 | 3 | 1 | 16 | 21 |
| Total |  |  |  |  | 1317 |  |  |  |  | 1041 | 2358 |

Peak Hour Summary

|  | Direction: |  |
| :---: | :---: | :---: |
|  | Eastbound |  |
| A.M | 830 | Volume |
| P.M | 1715 | 132 |
| Daily | 1715 | 132 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Volume |
| A.M | 845 | 20 |
| P.M | 1815 | 116 |
| Daily | 1815 | 116 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Combined |
| A.M | 830 | 94 |
| P.M | 1745 | 232 |
| Daily | 1745 | 232 |

HSA Consulting Group, Inc.
1315 Country Club Road
Gulf Breeze, Florida 32563

| Location: | Business Entrance West of Monroe St |  |  |
| :--- | :--- | :--- | :--- |
| County: |  |  |  |
| Start Date: | $\frac{\text { Leon }}{3-\text { Oct-12 }}$ | Start Time: | $0: 00$ |


| Time | Eastbound |  |  |  |  | Westbound |  |  |  |  | Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st | 2nd | 3rd | 4th | Hour Tot. | 1st | 2nd | 3rd | 4th | Hour Tot. | Total |
| 0:00 | 0 | 1 | 1 | 1 | 3 | 2 | 2 | 2 | 2 | 8 | 11 |
| 1:00 | 0 | 3 | 0 | 0 | 3 | 0 | 1 | 3 | 0 | 4 | 7 |
| 2:00 | 0 | 1 | 4 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
| 3:00 | 0 | 1 | 0 | 3 | 4 | 4 | 0 | 2 | 0 | 6 | 10 |
| 4:00 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 1 | 3 | 4 |
| 5:00 | 1 | 0 | 1 | 1 | 3 | 0 | 4 | 3 | 2 | 9 | 12 |
| 6:00 | 1 | 1 | 1 | 11 | 14 | 2 | 2 | 4 | 5 | 13 | 27 |
| 7:00 | 9 | 10 | 14 | 14 | 47 | 5 | 20 | 6 | 15 | 46 | 93 |
| 8:00 | 24 | 13 | 13 | 10 | 60 | 17 | 19 | 17 | 6 | 59 | 119 |
| 9:00 | 18 | 12 | 13 | 22 | 65 | 20 | 18 | 19 | 23 | 80 | 145 |
| 10:00 | 23 | 22 | 27 | 20 | 92 | 20 | 14 | 18 | 20 | 72 | 164 |
| 11:00 | 22 | 26 | 38 | 41 | 127 | 15 | 25 | 23 | 21 | 84 | 211 |
| 12:00 | 37 | 39 | 26 | 34 | 136 | 27 | 38 | 49 | 39 | 153 | 289 |
| 13:00 | 18 | 30 | 11 | 29 | 88 | 40 | 30 | 33 | 28 | 131 | 219 |
| 14:00 | 29 | 22 | 24 | 20 | 95 | 31 | 25 | 23 | 20 | 99 | 194 |
| 15:00 | 21 | 14 | 26 | 28 | 89 | 26 | 14 | 16 | 18 | 74 | 163 |
| 16:00 | 27 | 29 | 32 | 26 | 114 | 14 | 10 | 14 | 13 | 51 | 165 |
| 17:00 | 31 | 31 | 44 | 38 | 144 | 21 | 17 | 20 | 10 | 68 | 212 |
| 18:00 | 38 | 33 | 25 | 38 | 134 | 19 | 14 | 10 | 11 | 54 | 188 |
| 19:00 | 22 | 13 | 18 | 10 | 63 | 13 | 13 | 15 | 15 | 56 | 119 |
| 20:00 | 15 | 10 | 13 | 13 | 51 | 5 | 17 | 8 | 16 | 46 | 97 |
| 21:00 | 11 | 8 | 8 | 6 | 33 | 3 | 6 | 2 | 6 | 17 | 50 |
| 22:00 | 1 | 2 | 6 | 3 | 12 | 4 | 1 | 1 | 1 | 7 | 19 |
| 23:00 | 4 | 2 | 1 | 0 | 7 | 5 | 4 | 2 | 3 | 14 | 21 |
| Total |  |  |  |  | 1390 |  |  |  |  | 1154 | 2544 |

Peak Hour Summary

|  | Direction: |  |
| :---: | :---: | :---: |
|  | Eastbound |  |
| A.M | 730 | Hour |
| P.M | 1730 | 153 |
| Daily | 1730 | 153 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Volume |
| A.M | 745 | 68 |
| P.M | 1215 | 166 |
| Daily | 1215 | 166 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Combined |
| A.M | 745 | 132 |
| P.M | 1200 | 289 |
| Daily | 1200 | 289 |

HSA Consulting Group, Inc.
1315 Country Club Road
Gulf Breeze, Florida 32563

| Location: | Business Entrance West of Monroe St |  |  |
| :--- | :--- | :--- | :--- |
| County:  <br> Start Date: $\frac{\text { Leon }}{4-O c t-12}$ | Start Time: | $0: 00$ |  |


| Time | Eastbound |  |  |  |  | Westbound |  |  |  |  | Combined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st | 2nd | 3rd | 4th | Hour Tot. | 1st | 2nd | 3rd | 4th | Hour Tot. | Total |
| 0:00 | 0 | 1 | 2 | 0 | 3 | 1 | 1 | 5 | 0 | 7 | 10 |
| 1:00 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2:00 | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 1 | 1 | 3 | 5 |
| 3:00 | 0 | 0 | 1 | 2 | 3 | 0 | 0 | 0 | 1 | 1 | 4 |
| 4:00 | 0 | 1 | 0 | 2 | 3 | 0 | 1 | 0 | 0 | 1 | 4 |
| 5:00 | 0 | 1 | 0 | 1 | 2 | 1 | 5 | 0 | 4 | 10 | 12 |
| 6:00 | 2 | 3 | 1 | 6 | 12 | 6 | 1 | 6 | 1 | 14 | 26 |
| 7:00 | 10 | 11 | 14 | 14 | 49 | 1 | 9 | 3 | 4 | 17 | 66 |
| 8:00 | 14 | 9 | 14 | 19 | 56 | 12 | 4 | 7 | 11 | 34 | 90 |
| 9:00 | 14 | 12 | 16 | 19 | 61 | 10 | 9 | 10 | 4 | 33 | 94 |
| 10:00 | 22 | 19 | 17 | 25 | 83 | 10 | 11 | 3 | 4 | 28 | 111 |
| 11:00 | 23 | 31 | 37 | 33 | 124 | 7 | 13 | 11 | 15 | 46 | 170 |
| 12:00 | 27 | 28 | 36 | 26 | 117 | 17 | 9 | 19 | 16 | 61 | 178 |
| 13:00 | 32 | 31 | 20 | 27 | 110 | 20 | 16 | 19 | 22 | 77 | 187 |
| 14:00 | 23 | 23 | 26 | 23 | 95 | 18 | 19 | 17 | 16 | 70 | 165 |
| 15:00 | 24 | 19 | 24 | 26 | 93 | 19 | 16 | 17 | 26 | 78 | 171 |
| 16:00 | 35 | 31 | 25 | 21 | 112 | 20 | 11 | 11 | 20 | 62 | 174 |
| 17:00 | 40 | 33 | 30 | 29 | 132 | 24 | 14 | 16 | 19 | 73 | 205 |
| 18:00 | 25 | 29 | 32 | 29 | 115 | 20 | 28 | 11 | 20 | 79 | 194 |
| 19:00 | 23 | 24 | 18 | 24 | 89 | 23 | 10 | 17 | 20 | 70 | 159 |
| 20:00 | 25 | 28 | 18 | 12 | 83 | 9 | 15 | 10 | 12 | 46 | 129 |
| 21:00 | 13 | 18 | 10 | 5 | 46 | 11 | 6 | 17 | 7 | 41 | 87 |
| 22:00 | 7 | 11 | 5 | 3 | 26 | 10 | 13 | 5 | 10 | 38 | 64 |
| 23:00 | 2 | 6 | 3 | 2 | 13 | 11 | 9 | 4 | 4 | 28 | 41 |
| Total |  |  |  |  | 1430 |  |  |  |  | 917 | 2347 |

Peak Hour Summary

|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Volume |
| A.M | 845 | 61 |
| P.M | 1700 | 132 |
| Daily | 1700 | 132 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Volume |
| A.M | 845 | 40 |
| P.M | 1730 | 83 |
| Daily | 1730 | 83 |


|  | Direction: |  |
| :---: | :---: | :---: |
|  | Hour | Combined |
| A.M | 845 | 101 |
| P.M | 1700 | 205 |
| Daily | 1700 | 205 |

## Appendix B: Seasonally Adjusted Volume Counts



| 11:00 | 200 | 228 |
| :---: | :---: | :---: |
| 11:15 | 246 | 242 |
| 11:30 | 299 | 250 |
| 11:45 | 264 | 262 |
| 12:00 | 259 | 303 |
| 12:15 | 267 | 253 |
| 12:30 | 285 | 281 |
| 12:45 | 271 | 297 |
| 13:00 | 262 | 323 |
| 13:15 | 272 | 329 |
| 13:30 | 281 | 290 |
| 13:45 | 243 | 283 |
| 14:00 | 223 | 266 |
| 14:15 | 273 | 262 |
| 14:30 | 283 | 223 |
| 14:45 | 264 | 228 |
| 15:00 | 245 | 263 |
| 15:15 | 266 | 251 |
| 15:30 | 274 | 220 |
| 15:45 | 313 | 244 |
| 16:00 | 331 | 257 |
| 16:15 | 347 | 253 |
| 16:30 | 346 | 257 |
| 16:45 | 364 | 267 |
| 17:00 | 424 | 307 |
| 17:15 | 441 | 264 |
| 17:30 | 406 | 290 |
| 17:45 | 381 | 270 |
| 18:00 | 295 | 230 |
| 18:15 | 333 | 262 |
| 18:30 | 275 | 251 |
| 18:45 | 277 | 221 |
| 19:00 | 219 | 226 |
| 19:15 | 254 | 187 |
| 19:30 | 227 | 179 |
| 19:45 | 228 | 195 |
| 20:00 | 241 | 193 |
| 20:15 | 193 | 171 |
| 20:30 | 165 | 156 |
| 20:45 | 201 | 142 |
| 21:00 | 221 | 146 |
| 21:15 | 169 | 125 |
| 21:30 | 132 | 122 |
| 21:45 | 116 | 116 |
| 22:00 | 128 | 97 |
| 22:15 | 115 | 90 |
| 22:30 | 79 | 82 |
| 22:45 | 75 | 62 |
| 23:00 | 87 | 58 |
| 23:15 | 73 | 69 |
| 23:30 | 56 | 45 |
| 23:45 | 54 | 44 |


| 266 | 243 |
| :---: | :---: |
| 228 | 219 |
| 266 | 272 |
| 277 | 276 |
| 313 | 269 |
| 320 | 315 |
| 340 | 306 |
| 317 | 364 |
| 293 | 309 |
| 308 | 315 |
| 281 | 306 |
| 318 | 283 |
| 282 | 287 |
| 267 | 245 |
| 283 | 255 |
| 275 | 294 |
| 339 | 271 |
| 311 | 240 |
| 300 | 264 |
| 326 | 224 |
| 357 | 258 |
| 361 | 260 |
| 361 | 281 |
| 379 | 244 |
| 432 | 302 |
| 366 | 314 |
| 347 | 297 |
| 365 | 228 |
| 349 | 254 |
| 278 | 258 |
| 295 | 217 |
| 248 | 238 |
| 227 | 190 |
| 248 | 205 |
| 199 | 194 |
| 197 | 171 |
| 202 | 156 |
| 207 | 149 |
| 221 | 135 |
| 173 | 162 |
| 159 | 135 |
| 153 | 112 |
| 103 | 84 |
| 105 | 84 |
| 97 | 79 |
| 83 | 85 |
| 90 | 69 |
| 98 | 83 |
| 82 | 84 |
| 72 | 66 |
| 53 | 63 |
| 37 | 41 |


| 188 | 229 |
| :--- | :--- |
| 256 | 261 |
| 240 | 251 |
| 279 | 283 |
| 234 | 277 |
| 273 | 267 |
| 308 | 336 |
| 266 | 324 |
| 276 | 331 |
| 275 | 290 |
| 286 | 278 |
| 304 | 280 |
| 314 | 291 |
| 290 | 250 |
| 294 | 238 |
| 282 | 255 |
| 292 | 275 |
| 271 | 260 |
| 296 | 283 |
| 318 | 243 |
| 337 | 281 |
| 332 | 274 |
| 366 | 262 |
| 366 | 279 |
| 396 | 286 |
| 413 | 305 |
| 408 | 308 |
| 340 | 282 |
| 320 | 230 |
| 316 | 282 |
| 313 | 240 |
| 268 | 226 |
| 243 | 229 |
| 232 | 195 |
| 234 | 195 |
| 247 | 202 |
| 219 | 190 |
| 227 | 184 |
| 205 | 189 |
| 204 | 155 |
| 202 | 149 |
| 173 | 141 |
| 160 | 131 |
| 156 | 128 |
| 139 | 91 |
| 122 | 103 |
| 131 | 86 |
| 118 | 87 |
| 81 | 81 |
| 77 | 83 |
| 80 | 41 |
| 49 | 74 |
|  |  |
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| 218 | 234 |
| :---: | :---: |
| 244 | 241 |
| 269 | 258 |
| 274 | 274 |
| 269 | 283 |
| 287 | 279 |
| 311 | 308 |
| 285 | 329 |
| 277 | 321 |
| 285 | 312 |
| 283 | 292 |
| 289 | 282 |
| 273 | 282 |
| 277 | 253 |
| 287 | 239 |
| 274 | 259 |
| 292 | 270 |
| 283 | 251 |
| 290 | 256 |
| 319 | 237 |
| 342 | 266 |
| 347 | 263 |
| 358 | 267 |
| 370 | 264 |
| 418 | 299 |
| 407 | 295 |
| 387 | 299 |
| 362 | 260 |
| 322 | 238 |
| 309 | 268 |
| 295 | 236 |
| 265 | 229 |
| 230 | 215 |
| 245 | 196 |
| 220 | 190 |
| 224 | 190 |
| 221 | 180 |
| 209 | 168 |
| 197 | 160 |
| 193 | 153 |
| 194 | 144 |
| 165 | 126 |
| 132 | 113 |
| 126 | 110 |
| 122 | 89 |
| 107 | 93 |
| 100 | 79 |
| 97 | 78 |
| 84 | 75 |
| 74 | 73 |
| 63 | 50 |
| 47 | 53 |


| 176 | 234 |
| :---: | :---: |
| 225 | 268 |
| 229 | 288 |
| 263 | 295 |
| 246 | 297 |
| 244 | 296 |
| 273 | 311 |
| 243 | 283 |
| 304 | 276 |
| 261 | 314 |
| 265 | 267 |
| 277 | 291 |
| 283 | 257 |
| 278 | 293 |
| 267 | 291 |
| 280 | 288 |
| 261 | 233 |
| 293 | 258 |
| 319 | 242 |
| 274 | 261 |
| 270 | 282 |
| 296 | 231 |
| 300 | 266 |
| 259 | 215 |
| 243 | 248 |
| 285 | 282 |
| 243 | 213 |
| 242 | 257 |
| 259 | 233 |
| 245 | 260 |
| 252 | 247 |
| 232 | 244 |
| 218 | 236 |
| 252 | 245 |
| 265 | 218 |
| 235 | 215 |
| 210 | 219 |
| 193 | 186 |
| 215 | 184 |
| 195 | 165 |
| 185 | 188 |
| 186 | 163 |
| 159 | 152 |
| 159 | 166 |
| 142 | 157 |
| 153 | 129 |
| 120 | 116 |
| 119 | 107 |
| 105 | 98 |
| 97 | 141 |
| 99 | 108 |
| 142 | 133 |



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| :--- | :--- | :--- |
| $10: 45$ | 205 | 218 |
| $11: 00$ | 202 | 219 |
| $11: 15$ | 267 | 228 |
| $11: 30$ | 275 | 244 |
| $11: 45$ | 269 | 240 |
| $12: 00$ | 271 | 296 |
| $12: 15$ | 262 | 261 |
| $12: 30$ | 300 | 276 |
| $12: 45$ | 263 | 311 |
| $13: 00$ | 260 | 321 |
| $13: 15$ | 264 | 341 |
| $13: 30$ | 297 | 293 |
| $13: 45$ | 212 | 303 |
| $14: 00$ | 222 | 275 |
| $14: 15$ | 267 | 273 |
| $14: 30$ | 263 | 230 |
| $14: 45$ | 264 | 230 |
| $15: 00$ | 247 | 253 |
| $15: 15$ | 260 | 247 |
| $15: 30$ | 283 | 213 |
| $15: 45$ | 310 | 240 |
| $16: 00$ | 312 | 255 |
| $16: 15$ | 328 | 255 |
| $16: 30$ | 351 | 256 |
| $16: 45$ | 366 | 256 |
| $17: 00$ | 402 | 300 |
| $17: 15$ | 429 | 247 |
| $17: 30$ | 388 | 273 |
| $17: 45$ | 377 | 265 |
| $18: 00$ | 278 | 232 |
| $18: 15$ | 328 | 261 |
| $18: 30$ | 263 | 236 |
| $18: 45$ | 273 | 217 |
| $19: 00$ | 222 | 245 |
| $19: 15$ | 250 | 190 |
| $19: 30$ | 206 | 193 |
| $19: 45$ | 201 | 202 |
| $20: 00$ | 227 | 198 |
| $20: 15$ | 182 | 178 |
| $20: 30$ | 167 | 160 |
| $20: 45$ | 188 | 132 |
| $21: 00$ | 205 | 163 |
| $21: 15$ | 157 | 139 |
| $21: 30$ | 117 | 122 |
| $21: 45$ | 107 | 119 |
| $22: 00$ | 122 | 98 |
| $22: 15$ | 103 | 105 |
| $22: 30$ | 67 | 90 |
| $22: 45$ | 67 | 62 |
| $23: 00$ | 71 | 70 |
| $23: 15$ | 64 | 69 |
| $23: 30$ | 52 | 42 |
| $23: 45$ | 49 | 39 |
|  |  |  |
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| 219 | 198 |
| :--- | :--- |
| 276 | 221 |
| 245 | 205 |
| 254 | 247 |
| 274 | 258 |
| 302 | 252 |
| 291 | 323 |
| 282 | 316 |
| 273 | 358 |
| 252 | 332 |
| 289 | 322 |
| 263 | 299 |
| 285 | 281 |
| 280 | 289 |
| 261 | 258 |
| 267 | 241 |
| 262 | 276 |
| 305 | 265 |
| 281 | 226 |
| 284 | 245 |
| 309 | 208 |
| 359 | 250 |
| 353 | 254 |
| 354 | 271 |
| 341 | 243 |
| 413 | 302 |
| 400 | 300 |
| 385 | 272 |
| 373 | 220 |
| 329 | 239 |
| 283 | 264 |
| 278 | 208 |
| 250 | 233 |
| 221 | 197 |
| 246 | 215 |
| 195 | 171 |
| 191 | 188 |
| 192 | 155 |
| 199 | 149 |
| 207 | 128 |
| 174 | 167 |
| 157 | 147 |
| 156 | 112 |
| 99 | 93 |
| 95 | 94 |
| 85 | 83 |
| 75 | 86 |
| 92 | 63 |
| 97 | 88 |
| 77 | 79 |
| 66 | 73 |
| 54 | 65 |
| 36 | 43 |
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| 185 | 250 |
| :--- | :--- |
| 203 | 219 |
| 262 | 247 |
| 248 | 219 |
| 270 | 270 |
| 239 | 268 |
| 289 | 270 |
| 299 | 336 |
| 256 | 323 |
| 269 | 341 |
| 268 | 295 |
| 271 | 293 |
| 288 | 269 |
| 301 | 295 |
| 280 | 243 |
| 285 | 240 |
| 284 | 255 |
| 291 | 265 |
| 264 | 266 |
| 292 | 266 |
| 316 | 242 |
| 337 | 253 |
| 321 | 269 |
| 348 | 265 |
| 359 | 276 |
| 399 | 271 |
| 420 | 284 |
| 411 | 294 |
| 347 | 284 |
| 324 | 224 |
| 315 | 274 |
| 288 | 226 |
| 258 | 232 |
| 253 | 224 |
| 240 | 200 |
| 212 | 200 |
| 227 | 209 |
| 215 | 201 |
| 220 | 195 |
| 207 | 196 |
| 198 | 171 |
| 189 | 157 |
| 164 | 137 |
| 153 | 142 |
| 144 | 134 |
| 124 | 103 |
| 113 | 119 |
| 121 | 83 |
| 104 | 96 |
| 73 | 89 |
| 73 | 87 |
| 70 | 50 |
| 46 | 82 |
|  |  |
|  |  |
| 24 |  |


| 203 | 222 |
| :---: | :---: |
| 227 | 220 |
| 258 | 227 |
| 259 | 237 |
| 271 | 256 |
| 271 | 272 |
| 281 | 285 |
| 294 | 310 |
| 264 | 331 |
| 261 | 332 |
| 274 | 320 |
| 277 | 295 |
| 262 | 285 |
| 268 | 287 |
| 270 | 258 |
| 272 | 237 |
| 270 | 254 |
| 281 | 261 |
| 269 | 247 |
| 287 | 242 |
| 312 | 230 |
| 336 | 253 |
| 334 | 260 |
| 351 | 264 |
| 356 | 259 |
| 405 | 291 |
| 417 | 277 |
| 395 | 280 |
| 366 | 257 |
| 311 | 232 |
| 309 | 267 |
| 277 | 224 |
| 261 | 228 |
| 232 | 222 |
| 246 | 202 |
| 205 | 188 |
| 207 | 200 |
| 212 | 185 |
| 201 | 174 |
| 194 | 162 |
| 187 | 157 |
| 184 | 156 |
| 159 | 130 |
| 123 | 119 |
| 116 | 116 |
| 111 | 95 |
| 97 | 104 |
| 94 | 79 |
| 90 | 82 |
| 74 | 80 |
| 68 | 77 |
| 59 | 53 |
| 44 | 55 |


| 200 | 264 |
| :---: | :---: |
| 179 | 230 |
| 226 | 262 |
| 235 | 283 |
| 269 | 301 |
| 233 | 287 |
| 261 | 307 |
| 260 | 309 |
| 246 | 289 |
| 300 | 281 |
| 269 | 315 |
| 261 | 265 |
| 267 | 289 |
| 286 | 267 |
| 265 | 303 |
| 268 | 291 |
| 258 | 278 |
| 277 | 239 |
| 301 | 266 |
| 299 | 229 |
| 245 | 267 |
| 270 | 288 |
| 272 | 243 |
| 292 | 257 |
| 257 | 226 |
| 243 | 247 |
| 269 | 275 |
| 231 | 230 |
| 241 | 252 |
| 256 | 225 |
| 227 | 249 |
| 235 | 249 |
| 212 | 252 |
| 208 | 241 |
| 262 | 256 |
| 243 | 222 |
| 215 | 224 |
| 211 | 206 |
| 179 | 183 |
| 205 | 195 |
| 178 | 176 |
| 171 | 190 |
| 176 | 161 |
| 145 | 167 |
| 156 | 180 |
| 132 | 165 |
| 150 | 137 |
| 115 | 131 |
| 104 | 113 |
| 100 | 104 |
| 91 | 145 |
| 87 | 114 |
| 140 | 142 |




| 6 | 11 |
| :---: | :---: |
| 14 | 11 |
| 15 | 16 |
| 11 | 22 |
| 16 | 24 |
| 21 | 30 |
| 23 | 16 |
| 17 | 21 |
| 19 | 31 |
| 20 | 38 |
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| 24 | 26 |
| 14 | 18 |
| 17 | 20 |
| 13 | 24 |
| 17 | 27 |
| 21 | 30 |
| 22 | 25 |
| 17 | 21 |
| 25 | 34 |
| 22 | 26 |
| 24 | 30 |
| 19 | 28 |
| 29 | 31 |
| 37 | 36 |
| 22 | 36 |
| 21 | 29 |
| 22 | 43 |
| 24 | 44 |
| 17 | 43 |
| 13 | 45 |
| 11 | 18 |
| 15 | 46 |
| 18 | 27 |
| 13 | 25 |
| 18 | 20 |
| 8 | 22 |
| 11 | 23 |
| 12 | 14 |
| 7 | 21 |
| 12 | 18 |
| 9 | 33 |
| 5 | 6 |
| 4 | 12 |
| 8 | 17 |
| 5 | 15 |
| 3 | 5 |
| 0 | 13 |
| 3 | 7 |
| 1 | 8 |
| 2 | 4 |


| 7 | 22 |
| :---: | :---: |
| 10 | 14 |
| 15 | 13 |
| 14 | 19 |
| 20 | 18 |
| 19 | 18 |
| 19 | 20 |
| 17 | 29 |
| 18 | 27 |
| 22 | 36 |
| 15 | 19 |
| 12 | 23 |
| 13 | 22 |
| 12 | 29 |
| 14 | 27 |
| 9 | 23 |
| 16 | 15 |
| 11 | 19 |
| 12 | 17 |
| 11 | 16 |
| 14 | 27 |
| 15 | 24 |
| 17 | 17 |
| 21 | 24 |
| 13 | 19 |
| 19 | 26 |
| 9 | 28 |
| 19 | 25 |
| 30 | 26 |
| 17 | 24 |
| 13 | 30 |
| 21 | 21 |
| 14 | 32 |
| 20 | 25 |
| 8 | 30 |
| 4 | 35 |
| 18 | 27 |
| 15 | 18 |
| 9 | 24 |
| 13 | 25 |
| 8 | 14 |
| 5 | 6 |
| 4 | 19 |
| 6 | 16 |
| 0 | 10 |
| 4 | 10 |
| 5 | 8 |
| 4 | 9 |
| 5 | 9 |
|  | 8 |
| 4 | 7 |
| 0 | 6 |
| 0 | 7 |


| 6 | 17 |
| :---: | :---: |
| 10 | 14 |
| 14 | 16 |
| 14 | 20 |
| 15 | 20 |
| 21 | 23 |
| 18 | 22 |
| 19 | 25 |
| 19 | 30 |
| 19 | 32 |
| 18 | 19 |
| 11 | 19 |
| 19 | 24 |
| 15 | 24 |
| 16 | 22 |
| 14 | 24 |
| 14 | 18 |
| 13 | 22 |
| 15 | 21 |
| 16 | 24 |
| 16 | 20 |
| 18 | 27 |
| 18 | 23 |
| 21 | 23 |
| 17 | 24 |
| 24 | 29 |
| 19 | 35 |
| 20 | 28 |
| 24 | 28 |
| 19 | 32 |
| 19 | 35 |
| 21 | 34 |
| 16 | 38 |
| 18 | 25 |
| 13 | 34 |
| 12 | 31 |
| 14 | 24 |
| 15 | 22 |
| 9 | 19 |
| 12 | 20 |
| 13 | 16 |
| 6 | 16 |
| 8 | 21 |
| 8 | 22 |
| 5 | 11 |
| 4 | 16 |
| 6 | 16 |
| 5 | 14 |
| 4 | 7 |
| 1 | 10 |
| 4 | 7 |
| 2 | 7 |
| 2 | 6 |

HSA Consulting Group, Inc
1315 Country Club Road
1315 Country Club Road
Gulf Breeze, Florida 32563
Location:
County:
Business Entrance West of Monroe Street

| Leon |  |
| :--- | :---: |
| Week 41 |  |

Start Date:

| Wed Oct 3, 2012 |  |
| :---: | :---: |
| EB | WB |
| 0 | 2 |
| 1 | 2 |
| 1 | 2 |
| 1 | 2 |
| 0 | 0 |
| 3 | 1 |
| 0 | 3 |
| 0 | 0 |
| 0 | 0 |
| 1 | 0 |
| 4 | 0 |
| 0 | 0 |
| 0 | 4 |
| 1 | 0 |
| 0 | 2 |
| 3 | 0 |
| 0 | 0 |
| 0 | 2 |
| 1 | 0 |
| 0 | 1 |
| 1 | 0 |
| 0 | 4 |
| 1 | 3 |
| 1 | 2 |
| 1 | 2 |
| 1 | 2 |
| 1 | 4 |
| 11 | 5 |
| 9 | 5 |
| 10 | 20 |
| 14 | 6 |
| 14 | 15 |
| 24 | 17 |
| 13 | 19 |
| 13 | 17 |
| 10 | 6 |
| 18 | 20 |
| 12 | 18 |
| 13 | 19 |
| 22 | 23 |
| 23 | 20 |
| 22 | 14 |
| 27 | 18 |

Start Time:
0:00
Start Date:

| Thu Oct 4, 2012 |  |
| :---: | :---: |
| EB | WB |
| 0 | 1 |
| 1 | 1 |
| 2 | 5 |
| 0 | 0 |
| 1 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |
| 0 | 1 |
| 0 | 0 |
| 1 | 1 |
| 1 | 1 |
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| 0 | 0 |
| 1 | 0 |
| 2 | 1 |
| 0 | 0 |
| 1 | 1 |
| 0 | 0 |
| 2 | 0 |
| 0 | 1 |
| 1 | 5 |
| 0 | 0 |
| 1 | 4 |
| 2 | 6 |
| 3 | 1 |
| 1 | 6 |
| 6 | 1 |
| 10 | 1 |
| 11 | 9 |
| 14 | 3 |
| 14 | 4 |
| 14 | 12 |
| 9 | 4 |
| 14 | 7 |
| 19 | 11 |
| 14 | 10 |
| 12 | 9 |
| 16 | 10 |
| 19 | 4 |
| 22 | 10 |
| 19 | 11 |
| 17 | 3 |


| Week | SF |
| ---: | ---: |
| 40 | 0.99 |
| 41 | 0.98 |
| 42 | 0.98 |
| 43 | 0.99 |


| Factors <br> Applied | 0.98 |
| :--- | :--- |

## Weekday Average

| WB |  |
| ---: | ---: |
| 0 | 1 |
| 1 | 1 |
| 2 | 3 |
| 1 | 1 |
| 1 | 0 |
| 1 | 1 |
| 0 | 1 |
| 1 | 1 |
| 0 | 1 |
| 1 | 0 |
| 2 | 1 |
| 1 | 1 |
| 0 | 2 |
| 1 | 0 |
| 1 | 1 |
| 3 | 2 |
| 0 | 1 |
| 1 | 1 |
| 1 | 1 |
| 1 | 1 |
| 1 | 1 |
| 1 | 4 |
| 1 | 2 |
| 1 | 3 |
| 3 | 4 |
| 3 | 2 |
| 2 | 5 |
| 9 | 2 |
| 8 | 2 |
| 10 | 11 |
| 14 | 5 |
| 14 | 8 |
| 17 | 12 |
| 12 | 8 |
| 16 | 10 |
| 14 | 7 |
| 18 | 12 |
| 16 | 11 |
| 16 | 12 |
| 20 | 10 |
| 22 | 11 |
| 22 | 12 |
| 18 | 12 |
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| 10:45 | 23 | 11 |
| :---: | :---: | :---: |
| 11:00 | 20 | 8 |
| 11:15 | 28 | 9 |
| 11:30 | 21 | 7 |
| 11:45 | 22 | 14 |
| 12:00 | 34 | 15 |
| 12:15 | 36 | 29 |
| 12:30 | 29 | 18 |
| 12:45 | 29 | 21 |
| 13:00 | 35 | 13 |
| 13:15 | 29 | 10 |
| 13:30 | 34 | 22 |
| 13:45 | 16 | 19 |
| 14:00 | 10 | 23 |
| 14:15 | 17 | 28 |
| 14:30 | 24 | 23 |
| 14:45 | 21 | 21 |
| 15:00 | 26 | 21 |
| 15:15 | 24 | 25 |
| 15:30 | 26 | 23 |
| 15:45 | 27 | 19 |
| 16:00 | 26 | 38 |
| 16:15 | 28 | 27 |
| 16:30 | 26 | 15 |
| 16:45 | 34 | 18 |
| 17:00 | 22 | 31 |
| 17:15 | 32 | 28 |
| 17:30 | 30 | 24 |
| 17:45 | 36 | 20 |
| 18:00 | 34 | 27 |
| 18:15 | 23 | 34 |
| 18:30 | 28 | 30 |
| 18:45 | 22 | 23 |
| 19:00 | 19 | 29 |
| 19:15 | 17 | 23 |
| 19:30 | 18 | 21 |
| 19:45 | 16 | 22 |
| 20:00 | 15 | 25 |
| 20:15 | 16 | 12 |
| 20:30 | 9 | 13 |
| 20:45 | 17 | 12 |
| 21:00 | 7 | 18 |
| 21:15 | 6 | 15 |
| 21:30 | 10 | 6 |
| 21:45 | 9 | 7 |
| 22:00 | 7 | 4 |
| 22:15 | 8 | 13 |
| 22:30 | 4 | 12 |
| 22:45 | 4 | 3 |
| 23:00 | 1 | 8 |
| 23:15 | 2 | 4 |
| 23:30 | 1 | 3 |
| 23:45 | 1 | 1 |


| 20 | 20 |
| :---: | :---: |
| 22 | 15 |
| 26 | 25 |
| 38 | 23 |
| 41 | 21 |
| 37 | 27 |
| 39 | 38 |
| 26 | 49 |
| 34 | 39 |
| 18 | 40 |
| 30 | 30 |
| 11 | 33 |
| 29 | 28 |
| 29 | 31 |
| 22 | 25 |
| 24 | 23 |
| 20 | 20 |
| 21 | 26 |
| 14 | 14 |
| 26 | 16 |
| 28 | 18 |
| 27 | 14 |
| 29 | 10 |
| 32 | 14 |
| 26 | 13 |
| 31 | 21 |
| 31 | 17 |
| 44 | 20 |
| 38 | 10 |
| 38 | 19 |
| 33 | 14 |
| 25 | 10 |
| 38 | 11 |
| 22 | 13 |
| 13 | 13 |
| 18 | 15 |
| 10 | 15 |
| 15 | 5 |
| 10 | 17 |
| 13 | 8 |
| 13 | 16 |
| 11 | 3 |
| 8 | 6 |
| 8 | 2 |
| 6 | 6 |
| 1 | 4 |
| 2 | 1 |
| 6 | 1 |
| 3 | 1 |
| 4 | 5 |
| 2 | 4 |
| 1 | 2 |
| 0 | 3 |


| 25 | 4 |
| :---: | :---: |
| 23 | 7 |
| 31 | 13 |
| 37 | 11 |
| 33 | 15 |
| 27 | 17 |
| 28 | 9 |
| 36 | 19 |
| 26 | 16 |
| 32 | 20 |
| 31 | 16 |
| 20 | 19 |
| 27 | 22 |
| 23 | 18 |
| 23 | 19 |
| 26 | 17 |
| 23 | 16 |
| 24 | 19 |
| 19 | 16 |
| 24 | 17 |
| 26 | 26 |
| 35 | 20 |
| 31 | 11 |
| 25 | 11 |
| 21 | 20 |
| 40 | 24 |
| 33 | 14 |
| 30 | 16 |
| 29 | 19 |
| 25 | 20 |
| 29 | 28 |
| 32 | 11 |
| 29 | 20 |
| 23 | 23 |
| 24 | 10 |
| 18 | 17 |
| 24 | 20 |
| 25 | 9 |
| 28 | 15 |
| 18 | 10 |
| 12 | 12 |
| 13 | 11 |
| 18 | 6 |
| 10 | 17 |
| 5 | 7 |
| 7 | 10 |
| 11 | 13 |
| 5 | 5 |
| 3 | 10 |
| 2 | 11 |
| 6 | 9 |
| 3 | 4 |
| 2 | 4 |


| 23 | 12 |
| :---: | :---: |
| 22 | 10 |
| 29 | 16 |
| 32 | 14 |
| 32 | 17 |
| 33 | 20 |
| 35 | 26 |
| 31 | 29 |
| 30 | 26 |
| 29 | 25 |
| 30 | 19 |
| 22 | 25 |
| 24 | 23 |
| 21 | 24 |
| 21 | 24 |
| 25 | 21 |
| 22 | 19 |
| 24 | 22 |
| 19 | 19 |
| 26 | 19 |
| 27 | 21 |
| 30 | 24 |
| 30 | 16 |
| 28 | 14 |
| 27 | 17 |
| 31 | 26 |
| 32 | 20 |
| 35 | 20 |
| 35 | 17 |
| 33 | 22 |
| 29 | 26 |
| 29 | 17 |
| 30 | 18 |
| 22 | 22 |
| 18 | 16 |
| 18 | 18 |
| 17 | 19 |
| 19 | 13 |
| 18 | 15 |
| 14 | 11 |
| 14 | 14 |
| 11 | 11 |
| 11 | 9 |
| 10 | 9 |
| 7 | 7 |
| 5 | 6 |
| 7 | 9 |
| 5 | 6 |
| 4 | 5 |
| 3 | 8 |
| 4 | 6 |
| 2 | 3 |
| 1 | 3 |


| 01/01/2011 | - 01/01/2011 | 1.04 | 1.07 |
| :---: | :---: | :---: | :---: |
| 01/02/2011 | - 01/08/2011 | 1.04 | 1.07 |
| 01/09/2011 | - 01/15/2011 | 1.03 | 1.06 |
| 01/16/2011 | - 01/22/2011 | 1.02 | 1.05 |
| 01/23/2011 | - 01/29/2011 | 1.00 | 1.03 |
| 01/30/2011 | - 02/05/2011 | 0.99 | 1.02 |
| 02/06/2011 | - 02/12/2011 | 0.97 | 1.00 |
| 02/13/2011 | - 02/19/2011 | 0.96 | 0.99 |
| 02/20/2011 | - 02/26/2011 | 0.97 | 1.00 |
| 02/27/2011 | - 03/05/2011 | 0.97 | 1.00 |
| 03/06/2011 | - 03/12/2011 | 0.98 | 1.01 |
| 03/13/2011 | - 03/19/2011 | 0.98 | 1.01 |
| 03/20/2011 | - 03/26/2011 | 0.97 | 1.00 |
| 03/27/2011 | - 04/02/2011 | 0.96 | 0.99 |
| 04/03/2011 | - 04/09/2011 | 0.96 | 0.99 |
| 04/10/2011 | - 04/16/2011 | 0.95 | 0.98 |
| 04/17/2011 | - 04/23/2011 | 0.96 | 0.99 |
| 04/24/2011 | - 04/30/2011 | 0.97 | 1.00 |
| 05/01/2011 | - 05/07/2011 | 0.98 | 1.01 |
| 05/08/2011 | - 05/14/2011 | 0.99 | 1.02 |
| 05/15/2011 | - 05/21/2011 | 1.01 | 1.04 |
| 05/22/2011 | - 05/28/2011 | 1.01 | 1.04 |
| 05/29/2011 | - 06/04/2011 | 1.01 | 1.04 |
| 06/05/2011 | - 06/11/2011 | 1.01 | 1.04 |
| 06/12/2011 | - 06/18/2011 | 1.01 | 1.04 |
| 06/19/2011 | - 06/25/2011 | 1.01 | 1.04 |
| 06/26/2011 | - 07/02/2011 | 1.02 | 1.05 |
| 07/03/2011 | - 07/09/2011 | 1.03 | 1.06 |
| 07/10/2011 | - 07/16/2011 | 1.03 | 1.06 |
| 07/17/2011 | - 07/23/2011 | 1.03 | 1.06 |
| 07/24/2011 | - 07/30/2011 | 1.02 | 1.05 |
| 07/31/2011 | - 08/06/2011 | 1.02 | 1.05 |
| 08/07/2011 | - 08/13/2011 | 1.01 | 1.04 |
| 08/14/2011 | - 08/20/2011 | 1.01 | 1.04 |
| 08/21/2011 | - 08/27/2011 | 1.00 | 1.03 |
| 08/28/2011 | - 09/03/2011 | 1.00 | 1.03 |
| 09/04/2011 | - 09/10/2011 | 1.00 | 1.03 |
| 09/11/2011 | - 09/17/2011 | 0.99 | 1.02 |
| 09/18/2011 | - 09/24/2011 | 0.99 | 1.02 |


| 1.00 | 1.04 |
| :--- | :--- |
| 1.01 | 1.05 |
| 1.02 | 1.06 |
| 1.03 | 1.06 |
| 1.03 | 1.06 |
| 1.03 | 1.07 |
| 1.04 | 1.07 |
| 1.04 | 1.07 |
| 1.04 | 1.06 |


| Week | Dates | 5505 | 5507 | 5509 | 5510 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | LEON | COUNTY URBAN | SR366/PEN.\&ST.AUG.ST | SR 61, US 90-SR261 |  |
| 1 | 01/01/2011-01/01/2011 | 1.00 | 0.99 |  | 0.98 |
| 2 | 01/02/2011-01/08/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 3 | 01/09/2011-01/15/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 4 | 01/16/2011-01/22/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 5 | 01/23/2011-01/29/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 6 | 01/30/2011-02/05/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 7 | 02/06/2011-02/12/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 8 | 02/13/2011-02/19/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 9 | 02/20/2011-02/26/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 10 | 02/27/2011-03/05/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 11 | 03/06/2011-03/12/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 12 | 03/13/2011-03/19/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 13 | 03/20/2011-03/26/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 14 | 03/27/2011-04/02/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 15 | 04/03/2011-04/09/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 16 | 04/10/2011-04/16/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 17 | 04/17/2011-04/23/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 18 | 04/24/2011-04/30/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 19 | 05/01/2011-05/07/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 20 | 05/08/2011-05/14/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 21 | 05/15/2011-05/21/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 22 | 05/22/2011-05/28/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 23 | 05/29/2011-06/04/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 24 | 06/05/2011-06/11/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 25 | 06/12/2011-06/18/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 26 | 06/19/2011-06/25/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 27 | 06/26/2011-07/02/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 28 | 07/03/2011-07/09/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 29 | 07/10/2011-07/16/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 30 | 07/17/2011-07/23/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 31 | 07/24/2011-07/30/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 32 | 07/31/2011-08/06/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 33 | 08/07/2011-08/13/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 34 | 08/14/2011-08/20/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 35 | 08/21/2011-08/27/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 36 | 08/28/2011-09/03/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 37 | 09/04/2011-09/10/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 38 | 09/11/2011-09/17/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 39 | 09/18/2011-09/24/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
|  |  | 1.00 | 0.99 | 1.00 |  |
|  |  | 1.00 | 0.99 | 1.00 |  |
|  |  | 1.00 | 0.99 | 1.00 |  |
|  |  | 1.00 | 0.99 | 1.00 |  |
| 44 | 10/23/2011-10/29/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 45 | 10/30/2011-11/05/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 46 | 11/06/2011-11/12/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 47 | 11/13/2011-11/19/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 48 | 11/20/2011-11/26/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 49 | 11/27/2011-12/03/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 50 | 12/04/2011-12/10/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 51 | 12/11/2011-12/17/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 52 | 12/18/2011-12/24/2011 | 1.00 | 0.99 | 1.00 | 0.98 |
| 53 | 12/25/2011-12/31/2011 | 1.00 | 0.99 | 1.00 | 0.98 |

## Appendix C: Raw and Seasonally Adjusted Turning Movements Counts (TMCs)

File Name: C:\Program Files (x86)\JAMAR\PetraPro\Data Files\Monroe_LakeElla_Thurs_MID.ppd Start Date: 10/4/2012
Start Time: 11:30:00 AM

Week
41

## Raw Counts



Adjusted Counts


File Name: C:IProgram Files (x86)\JAMAR\PetraPro\Data Files\Lake Ella Study\Monroe_LakeElla_Thurs_PM.ppd Start Date: 10/4/2012
Start Time: 5:00:00 PM

Week
41

Raw Counts

|  | Lake Ella Westbound |  |  |  |  |  | Monroe Northbound |  |  |  |  |  | Publix S. Eastbound |  |  |  |  |  | Monroe Southbound |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Right | Thru |  | Left |  | Peds | Right | Thru |  | Left |  | Peds | Right | Thru |  | Left |  | Peds | Right |  | Thru |  | Left |  | Peds |
| 17:00 | 1 |  | 0 |  | 3 | 0 | 9 |  | 0 |  | 40 | 2 | 31 |  | 0 |  | 1 | 0 |  | 4 |  | 0 |  | 6 | 1 |
| 17:15 | 1 |  | 1 |  | 0 | 0 | 12 |  | 0 |  | 28 | 0 | 21 |  | 0 |  | 0 | 0 |  | 4 |  | 0 |  | 11 | 0 |
| 17:30 | 1 |  | 1 |  | 0 | 0 | 6 |  | 0 |  | 32 | 1 | 34 |  | 1 |  | 1 | 0 |  | 7 |  | 0 |  | 2 | 0 |
| 17:45 | 1 |  | 0 |  | 3 | 0 | 7 |  | 0 |  | 25 | 1 | 37 |  | 2 |  | 1 | 0 |  | 7 |  | 0 |  | 8 | 0 |
| 18:00 | 1 |  | 0 |  | 0 | 0 | 10 |  | 0 |  | 24 | 2 | 25 |  | 2 |  | 3 | 0 |  | 2 |  | 0 |  | 8 | 0 |
| 18:15 | 1 |  | 0 |  | 5 | 0 | 4 |  | 0 |  | 22 | 1 | 30 |  | 0 |  | 5 | 0 |  | 7 |  | 0 |  | 15 | 0 |
| 18:30 | 2 |  | 2 |  | 5 | 0 | 3 |  | 0 |  | 29 | 1 | 17 |  | 1 |  | 0 | 0 |  | 5 |  | 0 |  | 10 | 0 |
| 18:45 |  |  | 3 |  | 5 | 1 | 6 |  | 0 |  | 19 | 1 | 23 |  | 0 |  | 3 | 0 |  | 8 |  | 0 |  | 12 | 0 |

Adjusted Counts


File Name: C:\Program Files (x86)\JAMAR\PetraPro\Data Files\Lake Ella Study\Monroe_LakeElla_Sat_MID.ppd Start Date: 10/6/2012 Start Time: 11:00:00 AM

Week 41

| Week | SF |
| :---: | :---: |
| 40 | 0.99 |
| 41 | 0.98 |
| 42 | 0.98 |
| 43 | 0.99 |
|  |  |
| Factor Used | 0.98 |

## Raw Counts



Adjusted Counts


File Name: C:\Program Files (x86)\JAMAR\PetraPro\Data Files\Lake Ella Study\Monroe_LakeElla_Sat_PM.ppd Start Date: 10/6/2012 Start Time: 3:00:00 PM

Week
41

Raw Counts


Adjusted Counts

|  | MONROE <br> From North |  |  |  |  |  |  |  | LAKE ELLA From East |  |  |  |  |  |  | MONROE <br> From South |  |  |  |  |  |  |  | LAKE From West |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Right |  | Thru |  | Left |  | Peds |  | Right | Thru |  | Left |  | Peds |  | Right |  | Thru |  | Left |  | Peds |  | Right | Thru |  | Left |  | Peds |
| 15:00 |  | 5 |  | 1 |  | 8 |  | 0 | 17 |  | 1 |  | 4 |  | 0 |  | 8 |  | 0 |  | 13 |  | 0 | 16 |  | 0 |  | 2 | 0 |
| 15:15 |  | 10 |  | 0 |  | 7 |  | 0 | 19 |  | 1 |  | 6 |  | 0 |  | 7 |  | 0 |  | 25 |  | 0 | 25 |  | 2 |  | 0 | 0 |
| 15:30 |  | 5 |  | 0 |  | 9 |  | 0 | 21 |  | 0 |  | 10 |  | 0 |  | 3 |  | 0 |  | 13 |  | 1 | 18 |  | 0 |  | 2 | 0 |
| 15:45 |  | 0 |  | 0 |  | 3 |  | 0 | 25 |  | 0 |  | 11 |  | 0 |  | 2 |  | 0 |  | 14 |  | 0 | 19 |  | 0 |  | 1 | 0 |
| 16:00 |  | 5 |  | 0 |  | 11 |  | 0 | 14 |  | 1 |  | 8 |  | 0 |  | 4 |  | 0 |  | 16 |  | 0 | 30 |  | 0 |  | 0 | 0 |
| 16:15 |  | 4 |  | 0 |  | 5 |  | 0 | 14 |  | 1 |  | 7 |  | 0 |  | 0 |  | 0 |  | 9 |  | 0 | 20 |  | 0 |  | 5 | 0 |
| 16:30 |  | 3 |  | 0 |  | 15 |  | 0 | 14 |  | 1 |  | 4 |  | 0 |  | 5 |  | 0 |  | 21 |  | 0 | 16 |  | 1 |  | 4 | 0 |
| 16:45 |  | 4 |  | 0 |  | 10 |  | 0 | 14 |  | 1 |  | 4 |  | 0 |  | 10 |  | 0 |  | 12 |  | 0 | 27 |  | 0 |  | 2 | 0 |
| 17:00 |  | 5 |  | 0 |  | 1 |  | 0 | 22 |  | 0 |  | 6 |  | 0 |  | 5 |  | 0 |  | 24 |  | 0 | 28 |  | 1 |  | 2 | 0 |
| 17:15 |  | 8 |  | 0 |  | 8 |  | 0 | 19 |  | 1 |  | 5 |  | 0 |  | 6 |  | 0 |  | 22 |  | 0 | 28 |  | 0 |  | 2 | 0 |
| 17:30 |  | 1 |  | 0 |  | 3 |  | 0 | 22 |  | 0 |  | 9 |  | 0 |  | 4 |  | 0 |  | 20 |  | 0 | 16 |  | 0 |  | 1 | 0 |
| 17:45 |  | 3 |  | 0 |  | 8 |  | 0 | 13 |  | 0 |  | 6 |  | 0 |  | 2 |  | 0 |  | 16 |  | 0 | 22 |  | 0 |  | 2 | 0 |

## Appendix D: Traffic Data Used for Analysis (Preliminary)

Lake Ella Drive Weekday Traffic

|  | 15-Minute Counts |  |  |  | Sum of four previous 15 min periods |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Major Movement |  | Minor Movement |  |  |  |
| Start Time | NB | SB | EB | WB | Major (sum of both major app.) | $\begin{gathered} \hline \text { Minor (max } \\ \text { of minor } \\ \text { app.) } \\ \hline \end{gathered}$ |
| 7:00 | 111 | 408 | 8 | 7 |  |  |
| 7:15 | 153 | 385 | 10 | 11 |  |  |
| 7:30 | 147 | 405 | 14 | 11 |  |  |
| 7:45 | 169 | 373 | 14 | 16 | 2151 | 46 |
| 8:00 | 173 | 373 | 17 | 9 | 2178 | 55 |
| 8:15 | 176 | 357 | 12 | 9 | 2173 | 57 |
| 8:30 | 158 | 338 | 16 | 15 | 2117 | 59 |
| 8:45 | 170 | 311 | 14 | 20 | 2056 | 59 |
| 9:00 | 182 | 281 | 18 | 11 | 1973 | 60 |
| 9:15 | 174 | 249 | 16 | 14 | 1863 | 64 |
| 9:30 | 162 | 254 | 16 | 16 | 1783 | 64 |
| 9:45 | 158 | 242 | 20 | 11 | 1702 | 70 |
| 10:00 | 187 | 228 | 22 | 13 | 1654 | 74 |
| 10:15 | 180 | 222 | 22 | 16 | 1633 | 80 |
| 10:30 | 199 | 226 | 18 | 19 | 1642 | 82 |
| 10:45 | 206 | 232 | 23 | 17 | 1680 | 85 |
| 11:00 | 229 | 234 | 22 | 14 | 1728 | 85 |
| 11:15 | 261 | 241 | 29 | 16 | 1828 | 92 |
| 11:30 | 263 | 258 | 32 | 20 | 1924 | 106 |
| 11:45 | 273 | 274 | 32 | 20 | 2033 | 115 |
| 12:00 | 276 | 283 | 33 | 23 | 2129 | 126 |
| 12:15 | 284 | 279 | 36 | 22 | 2190 | 133 |
| 12:30 | 298 | 308 | 32 | 25 | 2275 | 133 |
| 12:45 | 268 | 329 | 33 | 30 | 2325 | 134 |
| 13:00 | 267 | 321 | 29 | 32 | 2354 | 130 |
| 13:15 | 281 | 312 | 30 | 19 | 2384 | 124 |
| 13:30 | 288 | 292 | 22 | 19 | 2358 | 114 |
| 13:45 | 275 | 282 | 24 | 24 | 2318 | 105 |
| 14:00 | 275 | 282 | 21 | 24 | 2287 | 97 |
| 14:15 | 280 | 253 | 21 | 22 | 2227 | 89 |
| 14:30 | 287 | 239 | 25 | 24 | 2173 | 94 |
| 14:45 | 285 | 259 | 22 | 18 | 2160 | 89 |
| 15:00 | 292 | 270 | 24 | 22 | 2165 | 92 |
| 15:15 | 281 | 251 | 19 | 21 | 2164 | 90 |
| 15:30 | 298 | 256 | 26 | 24 | 2192 | 91 |
| 15:45 | 323 | 237 | 27 | 20 | 2208 | 96 |
| 16:00 | 345 | 266 | 30 | 27 | 2257 | 102 |
| 16:15 | 342 | 263 | 30 | 23 | 2330 | 113 |
| 16:30 | 362 | 267 | 28 | 23 | 2405 | 115 |
| 16:45 | 368 | 264 | 27 | 24 | 2477 | 115 |
| 17:00 | 417 | 299 | 32 | 29 | 2582 | 117 |
| 17:15 | 423 | 295 | 34 | 35 | 2695 | 121 |
| 17:30 | 402 | 299 | 37 | 28 | 2767 | 130 |
| 17:45 | 383 | 260 | 35 | 28 | 2778 | 138 |
| 18:00 | 318 | 238 | 33 | 32 | 2618 | 139 |
| 18:15 | 321 | 268 | 29 | 35 | 2489 | 134 |
| 18:30 | 290 | 236 | 32 | 34 | 2314 | 129 |
| 18:45 | 275 | 229 | 32 | 38 | 2175 | 139 |


|  | 15-Minute Counts |  |  |  | Sum of four previous 15 min periods |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Major Movement |  | Minor Movement |  |  |  |
| Start Time | NB | SB | EB | WB | Minor (max of minor app.) | Major (sum of both major app.) |
| 7:00 | 40 | 98 | 0 | 0 |  |  |
| 7:15 | 57 | 83 | 0 | 0 |  |  |
| 7:30 | 66 | 110 | 0 | 0 |  |  |
| 7:45 | 93 | 142 | 0 | 0 | 689 | 0 |
| 8:00 | 79 | 122 | 0 | 0 | 752 | 0 |
| 8:15 | 101 | 131 | 0 | 0 | 844 | 0 |
| 8:30 | 85 | 181 | 0 | 0 | 934 | 0 |
| 8:45 | 111 | 194 | 0 | 0 | 1004 | 0 |
| 9:00 | 122 | 179 | 0 | 0 | 1104 | 0 |
| 9:15 | 133 | 195 | 0 | 0 | 1200 | 0 |
| 9:30 | 156 | 191 | 0 | 0 | 1281 | 0 |
| 9:45 | 171 | 249 | 0 | 0 | 1396 | 0 |
| 10:00 | 161 | 223 | 0 | 0 | 1479 | 0 |
| 10:15 | 173 | 234 | 0 | 0 | 1558 | 0 |
| 10:30 | 176 | 279 | 0 | 0 | 1666 | 0 |
| 10:45 | 200 | 281 | 0 | 0 | 1727 | 0 |
| 11:00 | 179 | 234 | 11 | 13 | 1756 | 13 |
| 11:15 | 226 | 268 | 20 | 23 | 1843 | 36 |
| 11:30 | 235 | 288 | 19 | 21 | 1911 | 57 |
| 11:45 | 269 | 295 | 22 | 16 | 1994 | 73 |
| 12:00 | 233 | 297 | 17 | 26 | 2111 | 86 |
| 12:15 | 261 | 296 | 42 | 18 | 2174 | 100 |
| 12:30 | 260 | 311 | 31 | 24 | 2222 | 112 |
| 12:45 | 246 | 283 | 23 | 20 | 2187 | 113 |
| 13:00 | 300 | 276 | 23 | 27 | 2233 | 119 |
| 13:15 | 269 | 314 | 31 | 24 | 2259 | 108 |
| 13:30 | 261 | 267 | 22 | 29 | 2216 | 100 |
| 13:45 | 267 | 291 | 20 | 22 | 2245 | 102 |
| 14:00 | 286 | 257 | 0 | 0 | 2212 | 75 |
| 14:15 | 265 | 293 | 0 | 0 | 2187 | 51 |
| 14:30 | 268 | 291 | 0 | 0 | 2218 | 22 |
| 14:45 | 258 | 288 | 0 | 0 | 2206 | 0 |
| 15:00 | 277 | 233 | 18 | 22 | 2173 | 22 |
| 15:15 | 301 | 258 | 27 | 26 | 2174 | 48 |
| 15:30 | 299 | 242 | 20 | 31 | 2156 | 79 |
| 15:45 | 245 | 261 | 20 | 36 | 2116 | 115 |
| 16:00 | 270 | 282 | 30 | 23 | 2158 | 116 |
| 16:15 | 272 | 231 | 25 | 22 | 2102 | 112 |
| 16:30 | 292 | 266 | 21 | 19 | 2119 | 100 |
| 16:45 | 257 | 215 | 29 | 19 | 2085 | 105 |
| 17:00 | 243 | 248 | 31 | 28 | 2024 | 106 |
| 17:15 | 269 | 282 | 30 | 25 | 2072 | 111 |
| 17:30 | 231 | 213 | 17 | 31 | 1958 | 107 |
| 17:45 | 241 | 257 | 24 | 19 | 1984 | 103 |
| 18:00 | 256 | 233 | 0 | 0 | 1982 | 75 |
| 18:15 | 227 | 260 | 0 | 0 | 1918 | 50 |
| 18:30 | 235 | 247 | 0 | 0 | 1956 | 24 |
| 18:45 | 212 | 244 | 0 | 0 | 1914 | 0 |

Note: Grey shaded rows were the peak hours that were counted on the minor approaches on the weekend

# Appendix E: Traffic Data Used for Analysis (Less Right Turns from Business Approach) 

Lake Ella Drive Weekday Traffic Without Eastbound Right Turning Traffic

|  | 15-Minute Counts |  |  |  | Sum of four previous 15 min periods |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Major Movement |  | Minor Movement |  |  |  |
| Start Time | NB | SB | EB | WB | Major (sum of both major app.) | Minor (max of minor app.) |
| 7:00 | 111 | 408 | 1 | 7 |  |  |
| 7:15 | 153 | 385 | 1 | 11 |  |  |
| 7:30 | 147 | 405 | 1 | 11 |  |  |
| 7:45 | 169 | 373 | 1 | 16 | 2151 | 45 |
| 8:00 | 173 | 373 | 2 | 9 | 2178 | 47 |
| 8:15 | 176 | 357 | 1 | 9 | 2173 | 45 |
| 8:30 | 158 | 338 | 2 | 15 | 2117 | 49 |
| 8:45 | 170 | 311 | 1 | 20 | 2056 | 53 |
| 9:00 | 182 | 281 | 2 | 11 | 1973 | 55 |
| 9:15 | 174 | 249 | 2 | 14 | 1863 | 60 |
| 9:30 | 162 | 254 | 2 | 16 | 1783 | 61 |
| 9:45 | 158 | 242 | 2 | 11 | 1702 | 52 |
| 10:00 | 187 | 228 | 2 | 13 | 1654 | 54 |
| 10:15 | 180 | 222 | 2 | 16 | 1633 | 56 |
| 10:30 | 199 | 226 | 2 | 19 | 1642 | 59 |
| 10:45 | 206 | 232 | 2 | 17 | 1680 | 65 |
| 11:00 | 229 | 234 | 2 | 14 | 1728 | 66 |
| 11:15 | 261 | 241 | 3 | 16 | 1828 | 66 |
| 11:30 | 263 | 258 | 7 | 20 | 1924 | 67 |
| 11:45 | 273 | 274 | 4 | 20 | 2033 | 70 |
| 12:00 | 276 | 283 | 4 | 23 | 2129 | 79 |
| 12:15 | 284 | 279 | 5 | 22 | 2190 | 85 |
| 12:30 | 298 | 308 | 5 | 25 | 2275 | 90 |
| 12:45 | 268 | 329 | 3 | 30 | 2325 | 100 |
| 13:00 | 267 | 321 | 2 | 32 | 2354 | 109 |
| 13:15 | 281 | 312 | 2 | 19 | 2384 | 106 |
| 13:30 | 288 | 292 | 2 | 19 | 2358 | 100 |
| 13:45 | 275 | 282 | 2 | 24 | 2318 | 94 |
| 14:00 | 275 | 282 | 2 | 24 | 2287 | 86 |
| 14:15 | 280 | 253 | 2 | 22 | 2227 | 89 |
| 14:30 | 287 | 239 | 3 | 24 | 2173 | 94 |
| 14:45 | 285 | 259 | 2 | 18 | 2160 | 88 |
| 15:00 | 292 | 270 | 2 | 22 | 2165 | 86 |
| 15:15 | 281 | 251 | 2 | 21 | 2164 | 85 |
| 15:30 | 298 | 256 | 3 | 24 | 2192 | 85 |
| 15:45 | 323 | 237 | 3 | 20 | 2208 | 87 |
| 16:00 | 345 | 266 | 3 | 27 | 2257 | 92 |
| 16:15 | 342 | 263 | 3 | 23 | 2330 | 94 |
| 16:30 | 362 | 267 | 3 | 23 | 2405 | 93 |
| 16:45 | 368 | 264 | 3 | 24 | 2477 | 97 |
| 17:00 | 417 | 299 | 2 | 29 | 2582 | 99 |
| 17:15 | 423 | 295 | 2 | 35 | 2695 | 111 |
| 17:30 | 402 | 299 | 4 | 28 | 2767 | 116 |
| 17:45 | 383 | 260 | 3 | 28 | 2778 | 120 |
| 18:00 | 318 | 238 | 5 | 32 | 2618 | 123 |
| 18:15 | 321 | 268 | 4 | 35 | 2489 | 123 |
| 18:30 | 290 | 236 | 4 | 34 | 2314 | 129 |
| 18:45 | 275 | 229 | 6 | 38 | 2175 | 139 |

## Appendix F: Crash Data




## Appendix E: Public Comments



# Comment Form <br> Monroe Street Median Feasibility \& Lake Ella Median Implementation Study Public Information Meeting \#1 <br> March 6, 2012 

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.

IT SRR MANY PROBLRMS WITHTHSS PLAN AS
IT APPLSRS TO SOUTK MONROR SOUTH OF TAR RASC ROAD TRACIK, WR ARR ACRUADY SHONT ON SPACR AND ARE DRPRENDRAT OA TAR SOUTA BOUND CANRS
$\qquad$
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$\qquad$
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$\qquad$
$\qquad$


Comment Form
Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public Information Meeting \#1
March 6, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.



Prone Number $850 \quad 228 \quad 3762$
Email


Please place in the Comment Box or Return by March 14, 2012

To:
Mr. Nick Arnio Reynolds, Smith and Hills, Inc. 1701 Hermitage Blvd.
Suite 101
Tallahassee, FL 32308
Phone:
(850) 558-2800

Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

Capital Region
Transportation Planning Agency
CRIT PA

Comment Form
Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public Information Meeting \#1
March 6, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.
$\qquad$
and tan pause money, It will
$\qquad$
now, I may not make it if you naut traffic
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$


Address


City, State, Zip
32303

Phone Number
$850385-2100$
Email
Phone:
Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

Capital region
Transportation Planning Agency
CRITPA

Comment Form
Monroe Street Median Feasibility \& Lake Ella Median Implementation Study Public Information Meeting \#1

March 6, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.

At Lake Ella, Consider a light across Legion Street. It might even be
$\qquad$
Also, please lower the speed
$\qquad$
$\qquad$ sidewalk a foot and revamping
the sidewalks in this area.
$\qquad$
$\qquad$ $\bar{\square}$


Please place in the Comment Box or Return by March 14, 2012

To:
Mr. Nick Arnio Reynolds, Smith and Hills, Inc. 1701 Hermitage Blvd.
Suite 101
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Phone: (850) 558-2800
Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

Comment Form

Transportation Planning Agency
CRITPA

Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public Information Meeting \#1
March 6, 2012

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Tallahassee has been my home for over 10 years.
Here I finished college and started bussiness. This
town represents many things I imagined capitalism do be...Orrinualy I am from Russia and remember the times when the "man", would make critical desssions for the small/everyday working goy. Recently I have put all of my savings to stat a restaurant on North Monroe. We heavily depend on Northbound traffic, coming from downtown if they cant tum into "The Creperine", I will go broke. And my American Dream will Between $6^{\text {th }}+7^{\text {th }}$ on North Mourree


Please place in the Comment Box or Return by March 14, 2012

To:
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Tallahassee, FL 32308
Phone: (850) 558-2800
Fax: (800) 276-0715
Email:
Nicholi.Arnio@rsandh.com

Comment Form

Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public Information Meeting \#1
March 6, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.

- Attractive Signage welcoming butt motunisis is
pedestrians into Neighborhoods Along Munres st-
$\qquad$
$\qquad$
$\qquad$
- A water Feature, ie - Large fountain at Some point along Route
$\qquad$
- Dramatic + appealing median Landscaping
$\qquad$
$\qquad$ myrtles

Address $\qquad$
City, State, Zip
32308
Phone Number
545-9836
Email $\qquad$

Please place in the Comment Box or
Return by March 14, 2012
To:
Mr. Nick Arno Reynolds, Smith and Hills, Inc. 1701 Hermitage Blvd.
Suite101
Tallahassee, FL 32308
Phone:
Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

Capital Region
Transportation Planning Agency
CRTPA

Comment Form
Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public Information Meeting \#1
March 6, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.
$\qquad$
I am the land lord of $1304+1318$
N. Monroe and a median would distroy my tenants (Cropevine, Sakura, Krewe de Eras, J. Michaels, Urban Threads and other surrounding users including BambooHouset House of style.

In also redeveloping 1307 N. Mon roe into 5 retail bays that also need 2 way access,
midtown is the only positive growth area dont change what is working.


Please place in the Comment Box or Return by March 14, 2012

To:
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Suite 101
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Phone:
(850) 558-2800

Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

## Comment Form

Monroe Street Median Feasibility \& Lake Ella Median Implementation Study Public Information Meeting \#1

March 6, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.

$\qquad$


Please place in the Comment Box or
Return by March 14, 2012
To:
Mr. Nick Arno
Reynolds, Smith and Hills, Inc.
1701 Hermitage Blvd.
Suite 101
Tallahassee, FL 32308
Phone: (850) 558-2800
Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

Capital Region
Transportation Planning Agency
(

Comment Form
Monroe Street Median Feasibility \& Lake Ella Median Implementation Study Public Information Meeting \#1 March 6, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.
$\qquad$
$\qquad$ a roused median with dedicated pedestrian aossing/retuge at or near Lake Ella.

of either a pedestrian octivated crossing beacon)
$\qquad$


ized pedestrian crossing in this location would significantly increase pedestrian and commercial detivity al both sides of


Please place in the Comment Box or
Return by March 14, 2012
To:
Mr. Nick Arnio
Reynolds, Smith and Hills, Inc.
1701 Hermitage Blvd.
Suite 101
Tallahassee, FL 32308
Phone:
Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

Comment Form
Monroe Street Median Feasibility \& Lake Ella Median Implementation Study Public Information Meeting \#1 March 6, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.

I am opposed to the idea of Medians on north morose between $5^{\text {th }}: 7^{\text {th }}$ Hue. the traffic that turns left off monroe conto Lith is very busy; the turning lane often backs up to $7^{\text {th }}$ Ave. Also, many small businesses just moved to the area trying to create a unique midtown area. These medians could potencidly cripple the growth of twat we are all trying to create. most of our small businesses twould tumble with the loss of business for eden a couple weeks. The road construction that happened on Gaines st put may businesses out of business : many others are holdingon
by a thread.
Name Michelle Torregrosa

| Address 1300 N. Monroe St. |
| :--- |
| City, State, zip Tallahassee FL 32303 |
| Phone Number $850-580-666 \mathrm{Z}$ |
| Email divasand devilse gmail.com |

Please place in the Comment Box or
Return by March 14, 2012
To:
Mr. Nick Arnio Reynolds, Smith and Hills, Inc. 1701 Hermitage Blvd. Suite 101
Tallahassee, FL 32308
Phone:
(850) 558-2800

Fax:
Nicholi.Arnio@rsandh.com

#  <br> CRIT PA 

## Comment Form

## Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

I'm am requesting that the City of Tallahassee and all others involved with the Median Project on Monroe, would consider NOT altering or changing the access (northbound and southbound) that property known as The Cottages at Lake Ella and the businesses known as On The Border, Golden Corral, U-Haul and Sonic currently have.

I am fortunate to be part owner of this property. My grandfather, Gilbert Sewell Chandler, Sr., purchased this property in the 1920's and built the lovely cottages that generations of family have enjoyed as their "home away from home" when it was a tourist camp. Then our family made the decision to try and share this wonderful location as a unique shopping center. We are privileged to have some of the most incredible independent business owners in the Tallahassee area as our tenants. Any changes to the access to this unique shopping location could most definitely affect these businesses in the most detrimental way. Access is critical.

The same situation exists on the west side of Monroe Street where our tenants currently have northbound and southbound access. These restaurants cater to large parties often using buses as their mode of transportation. Access is critical-U-turns are NOT feasible for these tenants.

I implore you to please make absolutely no changes to this stretch of Monroe Street, from $7^{\text {th }}$ Avenue to Tharpe Street. These businesses and our livelihood will not survive. This decision will have a direct negative impact on the future of these businesses.

If you must make any changes to this section of Monroe, please, please only consider alternative plan C .

Virginia Chandler Weeks 1101 Hays Street Tallahassee, FL 32301


Transportation Planning Agency
( ) D

Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered. It is my understanding that the city of Tallahrsie intends to create a median from pith ave
to ike calla drive in order to lon al increase pedestrian
 the leglorstr. Region Reponedly, thane is nosiudy deryonsinativg a cuspest problem with accidents in this a sea. Pedenncian have wafer Acred do hakealla via the hanafic light is 7 th sue and other sonnets.

The Lake flo cottier has a Rich history seaviap the Community vie multiple fruity owned busimesres. Doer the city unsent to deviroy these companove by resineratims access? This req has become syn omprouir with beauty and Thllaborvec Charm, I helene the unintended cionseguencer will have winch A deleterious input tr to vephtivh ALe this Invarcope toreven. Pest necouviden these phons.

Please Print


Please drop in the Comment Box or return to:
Mr. Nick Amnio Reynolds, Smith and Hills, Inc.

Address: 1701 Hermitage Blvd. Ste., 101 Tallahassee, FL 32308
Phone: (850) 558-2800
Fax: (800) 276-0715

City / State / Zip:

Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.

FOR The Past 25+ years our family has
INVESTED OUR PROPERTY WITH THE SMAL BUSINESS (MOM + POP) TENANTS, WE HAVE AT THE COTTAGES AT LAKE ELLA. WE CANNOT ALLOW
$\qquad$ CUSTOMERS TO BE ALTER IN ANY WAYTHEY WIN NOT SURVIVE. PLEASE DO NOT
$\qquad$ FROM THARPE STREET TO ETh AVENUE.
$\qquad$
$\qquad$
$\qquad$

Please Print
Name: Beulah M. Chandler

Address:
$\qquad$ 2004 WINTHROP WAY Taulhashee, Fl.


City / State / Zip:

Please drop in the Comment Box or return to:
Mr. Nick Arno Reynolds, Smith and Hills, Inc.

Address: 1701 Hermitage Blvd. Ste., 101
Phone: (850) 558-2800
Fax: (800) 276-0715

Comment Form

Transportation Planning Agency
CRTPA

Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.

I understand that the City of Tallahassee is planning to put medians dour momoe Street from $8^{\text {th }}$ to Thorpe. These changes will decrease traffic into locally owned stores and read to the deteriation of the shops at lake Ella. If you must make changes, I vil support plan "C" anode would love a pedestiom walkway for customers to would over from Golden Corral of On The Border.
$\qquad$
$\qquad$

Please Print


Address:S06 Collins Drive
$\qquad$
City / State / Zip: TaMahasser, FL

Please drop in the Comment Box or return by December 10, 2012 to:

Mr. Nick Arno Reynolds, Smith and Hills, Inc.

Address: 1701 Hermitage Blvd. Ste., 101 Tallahassee, FL 32308
Phone: (850) 558-2800
Fax: (800) 276-0715

Comment Form
Monroe Street Median Feasibility \& Lake Ella Median Implementation Study Public Information Meeting \#3 November 28, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.
As the owner of a business at late Ella for 23 years, I am very concerned about access to the businesses at Lake Ella and to the Park. Every day we get customers who drive by,
see something of interest and poll in to shop. If there is no access torn lane from southbound traffic, T will most certainly lose business. In a dilution to my oun concerns for my financial stability. I see that Lake Ella Park is a beloved park and a central place in our community or people to meet, walk, picnic + play. We should
not limitaccessibility from any direction.

to our community and my businesse t the


Em en wend aquarternoon imports. con

Comment Form

Compansacton Planning Agency
CRTPA

Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public Information Meeting \#3
November 28, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.
 monroe st ont Legion. A solid median would restrict this access and would be detrimental to the locally owned business at Lake Ella.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$


Please place in the Comment Box or
Return by December 10, 2012
To:
Mr. Nick Arnio
Reynolds, Smith and Hills, Inc. 1701 Hermitage Blvd.
Suite 101
Tallahassee, FL 32308
Phone:
(850) 558-2800

Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

Comment Form

Transportation Planning Agency
CRTPA

Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public Information Meeting \#3
November 28, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.


Morroestrect Revisions. Monroe Street has

$\qquad$
$\qquad$
$\qquad$


Phone Number \& $850-385-4331$
Email minowingtonosohoo.com

Please place in the Comment Box or Return by December 10, 2012

To:
Mr. Nick Arno
Reynolds, Smith and Hills, Inc. 1701 Hermitage Blvd.
Suite 101
Tallahassee, FL 32308
Phone: (850) 558-2800
Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

Contra beach
Transportation Planing Agency
CRTDA

Comment Form
Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public Information Meeting \#3
November 28, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.
I am writing to express my opine abut the median project on roth monroe, where of support the melian
do not support Plan $A$ which restricts Southbound lift turn oo to Leger Street. say this because such a restriction would purely limit access to Toke rel and the busonemes that purrould it.
$\qquad$
$\qquad$
$\qquad$
$\qquad$


Please place in the Comment Box or
Return by December 10, 2012
To:
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Suite101
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Fax:
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Comment Form
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November 28, 2012

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$\qquad$
$\qquad$
$\qquad$
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$\qquad$
$\qquad$
$\square$


Please place in the Comment Box or
Return by December 10, 2012
To:
Mr. Nick Arnio Reynolds, Smith and Hills, Inc. 1701 Hermitage Blvd.
Suite 101
Tallahassee, FL 32308
Phone: (850) 558-2800
Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

Co nd
Transportation Planning Agency
(

Monroe Street Median Feasibility \& Lake Ella Median Implementation Study

Public Information Meeting \#3
November 28, 2012

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$\qquad$
$\qquad$

Mane JEFFREY MANDE
addresses. 1641 LAKKEEUA $P R$.
city, State, Zip TALLAHASSEE FL 32303
Phone Number $850391-9320$
Email SENDME@ARIDICULOUS:COM

Please place in the Comment Box or
Return by December 10, 2012
To:
Mr. Nick Arno Reynolds, Smith and Hills, Inc. 1701 Hermitage Blvd.
Suite 101
Tallahassee, FL 32308
Phone:
Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

Comment Form

Transportation Planing Agency
CRTPA

Monroe Street Median Feasibility \& Lake Ella Median Implementation Study Public Information Meeting \#3

November 28, 2012

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Suite 101
Tallahassee, FL 32308
Phone: (850) 558-2800
Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

Conical lego
Transportation Planning Agency
CRTPA

Comment Form
Monroe Street Median Feasibility \& Lake Ella Median Implementation Study Public Information Meeting \#3

November 28, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.
$\qquad$
median ow North Morroe near lake Ella for pedestrian
However, I advocate that the median project allow for both worth and south-bornd
turns int Lake Ella and The Cottages via
Legion drive
We can definitely support the goals of pedestrian safety, movement of traffic, and access to local businesses simultaneously.
thank you.
$\qquad$
$\qquad$



Please place in the Comment Box or
Return by December 10, 2012
To:
Mr. Nick Arnio
Reynolds, Smith and Hills, Inc. 1701 Hermitage Blvd.
Suite 101
Tallahassee, FL 32308
Phone: (850) 558-2800
Fax:
(800) 276-0715

Email:
Nicholi.Arnio@rsandh.com

## Arnio, Nicholi

From:
Sent:
To:
Cc:
Subject:

Burke, Greg [Greg.Burke@talgov.com](mailto:Greg.Burke@talgov.com)
Wednesday, November 28, 2012 12:50 PM
'Delaney, Kristina'
Chung, Suzanne; Reed, Harry; Arnio, Nicholi
RE: Walgreens \#3374 Tallahassee, FL - Monroe Street Median Feasibility and Lake Ella median Implementation study

Hi Kristina. I will make sure that my agency keeps you informed regarding the status of this project. For your information, we have added a project page to the agency's website that is updated as the study progresses (http://www.crtpa.org/Monroe Median Project.html).

Sincerely,

Greg T. Burke, AICP
Transportation Planner
Capital Region Transportation Planning Ageney
408 N. Adams Street, 4th Floor
Tallahassee, FL 32301
850/891.6802 Fax/891.6832
Email: greg.hurke@talgov.com
web site: www.crtpa.org

Mailing Address:
300 S. Adams Street, M.S. A-19
Tallahassee, FL 32301

From: Delaney, Kristina [mailto:kristina.delaney@walgreens.com]
Sent: Wednesday, November 28, 2012 12:25 PM
To: Burke, Greg
Cc: Chung, Suzanne
Subject: Walgreens \#3374 Tallahassee, FL - Monroe Street Median Feasibility and Lake Ella median Implementation study

Hi, Greg,

Following our telephone conversation earlier, please keep up informed periodically about the status of this project. Thank you.

Be well,
Kristina
Kristina Delaney
Walgreen Co.
104 Wilmot Road, MS\#1420
Deerfield, IL 60015
p 847-315-4658
f 847-315-4825
(0)

Every day I helpp piecole get, stay and live well.
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## Arnio, Nicholi

## From:

## Sent:

To:
Subject:
Attachments:

Burke, Greg [Greg.Burke@talgov.com](mailto:Greg.Burke@talgov.com)
Wednesday, November 28, 2012 12:16 PM
Arnio, Nicholi
FW: Median Project at Lake Ella
median.jpg
-----Original Message-----
From: Mitchell, Yulonda
Sent: Wednesday, November 28, 2012 12:10 PM
To: Burke, Greg
Subject: FW: Median Project at Lake Ella

Yulonda Mitchell
Capital Region Planning Agency
Mailing Address: 300 South Adams Street, Box A-19 Physical Address: 408 North Adams Street Tallahassee, FL 32301
Phone: 850.891.6800
Fax: 850.891.6832
-----Original Message-----
From: Ingram, M'Lisa
Sent: Wednesday, November 28, 2012 11:20 AM
To: Reed, Harry
Cc: Mitchell, Yulonda
Subject: FW: Median Project at Lake Ella

FYI
------Original Message-----
From: Wendy [mailto:wendy@quartermoonimports.com]
Sent: Tuesday, November 27, 2012 4:57 PM
To: Gillum, Andrew; Miller, Nancy; Ziffer, Gil; Marks, John
Cc: Minor, Rick
Subject: Median Project at Lake Ella

Dear Commisioners and Rick Minor,
I am writing to ask your support in advocating for an opening in the planned Monroe Street median at Lake Ella. I am concerned that if or when the state gains control of the project, their goal will be to move traffic swiftly rather than preserve public access to one of the most beloved parks in our city. Monroe Street is more than a highway. It is the artery connecting neighborhoods to each other and people to local businesses and the beloved Lake Ella Park. The businesses at Lake Ella would be impacted severely if there was not access from southbound traffic. Please see the attached draft of Plan A. Please help us at the CRTPA meeting tomorrow (Wednesday 11/28 at the Northwood Centre Atrium, 1940 N. Monroe from 5pm-7pm. ) We are collecting comment forms from our customers and staff, but we know that we need your voice to address the state. Please help us to preserve easy and safe access to Lake Ella.

I have attached a copy of Draft of Plan A. This would be the worst case scenerio.

There are other options (Plan C is preferred with Plan B as a second) we would support that allow access from both traffic directions.

Thank you,
Wendy Halleck
Quarter Moon Imports@talgov.com
1641 N. Monroe
Tallahassee Florida 32303
Shop (850) 222-2254
Cell (850) 222-2254
www.quartermoonimports.com

Coridmegon
Transportation Planning Agency
CRTPA

## Comment Form <br> Monroe Street Median Feasibility \& Lake Ella Median Implementation Study <br> Public Information Meeting \#3 <br> November 28, 2012

Public comments will be incorporated into this study and will be considered during the evaluation of the alternatives. All comments will be considered.

Monroe Steet is not a highway, it is a major street that connects neighborhoods to the most central and beloved park of Tallahassee and many long established locally owned businesses.

We oppose any plan that limits access to Lake Ella or the businesses located there. We feel that making pedestrian traffic safer is great, but we simply oppose a median that does not
allow entry access to Lake Ella and to local businesses from both directions of traffic. We prefer other plans, which include Medians, but which allow access from both the north and south
directions of traffic. We also feel that Lake Ella truly is a beautiful centerpiece to our town. We should not impede people from easy and safe access. We are frequent customers of the local
businesses that surround Lake Ella and the Wednesday Farmer's Market and we also love to visit the park itself. Please consider incorporating a plan that takes these issues into account.

Thank you for your time and efforts to make Tallahassee a better, safer, and small business friendly city!


##  <br> 

Safety

## Geometry <br> 0

ATTACHMENT 3
ATTACHMENT 3

CराPA

## ATTACHMENT 4



## CराPA

ALTERNATIVE A

ATTACHMENT 4
ALTERNATIVE B - PREFERRED


## ATTACHMENT 4 <br> ALTERNATIVE C



## Agenda Item 6 C

## 2010 FHWA Urbanized Area Boundary Map

## REQUESTED BY: CRTPA Staff

Type of ITEM: Discussion

## STATEMENT OF ISSUE

One of the additional work requirements as a result of the 2010 Census is the development of a 2010 Federal Highway Administration (FHWA) Urbanized Area Boundary Map. This map is used as a demarcation line for urban and rural status throughout the region, as well as for use is assisting in functionally classifying roadways.

Staff is seeking approval of the 2010 FHWA Urbanized Area Boundary Map.

## RECOMMENDED ACTION

Option 1: Approve 2010 FHWA Urbanized Area Boundary Map.

## HISTORY and ANALYSIS

After each decennial census, the Federal Highway Administration (FHWA) requests that each urbanized area review the urbanized area boundary for expansion based upon population and/or demographic changes. The map that is produced by the CRTPA is used as a demarcation line between urbanized and rural areas of the community, as well as assisting in the determination of the roadway system from a functional classification standpoint.

The process for identifying the new urban boundary begins with the use of the previous census Urbanized Area Boundary. In Leon County and Gadsden County that map would be the 2000 Urbanized Area Boundary. Since Wakulla has new urbanized areas there is no 2000 Urbanized Area Boundary map.

After the Census is complete, there is an analysis done by the Census Bureau to determine "urban" areas which is based on a standard of 1,000 people per square mile. This analysis produces a map called the Census Defined Urban Area Boundary. The borders of the map do not go beyond the 1,000 people per square mile standard. It is very exact in nature and requires "smoothing". An example of a smoothed boundary can be found on Attachment 4 of Attachment 1 (the 2010 Urbanized Area Boundary Report).

The "smoothing" of the boundary is done to account for growth in the next ten years based on growth patterns that may have exceeded the previous boundary, comprehensive plan initiatives, or known large scale developments that may be in the approval process. The smoothing process is completed in conjunction with government representatives, and the Florida Department of Transportation. When
completed, the product is a new Urbanized Area Boundary map. For Gadsden, Leon and Wakulla Counties this is the 2010 Urbanized Area Boundary Map. An example of this can be found on Attachment 6 of Attachment 1 (the 2010 Urbanized Area Boundary Report).

Capital Region Transportation Agency (CRTPA) staff has been working with Research Section of the Tallahassee-Leon County Planning Department, FDOT, Wakulla County and Gadsden County to develop this map for FDOT and FHWA approval.

Lastly, staff has produced a justification report, Attachment 1, which will be submitted to FDOT and FHWA for review and will be submitted in a final form with the approved 2000 FHWA Urbanized Area Boundary Map. For comparison purposes, the growth of the urbanized areas in the CRTPA region is shown on Attachment 2.

## NEXT STEPS

Upon approval, MPO staff will submit the 2010 FHWA Urbanized Area Boundary Map to FDOT and FHWA.

## RECOMMENDED ACTION

Option 1: Approve 2010 FHWA Urbanized Area Boundary Map.

## ATTACHMENTS

Attachment 1: 2010 FHWA Urbanized Area Boundary Map Justification Report
Attachment 2: 199020002010 Growth comparison map

## 2010 FEDERAL HIGHWAY ADMINISTRATION URBANIZED AREA BOUNDARY FOR THE TALLAHASSEE METROPOLITAN STATISTICAL AREA

Since the last time that this report was submitted in 2004 the Tallahassee-Leon County Metropolitan Planning Organization (MPO) has expanded twice to include the entire Tallahassee Metropolitan Statistical Area which includes Gadsden, Jefferson, Leon and Wakulla Counties. Additionally, the Tallahassee-Leon County MPO has changed its name to the Capital Region Transportation Planning Organization, or CRTPA.

This report outlines the CRTPA recommendations to the Florida Department of Transportation (FDOT) in the development of the Federal Highway Administration (FHWA) Urbanized Area Boundary for the Tallahassee MSA.

Definition - FHWA Urbanized Area Boundary incorporates the land necessary to produce an identifiable boundary which may include developed areas and nearby transportation facilities. The Urbanized Area Boundary is used by various agencies to establish both urban and rural areas for Highway Functional Classification as well as to determine level or service and access management standards as defined in FDOT rules, procedures and manuals.

CRTPA/FDOT Coordination - The CRTPA took the lead in coordinating activities between regional partners to provide input to FDOT District 3 on the 2010 Urbanized Area Boundary based on information from the 2010 Census.

FHWA Boundary Methodology - The 2010 Census Defined Urbanized Area Boundary and the 2000 Urbanized Area Boundary maps were utilized as a starting point for this process. The product of this effort is the 2010 Urbanized Area Boundary Map.

## GADSDEN COUNTY

## Areas not in CRTPA jurisdiction during 2000 Census

## Chattahoochee (Map Shown as Attachment 1)

Using the 2010 Census Defined Urbanized Area Boundary as a base there are three (3) areas to include:

1. The first is the northwest corner of the city. The boundary includes the state border to the north, Apalachicola River to the west, US 90 to the south, and River landing Road to the east.
2. The second area is bordered by Jinks Crossing Road to the east, US 90 to the south, Maple Street/Engineer Road/Main Street to the west, and Main Street/Perimeter Road to the north.
3. The last area is bordered by Maple Street to the east, Lincoln Drive to the south, Chattahoochee Street to the west, and Hickory Street to the north.

## Areas in CRTPA Jurisdiction during 2000 Census

Quincy (Maps of Quincy are shown as Attachments 2 and 3)
This area will maintain the 2000 Urbanized Area Boundary as well as expand to meet the 2010 Census Defined Urbanized Area Boundary in the area south of Quincy.

Midway (Maps are shown as Attachments 4, 5, and 6)
The 2000 Urbanized Area Boundary led to the Gadsden/Leon border. With the expansion of the 2010 Census Defined Urbanized Area Boundary leading to the City of Midway all of the City of Midway is included in the 2010 Urbanized Area Boundary.

## Havana (Maps are shown as Attachments 4, 5, and 6)

Similar to Midway, the 2000 Urbanized Area Boundary led up to the Gadsden/Leon border. The 2010 Census Defined Urbanized Area Boundary is now in Gadsden County and leading even further towards Havana. There are two areas that will fill in the boundary west of US 27. The borders for these areas "fill in" the area surrounded by the railroad to the west, the Leon/Gadsden border to the south, US 27 to the east, and Rich Bay Road to the north.

## LEON COUNTY (Maps are shown as Attachments 4, 5, and 6)

The 2000 Urbanized Area Boundary is maintained and expanded upon in three areas.

## Tallahassee (Blountstown Highway)

The 2000 Urbanized Area Boundary is expanded to include Blountstown Highway in the 2010 Urbanized Area Boundary.

## Tallahassee (Northwest)

The border to the west is expanded to the powerline easement to the west, US 90 to the south, to the 2000 Urbanized Area Boundary to the east and north.

## Tallahassee (Tram Road)

The 2000 Urbanized Area Boundary along Tram Road is adjusted to be north of Tram Road.

## WAKULLA COUNTY (Maps are shown as Attachments 4, 5, 6, and 7)

No area of Wakulla County met the Census definition of "Urbanized Area" for the 2000 Census. However, the 2010 Census identified two areas that met the "Urbanized Area" definition.

## Wakulla County (Northeast)

The first new urbanized area in Wakulla County is in the northeast south of the Woodville Community. The boundaries are from the powerline to the East of Woodville Highway, south to SR 267, West to the powerline easement, and north to the Leon/Wakulla county line.

The new 2010 Urbanized Area Boundary expands the Leon County 2000 Urbanized Area Boundary beyond Woodville in Leon County to encumber the northeast area of Wakulla County.

## Wakulla County (Crawfordville)

The Crawfordville area is the second new 2010 Urbanized Area in Wakulla County. The boundary on the east include Casseaux/Andrew J Hargrett Sr. Road/Iroquois Road/Black Foot Road/Klickitat Drive, to the south, Martin Luther King Jr Memorial Road/Alexander Road/Council Moore Road/Harvey Mill Road, to the west, Fulton Harvey Road/Lura Lane/Michael Drive/US 319, and the north, East Ivan Road/ Wakulla-Arran Road.

ATTACHMENT 1 of ATTACHMENT 1


ATTACHMENT 2 of ATTACHMENT 1

2010 Quincy Census Defined Urbanized Area"
2000 Quincy Smoothed Boundary

ATTACHMENT 3 of ATTACHMENT 1



2000 Tallahassee Smoothed Boundary
2010 Tallahassee Census Defined Urbanized Area (1,000 People per Square Mile)
$\square$


Areas Added to Create Smoothed Boundary
$\square$


ATTACHMENT 7 of ATTACHMENT 1


CRTPA/TLCMPO URBANIZED BOUNDARIES (1990, 2000, and 2010)

## 2010

## 2000

1990

## Agenda Item 6 D

## GIS DATA DISCOVERY AND ASSESSMENT AND GAP ANALYSIS

## Requested by: CRTPA Staff

Type of ITEM: Discussion

## Statement of Issue

CRTPA Staff is seeking approval of $\$ 42,935$ to be used for regional GIS Data Discovery and Assessment and Gap Analysis activities to be performed by the Environmental Systems Research Institute, Inc. (ESRI) through the Tallahassee-Leon County GIS (TLCGIS).

## RECOMMENDED ACTION

Option 1: Approve GIS Data Discovery and Assessment and Gap Analysis funding.

## History and Analysis

## Background

Over the course of the last year the Tallahassee-Leon County GIS Department (TLCGIS) and CRTPA have been meeting to discuss a partnership for multiple projects including website mapping, internet mapping and the provision of transportation data for CRTPA region partners. One of the major difficulties regarding the provision of GIS data access for regional partners is the fact that there are inconsistencies with GIS use, software, data and formats throughout the region.

This is not a reflection of GIS usage for regional partners, just that they are at varying scales of use for GIS. What one county or government uses GIS for may or may not be consistent with other local governments or county. Yet there remains a need to share transportation information across the region. While it sounds like a relatively easy solution to get a consistent approach to GIS utilization, that is not the case since usage and needs are different.

Understanding the type of GIS system that is being used and what it is being used for could solve a major component of the "unknown" GIS issue. The provision of consistent, updated, and clear transportation data for the entire region is the goal. To reach that goal we need to understand what data is available and where the gaps in the data exist. Step one, from the perspective of CRTPA staff and TLCGIS staff, is for TLCGIS to enter into a contract with a leader in the GIS world, Environmental Systems Research Institute (ESRI) to conduct a Data Discovery and Assessment and Gap Analysis.

## Data Discovery and Assessment

The Environmental Systems Research Institute (ESRI), under the guidance of TLCGIS, will provide the following to determine the existing regional partner GIS conditions:

- Review existing data sources.
- Meet with varying stakeholders.
- Identify different existing data sources.

Upon completion of step one, the CRTPA and TLCGIS will have a better understanding of what needs to happen to provide a regional GIS system.

## Gap Analysis

The Gap Analysis component will provide the following, again under the guidance of the TLCGIS:

- Assessment of "Gap" between existing data and he ESRI Local Government Information Model.
- Determine the level of effort necessary to develop a new data model for the CRTPA.
- Determine the needs of the individual CRTPA regional partners to adapt or create a GIS element.


## $\underline{\text { Cost }}$

The cost of this initial step is outlined below:

| Data Discovery and Assessment | $\$ 22,353$ |
| :--- | :--- |
| Gap Analysis | $\$ 20,582$ |
| Total | $\$ 42,935$ |

Funding is available in the Unified Planning Work Program (UPWP) budget to cover this expenditure.
The completion of these two steps will help determine how to proceed with the regional GIS effort. The step one components should both be finished by May 2013 with a direction on how to proceed. The information will then be provided to the CRTPA along with a recommended course of action for moving forward.

## Next Steps

Upon approval by the CRTPA, staff will work with both the TLCGIS and ESRI staffs to complete this effort.

## OPTIONS

Option 1: Approve GIS Data Discovery and Assessment and Gap Analysis funding.
(Recommended)
Option 2: Provide other direction.

# Agenda ITEM 6 E 

## Orange Avenue Resurfacing

Requested by: FDOT Staff $\quad$ Type of Item: Discussion

## STATEMENT OF ISSUE

The Florida Department of Transportation (FDOT) has a resurfacing project (FPID 426965-1) planned for SR 373 (Orange Avenue) from Lake Bradford Road to South Monroe Street scheduled to be let in October 2013. This project currently excludes the section containing the old railroad bridge over the St. Mark's Trail. The Department also has a planned project (FPID 432137-1) in FY 2018 to replace the bridge structure over St. Mark's Trail. The Department would like to present some preliminary options for this location and gather input from the CRTPA on the matter.

## CRTPA SUBCOMMITTEE ACTIONS

On January 15, 2013, this item was presented to the CRTPA's Citizens Multimodal Advisory Committee (CMAC) and Technical Advisory Committee (TAC). At the CMAC, Mr. Hans vonTol attended the meeting as a citizen and noted that he wanted to voice support to add bicycle lanes to Orange Avenue when it is resurfaced. FDOT staff was present at the meeting and stated that although bicycle lanes may not be able to be provided due to right-of-way restrictions, the Department is discussing the potential treatment of Orange Avenue with Sharrow markings.

## History and Analysis

The FDOT has determined that the bridge over the St. Marks Trail has reached the end of its useful life (structurally deficient) and therefore needs to be replaced or removed. Pictures of the current bridge approaches and structure are shown in Attachment 1. As stated above, replacement of the bridge was not contemplated to be part of the resurfacing project. However, FDOT began to look at addressing the deficient bridge as part of the resurfacing project. One of the options is to remove the bridge and lower the road and bring the St. Marks Trail to the new grade of the road. This concept was first mentioned at the FDOT November 13, 2012 public meeting on the resurfacing project. It was also mentioned briefly at the November CRTPA Board meeting during the FDOT presentation on the Tentative Work Program.

On January 9, 2013, a meeting was held at the request of FDOT to discuss with City and CRTPA staff an option of removing the bridge and lowering the road as part of the resurfacing project. In attendance at the meeting were representatives of Tallahassee-Leon County Planning Department (TLCPD), City of Tallahassee Public Works Department (COT PW), City of Tallahassee Parks and Recreation

Department (COT P\&R), CRTPA staff and FDOT and their consultant. FDOT explained the situation about the deficient bridge and the process of lowering the road and bringing the trail to grade with the lowered road.

The concerned voiced by the majority of the City and CRTPA staff was the safety for the trail users. There would continue to be conflict between trail users and the vehicle traffic on Orange Avenue even though, the FDOT proposed a marked crossing with a HAWK signal.

The St. Marks Trail represents the backbone of the future regional trail network. The number of trail users will only continue to increase as the trail network grows and becomes better known and popular. In addition, traffic on Orange Avenue will continue to grow from its current 17,000+ daily vehicles. The consensus of staff is that there needs to be a grade separation for the safety of the trail users and the motoring public using Orange Avenue. The grade separation standard over major roadways is consistent with other parts of the regional trail network i.e. the Cascades Park Bike/Pedestrian Bridge over Monroe Street and the concept plans for a grade separation of the St. Marks Trail over Capital Circle at Woodville Highway.

The option of a replacing the bridge with a tunnel similar to a box culvert as shown in Attachment 2 was discussed. The tunnel option may create some safety concerns because of its location and the length of the tunnel. It could be over 100 feet long.

Given the above identified concerns, it was the recommendation of staff that the bridge be replaced with a structure similar to the existing design, a span bridge with side slopes as shown in Attachment 3.

## NEXT STEPS

The FDOT will evaluate the input from CRTPA and advise how it would like to proceed with the bridge replacement.

## ATTACHMENT

Attachment 1: Pictures of the current Orange Avenue Bridge over the St. Marks Trail
Attachment 2: Tunnel options
Attachment 3: Span bridge option


Orange Ave looking west - south side of road


Orange Ave looking east - south side of road


Boardwalk/Sidewalk - Orange Ave looking east - south side of road


St Marks Trail looking north


## Current Bridge Structure



Current Bridge Structure

Tunnel Options


Pedestrian Underpass Bridge (Span Bridge)


## Agenda Item 6 F

## Sustainable Communities Calculator

REQUESTED BY: CRTPA Staff
TYPE OF ITEM: Information

## STATEMENT OF ISSUE

Bruce Landis, PE, AICP, of Sprinkle Consulting will demonstrate the use of the web-based application of the Sustainable Communities Calculator.

## History and Analysis

The basis for the Sustainable Communities Calculator was developed as an element of the Regional Mobility Plan. With the authorization of the CRTPA in October 2011, Sprinkle Consulting was contracted under CRTPA's General Planning Consultant contract with URS Corporation to complete the attributes of the calculator so that it could become fully functional. The calculator is in the final stages of completion. The calculator is able to determine future fiscal impacts to the community infrastructure based on inputs about planned developments and surrounding infrastructure characteristics. In addition, the calculator is able to provide individual household impacts and cost associated with new development characteristics, community wide energy and environmental impacts and costs, and effects on the regional economy of planned development.

Attachment 1 shows the screens and levels of input and output that are part of the web-based Sustainable Communities Calculator.

## NEXT STEPS

The consultant will continue to finalize the web-based calculator and provide training to staff regarding the fully updated calculator.

## ATTACHMENT

Attachment 1: Sustainable Communities Calculator Web-based Screen Shots


## CRTPA Sustainable Communities

 \# Calculator vo. 3

Capital Region Transportation Planning Agency - Tallahassee, FL MSA

Planned Development \& Surrounding Infrastructure Characteristics
"Livability" Infrastructure of Surrounding Area


$\square$

$\square$

vary Eraust (6-9perthour)

$\square$


Roadway Network Operations \& Maintenance Costs (exciuding cosis for through fac thes)

| Cries | \$14,200000 |
| :---: | :---: |
| County | \$5800000 |
| State | \$8,500,000 |
| Total | \$28,500,000 |


| (excluang extomer VMT) | $2450,198.280$ |  |
| :---: | :---: | :---: |
| l6xemply |  | 17 |
| O\&M Costs per VMT for Network | S0.0116 |  |
|  |  |  |
|  | Develooment | Household |
| vMT Benchmark | $9.550,000$ | 19.100 |
| VMT of Proposed Development | 7361.454 | 14.723 |
| \%reduction in VMT | $23 \%$ |  |

Sustainable Communities Calculator vo. 3 Energy \& Environment

Capital Region Transportation Planning Agency - Tallahassee, FL MSA


Sprinkle
1-888-462-3514 muw sprinkleconsulting com

## Community-Wide Energy \& Environmental Impacts \& Costs



Home | poovi CRTPA | CRTPA Weonnge | Documentsprosets I Contac: Us


The Capral Region Transportat on Planning Agency




## \# Household Economy

Effects on the Regional Economy

## Comparalive Costs



Lost Disposable Income


## \#Household Economy

Capital Region Transportation Planning Agency - Tallahassee, FL MSA

Effects on the Regional Economy

Comparative Benefits


Gained Disposable Income



Auto Operations \& Maintenance Costs

| Annuei | 51.223490 | \$623894 | \$464333 | \$605,527 |
| :---: | :---: | :---: | :---: | :---: |
| 10.Year Total | S12.234.901 | S6.238.939 | \$4 543332 | \$6,055,272 |
| Fuel Costs |  |  |  |  |
| Annual | S2218 | S1. 131 | S8\$2 | \$1,850 |
| toyear Totat | \$22,183 | \$11,312 | S8419 | \$18,500 |
| Heath Care Costs |  |  |  |  |
| Annuai | S170 | 5158 | 59 | 818 |
| 90-Year Total | S1702 | \$1.580 | \$92 | \$177 |

Regional Spending Multiplier (RIMS II-Madified) ${ }^{5}$

twa Capital Region Transportation Plaming Agenss


Capital Region Transportation Planning Agency - Tallahassee, FL MSA

Effects on the Regional Economy

Comparative Costs


Lost Disposable income

| Annus) | 5297.003 | \$376,039 | S606.041 | \$306,101 |
| :---: | :---: | :---: | :---: | :---: |
| 10-Year Total | \$2.970 029 | \$3.760 394 | 56.060414 | \$3,061,006 |
| Auto Ownership Costs |  |  |  |  |
| Annua) | \$865,095 | S1,095 308 | \$1.765,246 | S891,594 |
| 10-Year Total | 58.650946 | \$10,953081 | \$17.652457 | \$8,915,940 |


| Annual | 5599.650 | \$759,157 | 51.223 .490 | 5617,963 |
| :---: | :---: | :---: | :---: | :---: |
| 10. Year Total | 55.995963 | \$75971570 | \$12.234,901 | S6,179,630 |
| Fisel Costs |  |  |  |  |
| Annual | \$543,550 | S688, 193 | \$1.109 127 | \$184,136 |
| to-year Total | \$5,435 502 | \$6.861.953 | S71.091269 | \$1,841,355 |


| Annual | \$6.122 | \$80.518 | S85, 120 | \$76,247 |
| :---: | :---: | :---: | :---: | :---: |
| 10-Year Total | S61. 224 | S805 177 | \$851.198 | \$762,469 |
| Total | S1767896 | 52,311022 | \$3,679897 | \$2,076,040 |
| 10-Year Tota | 317678162 | \$23.140.221 | S30798.970 | \$20.760.401 |

prome seo sot cose-Far eso agisssz

Capital Region Transportation Planning Agency - Tallahassee, FL MSA

## Effects on the Regional Economy

Comparative Benefits


Gained Disposable Income
Commute Time Costs

| Annual | $\$ 606,041$ | $\$ 309038$ | $\mathbf{S 2 3 0 , 0 0 2}$ | $\mathbf{\$ 2 9 9 , 9 4 1}$ |
| :--- | :--- | :--- | :--- | :--- |
| 10 -Year Total | $\$ 8,060.414$ | $\$ 3090,384$ | $\$ 2,300019$ | $\$ 2,999,407$ |



Auto Operations \& Maintenance Costs

| Annual | $\mathbf{S 1 2 2 3 , 4 9 0}$ | $\mathbf{S 6 2 3 8 9 4}$ | $\mathbf{S 4 6 4 3 3 3}$ | $\mathbf{S 6 0 5 , 5 2 7}$ |
| :--- | :--- | :--- | :--- | :--- |
| 10 -Year Total | $\$ 12,234,901$ | $\$ 6238,939$ | $\mathbf{S 4 6 4 3 , 3 3 2}$ | $\mathbf{S 6 , 0 5 5 , 2 7 2}$ |



| Regional Spending Multipler (RIMS II- Modified) ${ }^{\text {a }}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Tota! | \$5 449.927 | \$2.831792 | \$2 027,304 | \$4.017.929 |
| 10-Year Total | S54499.275 | \$28.317.917 | \$20.273037 | \$40,179,291 |

The Capial Region Transportalion Piguning Agens


Capital Region Transportation Planning Agency - Tallahassee, FL MSA

Sprinkle
-888-462-3514 www sprinkeconsuting .oom

## Output Summary



The Capial Region Iransportation Planning Agency
Prove s50 5aP 8500 - Far asos92 0332



## Agenda Item 6 G

## CRTPA WEBPAGE UPDATE

Requested by: CRTPA Staff
TYPE OF ITEM: Information

## STATEMENT OF ISSUE

At the November 26, 2012 CRTPA Board meeting, members approved a work order related to the final phase of the update to the CRTPA Website by one of the CRTPA's General Planning Consultants (URS Corporation). Project consultants will provide an update on efforts related to the webpage update.

## Previous Agenda Items Relating to CRTPA GPC

March 15, 2010 - Agenda Item 5E - SU Funding Allocation
March 21, 2011 - Agenda Item 2E - RFQ for CRTPA General Planning Consultant
June 20, 2011 - Agenda Item 3B - General Planning Consultant Joint Participation Agreement June 20, 2011 - Agenda Item 3B - General Planning Consultant Selection Approval September 19, 2011 - Agenda Item 3D - Joint Participation Agreement Amendment Authorization November 26, 2012 - Agenda Item 2C - CRTPA General Planning Consultant Authorization to Proceed

## History and Analysis

At the September 19, 2011 CRTPA Board meeting, a Joint Participation Agreement was approved associated with executing the GPC Work Orders for initiation of CRTPA GPC projects. One of the projects initiated was the CRTPA Website Development Consultation (to be developed by URS Corporation for $\$ 6,500$ ).

Subsequently, project development efforts were initiated to develop a framework to update the CRTPA's website in a manner that would support use of the existing website technology (allowing CRTPA staff to maintain and update the new website) as well as incorporate additional features not provided on the current website (including a meetings calendar). These efforts were recently completed and the next (and final) phase (project implementation) remains.

At the November 26, 2012 CRTPA Board meeting, members approved a work order authorizing URS Corporation to proceed with final phase of the website update. The implementation phase of the project involves building the new site including transitioning the existing website data as well as implementation of new features not currently on the existing website. Completion of the final implementation phase is scheduled to be complete by June 30, 2013.


A status report on the activities of the Capital Region Transportation Planning Agency (CRTPA) and other items of interest will be provided.


This portion of the agenda is provided to allow members an opportunity to discuss issues relevant to the CRTPA.


This portion of the agenda is provided to allow for citizen input on any CRTPA issue. Those interested in addressing the CRTPA should complete a speaker request form located at the rear of the meeting room. Speakers are requested to limit their comments to three (3) minutes.

# Fiscal Year (FY) 2013 - FY 2017 <br> Transportation Improvement Program (TIP) Administrative Amendment 

## Requested by: FDOT

TYPE OF ITEM: Information

The purpose of this item is to inform members of the administrative amendment of the FY 2013 - FY 2017 TIP subsequent to the November 26, 2012 CRTPA Board Meeting.

Specifically, the following project has been administratively amended in the FY 2013- FY 2017 TIP:

- Capital Cascade Connector Bridge. Update funding for this project to reflect that transition of funding from federal enhancements funds to federal transportation alternatives funds (4259411).


## ATTACHMENT

Attachment 1 provides the TIP replacement page reflecting the change to the above project.
CRTPA Transportation Improvement Program - FY 2012/13-2016/17

ATTACHMENT 1

| Prior Year Cost: | 150,000 |
| :--- | :--- |
| Total Project Cost: | $1,000,500$ <br> Project Description:The Capital Cascades Connector Bridge will provide bicyclists and pedestrians a safe crossing over Monroe Street. For more <br> information contact Gary Phillips at BP 2000 (219-1060). <br>  <br>  <br> Note: This project was amended in November 2012 to place additional funding on the project in FY 2013 (\$550,000). Futhermore, <br> project was administratively amended in December 2012 to update funding source. |

December Amendments 2012/13 through 2016/17 TIP (Feb 16
FDOT Data)

Agenda ITEM 10 B

## Correspondence

The Capital Region Transportation Planning Agency received the following correspondence since our last meeting:

- November 14, 2012 - from Howard Glassman, Executive Director of the Florida Metropolitan Planning Organization Advisory Council to Harry Reed, regarding funding contribution for lobbying activities.
- December 14, 2012 - from the Honorable Nick Maddox, Chair, Leon County Board of County Commissioners to Harry Reed, regarding the appointment of Mary Ann Lindley as Chair of the Leon County Transportation Disadvantaged Coordinating Board.

November 15, 2012

Mr. Harry Reed
Capital Region TPA
300 S Adams Street Box A-19
Tallahassee, FL 32301
( GQVVY
Dear Mr/Reed:
The MPOAC would like to thank the Capital Region TPA for the $\$ 500.00$ contribution to support the MPOAC legislative advocacy activities. Your support will enable the MPOAC to continue to advance the policies and positions of the MPOAC as adopted by our Governing Board.

Once again, thank you for your contribution.

$\mathrm{HG} / \mathrm{bm}$
cc: Mayor Richard J. Kaplan

## Leon County

 Board of County Commissioners301 South Monroe Streel, Tallahassee, Florida 32301
(850) 606-5302 www.leoncountyfl.gov

## Commissioners

BILI. PROCTOR
December 14, 2012
District I
JANE G. SAULS
District 2
JOHN DAILEY
Districl 3
BRYAN DESLOGE
District 4
KRISTIN DOZZIER
Dear Mr. Reed:
District 5
MARY ANN LINDLEY
At-Large
NICK MADDOX
At-Large
Harry Reed, Director
Capital Region Transportation Planning Agency

## Re: Transportation Disadvantaged Coordination Board

Pursuant to Leon County Policy No. 11-2, "Membership on Boards, Committees, Councils, and Authorities," I have appointed Commissioner Mary Ann Lindley to serve as the Board of County Commissioners' representative to the above-named committee for 2013.
vincent s. long If you need any additional information, please contact Christine Coble at 606-5300.
County Administrator
herbert w.a. thiele Sincerely,
County Attorney


Nick Maddox
Chairman

NMi/cc
cc: Commissioner Mary Ann Lindley

# Agenda Item 10 C <br> Technical Advisory Committee/Citizens Multimodal AdVISORY COMMITTEE/TRANSPORTATION DISADVANTAGED Coordinating Board ACTIONS <br> Requested by: CRTPA Staff <br> Type of ITEM: Information 

## STATEMENT OF ISSUE

This item provides information to the Capital Region Transportation Planning Agency (CRTPA) on the activities of the Technical Advisory Committee (TAC), the Citizens Multimodal Advisory Committee (CMAC), and the Leon County Transportation Disadvantaged Coordinating Board (TDCB).

## CRTPA SUBCOMMITTEE ACTIONS

The TAC and the CMAC met on January 15, 2013, and took action on the following items:

- Minutes of the November 13, 2012 Committee Meetings - Approved
- CRTPA Congestion Management Process Plan - The TAC and CMAC approved a recommendation to adopt the plan as with changes to include references to the Multi Modal Transportation District and the need to look at the condition of existing facilities when considering congestion management alternatives. (For example, looking to see if the sidewalks and bicycle lanes in the area under consideration for improvements are in condition that allows and encourages accessibility by all users.)
- Jefferson County Bicycle and Pedestrian Master Plan - Approved the plan as presented.
- Monroe Street Access Management and Lake Ella Implementation Study- Approved the Study
- Fiscal Year 2013-2017 Transportation Improvement Program Amendments - Approved amending the FY 2013-2017 TIP to reflect the following:

1. CR 12 (Fairbanks Ferry Road) Study (Project \#4333891): Add new project related to the study and preliminary design of CR 12 (Gadsden County) from $5^{\text {th }}$ Street (Havana) to the Leon County line to address lane departure crashes (Total funding: $\$ 220,000$ in FY 2013).
2. City of Tallahassee StarMetro (Project \#4336851): Add new project related to use of Federal Transit Administration Section 5310 funds (Total funding: $\$ 200,000$ in FY 2013).
3. Capital Circle (Crawfordville Road to Springhill Road) (Project \#2197492): Add this project to TIP to reflect the receipt of design funding (Total funding: \$1,969,500 in FY 2013).

The TAC and CMAC also heard an update on the following:

- Orange Avenue Resurfacing Project - The CMAC had one citizen speaker, Mr. Hans van Tol, who requested that the Orange Avenue Project consider adding bicycle lanes when the roadway is resurfaced. A FDOT representative was present at the meeting and stated that the right-of-way may prohibit the addition of bicycle lanes, however, they are considering adding a sharrow to the roadway.


## LEON COUNTY TRANSPORTATION DISADVANTAGED COORDINATING BOARD (TDCB) ACTIONS

The TDCB met on January 16, 2013. They received a report from the Community Transportation Coordinator, reviewed the annual operations report, and elected a vice-chair.


The Capital Region Transportation Planning Agency will meet in the City of Tallahassee Commission Chambers on the following dates. The topics of discussion will include the following:

- March 25 Draft Unified Planning Work Program (UPWP), Draft Transportation Improvement Program (TIP)
- April 15
(CRTPA Retreat 9 a.m. -1 p.m.)
- May 20

Final UPWP

- June 17

Final TIP

- September 16

Priority Project Lists Adoption

- October 21
(CRTPA Retreat 9 a.m. - 1 p.m.)
- November 18 Draft Work Program, Election of Chair/Vice Chair
* CRTPA Board meetings are scheduled to begin at 1 pm.


The Expense Report for October, 2012 is attached.
CITY OF TALLAHASSEE, FLORIDA Expenses By Department
460000


Account
Unencumbered

|  |  |  |  |
| ---: | ---: | ---: | ---: |
| 30,973 | - | - | 367,952 |
| - | - | - | 9,973 |
| -- | - | 5,000 |  |
| 231 | - | - | 2,769 |
| 2,536 | - | - | 38,722 |
| 1,331 | - | - | 16,042 |
| 820 | - | - | 10,180 |
| 452 | - | - | 5,477 |
| 3,540 | - | - | 41,543 |
| 861 | - | - | 9,467 |
| 1,016 | - | - | 16,252 |
| 41,759 | - | -- | 523,378 |


 $\begin{array}{cccc}\text { Expended This } & \text { Amended } & \text { Budget } & \text { Year to Date } \\ \text { Month } & \text { Budget } & \text { Allotment to Date } & \text { Expended }\end{array}$

 2012-10-31
FY2013
13-Dec-12
11:35 AM Report Date:
Budget Period:
Run Date:
Run Time:

## CRTPA October 31, 2012

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$\begin{array}{r}375 \\ 1,000 \\ 19 \\ 5,917 \\ 2,083 \\ 83 \\ 100 \\ 63 \\ 375 \\ 375 \\ 1,083 \\ 50 \\ 208 \\ 1,052 \\ \hline 12,783\end{array}$
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| CITY OF TALLAHASSEE, FLORIDA <br> Expenses By Department <br> 460000 <br> CRTPA | CRTPA <br> October 31, 2012 |  |  |  |  | Report Date: Budgel Period: Run Date: | $\begin{array}{r} \text { 2012-10-31 } \\ \text { FY2013 } \\ \text { 13-Dec-12 } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Run Time: | 11:35 AM |
| Account Account Description | Expended This Month | Amended Budget | Budget Allotment to Date | Year to Date Expended | Pre-Encumbered | Encumbered | Unencumbered \& Unexpended |
| Total Allocated Accounts | 4,027 | 47,543 | 3,962 | 4,027 | - | -- | 43,516 |
| Total Expenses | 47,938 | 766,081 | 63,840 | 47,938 | 19,680 | 42,456 | 656,007 |
| Percent of Budget |  |  | 8.33\% | 6.26\% |  |  |  |

## Agenda ITEM 10 F

## News Articles/For Your Information

The following news article is provided for the information of CRTPA Board members:

- "A Carolina Governor Who Breaks All Molds" (January 10, 2013, Neil Pierce, Washington Post Writers Group)


## A Carolina Governor Who Breaks All Molds

Neal Peirce / Jan 102013

For Release Sunday, January 13, 2013
© 2013 Washington Post Writers Group
"Leadership needs to be state and local - Republican and Democrat - governors and mayors taking bold steps, regardless of political affiliation, trying to solve problems."

How refreshing to hear those words in today's hyper-partisan world! And how difficult to make the vision work.

But the assertion does come from Pat McCrory, a politician who's learned how to form cross-partisan alliances before. The former 14-year-long mayor of Charlotte, McCrory clinched the Republican nomination and then sailed to easy victory last November to be inaugurated last week as the first big-city leader to become governor in North Carolina's history.

McCrory initially caught my attention when, as mayor, he faced down Charlotte's powerful developers by requiring sidewalks on most streets of their new suburban tracts. Even more impressively, he fought fervid naysayers to win overwhelming voter approval for Charlotte's now highly acclaimed and popular light rail line, delivering Charlotteans easy mobility and relief from congested traffic.

McCrory's success showed that the essence of being a mayor is not the ideology, certainly not the excessive partisanship so rampant in today's national and, increasingly, state politics. Instead it's pragmatism - dealing first and foremost with day-to-day constituent demands for efficient services such as policing, trash removal, fixing potholes, transit and more. And then setting a vision for the city's longterm development.

The Southern setting is also significant. Historically, rural politicos often scorned cities as "cauldrons of evil." Apparently that's a dead and gone strategy in increasingly urban North Carolina: the ex-mayor of the largest city won the governorship with thousands of votes to spare.

So what's McCrory's top priority as governor? It's infrastructure. "I'm an Eisenhower disciple," he told me. "Infrastructure can play a key role in helping the economy and helping communities, urban and rural alike."

The big issue, he suggests, is to create a 25 -year North Carolina infrastructure plan, and not just road building but four broad areas important both to cities and rural areas - transportation, water, energy and communications. His interest in joint approaches stems from his experience in Charlotte, "where we redid our water and sewer at the same time we expanded transit and road lines."

But McCrory has ties to the usual anti-spending Republican right, as well. His selection as budget director is Art Pope, a wealthy businessman who helped start conservative-oriented think tanks and has helped bankroll a series of Tea Party-like Republican candidates for the legislature.

For transportation secretary, McCrory nominated Tony Tata, a retired Army general and former Fox News commentator who'd recently served a brief, stormy stint as Wake County schools superintendent. Tata has no experience in U.S. road and transit issues, but McCrory notes: "He did a lot of the infrastructure in Afghanistan and Iraq. I figured if he could do it there, under fire, he can do it in North Carolina."

Tata's the man McCrory's instructed to develop the state's 25-year transportation plan, "a vision of where we need to build our infrastructure." The idea, says the new governor, is "to show the draft plan to the public and then get feedback." Will it cost money? McCrory assumes so, but says: "The problem in the past was asking people for money without showing them the plan."

McCrory's conservative side is illustrated by the issue of climate change - a special peril for North Carolina's coastal communities. He'll only say (without specifics) that the solution is "to clean the air, clean the water, clean the land."

Yet his visionary side is indisputable. He questions how smart it is to grant cash and other incentives to draw industries from one state to another. Companies' real bottom line, he suggests, is more likely longterm tax rates, education, infrastructure, quality of life. And, he believes "incentives aren't free - they're a tax on someone else."

Pragmatically, he's not sure he'll be able to stop incentives in view of North Carolina's currently slow economy. "When do you blink when so many people are hurting"? He's not sure - though he believes agreements with other governors might avert the need.

And significantly, McCrory was a key founder, in 2009, of a multistate Southern coalition to plan joint approaches - the Piedmont Alliance for Quality Growth. Now, he says, he'd like to recruit his fellow governors from Georgia, South Carolina, Virginia and Tennessee to work with him on a region-wide, 25year transportation agenda.

Referring to the other governors, McCrory says: "At one moment I'll be competing with my friends next door" for businesses. "But l'll also seek alliances with them on a broad array of issues - energy, oil and gas exploration, electric generation, solar and wind, ports, water, roads and transportation crossing infrastructure, the environment - major issues the state borders don't recognize."

Again, it's Pat McCrory - mixed visionary, pragmatist, friend of many moderates and ultra-conservatives alike. I detect few more interesting mixes in today's American politics and public life.

Neal Peirce's e-mail is npeirce@citistates.com.



[^0]:    1. FDOT D-3 Preliminary Estimates Section Transportation Costs Annual Roadway Construction Cost, Revised December 2011. CEI (normally $15 \%$ of the construction cost) is not included.
    2. Unit costs per FDOT Area 7 averages (07/2011-06/2012).
    3. Based on unit cost per marking from City of Winter Park, FL project on Palmer Avenue
[^1]:    - Estimate does not include utility relocation costs.
    - The mobilization costs are based on $15 \%$ of the construction cost
    - Embankment to 1 ft depth
    - No R/W Impact
    - No specialized landscaping (beyond sodding)
    - Utility relocations by others

    SOURCE: Unit Costs per FDOT Lake County (Area 7) averages (07/2011-06/2012)

[^2]:    - Estimate does not include utility relocation costs.
    - The mobilization costs are based on $15 \%$ of the construction cost
    - Embankment to 1 ft depth
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    SOURCE: Unit Costs per FDOT Lake County (Area 7) averages (07/2011-06/2012)

[^3]:    HSNV 90010 S

[^4]:    HSAN 90010 S

