AGENDA
CMC

Congestion Management Committee
Collier County Growth Management Division
Main Conference Room
2885 South Horseshoe Drive
Naples, Florida 34104

March 21, 2018
2:00 p.m.

1. **Call to Order**
2. **Roll Call**
3. **Approval of Agenda**
4. **Approval of January 17, 2018 Meeting Minutes**
5. **Open to Public for Comment on Items Not on the Agenda**
6. **Agency Updates**
   A. FDOT
   B. MPO Director
   C. Other
7. **Committee Action**
   A. Election of Chair & Vice-Chair
   B. Endorsement of Scope for the Transportation Systems Performance Report
8. **Reports and Presentations (May Require Committee Action)**
   A. Draft Scope 2045 Long Range Transportation Plan
   B. City of Naples & Collier County Traffic Management Center (TMC) Co-location Feasibility Study
9. **Member Comments**
10. **Distribution Items (No presentation)**
    A. MPO's and FDOT's Vision Zero Safety Performance Targets
11. **Next Meeting Date:**

    Next Meeting Date: May 16, 2018 at 2 p.m.
12. **Adjournment**

PLEASE NOTE:

This meeting of the Congestion Management Committee (CMC) of the Collier Metropolitan Planning Organization (MPO) is open to the public and citizen input is encouraged. Any person wishing to speak on any scheduled item may do so upon recognition of the Chairperson. Any person desiring to have an item placed on the agenda shall make a request in writing with a description and summary of the item, to the MPO Director or CMC Committee Chair 14 days prior to the date of the next scheduled meeting of the CMC. Any person who decides to appeal a decision of this Committee will need a record of the proceedings pertaining thereto, and therefore may need to ensure that a verbatim record of the proceeding is made, which record includes the testimony and evidence upon which the appeal is to be based. In accordance with the Americans with Disabilities Act, any person requiring special accommodations to participate in this meeting should contact the Collier Metropolitan Planning Organization 72 hours prior to the meeting by calling (239) 252-5804. The MPO's planning process is conducted in accordance with Title VI of the Civil Rights Act of 1964 and Related Statutes. Any person or beneficiary who believes that within the MPO's planning process they have been discriminated against because of race, color, religion, sex, age, national origin, disability, or familial status may file a complaint with the Collier MPO by calling MPO Executive Director, Anne McLaughlin, at (239) 252-5884 or by writing to Ms. McLaughlin at 2885 South Horseshoe Dr., Naples, FL 34104.

Congestion Management Committee of the
Collier Metropolitan Planning Organization
Collier County Growth Management Department
Main Conference Room
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Naples, Florida 34104

January 17, 2018
2:00 p.m.

1. Call to Order

Mr. Khawaja called the meeting to order at 2:00 p.m.

2. Roll Call

Ms. Gonzalez called the roll and confirmed that a quorum was present.

Members Present
Tony Khawaja, Collier Traffic Ops, Chairman
Pierre Beauvoir, Collier Traffic Ops (alternate for Tony Khawaja)
Tim Pinter, City of Marco Island, Vice-chairman
Omar DeLeon, Public Transit and Neighborhood Enhancement (PTNE)
Alison Bickett, City of Naples
Karen Homiak, Citizen Advisory Committee (CAC) Representative
Dr. Mort Friedman, Pathways Advisory Committee (PAC) Representative
David Ogilvie, Collier School District
David Rivera, City of Naples

Members Absent
Dan Summers, Collier Emergency Management
Wayne Martin, Greater Naples Fire Rescue

Others Present
Victoria Peters, Florida Department of Transportation (FDOT)
Trinity Scott, Collier County Transportation Planning

MPO Staff
Anne McLaughlin, MPO Executive Director
Gabrielle Gonzalez, MPO Administrative Secretary
Brandy Otero, MPO Senior Planner

3. Approval of the Agenda

Mr. Ogilvie: **I move to approve the agenda.**

Mr. Pinter: **I second the motion.**

THE MOTION CARRIED UNANIMOUSLY.

4. Approval of the July 19, 2017 Meeting Minutes

Ms. Homiak: **I move to approve the July 19 meeting minutes.**

Mr. Ogilvie: **I second the motion.**

THE MOTION CARRIED UNANIMOUSLY.

5. Open to the Public for Comment on Items not on the Agenda

None.

6. Agency Reports

A. FDOT

Ms. Peters stated that the Florida Department of Transportation (FDOT) has received applications for the upcoming Work Program (WP) cycle. She stated that the soft deadline for applications would be February 1st to allow FDOT to review applications and get back to applicants should any further information be needed. The final deadline for applications would be on July 1st. Ms. Peters stated that this year the Metropolitan Planning Organization (MPO) was focusing funds solely on bridges.

B. MPO Director

None.

C. Other

Mr. Beauvoir updated the committee on several Collier County Traffic Operations projects. He stated that the department has received a Notice to Proceed (NTP) for the arterial monitoring cameras project from FDOT to commence work and begin purchasing equipment. He explained that they have also received an NTP for the traffic count project. The project includes the deployment of 49 weigh stations throughout the County. Mr. Beauvoir stated that he was working on a scope of work for a third project which was a network upgrade for the County, City of Naples, and FDOT. The purpose of the project is to update the network and standardize communication between the different regional local agencies and the FDOT communication network. Mr. Beauvoir stated that the City of Marco Island declined to participate in this project. He also updated the committee on the video wall implementation which has already been completed. He stated that they were in the process of putting some components of the video wall in the Emergency Operations Center (EOC). Mr. Beauvoir also updated the committee on the Intellilight project which included controllers and an Advanced Traffic Management System (ATMS) which would replace the current system. He stated that 45 controllers have already been deployed with another 34 being deployed in the

coming week. Mr. Beauvoir stated that there would be a total of 212 controllers deployed throughout the County by May.

Dr. Friedman asked why Marco Island chose not to participate in the network upgrade project. Mr. Pinter stated that the City of Marco Island was in no way connected to the County and there is no conduit connection into the County. They also do not have a Traffic Management Center at this time. Therefore, the City of Marco decided that the cost outweighed the benefit.

Ms. Bickett updated the committee on the Naples Mobility Study. She stated that the analysis of the study was taken before City Council in October and there were a few areas under scrutiny, specifically the proposed road diet along US-41. Ms. Bickett stated that they were now looking at implementing the study throughout the City.

Mr. Rivera updated the committee on the new video wall at the City of Naples Traffic Ops. He stated that they've added another 4 cameras throughout the City and are working on adding several more. Mr. Rivera stated that they did receive the 20 controllers as part of the Intellilight project however, they were not deployed because the City has not received the software. He also stated that the City of Naples recently finished the Third Avenue South project where a roundabout was installed and they are now looking at phase two of that project where they will replace another intersection with a roundabout at Third Avenue South and Eighth Street. Mr. Rivera stated that they've also just finished the Gulf Shore Drive project where they've put in green bike symbols and stripes as well as rapid flashing beacons.

Mr. Pinter updated the committee on the City of Marco Island's installation of rapid flashing beacons stating that they just finished their first installation and the Marriott was installing an additional five beacons for their expansion on Collier Blvd. The City of Marco would be adding two more, so all intersections of Collier Blvd in Marco Island would have rapid flashing beacons. Mr. Pinter stated that the City had two Local Agency Program (LAP) projects move up from 2020 to 2018 for design. He stated that 60% of the project needed to be complete by October 1st.

7. Committee Action

None.

8. Reports and Presentations (May Require Committee Action)

A. Review and Comment on Draft Scope of Services for Transportation Performance System Report

Ms. McLaughlin stated that the Congestion Management Process (CMP) makes a firm commitment to prepare a biennial systems performance report. She stated that she added "an action plan" to the scope as her hopes were that the report would provide some further steps and even possible projects. Ms. McLaughlin stated that the need for the report came out of the need for additional data in order to drive project prioritization. Ms. McLaughlin highlighted some of the key points in the draft scope. She stated that it was important for the scope to look beyond the 5-year Transportation Improvement Program (TIP) and hold a basic task to evaluate base line conditions. The systems performance report should expand the County's Annual Update and Inventory Report (AUIR) to include congested conditions within City of Naples, City of Marco Island, and Everglades City for arterial and collector roads and bridges. It should also capture committed improvements through FY 2022 and project deficiencies out 10-years. Ms. McLaughlin stated that the report should address data gaps including intersection turning movement counts, intersection LOS, travel time reliability, crash data, congestion overlay, and incident delay. It should factor in transit ridership, and monitor effectiveness of the current ITS systems. The report should also recommend projects needed to fill data gaps and propose alternative analysis to complete the initial performance report. Ms. McLaughlin stated

that phase two would be the action plan portion which would identify and prioritize projects needed to address congestion.

The committee discussed how the benefit of some projects would be measured, such as a project that adds in cameras. Committee members expressed concern with the level of analysis that it would take to address some of the data gaps along with funding concerns. A discussion ensued amongst committee members and staff on how data is collected for the County's AUIR. The discussion included information that is not captured in the AUIR such as level of service during peak hours and season as well as congestion during school hours.

Ms. McLaughlin stated that there is approximately 60-70 thousand dollars currently available to do some of these studies.

The committee and staff members discussed how they'd collect certain data. Ms. Trinity Scott pointed that currently the County does not have turn moving counts readily available. She stated that she believed the committee needed to start implementing new technologies to be able to capture the data that is needed. Mr. Strakaluse stated that perhaps the committee should work off a list of projects that have already been implemented to evaluate the projects and point out data gaps. Mr. Khawaja stated that he would have a hard time coming up with metrics for certain projects such as adding in cameras. Mr. Beauvoir pointed out that the County does not currently have a person to run analytics on data which makes this task even more cumbersome. Ms. Scott stated that the County is already collecting data that is not being used and that they should consider partnering with a college to get students to analyze the data and pull the necessary information. She also stated that the committee needed to look beyond the CMC box funds and start feeding projects through other committees for funding.

Further discussion ensued amongst committee members and staff on how to proceed with this. Mr. Strakaluse stated that the City of Naples and the County's AUIR already have some good data which could serve as starting points. The committee discussed other data gaps that they were interested in filling such as infrastructure gaps, flood mitigation, etc.

Ms. McLaughlin stated that she would flush the scope out further and bring it back at the committees' next meeting. She stated that she would add in addressing information on Automated/Connected Vehicles, identifying infrastructure gaps, and factoring in school hour congestion. She stated that she'd also add in some more multi-modal components. Ms. McLaughlin asked the committee to provide any further comments to her within the next 30-days.

B. Collier/Lee/Charlotte Traffic Incident Management (TIM) Team

Mr. Kevin Smith with the TIM Team gave a PowerPoint presentation. The presentation can be made available to anyone who requests it. The presentation covered the importance of the TIM team in Collier County. It also discussed the focal points of TIM, those being 'Incident', 'Event', and 'Planning & Development.' The presentation explained what the TIM team is and what they do particularly within Collier County. It also covered the TIM Teams logistics, team participants, activities, and expectations. He then opened the floor up for questions and comments.

Ms. Scott asked if there have been discussions to leave crashed vehicles on the shoulder and tow them during off-peak hours in order to clear the interstate and move traffic faster. Mr. Smith stated that they often do that with larger commercial vehicles. Ms. Scott stated that they should look at doing the same thing with passenger vehicles as well. She also stated that they should consider having tow trucks stationed along the interstate during peak hours for faster clearance of accidents. Ms. Scott also asked whether the TIM Team passes information on to FDOT when there is a recurring incident at a specific location. She stated that there seems to be a crash on I-75 every evening. Mr. Smith stated that they do pass this information on to FDOT. Ms. Scott also asked if shoulders can be used to move traffic when there is an incident that has blocked one or more lanes. Mr. Smith stated that this is up to law

enforcement working the scene however, the TIM Team highly suggests the use all their resources including opening shoulders for traffic flow.

Discussion continued amongst committee members and TIM Team staff on this topic. They also discussed emergency evacuation procedures.

9. Member Comments

None.

10. Distribution Items

None.

11. Next Meeting Date

March 21, 2018 at 2:00 p.m.

12. Adjournment

With no further comments, Mr. Khawaja adjourned the meeting at approximately 4:02 p.m.

COMMITTEE ACTION
ITEM 7A

Election of Chair and Vice-Chair

OBJECTIVE: For the Committee to elect a Chair and Vice-Chair for calendar year 2018.

CONSIDERATIONS: The CMC by-laws state that the Committee shall elect a Chair and Vice-Chair at the first regularly scheduled meeting of each year when a quorum is attained.

Any committee member may nominate or be nominated as Chair/Vice-Chair. Elections shall be decided by the majority vote of committee members present. The Chair and Vice-Chair shall serve a one-year term or until a successor is elected. Tony Khawaja is the current Chair and Tim Pinter is Vice-Chair.

STAFF RECOMMENDATION: That the Committee elect a Chair and Vice-Chair for calendar year 2018.

Prepared By: Anne McLaughlin, MPO Executive Director

EXECUTIVE SUMMARY
Committee Action
Item 7B
Endorsement of Scope of Services for Transportation Performance System Report

Objective:

For the Committee to endorse the Scope of Services for the Transportation Performance System Report.

Considerations:

The 2017 Congestion Management Process was approved by the MPO Board at their October meeting. The plan included a recommendation to fund a Biennial Transportation System Performance Report. The Performance Report will recommend both short and long-term projects to address congestion. The Committee reviewed and commented on the preliminary draft at its January 17th meeting.

A clean copy of the revised Scope is provided in **Attachment 1**. A track-changes copy is provided in **Attachment 2**. The proposed make-up of the Request for Proposal Evaluation Committee and Evaluation Criteria are provided in **Attachment 3**.

Staff Recommendations:

For the Committee to endorse the Scope of Services for Transportation Performance System Report.

Attachments

1. Clean Copy Revised Scope
2. Track Changes Copy Revised Scope
3. Proposed Evaluation Committee and Criteria

Prepared by: Anne McLaughlin

TRANSPORTATION SYSTEM PERFORMANCE REPORT AND ACTION PLAN

SCOPE OF WORK

BACKGROUND

The Congestion Management Process 2017 Update (2017 CMP Update) calls for the preparation of a Biennial Transportation System Performance Report, described in the CMP as follows:

> *"The Biennial Transportation System Performance Report (Performance Report) will lay the foundation for project identification and prioritization in accordance with Federal guidelines. The Performance Report will provide a thorough system assessment to identify where priority investments should be made. The Performance Report will include an analysis of newly implemented CMS/ITS projects based on the performance measures identified in the CMP as specifically assigned to each funded project.*
>
> *The Performance Report will recommend both short- and long-term projects to address congestion. The CMS/ITS committee [since renamed "Congestion Management Committee (CMC)] will use the report as a basis for recommending project priorities that in all likelihood, will have associated costs that are beyond the reach of the MPO's limited TMA funds allocated to the CMS/ITS "Box". The CMS/ITS committee will use the Performance Report to develop projects for the timeframe that covers the next five-to-ten years out, to propose studies and solutions that go beyond the MPO's current 5-year TIP.*
>
> *The first iteration of the Biennial Performance Report is expected to identify and prioritize projects for the CMS/ITS Committee to develop in more detail and submit for future funding. It is likely that the first Performance Report will indicate procedural changes that may require amending the 2017 CMP Update. Amendments, if required, will be brought to the MPO Board for adoption."*

TASKS APPLICABLE TO ALL PHASES

1. Project Management - provide over-all project management, QA/QC review of documents and provide support services as needed. Activities include a project kick-off meeting, management and oversight of the activities and products produced by the consultant team members. If subconsultants are used, primary consultant will coordinate delivery of sub-consultant work products, provide technical support during staff review of products and communicate needed revisions to the sub-consultants.
2. Public Involvement Activities – Consultant will develop a Public Participation Plan (PPP) for the project. PPP will provide on-line opportunities for public input by establishing an interactive project web site and use of social media. Consultant will provide on-line surveys, prepare necessary materials, exhibits, presentations, and handouts for meetings with the MPO Board and Advisory Committees. Consultant will take minutes and record verbal and documented comments from the public, staff and elected officials and keep a record of how comments were addressed. Staff may choose to supplement the consultant-supported outreach by giving presentations to local homeowner's and civic associations and by hosting informational booths at special events.

The MPO will follow its Government to Government Public Outreach policy to conduct outreach to Tribal entities. MPO staff will present to the CAC.

Consultant will present to the following entities at least once during each of the two phases in the development of report and action plan. Anticipate presenting at six meetings:

- 2 MPO Board Meetings
- 2 Congestion Management Committee Meetings
- 2 Technical Advisory Committee Meetings

2. GIS Database Development - The Consultant will ensure the MPO receives all data pertinent to completion of the report and action plan, including GIS shapefiles, spreadsheets, databases, and all exhibits in PDF or JPEG format.

PHASE ONE – SYSTEM PERFORMANCE REPORT

Baseline Conditions

Evaluate Baseline Conditions – Consultant will expand Collier County's Annual Update & Inventory Report/Capital Improvement Element Schedule 2017 (AUIR) to include congested conditions within the City of Naples, City of Marco Island and Everglades City for arterial and collector roads and bridge facilities (pp23-37). The AUIR captures committed improvements through FY2022 and projects deficiencies out ten years to 2027 (in two five-year increments.) The System Performance Report will extend the AUIR's analysis to include committed improvements through FY 2023 to coincide with the current FDOT FY 2019-2023 Work Program/MPO TIP (pending June 2017 adoption).

Data Gaps

Evaluate Data Resources and Monitoring Practices – Consultant will identify data gaps that are essential to fill; and recommend projects to close the gaps. The Congestion Management Committee (CMC) identified several critical data gaps while developing the 2017 CMP Update, to be used as a starting point:

- Intersection Turning Movement Counts
- Intersection LOS
- Travel Time Reliability (Excessive Delay, Person Miles Traveled on non-interstate NHS)
- Crash Data / Congestion Overlays / incident Delay
- School congestion – significance, measurement, mitigation
- How to factor in transit ridership, mode choice
- How to monitor effectiveness of current ITS
- Consideration of Automated/Connected Vehicles

Recommend Projects Needed to Fill Data Gaps – Consultant will identify projects needed to fill data gaps, including a brief project description, estimated cost and a recommended staging plan for completing these studies in relation to other on-going planning efforts such as the MPO's responsibility to complete the 2045 Long Range Transportation Plan for adoption by December 2020.

Propose Alternative Analyses to Complete Initial Performance Report – It is critical that the Consultant be prepared to offer suggestions for completing the Initial Performance Report using readily available data. This requires the Consultant to plan ahead, anticipate potential issues, and reserve time and budget in the response to the RFP in order to complete the Initial Performance Report.

PHASE TWO – ACTION PLAN

Identify and Prioritize Projects Needed to Address Congestion

Strategies - apply the full range of strategies identified in 2017 CMP and incorporate additional strategies suggested by applicable Best Practices within state of Florida

Project Prioritization/Evaluation Criteria – develop and apply criteria that address the following:

- Cost/Benefit Analyses (identify projected performance)
- Cost Feasibility based on projected revenues (MPO can supply)
- Environmental Justice Screening
- Expansion of Mode Choice
- Opportunities to Support Local Land Use Policies/Comprehensive Plans
- ETDM Screening
- National System Performance Measures per 23 CFR § 490.507 (Travel Time) and §490.607 (Freight)
  - 490.507 (a)(1) Percent of the person-miles traveled on the Interstate that are reliable (*Travel time reliability defined as the consistency or dependability of travel times from day to day or across different times of the day 23 CRF §490.101)*
  - 490.507 (a)(2) Percent of person-miles traveled on the Non-Interstate National Highway System that are reliable (all traffic/vehicles data in NPMRDS or Equivalent – every 15 minutes) Level of Travel Time Reliability (LOTTR)
  - 490.607 Truck Travel Time Reliability (TTTR) Index on the Interstate System
  - 490.707(a) Annual Hours of Peak Hour Excessive Delay Per Capita – Total Peak-Hour Excessive Delay person-hours on NHS *(required in urbanized areas with population over 1 million first reporting period; second reporting period applies to urban areas with pops over 200,0000*
  - 490.707(b) Percent of Non-SOV Travel (*ditto)* sources: ACS, local survey or local counts (includes bike/ped counts)
  - 490.807 Total Emissions Reduction - Percent Change in CO2 Emissions on the NHS compared to Calendar Year 2017 – NHS – based upon annual state total fuel sales data from Highway Statistics and VMT estimates on NHS and all public roads from HPMS; annual Total Tailpipe Co2 Emissions on the NHS

Provide Implementation Strategy

1. Group projects in the following categories:
   a. Short, Medium and Long-Range
   b. Low, Medium and High Cost
2. Recommend funding sources
3. Identify methodology to monitor projected performance
4. Provide staff training on querying spreadsheets, updating data and maps.
5. Other recommendations to assist with congestion management identified by the Consultant

Congestion Management Committee Final Review Draft 3/21/18

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Transportation System Performance Report RFP

Proposed Evaluation Committee:

1. Brandy Otero, Collier MPO
2. Greg Strakaluse (or designee), City of Naples
3. Trinity Scott (or designee), Collier County, Transportation Planning
4. Tony Khawaja (or designee), Collier County, Traffic Operations
5. Tim Pinter (or designee), City of Marco Island

Proposed Evaluation Criteria and Scoring

(must meet completion date, TBD; and be within available budget amount to be considered)

1.	Overall Quality of Proposal	10 pts
2.	Understanding of Scope	15 pts
3.	Proposed Methodology	20 pts
4.	Team Members Experience	25 pts
5.	Project Management	10 pts
6.	Cost	20 pts
		100 pts

EXECUTIVE SUMMARY
COMMITTEE PRESENTATION
ITEM 8A

Scope of Work for the 2045 Long Range Transportation Plan (LRTP)

OBJECTIVE: For the Committee to receive a presentation on the Scope for the 2045 Long Range Transportation Plan (LRTP).

CONSIDERATIONS: The Transportation System Performance Report (TSPR) will provide important background information for the development of the 2045 LRTP. For this reason, MPO staff will give a brief presentation on the Scope for the 2045 LRTP **(Attachment 1)** and a Time Line (**Attachment 2**) showing how the TSPR and LRTP may inter-relate in terms of development. The Scope for the 2045 LRTP proposes the following initiatives:

- Considerations of policies/recommendations contained in Collier County Community Housing Plan – 2017 Update
- Consideration of policies/recommendations contained in the MPO's Congestion Management Process 2017 Update
- Partnering with Lee County MPO in a regional Origin and Destination Study using cell phone/blue tooth technology
- Coordinating with ongoing City of Naples and Collier County studies regarding sea level rise and stormwater and transportation infrastructure vulnerabilities.
- Automated Connected Electric Vehicles Shared Mobility (ACES) addressed in FDOT District 1 Regional Travel Demand Model (RTDM) and discussed in LRTP including positive and negative impacts.

COMMITTEE RECOMMENDATIONS: The Technical Advisory Committee (TAC) and Citizens Advisory Committee (CAC) reviewed the draft Scope at their February 26th meetings. The TAC's comments have been incorporated in **Attachment 1**.

STAFF RECOMMENDATION: That the Committee receive a presentation on the Scope for the 2045 LRTP for informational purposes

Prepared By: Anne McLaughlin, MPO Executive Director

ATTACHMENTS:

1. Scope 2045 LRTP
2. Time Line 2045 LRTP and Related Studies

2045 LRTP Update Scope of Services

BACKGROUND

Every five years, the Collier Metropolitan Planning Organization (MPO) updates its Long Range Transportation Plan (LRTP). Pursuant to federal guidelines, the MPO is scheduled to adopt a 2045 LRTP by December 2020. The purpose of this plan update is to advance a 20-year planning horizon and to adopt a Cost Feasible Plan (CFP) that encourages and promotes a safe and efficient, multi-modal transportation system that addresses the future year transportation demands. Results of the LRTP process are intended to serve the overall mobility needs of the area while also being cost effective and consistent with national, state and local goals and objectives. The 2045 LRTP must address national Performance Measures and state-adopted Performance Targets.

2045 INITIATIVES

Collier MPO has initiated several studies which will be in process or completed as this Request For Proposals (RFP) is published. These studies are intended to inform the development of the 2045 LRTP:

- **Collier County Community Housing Plan 2017 Update** -adopted by the Board of County Commissioners, the section on Transportation Enhancements has implications for the 2045 LRTP with regard to Goals and Objectives, incorporating transit and Travel Demand Management into scenario planning.

- **Congestion Management Process** – the 2017 Update adopted by the MPO includes the demand-side management options and intensification of transit services linked with more dense and diversified land uses in corridors as suggested in the County's Community Housing Plan.

- **Origin and Destination Study –** Collier MPO will participate in a regional Origin and Destination Study led by Lee County MPO.

  Transportation Network's Vulnerability to Climate Change - Report on current City of Naples and Collier County studies underway that will provide insights regarding the vulnerability of transportation infrastructure to sea level rise and increasingly frequent and severe storm events. Introduce a discussion of policy implications, particularly for future updates to the LRTP as the current studies are completed:

  - Collier County is working with the University of Florida which received a grant from the National Oceanic and Atmospheric Administration (NOAA) for a study to predict the impact of near-future sea level rise and storm surge on Collier County. The primary deliverable is a Web-Based Interactive Decision-Support Tool for Adaption of Coastal urban and Natural Ecosystems (ACUNE). This is a 3-year study scheduled for completion in June 2020.

- The City of Naples is updating its Stormwater Management Plan. The anticipated completion date is summer 2018, at which time the City will begin studying potential Climate Change impacts. This study is anticipated to require two years to complete.
- Studies underway by State and Federal regulatory agencies overseeing the design of stormwater and transportation infrastructure will be reported on as part of this section.

- **Automated Connected Electric Vehicle Shared mobility (ACES) -** the MPO wishes to address FDOT's guidance on incorporating Automated Connected Electric Vehicle Shared mobility (ACES) technology into the District 1 Regional Travel Demand Model (RTDM) and other components of the 2045 LRTP.

SCOPE OF WORK

The MPO is issuing a RFP to hire a consultant team to serve as the Team Project Manager and coordinate the planning, analysis and public involvement services. The MPO retains all rights and ownership to the data, reports, presentations, maps, video and figures delivered by the Consultant in order to complete the tasks in this Scope of Services The consultant will undertake the following tasks during the development of the 2045 LRTP:

Tasks Applicable to All Phases

1. Project Management - provide over-all team project management, QA/QC review of documents and provide support services as needed. Activities include a project kick-off meeting, management and oversight of the activities and products produced by the consultant team members and assisting MPO staff with management of the 2045 LRTP Update. Consultant will coordinate delivery of consultant team work products, provide technical support during staff review of products and communicate needed revisions to the consultant team. Consultant will communicate with all team members as needed to effectively manage the delivery of the services provided by each firm and will be responsible for maintaining the content of the project schedule, making adjustments as needed and communicating any changes to team members.

2. Districtwide Travel Model Development Process Oversight - support MPO staff in review and coordination on the update of the FDOT District-wide Regional Planning Model (D1RPM). The D1RPM will be the primary travel demand forecasting tool for updating the LRTP. Consultant will attend Districtwide model development meetings as deemed necessary by the MPO and advise the staff on issues related to the progress of the model development process and the use of the model for developing the Needs Plan and the Cost Feasible Plan. Coordination efforts include providing additional model data and input assumptions to FDOT, and reviewing intermediate model data files provided by FDOT for quality and completeness. Oversight may include incorporating findings from the joint Lee County/Collier MPO Origin and Destination Study.

3. Public Involvement Activities – Consultant will develop a Public Involvement Plan (PIP) for the 2045 LRTP. The PIP will include the provision of on-line opportunities for public input by establishing an interactive project web site and use of social media. Consultant will provide on-line surveys and maps, prepare necessary materials, exhibits, presentations, advertising and handouts for meetings with the MPO Board and Advisory Committees. Consultant will take

minutes and record verbal and documented comments from the public, staff and elected officials and keep a record of how comments were addressed in subsequent revisions to the LRTP; conversely, if comments did not result in revisions, the Consultant will briefly explain why. **The Consultant will provide translation services for outreach to Spanish and Haitian-speaking residents of Collier County**. Staff will supplement the consultant-supported outreach by giving presentations to local homeowner's and civic associations and by hosting informational booths at special events. The MPO will follow its Government to Government Public Outreach policy to conduct outreach to Tribal entities. Consultant will present to the following entities at least once during each of the four phases in the development of the 2045 LRTP.

The Citizens Advisory and Technical Advisory Committees (CAC and TAC) may be combined into a single joint meeting; as may the Congestion Management Committee (CMC) and the Bicycle and Pedestrian Advisory Committee (BPAC). Consultant will schedule four Advisory Network/General Public meetings in a variety of locations to encourage participation by different socio-economic and demographic groups within Collier County.

The MPO is developing an Advisory Network consisting of members of the public who have indicated an interest in participating in discussions on specific transportation topics. MPO staff will contact Advisory Network members and notify them of General Public open houses, meetings and workshops.

- MPO Board
- Advisory Committees – CMC, CAC, TAC and BPAC
- Advisory Network/General Public open houses, meetings, and/or workshops
- Tribal Outreach – conducted according to the MPO's Government to Government Public Involvement Policy

4. GIS Database Development - The Consultant will ensure the MPO receives all data pertinent to the TDM and all LRTP maps in a GIS platform compatible with the MPO's software. Maps will also be submitted as PDFs. (Data sources include FDOT, MPO member entities and the Consultant)

Phase One Tasks – Existing Conditions, Forecasts, Goals, Performance Measures

1. Visioning – Consultant will conduct a Visioning workshop with the MPO Board

2. Opportunities and Challenges – Identify and analyze trends in terms of growth in population and employment, commuting times, VMT, crash statistics, congestion, housing location and access to jobs and services, and the cost of housing inclusive of the cost of transportation to get to/from jobs and services. (See Center for Neighborhood Technology, Housing and Transportation Affordability Index; Affordable Housing Report for Collier County.)

3. Goals and Objectives - develop Goals and Objectives based on federally mandated planning factors and supporting FDOT's primary goal of Safety and the results of the Visioning process

4. Performance Measures and Targets – Incorporate State/MPO performance targets addressing national performance measures. Consultant may suggest additional performance measures as appropriate based on the Vision, Goals and Objectives.

5. 2045 Socio-economic Data Development and District 1 Regional Transportation Demand Model (TDM) Validation – review and comment as needed pending FDOT release of preliminary TDM TAZ assignments for the 2015 Base Year. [The anticipated release of preliminary 2015 baseline data for MPO review is April 2019, with refinements continuing through the end of December 2019.]

6. Allocate 2045 Socio-economic Forecasts to TAZs – Working closely with the TAC, allocate 2045 socio-economic forecasts provided by FDOT and the Bureau of Business and Economic Research (BBER) to MPO TAZ's based on current approved development plans and adopted land use regulations and policies. The allocation will take into account a number of factors, such as parcel size, environmental conditions, existing zoning, and approved masterplans. The TAC will take the lead in determining the allocation with support provided by the Consultant and MPO staff.

Phase One Deliverables:

- Public Involvement Plan
- Updated Project Schedule
- Vision, Goals and Objectives
- Performance Measures and Targets
- 2045 Socio-Economic Data Set and Technical memorandum, proposed updated Traffic Analysis Zone (TAZ) structure, if needed
- ACES – how the LRTP and TDM will address it, including decreased revenues
- Existing Conditions Analysis, including Environmental Justice Communities and Preliminary Climate Change Vulnerability Assessment
- Planning Consistency – summarize pertinent elements of the Florida Department of Transportation LRTP, SIS, Freight Plan and SHSP

Phase Two Tasks – Scenario Planning

1. Alternative Land Development Scenario Development and Testing using County's Interactive Growth Model (CIGM) – develop land development alternatives and associated transportation infrastructure needs in 5-year increments through year 2045, using the CIGM in close coordination with the TAC. The purpose is to test alternative outcomes for the 2045 Needs Plan and 2045 Network map. Incorporate Alternative Transit and Travel Demand Management (TDM) Scenarios to test the effectiveness of diversified transportation options, increased transit and bike/ped modal share; Transit Oriented Development (TOD) infill and in growth areas along transit corridors to support Bus Rapid Transit, mixed-use and walkable development. The **2017 Congestion Management Process** recommends conducting the following scenario testing to determine their potential effectiveness in this region, if the area were to reach full build-out under current land use policies and regulations:

    - Land Use Alternatives – high density, mixed-use centers and corridors as infill, new development or redevelopment joined with alternative transportation scenarios such as:
    - Bus Rapid Transit Corridors
    - New Multi and Intermodal Hubs
    - Enhanced Travel Demand Management

- Designing arterials to freeway standards, including overpasses and other, potentially less costly intersection treatments such as continuous flow intersections

The **Collier County Community Housing Plan** (2017) envisions a scenario in which transportation corridors are identified for multi-family development (this could include infill and redevelopment), and bus rapid transit and express service lines and a park and ride system are implemented. This vision is supported by the **Congestion Management Process** (2017) along with the addition of a robust Transit Demand Management (TDM) program in the region.

2. Existing and Committed Network – develop Existing and Committed Transportation Network based on the current MPO Transportation Improvement Program and FDOT Work Program.

3. Project Selection and Prioritization Criteria – develop project selection and prioritization criteria in close coordination with the TAC, to address the Vision, Goals and Objectives, Performance Measures and Targets established for the 2045 LRTP and the following federally mandated Metropolitan Planning Factors that all LRTP's are required to address (23 CFR 450.306):

   1) Support the **economic vitality** of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;

   (2) Increase the **safety** of the transportation system for **motorized and non-motorized** users;

   (3) Increase the **security** of the transportation system for **motorized and non-motorized** users;

   (4) Increase **accessibility and mobility** of **people and freight**;

   (5) Protect and enhance the **environment**, promote **energy conservation**, improve the **quality of life**, and promote **consistency** between transportation improvements and State and local **planned growth and economic development** patterns;

   (6) Enhance the **integration and connectivity** of the transportation system, across and between modes, for **people and freight**;

   (7) Promote **efficient** system **management and operation**;

   (8) Emphasize the **preservation** of the existing transportation system;

   (9) Improve the **resiliency and reliability** of the transportation system and reduce or **mitigate stormwater impacts of surface transportation**; and

   (10) Enhance **travel and tourism**.

Phase Two Deliverables

- Report summarizing results of scenario planning, project selection and prioritization criteria

Phase Three Tasks – Needs and Cost Feasible Plan

1. System-wide Needs Plan – identify the appropriate level of needed improvements and modifications based on future conditions, the guidance provided in the Vision, Goals, Objectives and Project Selection and Prioritization Criteria. The recommendations will provide a long-term perspective for

how various modes of travel integrate/interface together given existing and future conditions/constraints and the region's overall economic vision. Consultant will summarize recommended improvements in a Systems Needs Plan for each mode.

2. Revenue Projections - report on FDOT's forecasted revenues for Collier MPO and potential trade-offs based on the Project Selection Criteria and public input.

3. Preliminary and Final Cost Feasible Plan – based on projected revenues and input received thus far, refine the transportation network identified in the Needs Plan to develop the Cost Feasible Plan.

4. Environmental Screening – screen all new, previously unscreened improvements using FDOT's Efficient Transportation Decision Making (ETDM) process, available on the FDOT website.

5. Environmental Justice Screening – incorporate Collier MPO's identified Environmental Justice communities and populations into an analysis of the cost/benefit of proposed Cost Feasible Plan to determine whether EJ communities and populations share equally in the benefits and the network and are not disproportionately affected by the negative impacts of the network.

Phase Three Deliverables

- Preliminary and Final Needs Plan
- Preliminary and Final Cost Feasible Plan

Phase Four Tasks – Preliminary and Final LRTP

Prepare first a Preliminary, followed by the Final 2045 LRTP addressing all technical requirements, as identified in the FHWA's Expectations Letter (for LRTPs). The MPOAC's 10/4/2017 draft is attached**. Tasks that are in addition to the FHWA's Expectations Letter are noted in bolded text:**

1. Record of Public Involvement – Comments received and how addressed
2. Planning Factors
3. SHSP Consistency
4. Freight
5. Environmental Analysis
    - **Introductory Discussion of Implications of Climate Change -**
    - ETDM Review
    - EJ Review
    - Conclusions
6. **FDOT ACES guidance – including potential positive and negative impacts**
7. Congestion Management
8. Performance Management – Measures and Targets
9. Multimodal Feasibility
10. Transit Asset Management (TAM) **–** deadline to adopt a TAM is October 1, 2018; requires coordination between the MPO and local transit providers
11. Technical Memos – Final Needs Assessment Model Run; Cost Feasible Plan Model run
12. **Additional model runs and data reconciliation as required to bring the FDOT D1 Regional Travel Demand Model in sync with the final adopted 2045 LRTP.**

The anticipated Table of Contents for the Preliminary and Final 2045 LRTP is provided below for guidance, based on previous Collier MPO LRTPs:

- Executive Summary
- Introduction and Background
- Plan Process
- Challenges and Opportunities
- Vision, Goals and Objectives and Federal/State Requirements (Planning Factors)
- Socioeconomic Land Use Forecast
- System-wide Needs Assessment and Plan
    - Existing +Committed Network
    - Scenarios - Investment Alternatives
    - Needs plan
- Financial Plan
- Cost Feasible Plan
- Implementation

Phase Four Deliverables

- Preliminary and Final 2045 LRTP
- Supporting Documentation
- Data Files

Draft Time Line Showing Development of 2045 LRTP and Supporting Studies 3/21/2018 CMC; 3/26/2018 CAC/TAC meetings

Major Planning Studies	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19
Transportation System Performance Report																		
Origin & Destination Study (Lee MPO Lead)																		
Naples Stormwater Management Plan Phase I																		
Naples Stormwater Management Plan Phase II																		
NOAA Grant/Collier/Naples Sea Level Rise																		
D1TDM 2015 Base Year - MPO Release/Review																		
ACES Guidance - FDOT																		
2045 LRTP Phase I - Existing Conditions - Goals																		
2045 LRTP Phase II - Scenario Planning																		
2045 LRTP Phase III - Needs & Cost Feasible Plan																		

Major Planning Studies	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21
Naples Stormwater Management Plan Phase II															
NOAA Grant/Collier/Naples Sea Level Rise															
2045 LRTP Phase III - Needs & Cost Feasible Plan															
2045 LRTP Phase IV - Preliminary & Final LRTP															
2045 LRTP Final Reconciliation - All Data/Networks															

COMMITTEE PRESENTATION
ITEM 8B

City of Naples & Collier County TMC Co-location Feasibility Study

OBJECTIVE: For the Committee to receive an update on the City of Naples & Collier County Traffic Management Center (TMC) Co-location Feasibility Study prepared by the Florida Department of Transportation (FDOT).

CONSIDERATIONS: The City of Naples submitted a project application for a Traffic Operations Center Consolidation Study in February 2016. The purpose was to "…study existing conditions for how each TOC operates, assess performance and the agency/community need for independent operations, and then evaluate the advantages and disadvantages for consolidation. The Congestion Management System/Intelligent Transportation System (CMS/ITS) Committee ranked the project third. The MPO Board approved the committee's project priorities and submitted them to FDOT.

FDOT subsequently decided to conduct the study using State resources rather than the MPO's SU funds. FDOT worked closely with City of Naples and Collier County staff in developing the report. The study concludes that "…co-locating the City of Naples and Collier County TMCs is recommended. Co-location would provide the motorists in that region a seamless transportation network with reliable incident response. Each agency would still be able to successfully meet their own goals and objectives, with the potential to exceed current performance due to quicker coordination efforts between agencies."

COMMITTEE RECOMMENDATION: The Citizens Advisory Committee (CAC) and Technical Advisory Committee (TAC) received a brief presentation on the recommendations of the study. The CAC did not take formal action.

The TAC voted to approve a motion to move forward with sharing data and video, but not to endorse the TMC Colocation Study for the reasons put forward by City of Naples staff:

- Redundancy in terms of having two independent TMCs is an important attribute to preserve
- City/County differences in traffic management policy and responsibilities regarding operations and security
- Likely negative impact on providing expected service level for City residents and businesses from a more distant TMC location
- Loss of benefits associated with multi-tasking staff roles and interacting with co-located City staff in current location; impacts on ability to coordinate quick response times by non-traffic operations City staff, public works, police, fire, EMS

After the meeting, the County Traffic operations representative on the TAC, who was called out of the meeting prior to the committee's vote, sent an email to MPO staff stating his support for the TMC Colocation Study recommendations. Staff from the City and County attended the MPO Board meeting to answer questions and provide additional input as needed.

MPO BOARD RECOMMENDATION: The MPO Board received a presentation at their March 9th meeting and recommended that the report be presented to the Naples City Council for action prior to the Board taking action on the report.

STAFF RECOMMENDATION: That the Committee receive an update on the City of Naples & Collier County Traffic Management Center (TMC) Co-location Feasibility Study.

Prepared By: Anne McLaughlin, MPO Director

ATTACHMENTS:

1. City of Naples TOC Consolidation Study Application
2. FDOT's TMC Co-location Study

District One
Priority Project Information Packet

Name of Applying Agency: City of Naples

Project Name:

Traffic Operations Center Consolidation Study

Project Category:

Congestion Management ☒ TRIP ☐ CIGP ☐

Transportation Alternative ☐ RTAP ☐ Transit/Modal ☐

Will this be a LAP project? Yes ☐ No ☒

(If yes, applicant must be LAP certified)

Project Limits/Location:
Describe beginning and end points of project, ex.; from ABC Rd. to XYZ Ave. Limits run south to north or west to east. Include jurisdiction (city/county), project length attach a labeled project map.
For some time, there has been conversation about consolidation of the City of Naples and Collier County Traffic Operations Centers. Currently, each agency maintains its own center for purposes of managing signalized intersections and the transportation network within each respective boundary limits. In recent years the City and County have been working together to share traffic video feeds and intersection control data in an effort to provide seemless coordination and realtime traffic conditions. The County's TOC is located on South Horseshoe Drive. The City's TOC is located at 295 Riverside Circle.

Is the roadway on the State Highway System? Yes ☒ No ☐

Is the roadway on the Federal Aid Eligible System? Yes ☒ No ☐

If no, give local jurisdiction:

Is this project consistent with the MPO/TPO Long Range Transportation Plan?

Yes ☒ No ☐ Page number (attach page from LRTP): 6-24 and Appendix C

Is this project in the local jurisdiction's Capital Improvement Plan?

Yes ☐ No ☒ (attach page from CIP)

Project Description

Phase(s) requested:

Planning Study☒ PD&E ☐ PE ☐ ROW☐ CST☐ CEI ☐

Project cost estimates by phase:

Planning Study $ 250,000 ROW $0

PD&E $0 CST $0

PE $0 CEI $0

TOTAL Project Cost: $250,000

Project Details: Clearly describe the project and desired improvements in detail and indicate if work will be completed in-house. Include labeled photos and maps. (Add additional pages if needed)

For some time there has been conversation about consolidation of the City of Naples and Collier County Traffic Opeations Centers. Currently, each agency maintains its own Center for purposes of managing signalized intersections and the transportation network within each respective boundary limits. This project would study the existing conditions for how each TOC operates, assess performance and the agency/community need for indepentant operations, and then evaluate the advantages and disadvantages for consolidation. Attention would be given to individual agency protocols, technology and community expectations for each TOC. The study would qualify and quantify efficiencies for consolidation, as well as impairments and loss to each community. The study is not intended to be a plan for consolidation of TOC's, but rather a study of the advantages, disadvantages, efficiencies and costs associated with such a concept.

Constructability Review

For items 2-7 provide labeled and dated photos (add additional pages if needed)

1. Are there any other projects (ex. drainage, utility, etc.) programmed (local, state or federal) within the limits of this project? Yes☐ No☒

   If yes, provide details of the other project(s), including project scope and schedule:
   Click here to enter text.

2. Does the applicant have an adopted ADA transition plan? Yes☒ No☐

   Identify areas within the project limits that will require ADA retrofit. (Include GIS coordinates for stops and labeled photos and/or map)

   Click here to enter text.

3. Are there any transit stops/shelters/amenities within the project limits?

Yes☒ No☐

How many? 2

Stop ID number: Collier Area Transit: US41 & Fleischmann, 8th St N and NCH

4. Are any improvements needed or requested for bus stops? Yes ☐ No ☒

   Description of existing conditions at stop and desired improvements (add additional pages if needed):
   Click here to enter text.

5. Are turn lanes being added? Yes☐ No☒

   If yes, provide length of turn lanes

   Click here to enter text.

6. Drainage structures:

   Number of culverts or pipes currently in place: 0

   Type: Click here to enter text.

   Replacement? Click here to enter text.

   Details Click here to enter text.

   Will drainage ditches be filled in? Yes ☐ No☒

   If yes, provide the limits and quantify in linear feet:

   Click here to enter text.

   Describe the proposed conveyances system (add additional pages if needed

   Click here to enter text.

   Are there any existing permitted stormwater management facilities/ponds within the project limits? Yes☐ No☒

   If yes, provide the location and permit number (add additional pages if needed

   Click here to enter text.

   Utilities within project limits: Yes☐ No☒

   If yes, list specific utilities within project limits and describe any potential conflicts (add additional pages if needed):
   Click here to enter text.

   Are there Bridges within project limits: Yes☐ No ☒

If yes, can bridges accommodate proposed improvements? Yes ☐ No☐

If no, what bridge improvements are proposed? (add additional pages if needed):

Click here to enter text.

7. Is needed Right-of-Way (ROW) within public ownership? Yes☒ No ☐

   Provide details of potential ROW issues and how they will be addressed, evidence of ROW (GIS, maps, etc.) as well as a detailed breakdown of costs. Also include information about any potential encroachment issues (add additional pages if needed):
   Click here to enter text.

8. Are permits required? Yes☐ No ☒

   If yes, list the types of permits required:
   Click here to enter text.

   If no, state the qualified exemption:
   Click here to enter text.

9. Are there any wetlands within the project limits? Yes☐ No☒

   If yes, list the type of wetlands and if mitigation will be required. Provide any additional information:
   Click here to enter text.

   Is there critical habitat within the project limits? Yes☐ No ☒ (Provide details)
   Click here to enter text.

10. Are there any endangered species within the project limits? Yes☐ No ☒

    If yes, list the species and what, if any mitigation or coordination will be necessary:
    Click here to enter text.

11. Is a historic survey required? Yes☐ No☒ (Provide details)
    Click here to enter text.

12. Is Recreational or 4(f) property within the project limits? Yes☐ No ☒ (Provide details)
    Click here to enter text.

13. Are there any contamination areas within the project limits? Yes ☐ No ☒ (Provide details)
    Click here to enter text.

Required Attachments

A. Detailed Project Scope with Project Location Map
B. Project Photos - dated and labeled
C. Detailed Cost Estimates including Pay Items
D. LRTP and Local CIP page
E. Survey/As-builts/ROW documentation/Utility/Drainage information
F. Detailed breakdown of ROW costs included in estimate (if ROW is needed/included in request or estimate)

Applicant Contact Information

Agency Name: City of Naples

Mailing Address: 295 Riverside Circle, Naples, FL 34102

Contact Name and Title: Alison Bickett, P.E., Traffic Engineer

Email: abickett@naplesgov.com **Phone:** (239) 213-5003

Signature: Alison Bickett **Date:** 2-3-16

Your signature indicates that the information included with this application is accurate.

Maintaining Agency: City of Naples

Contact Name and Title: Gregg Strakaluse, Streets and Stormwater Director

Email gstrakaluse@naplesgov.com **Phone:** (239) 213-5003

Signature: [signature] **Date:** 2/6/16

Your signature serves as a commitment from your agency to maintain the facility requested.

MPO/TPO:

Contact Name and Title: Anne McLaughlin, Executive Director

Email: AnneMcLaughlin@colliergov.net **Phone:** 239-252-5884

Signature: [signature] **Date:** 2/8/16

Your signature confirms the requested project is consistent with all MPO/TPO plans and documents, is eligible, and indicates MPO/TPO support for the project.

COLLIER
Metropolitan Planning Organization

Collier MPO CMS/ITS Project Concept Sheet

REQUIRED INFORMATION:

1. Name of Project **Traffic Operations Center Consolidation Study**
2. Name of Applicant City of Naples
3. Name of Submitting Jurisdiction City of Naples
4. If this is a multi-jurisdictional application, please list the jurisdictions involved

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5. Describe the project and its purpose, including the project limits (if applicable). Attachment? ☐

For some time, there has been conversation about consolidation of the City of Naples and Collier County Traffic Operations Centers. Currently, each agency maintains its own center for purposes of managing signalized intersections and the transportation network within each respective boundary limits. In recent years the City and County have been working together to share traffic video feeds and intersection control data in an effort to provide seemless coordination and realtime traffic conditions. The County's TOC is located on South Horseshoe Drive. The City's TOC is located at 295 Riverside Circle..

6. Amount of CMS/ITS funds being requested **$250,000**
7. Estimated Total Project Cost **$350,000 Includes $100,000 of City and County staff time to assist a consulting firm.**
8. Anticipated time to complete the project **14 months**
9. Does this project require the acquisition of Right-of-Way? ☐ YES ☒ NO

PROJECT DESCRIPTION:

CHECK ALL STATEMENTS BELOW THAT APPLY TO THE PROJECT WITH DOCUMENTED EXPLANATION OF HOW IT APPLIES:

☒ Uses a Transportation System Management (TSM) approach through management and operations enhancements (i.e. intersection improvements, signal improvements, special events management strategies, incident management). Attachment? ☐

A study to evaluate advantages, disadvantages, efficiencies and impairments of City and County TOC consolidation has the potential to improve operations and reduce operating cost.

☒ Uses a Travel Demand Management (TDM) strategy to reduce traffic congestion and increase efficiency of the system (i.e. carpooling, vanpooling, transit, park and ride facilities, bicycle and pedestrian transportation). Attachment? ☐

A study of TOC consolidation may result in demonstrating reduced vehicle delay, improved operational response time, better control of traffic management during emergency vehicle response. This project is consistent with the Collier County MPO adopted Long Range Transportation Plan. Its major components include:

- **Increase the safety of transportation for non-motorized users**
- **Increase the security of transportation system for non motorized users**
- **Increase the accessibility and the mobility options available to people**
- **Protect and enhance the environment, promote energy conservation and improve quality of life**
- **Enhance the integration and connectivity of the transportation system, across and between modes for people.**

[X] Supports/enhances and effectively integrates with the existing Intelligent Transportation System (ITS) architecture (i.e. signal optimization, automatic vehicle locators for transit, signal cameras, motorists' information systems, incident management, signal preemption). Attachment? [ ]

A study may determine improved operational response time and less vehicular delay while better controlling traffic.

[X] Increases Security (i.e. improves a hurricane evacuation route, addresses a documented security condition for transit). Attachment? [ ]

A study may determine improved video surveillance resulting in better communications.

[X] Increases Safety (i.e. reduces crashes, injuries, or fatalities, addresses a documented safety problem). Attachment? [ ]

A more efficiently operated TOC can provide services that improve safety, emergency response within the City/County/State transportation network.

[X] Promotes Regional Connectivity (i.e. improves level of service of inter-county highway or transit, enhances the inter-county connectivity of pathways/bikeways/trails). Attachment? [ ]

A study of TOC consolidation would encompass Countywide regional connectivity.

[ ] Promotes Multi-Modal Solutions (i.e. increase transit ridership, increase number of covered bus shelters, increase connectivity between motorized and non-motorized modes). Attachment? [ ]

[X] Protect Environmental Resources (i.e. reduce air quality emissions, reduce travel time delay, reduce fuel consumption). Attachment? [ ]

A study would determine reductions in power consumption, equipment and redundant operations that may result in the conservation of environmental resources and taxpayer funds.

☐ Promotes Economic Development or Freight Movement (i.e. increase accessibility to major employment centers, increase accessibility to freight activity center). Attachment? ☐

_____

_____

_____

☐ Other. Attachment? ☐

_____

_____

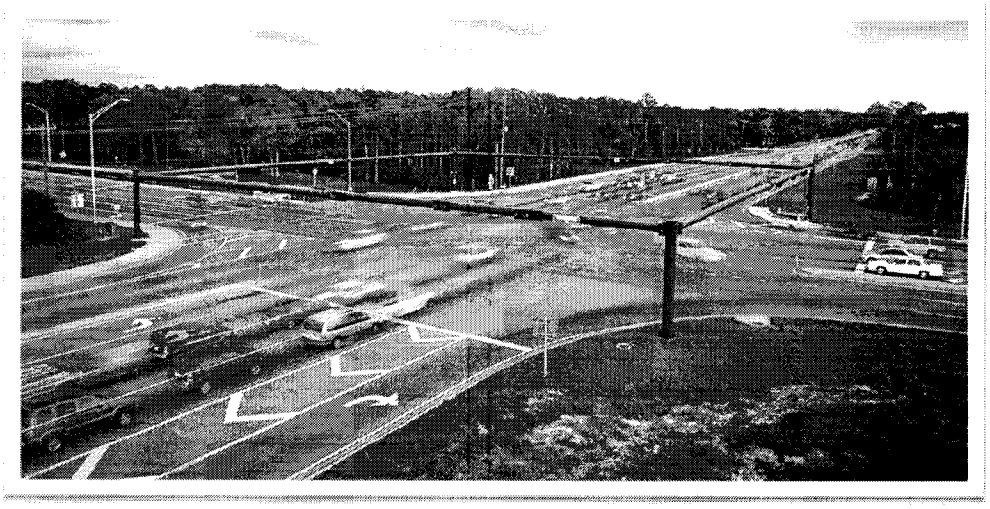
_____

CMS/ITS Projects

Because CMS/ITS projects are generally short term and immediate action projects, their role in the LRTP process is modest and are more thoroughly addressed in the congestion management process. In the Collier 2040 LRTP, a block of funds has been set aside by the MPO to address CMS/ITS projects. The current TIP includes several improvements to the traffic management center, arterial monitoring cameras, and other traffic equipment improvements, which are not tied to specific facilities. Currently included for construction in the 2015-2020 TIP are the physical improvement CMS projects listed below:

- Golden Gate Parkways/Livingston Road turn lanes
- Pine Ridge Road Turn Lanes (various locations)
- Immokalee Road at CR 850 (Corkscrew Road) turn lanes

Future CMS/ITS projects will be drawn from the Needs Assessment as described previously, and by established MPO practice will be funded through the 40% set-aside of TMA funds in the CFP. During the 2021-2040 planning period, $37.3 M has been set-aside for CMS/ITS projects.



New Bridge Program

As mentioned previously, the New Bridge Program is funded largely by a 20% set-aside of TMA fund totaling $18.7M for the 2021-2040 planning period. While not sufficient to fund all the new bridge needs, as in highways, transit and pathways, the MPO will continue to pursue other funding options that may come available.

2040 Cost Feasible Plan - Summary of Funded Projects Grouped by Funding Source with Costs Shown in Future Year of Expenditure (YOE) in Millions of Dollars

CF#	Facility	From	To	# of Existing Lanes	Project Length (Miles)	Project Type	CST PDC	2021-2025			2026-2030			2031-2040			Total	Balance
								PE	ROW	CST	PE	ROW	CST	PE	ROW	CST		
43	SR 29	North of SR 82	Collier/Hendry Line	2	2.4	2-Lane Roadway to 4 Lanes with Paved Shoulders (Includes milling and resurfacing of existing pavement)	$7.89			$10.02							$10.02	
60	SR 29	I-75 (SR 93)	Oil Well Rd	2	10.2	2-Lane Roadway to 4 Lanes with Paved Shoulders (Includes milling and resurfacing of existing pavement)	n/a							$6.19	$3.63		$9.82	
4	I-75	Collier Blvd (CR 951)				Interchange, Single Point Urban	$41.40			$55.87							$55.87	
	TMA BOX (20%) Bridges						n/a			$4.66			$4.66			$9.34	$18.66	
	TMA BOX (40%) Pathways (Bike/Ped)						n/a			$9.32			$9.32			$18.67	$37.31	
	TMA BOX (40%) CMP						n/a			$9.32			$9.32			$18.67	$37.31	
2	Golden Gate Parkway	I-75				(New) 2-Lane Ramp	$2.00	$0.59		$2.54							$3.13	
3	Pine Ridge Rd	I-75				Intersection Traffic Signalization	$5.00	$0.80		$6.35							$7.15	
7	Immokalee Rd	I-75 interchange				Intersection Traffic Signalization	$2.75	$0.51		$3.49							$4.00	
12	Old US 41	US 41 (SR 45)	Lee/Collier County Line	2	1.5	2-Lane Roadway to 4 Lanes with Sidewalks, Bike Lanes, and Curb & Gutter (Includes milling and resurfacing of existing pavement)	$15.03	$2.72					$22.55				$25.27	
18	SR 84 (Davis Blvd)	Airport Pulling Rd	Santa Barbara Blvd	4	3	4-Lane Roadway to 6 Lanes with Sidewalks, Bike Lanes , and Curb & Gutter with Inside Paved Shoulder (Includes milling and resurfacing of existing pavement)	$33.11				$6.85				$77.66		$84.51	$82.78
19a	Critical Needs Intersection (Randall Blvd at Immokalee Road)	Immokalee Road	8th Street			Interim At-Grade Intersection improvements, including 4-laning to 8th Street;	$4.00			$5.08							$5.08	
21	US 41	Goodlette Rd		N/A		Intersection	$2.00	$0.37		$2.54							$2.91	
41	SR 951 (Collier Blvd)	South of Manatee Rd	North of Tower Rd	4	1	4-Lane Roadway to 6 Lanes with Sidewalks, Bike Lanes, and Curb & Gutter (Includes milling and resurfacing of existing pavement)	$13.35	$2.02					$20.03				$22.05	
15	US 41 (SR 90) (Tamiami Trail East)	Greenway Rd	6 L Farm Rd	2	2.6	2-Lane Roadway to 4 Lanes with Outside Paved Shoulders (Includes milling and resurfacing of existing pavement)	$21.83				$6.01				$25.59	$41.70	$73.30	
9	US 41 (SR 90) (Tamiami Trail East)	Collier Blvd (SR 951)				Single Point Urban Interchange (SPUI) - Mainline Over Crossroad	$44.14							$10.30			$10.30	$110.35
5	CR 951 (Collier Blvd)	Golden Gate Canal	Green Blvd	4	2	4-Lane Roadway to 6 Lanes with Sidewalk, Bike Lanes, and Curb & Gutter (Includes milling and resurfacing of existing pavement)	$30.00	$3.66		$38.10							$41.76	
19b	Critical Needs Intersection (Randall Blvd at Immokalee Road)	Immokalee Road	8th Street			Ultimate intersection improvement	$31.00							$4.68		$53.48	$58.16	
14p	Vanderbilt Beach Rd	CR 951 (Collier Blvd)	8th St	0 & 2	6	Expand from 0 & 2 lanes to building 3 lanes of a six lane footprint from Collier Blvd to Wilson Blvd and 2 lanes from Wilson to 8th St	$59.96		$12.86	$76.15							$89.01	
40	Airport Pulling Rd	Vanderbilt Beach Rd	Immokalee Rd	4	2	4-Lane Roadway to 6 Lanes with Sidewalks, Bike Lanes, and Curb & Gutter (Includes milling and resurfacing of existing pavement)	$5.00	$1.22		$6.35							$7.57	
25	Oil Well Rd/CR 858	Everglades Blvd	Oil Well Grade Rd	2	3.9	2-Lane Roadway to 4 Lanes with Outside Paved Shoulders (Includes milling and resurfacing of existing pavement)	$20.00						$30.00				$30.00	
33	Veterans Memorial Blvd	Livingston Road	US 41	2	2.9	2-Lane Undivided Roadway with Sidewalks, Bike Lanes and Curb & Gutter	$8.00	$1.95	$1.08				$12.00				$15.03	
20	Immokalee Rd	Camp Keais Rd	Carver St	2	2.5	2-Lane Roadway to 4 Lanes with Sidewalks, Bike Lanes, and Curb & Gutter (Includes milling and resurfacing of existing pavement)	$25.04				$5.24	$23.01	$37.56				$65.81	
56	Benfield Road	City Gate Boulevard North	Lords Way	0	3.9	2 lane roadway in a 4 lane footprint	$56.47	$1.83			$20.69				$21.21		$43.72	$141.16
29	Wilson Boulevard/Black Burn Road	Wilson Boulevard	End of Haul Road	0	2.6	2 lane roadway in a 4 lane footprint	$29.31	$0.61			$6.90				$30.70		$38.20	$73.28
51	Wilson Blvd.	Golden Gate Blvd.	Immokalee Rd.	2	3.3	2-Lane Roadway to 4 Lanes	$23.36	$2.85				$21.47				$44.63	$68.94	
73	Little League Rd. Ext.	SR-82	Westclox St.	0	3.7	New 2-lane roadway	$28.02				$3.86				$17.05	$53.52	$74.42	
	Future County Highway Funds					Projects to be determined at a later date	$9.12	$3.37			$10.47	$26.35			$64.17	$17.42	$121.78	
14p	Vanderbilt Beach Road Ext	Collier Boulevard	8th Street	2 & 0	6	Add remaining 3 lanes	$39.97									$76.34	$76.34	
34	Camp Keais Road	Immokalee Road	Pope John Paul Blvd.	2	2.6	2-Lane Roadway to 4 Lanes with Outside Paved Shoulder (Includes milling and resurfacing of existing pavement)	$10.00				$2.76					$19.10	$21.86	
36	Vanderbilt Beach Road	Airport Road	US 41	4	2.1	4-Lane Roadway to 6 Lanes with Sidewalks, Bike Lanes, and Curb & Gutter (Includes milling and resurfacing of existing pavement)	$4.00				$3.10		$6.00				$9.10	
32	Immokalee Rd (CR 846)	SR 29	Airpark Blvd	2	0.4	2-Lane Roadway to 4 Lanes with Sidewalks, Bike Lanes, and Curb & Gutter (Includes milling and resurfacing of existing pavement)	$4.06				$3.10				$4.09	$7.75	$15.55	
							$636.31	$22.50	$13.93	$229.78	$68.97	$70.83	$151.43	$21.17	$244.70	$360.62	$1,183.93	$730.09

Project Phase	Inflation Factors		
	2021-2025	2026-2030	2031-2040
PE/PD&E	1.219	1.379	1.561
ROW	1.44	1.838	2.345
CST	1.27	1.5	1.91

	2021-2025			2026-2090			2031-2040			Remaining Balance	
	Revenue	Spent	Remaining	Revenue	Spent	Remaining	Revenue	Spent	Remaining		
TMA	$23.32	$23.29	$0.03	$23.32	$23.29	$0.03	$46.64	$46.69	-$0.05	$0.01	$93.28
CA	$55.60	$58.10	-$2.50	$52.60	$42.58	$10.02	$115.10	$144.95	-$29.85	-$22.33	$223.30
SIS	$65.89	$65.89	$0.00	$0.00	$0.00	$0.00	$9.82	$9.82	$0.00	$0.00	$75.70
County	$106.82	$108.26	-$1.44	$201.66	$212.50	-$10.84	$430.84	$414.74	$16.10	$3.83	$739.32
											$1,131.60

Notes: Design phases funded by OA not included in totals
#56 and #29 are only partial ROW & Mitigation costs

8B Attachment 2

THE CITY OF NAPLES & COLLIER COUNTY TMC CO-LOCATION FEASIBILITY STUDY

PREPARED FOR

FLORIDA DEPARTMENT OF TRANSPORTATION, DISTRICT 1
Project Manager: Katherine Chinault
801 N. Broadway Avenue
Bartow, Florida 33830

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Completed By:		

Table of Contents

Acronyms and Abbreviations

ACL.....Access Control List
APL..... Approved Products List
ATMS .....Advanced Traffic Management System
ATTS..... Arterial Travel Time System
CCTV..... Closed Circuit Television
CONOPS..... Concept of Operations
CCTO.....Collier County Traffic Operations
FDOT ..... Florida Department of Transportation
FDOT D1 .....Florida Department of Transportation, District One
FON..... Fiber Optic Network
GBPS.....Gigabits Per Second
GEC.....General Engineering Consultant
IT..... Information Technology
ITS..... Intelligent Transportation Systems
IVEDDS..... Interagency Video and Event Data Distribution System
LAP ..... Local Agency Program
MOU .....Memorandum of Understanding
MVDS..... Microwave Vehicle Detection Sensor
NPD.....Naples Police Department
PTZ ..... Pan, Tilt, Zoom
RTMC .....Regional Transportation Management Center
SOG.....Standard Operating Guidelines
SOP .....Standard Operating Procedures
SWIFT.....SouthWest Interagency Facility for Transportation
TMC.....Traffic Management Center
VLAN ..... Virtual Local Area Network
VMS.....Variable Message Signs

1 Executive Summary

The Florida Department of Transportation, District One (FDOT D1), commissioned a task to assess the potential opportunity to co-locate the Collier County and City of Naples TMCs and this report summarizes those efforts and the formal recommendation. These co-location efforts can be beneficial for managing multimodal transportation scenarios and leveraging communication infrastructure for traffic incident management.

This assessment analyzed if certain services provided by these two Maintaining Agencies could be more productive and cost-efficient through co-locating the two agencies' independent existing operations into a single TMC.

For this study, understanding the goals and objectives of each agency was imperative. Through stakeholder coordination, we identified goals and objectives of each agency, as well as key potential advantages and disadvantages of co-location for each agency. The feasibility study took each agency's top goals and objectives, weighted them by importance, analyzed existing operations independently, and analyzed the potential effects of co-location.

The following grading criteria was used to rank each agency's current operations and potential operations if both agency's TMCs were to co-locate.

1	2	3	4	5
Unsatisfactory	Satisfactory	Good	Excellent	Optimized
No monitoring ability. Slow/no response to incidents. Minimal technology.	Limited monitoring ability. Reactive approach to incidents. Outdated technology. Processes are developing. Limited accountability.	Monitors regularly. Responds to incidents. Changes signal timing as needed. Limited regional interconnectivity. Coordination with partners is limited. Mix of outdated technology and new technology. Documented processes.	Monitors regularly, has automated alarms. Proactive approach to incidents. Pre-defined signal timing plans for incident response. Seamless coordination process with region. Newer technology. Data sharing.	Automated monitoring alerts. Fully connected network. New technology. Highest level of capability. Real-time reporting.

Both agencies had goals that included the following language, "optimal level of service throughout the network" and "interconnected transportation system to all users". And both agencies indicated key advantages to co-location; "better coordinated response to incidents" and "faster and more efficient sharing of data", both of which correlate directly with the goals stated above. After ranking each option by agency, it was concluded that co-location would benefit both the City, County and ultimately the motorists by being able to better manage traffic and incidents throughout the region. Having both agencies in one location would help by minimizing the coordination efforts required to successfully manage the existing transportation network and future connectivity.

2 Introduction

2.1 Purpose of this Document

This document serves as a feasibility study to assess the opportunity to co-locate the Collier County and the City of Naples TMCs. While the task was to conduct a comprehensive consolidation feasibility study, the terminology was better defined as a co-location feasibility study. After meeting with the respective agencies, each had expressed concerns with the term "consolidation" – as such efforts, can many times include discarding the individual operating characteristics of the respective agencies in favor of a joint structure. Consolidation is often associated with staff reductions as operational structures and job duties are rearranged. However, for the purpose of this document co-location is defined as two agencies operating individually, within a shared facility. Co-location efforts would be geared towards managing multimodal transportation and leveraging infrastructure for the benefit of traffic incident management. TMCs often have to reach across jurisdictional boundaries to collect information for the entire road network to truly understand traffic operations within their own jurisdiction. Having both agencies in one location would help by minimizing the coordination efforts required to successfully manage the existing transportation network and future connectivity. This document identifies areas in which the co-location within a single TMC may bring about improvements, changes in level of service provided to the community, changes in incident management and the necessary steps needed to successfully co-locate two independent agencies. This report will also explain any negative impacts of co-location. The overall purpose of the document will be to determine if benefits will be realized by regionalizing these two respective TMCs.

2.2 Document Organization

The Feasibility Study includes a background of the existing TMCs, their business functions, and Standard Operating Procedures (SOP), which includes the deployed signal and Intelligent Transportation System (ITS) technologies. Further, it evaluates two options, separate TMC environments or the proposed co-located environment. Additionally, this document is intended to convey the agency needs and the proposed environment expectations to help foster a consensus among the stakeholders as to how to proceed with co-location efforts.

This document is organized as follows:

- Section 1 – Executive Summary
- Section 2 – Introduction
- Section 3 – Existing Systems and Requirements
- Section 4 – Description of Co-Location
- Section 5 – Feasibility Assessments
- Section 6 – Final Professional Recommendation

2.3 Scope

The Florida Department of Transportation, District One (FDOT D1), through the District Wide Intelligent Transportation Systems (ITS) General Engineering Consultant (GEC) Contract, requested the assistance of Metric Engineering, Inc. (Metric) to be utilized to conduct a comprehensive study to assess the opportunity to co-locate the Collier County and the City of Naples TMC.

Metric is comprised of transportation professionals with sectors specializing in traffic operations, intelligent transportation systems (ITS), and systems engineering. Metric was utilized for this study due to their experience with TMC Operations since they operate the District 2 RTMC. The District 2 RTMC has multiple agencies co-located within the facility, which gives Metric a unique perspective into the co-located environment.

For this study, Metric is responsible for all activities related to project management, meetings and coordination, stakeholder coordination, conducting operational and technological analyses, and developing a final report of all findings. This scope of work requires Metric to coordinate with all required stakeholders to discuss the potential impacts of co-location. The scope also requires Metric to review all business functions related to each TMC such as services provided, staffing, standard operating procedures, partner agency coordination, operations and maintenance costs, technologies used, agency goals, performance measures and other elements to determine a recommended solution for FDOT D1.

3 Existing Systems and Requirements

3.1 Existing System Matrix

To better compare the existing system components for both Collier County and the City of Naples, the following matrix was created. This comparison illustrates the current snapshot of the hours of operation, existing staffing, response times, and ITS/ATMS infrastructure deployed among each governmental agency.

Current Operations Matrix			
		Collier County	City of Naples
	Hours of Operation	M-F, 6:30am-6:00pm	M-F, 7:30am-4:30pm
Existing Infrastructure/ Staff Numbers	TMC Operator	1 FTE*	1 FTE*
	Signal Engineers	5	2
	Signal Technicians	7	4
	Infrastructure Locate Tech	3	0
	Network/IT Staff	3	1
	After Hours	2 - On-Call	1 - On-Call
	Traffic Signals	212	35
	- Connected by Fiber	191	28
	- Emergency Signals	13	1
	VMS	6	0
	CCTV Cameras	196	35
	Detection Types		
	-Loops	Yes	Yes
	-Video	Yes	No
	-MVDS	Yes	No
	-Bluetooth	Yes	No
	-Pucks	Yes	No
	Current ATMS Software**	Siemens - ACTRA	Siemens - TACTICS
	Signal Failure Response Time (After Normal Business Hours)		
	--Flash	2 Hours	2 Hours
	--Pedestrian	2 Hours	2 Hours
	--Side Street	2 Hours	½ Hour
*** 1 Full Time Equivalent (FTE) – Multiple employees perform TMC Operations duties in addition to their other full-time responsibilities.** ****A new ATMS Software Vendor was recently chosen for both the City and County.**			

3.1.1 Collier County

The Collier County TMC operates Monday through Friday from 6:30 a.m. to 6:00 p.m. and has 2 on-call staff for after-hours coverage. Between multiple employees, the following services are

managed through the County Traffic Operations team: signal timings; design; roadway sign maintenance; street lights; signals complaint hotline; network connectivity and communications; roadway incidents; special events; and other infrastructure. The TMC's primary functions are traffic signal management, signal timing management, incident management, and overall traffic monitoring. A key function of the TMC is to respond to traffic related issues by evaluating, assessing and taking appropriate actions as necessary including dispatching signal crews to the proper signalized intersection. The TMC operates traffic signal controllers remotely to implement traffic management strategies at signalized intersections based on traffic conditions, incidents, emergency vehicle preemptions, pedestrian crossings, etc. TMC personnel diagnose field equipment malfunctions which may include detection failure. These malfunctions are reported and tracked for repair and/or replacement of the failed equipment.

The current annual operating budget for the County TMC is $898,600 and includes over $500,000 set aside for facility overhead costs (lease space, phone, security, power, communications) and personnel, $73,800 for operational costs, and $317,600 for capital costs.

3.1.2 City of Naples

The City of Naples TMC operates Monday through Friday from 7:30 a.m. to 4:30 p.m. and has 1 on-call staff for after-hours coverage. Staffing of the TMC is shared between 6 employees. The following services are managed through the City Traffic Operations team: signal timings; network health; design; roadway sign maintenance; street lights; signals complaints; communications; roadway incidents; special events; and other infrastructure. The City also has the responsibility of coordinating signal timings, dispatching signal techs, incident management, responding to citizen complaints and traffic monitoring. The City TMC staff works very closely with the City of Naples Police Department to manage and mitigate traffic related issues. The TMC operates traffic signal controllers remotely to implement traffic management strategies at signalized intersections based on traffic conditions, incidents, emergency vehicle preemptions, pedestrian crossings, etc. TMC personnel diagnose field equipment malfunctions which may include detection failure. The City TMC's goals and functions are primarily the same as those of the County TMC.

The current annual operating budget for the City of Naples TMC is $201,175 and includes $26,700 per year for facility overhead costs (lease and utilities), $30,000 in operational costs (service repairs, software upgrades, miscellaneous electronics, etc.), and $50,000 in capital costs (servers, memory management units (MMUs), controllers, etc.). The rest of the budget is for personnel costs and other related costs.

3.2 Existing Performance Measures

Presently, the County and City are working to develop baseline performance measures as they continue to grow their respective programs. Below is the current break out of what each has begun to report on for each program.

3.2.1 Collier County

Currently, Collier County has established some performance measures for TMC operations and maintenance, both of which directly contribute to the success of the ATMS program. The following performance measures are represented in their quarterly dashboards.

The TMC operational performance measures are as follows:

1. Number of signal timing adjustments made
2. Number of vehicle detection issues
3. Number of Traffic Counts issues

The maintenance related performance measures are as follows:

1. Percent of ground preventative maintenance
2. Percent of Network uptime
3. Percent of Traffic system uptime
4. Percent of UPS uptime

Also, included in the dashboard is a device summary, number of devices connected, the number of work orders completed, number of communication outages and duration, the number of ground and aerial PMs that are conducted, the percent of operational signals, the number of calls to the TMC, and number of work orders generated. While a baseline has not been established, the County started reporting with the quarterly dashboard for October 2016 through December 2016. Refer to Appendix A for example dashboard reports from Collier County.

3.2.2 City of Naples

The City has also established performance measures for TMC operations and maintenance. The performance measures within the City's quarterly dashboard are divided into three categories: notifications, incident detection, and reports generated.

The notification performance measures are as follows:

1. Number of congestion notifications
2. Number of critical malfunction notifications
3. Number of Preventative Maintenance visits performed

The incident detection performance measures are as follows:

1. Number of TMC Systems Administrator Tasks Performed
2. Average incident detected to notification time in minutes
3. Number of accidents along the corridor
4. Volumes for each month, by monitoring site location

The reports generated performance measures are as follows:

1. Number of detection failure reports
2. Number of Traffic Monitoring Requests

Also, included in the dashboard is a device summary, number of devices connected, and definitions used within the dashboard. The performance measures published are for the US 41 corridor, which is the only State route, within the City of Naples. While a baseline has not yet been established, the City just published their first quarterly dashboard for January 2017 through March 2017. Refer to Appendix A for example dashboard report from City of Naples.

3.3 Existing Coordination with other Agencies

3.3.1 Collier County

Collier County consists of the following jurisdictions: City of Naples, Marco Island and Everglades City. The City of Marco Island and Naples maintain signals within their respective city limits (see section 3.3.3 Jurisdictional Boundaries).

Collier County also has a working relationship with local law enforcement agencies, emergency management centers and citizen advisory groups.

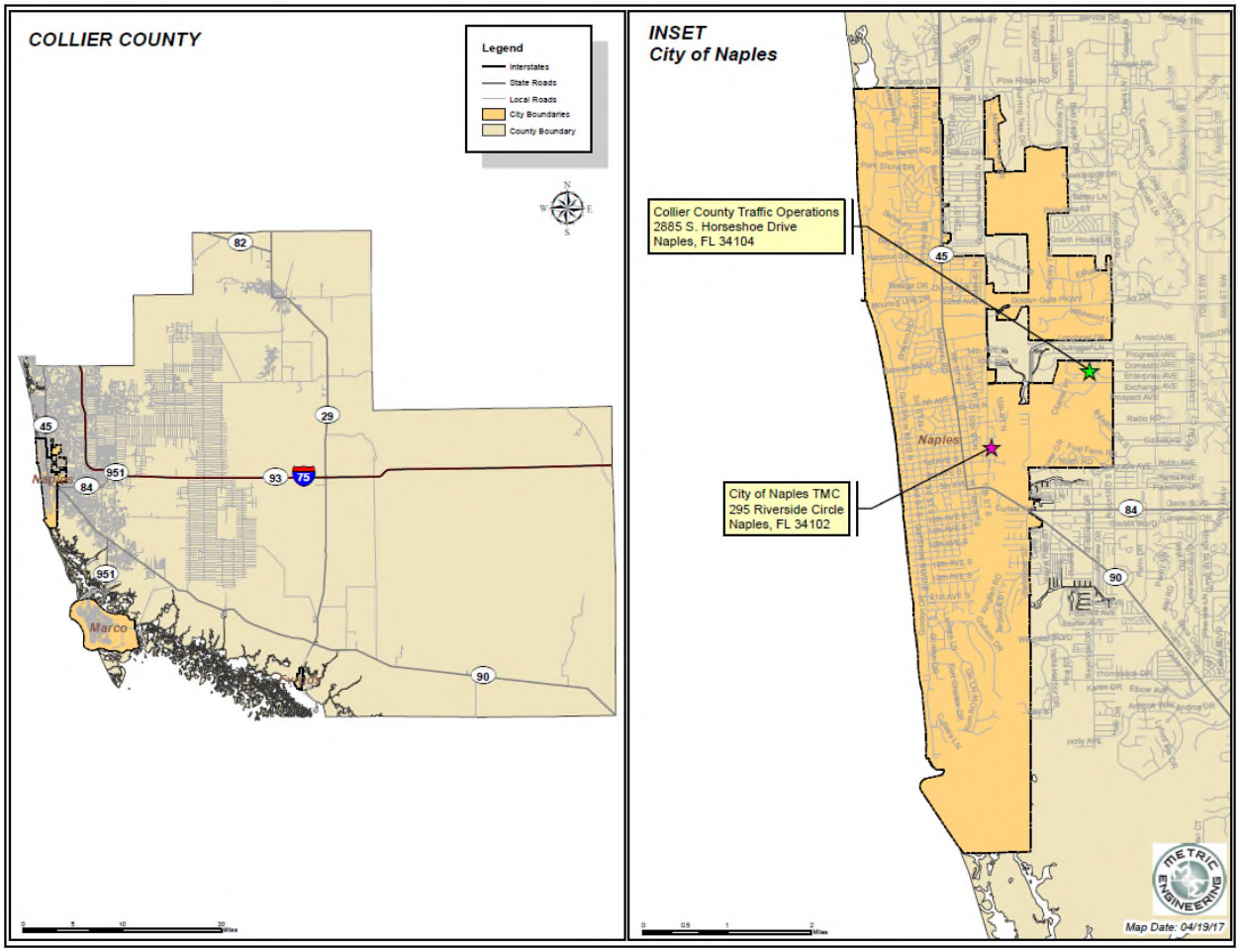
The District 1 Regional Transportation Management Center (RTMC), named the SouthWest Interagency Facility for Transportation (SWIFT) SunGuide Center, also regularly communicates with Collier County regarding incidents on the freeway system that might affect arterial roadways within their jurisdiction.

3.3.2 City of Naples

The City of Naples TMC covers the geographic region within the city limits, with a few exceptions of signals maintained by Collier County. Currently, the city regularly coordinates with Collier County and the City of Naples Police Department (NPD). The City provides CCTV camera access to NPD to assist with traffic monitoring during incidents or events. NPD is authorized to utilize PTZ control from 5 p.m. to 7 a.m.

3.3.3 Jurisdictional Boundaries

On the following page is a map of the jurisdictional boundaries for both Collier County and the City of Naples.


COLLIER COUNTY
Legend
Interstates
State Roads
Local Roads
City Boundaries
County Boundary
82
29
45
951
84
93
75
Naples
Marco
90
INSET
City of Naples
Collier County Traffic Operations
2885 S. Horseshoe Drive
Naples, FL 34104
City of Naples TMC
295 Riverside Circle
Naples, FL 34102
45
Naples
84
90
METRIC ENGINEERING
Map Date: 04/19/17

3.4 Data Center Equipment and Space

3.4.1 Collier County

The County TMC is currently located at 2885 Horseshoe Drive South in Naples, Florida. The Collier County signal system is currently comprised of 212 total signalized intersections, of which 191 are networked back to the TMC for remote monitoring. Collier County has existing controllers, ATMS software, adaptive technology, servers, and a video wall that are all past end-of-life. Currently, the signals are monitored through Siemens ACTRA software. However, infrastructure upgrades are in the process of being made to the Video Wall and ATMS systems for the County. While the contracts are still being finalized, the intent is that these procurements will update the existing video wall systems, controllers and central management software for the County's use. At this time, there is no connectivity between Collier County and City of Naples.

3.4.1.1 Fiber Optic Infrastructure

As network connectivity to the roadside devices must be reliable, the County has determined the most effective and dependable transmission media is a fiber optic network. This communication medium is superior to others (such as copper or wireless) in that it can carry large amounts of data long distances at high speeds and with great fidelity. Collier County operates and maintains over 150 miles of optical fiber located along the roadway connecting 191 signals. The County's fiber optic network allows for secure and reliable connectivity between the roadside devices and the TMC. In addition to the fiber optic infrastructure, five-percent (5%) of the connected signals communicate through wireless connections.

3.4.1.2 Closed Circuit Television (CCTV) Cameras

Collier County currently operates and maintains 196 CCTV cameras with pan, tilt, zoom (PTZ) capabilities. Real-time observation of the roadways is an indispensable tool for the agency. By utilizing CCTV Cameras, the County has the ability to monitor traffic and identify traffic conditions on a real-time basis, whether during normal free flowing traffic conditions or non-free flowing conditions such as incidents, work zones, special events, congestion, and weather events.

3.4.1.3 Video Wall

Collier County currently utilizes an existing video wall system to monitor the flow of traffic on the roadways. The TMC operations staff also utilizes the current video wall system to monitor weather related impacts, signal network information and real-time network congestion, to determine driver delays, construction activities, and equipment malfunctions, in addition to vehicular incidents. This existing video wall system is scheduled to be replaced with a new state of the art, software based video wall system this fiscal year (FY 2018).

3.4.1.4 Microwave Vehicle Detection Sensor

The County uses Microwave Vehicle Detection Sensors (MVDSs) to detect vehicles in the dilemma zone and at the stop bar, vehicle speeds, and roadway occupancy. The MVDS also provide traffic counts to transportation planning and external agencies. This data assists with developing timings for the intersection and/or corridor. The County has deployed 39 MVDS with an additional 49 in procurement.

3.4.1.5 Network Security

The County has implemented network security policies and procedures to minimize the risk of unauthorized network access. The County has also installed both hardware (e.g. firewall) and software (e.g. Antivirus) to protect the County's network and systems from malicious attacks, intrusion and accidental issues. The County currently utilizes both Cisco ASA Firewall and Cisco AnyConnect VPN Software to help keep the network secure. Protecting the County's traffic management network is one of the County's top priorities. Currently there is a Local Agency Program (LAP) project for Collier County to upgrade the existing Information Technology (IT) infrastructure. This includes updating the ATMS software to monitor the signal status of the signals connected through the fiber optic network. Additionally, a network management system, SolarWinds and Putty software are utilized to monitor and report network traffic issues.

3.4.2 City of Naples

The City of Naples currently operates a Traffic Management Center to monitor traffic and manage incidents along their designated roadways. The TMC is currently located at 295 Riverside Circle within the city limits and maintains 35 signalized intersections, 28 of which are monitored remotely by the TMC. Remote monitoring is vital to the City of Naples signal operation as it enables the TMC Operations staff to remotely troubleshoot and diagnose the field equipment for failure or malfunction. The City has existing controllers, ATMS software, and a video wall that all have passed end-of-life. Currently, the signals are monitored through Siemens TACTICS software. Infrastructure upgrades are in process for the Video Wall and ATMS systems for the City.

3.4.2.1 Fiber Optic Infrastructure

Currently, the City of Naples has fiber optic infrastructure connecting 28 signals. The fiber optic infrastructure plays a key role in their ability to monitor the signal operations remotely. The City currently maintains approximately 30 miles of fiber optic infrastructure along its roadways.

3.4.2.2 CCTV Cameras

The City of Naples currently operates and maintains 35 CCTV cameras. Real-time observation of the roadways is an indispensable tool for the City of Naples. To increase operator efficiency, camera presets are used to view pre-defined positions of the roadway and intersections to detect incidents or vehicular backups on the roadway. When an incident is located, the camera will be manually adjusted to the specific incident location to determine the lanes affected and the potential impact of the incident.

3.4.2.3 Video Wall

The City currently utilizes an array of video monitors to observe the flow of traffic on the roadways. The TMC operations staff also utilizes the current video wall system to monitor weather related impacts. The Department has programmed a video wall upgrade that will replace the current monitors with new 46" displays in a 2 x 4 configuration. By replacing the monitors with new displays, the City of Naples can upgrade their current operations to better monitor traffic on the roadways.

3.4.2.4 Network Security

Protecting traffic signal and video images is one of the City's top priorities. To minimize risk to unauthorized network access, the City has implemented network security policies and procedures. These policies and procedures guarantee that at no time, will a computer have the ability to establish simultaneous network connections between the TMC and a secondary network. The City has also installed both hardware (e.g. double firewall) and software (e.g. Antivirus) to protect the City's network and systems from malicious attacks, intrusion and accidental issues.

4 Description of Co-Location

4.1 Overview of Co-Location

Co-location would include leveraging joint resources such as the building space, video wall, network equipment, work stations, data center, field infrastructure (FON), and personnel. To ensure the success of joint operations, an Interlocal agreement between Collier County and the City of Naples must be developed and executed. A Memorandum of Agreement (MOA) would need to be developed to serve as the interlocal agreement to initiate this cooperative process. Other measures, such as a joint standard operating procedures (SOP), will be necessary as the two agencies further embark upon co-location. The current state of operations of both the County and the City creates an opportune time to begin evaluating the idea of co-location, as each agency is beginning the task of upgrading or replacing equipment that has reached its end of life, the County is in the process of acquiring new ATMS software for both it and the city, and the city has outgrown their current Traffic Operations Center. It is anticipated that the co-located TMC would have five (5) workstations; one each for both the county and city to have a signal engineer present (as needed), one for a joint full-time system operator, and two spare workstations. The video wall would consist of twenty-six (26) - 55" video monitors, eighteen (18) of which would be designated for Collier County and eight (8) would be designated for City of Naples. These numbers were decided by a ratio of how many cameras each agency has, but can be finalized at a later time. Additional requirements are below.

4.2 Proposed Building Requirements

The building for the proposed co-location would need to be large enough to house the staff and support equipment for both agencies; approximately 6,000 square feet at a minimum. This square footage would include the proposed video wall, data center, workstations, and shared office space. The building would also require a robust enough HVAC system to handle the ITS network components within, and have the redundancy necessary to ensure the climate control for equipment, such as the servers. Since the building will house the staffing and core equipment to support both the county and city networks, backup generators, fire suppression system, and an uninterruptible power supply (UPS) will be necessary to ensure that equipment is not affected by momentary loss of power and must maintain network connectivity. The building will need to be hurricane rated and will also need physical access restriction of a type agreed upon by both the city and county to ensure that opportunities for unauthorized entry are minimized.

4.3 Personnel Requirements

The new joint operator position(s) would be staffed for full-time hours and potentially could require multiple operators during peak hours, if deemed necessary. This position would be responsible for checking all signalized intersections, responding to any calls, observing

problematic signal intersections when needed, and providing basic trouble-shooting procedures, as designated by each agency. The responsibilities for the operator would be documented within the joint standard operating guidelines. The signal engineer or technician that would sit at a workstation within the TMC would most likely be responsible for pre-defined temporary signal timing changes as indicated for non-recurring congestion and planned special events, dispatching locates, coordinating fiber issues, responding to motorist complaints, troubleshooting field issues remotely, and monitoring the overall health of the system. The joint operator position would help relieve every day operational duties from existing staff that have been helping with these duties on top of their normal duties.

4.4 Technical Requirements

Once the Interlocal Agency Agreement is established, each governmental agency will have both individual and joint technological requirements for the co-location of TMC operations. The agreement would require that each party bear a proportional share of the ongoing operational and maintenance costs of the TMC. These requirements have the ability to change as the dynamics of the technology supporting traffic flow and traveler safety constantly improve. The technical requirements will be unique to each governmental agency; however, the suggestion would be for the co-located operations staff to respond to roadway incidents as if it was a single governmental entity.

Due to each agency's individual requirements, a clear line of delineation is preferred within a co-located TMC. These individual agency requirements can be operated under an umbrella of joint requirements that are agreed upon in advance by both agencies and should be outlined in a joint standard operating procedures (SOP) document. This will allow each of the agencies the opportunity to deploy, maintain and operate equipment using strategies that will suit the needs of the individual department while still maintaining consistency with the overall joint goals. In the event of an overall TMC equipment failure (i.e. video wall) either agency will have the ability to establish temporary communications, from their home office location, and allow for the TMC staff to view the roadways without issue until the failed equipment can be either repaired or replaced.

4.4.1 Server Equipment

Traffic Management Centers commonly deploy numerous servers to provide the operations staff with the ability to perform proper incident management. This co-located TMC will follow the same model but with one major improvement. Due to the costs and environmental impacts of deploying a TMC with an industry standard data center, consideration is given to the possibility of deploying a virtual server environment. A virtual environment would reduce the server's footprint thus allowing each agency the ability to house all their server hardware in a co-located data center but still remain operationally separated. One advantage to this type of deployment

is that each agency has the ability to operate independently, as the other agency would replicate the data, which could be used as a secondary connection if a device failure were to occur. Finally, due to the reduction in equipment, the initial cost of investment and equipment is reduced, resulting in more physical space for future equipment deployment, and reducing the operations and maintenance costs for both agencies.

4.4.2 Network Connectivity

To allow each agency to view, monitor, and dispatch to roadside equipment failures and traffic incidents, each agency may have the ability to access every roadside device in the event of equipment failure or, as a co-located facility, have the ability to share operational labor resources. The preferred connection would be at the TMC network core devices; only a single redundant connection would be required for proper routing of the roadside devices, including multicast images from the CCTV cameras. This would aid in dissemination of all information between both agency partners for a seamless operation to the traveling public.

A secondary recommendation would be for each of the agencies' traffic signal networks to be operated independently but have the TMC and operations network reside on its own unique Virtual Local Area Network (VLAN). VLANs allow network administrators to group equipment together within the same virtually created network, although these devices may be spread out through the county and operated from different managed switches. This also gives both agencies the ability to operate their respective equipment as if it were segregated into its own private network, while still sharing physical network resources. Routing roadside traffic to this exclusive TMC network would allow for sharing of data between each agency while also adhering to all existing network security policies.

4.4.3 Network Security

As agency traffic signal and video images will be shared between both agencies, proper network security must be maintained at all times. In other co-located TMCs across the state, agencies commonly deploy firewalls to segment the network and block unwanted Ethernet traffic between the agencies and their required internet connections. Since the City and County's Ethernet networks will be visible to each other, a secondary option would be for each of the agencies to deploy Access Control Lists (ACLs). An ACL is a configuration tool which will only pass designated and/or approved network traffic between each of the proposed networks. If the network traffic is unauthorized and is not validated by the routing equipment, the router discards the data packets, preventing the traffic from being forwarded to its destination. Additionally, it is recommended that a network management system, like the ones used by Collier County presently, could be deployed to monitor and report network traffic issues. This would provide alerts and notifications to the system administrator and could also be a jointly shared resource for both agencies.

4.5 Operations and Maintenance Requirements

The interagency agreement between the City of Naples and Collier County will be important in establishing the operational and maintenance responsibilities for the co-located TMC. Both the City and County previously shared concerns about access to their respective engineering and technology departments, as well as maintenance warehouses, if the staff were to be co-located. The County has proposed property for a co-located TMC that is adjacent to their current operations. This location is 10-15 minutes away from the current City of Naples TMC. There could be operational impacts for the City to operate out of a remote TMC. These could be mitigated by innovative measures, such as remote management of IT resources.

4.6 Agreements/Affected Institutional Issues

For co-location to be feasible, a Traffic Management Center Operation and Maintenance Interlocal Agreement would be required between the City of Naples and Collier County. This agreement would help define the responsibilities of both agencies once they are co-located. Some of the necessary items to have in this agreement are the following: maintenance at the TMC Facility, technical support for the TMC, shared operator requirements and responsibilities, and reimbursement requirements. All of these components will need to be included in the agreement to provide clear understanding of responsibilities by all parties.

4.7 Overview of SOP, SOG, and Operations Changes Once Co-Located

For co-location, each agency will still have their respective standard operating procedures (SOPs) and standard operating guidelines (SOGs); however, there will be a need for the TMC to have a set of SOPs and SOGs followed by both agencies. These documents would need to be developed with input and buy-in from both the County and City. Important components to include would be daily operations for the shared operator, incident response protocols, maintenance dispatch and troubleshooting procedures, building procedures, general policies that are agreed upon, software procedures, and any additional information that will be used by both agencies. This would not replace each agency's individual SOPs and SOGs, but would be in addition to them.

4.8 Advantages of Co-Location

During discussions with the agencies, each agency had their own perspective on what advantages may be gained through co-location. Below are the possible key advantages communicated by each agency.

4.8.1 Collier County

- The reduction in operational and infrastructure costs
- Consolidation of system upgrades
- Centralized operations and improved cooperation between the City and the County
- Better coordination during incident response
- Improved working information and data sharing between agencies

4.8.2 City of Naples

- Coordination of traffic management system at jurisdictional boundaries, disjointed intersections
- Faster and more efficient sharing of data and information
- Programming and developing detours and by-passes for road closures, evacuations, and construction
- Additional hours of coverage

4.9 Disadvantages of Co-Location

During discussions, viewpoints on the disadvantages of co-location also differed by agency. From the stakeholder meetings with both agencies, the possible key disadvantages communicated from each agency are listed below.

4.9.1 Collier County

- The loss of autonomy
- Selected site of the co-located facility could present a hardship to some employees
- The introduction of another layer of management
- Finding a location suitable for both operations
- Added potential of staffing conflicts

4.9.2 City of Naples

- Negative impacts to the City's level of service (road, transit, bicycle, pedestrian, ride share, etc.)
- Requires more City staff and cost associated with additional space
- Different metrics for measuring performance results in policy and procedural conflicts
- Forces the use of identical hardware and software interfaces with little opportunity to use different technology specifically for City needs. City seeks to provide a balance in level of service for all roads whereas the County prioritizes mainline roadways

Fortunately, the disadvantages listed above can be minimized with effective communication and coordination up front from each agency embarking upon co-location. A well thought out Memorandum of Understanding (MOU) between the agencies is key to establishing roles, responsibilities and common ground between the City of Naples and Collier County. A joint SOP will further help to minimize any perceived disadvantages of co-location, as well as optimize its effectiveness.

4.10 Operating Costs of Co-Location

4.10.1 Operating Costs of Building

Capital costs for the actual construction of the potential co-located TMC, including all software and hardware, are not included as a part of this study. The costs within this category are for operating expenses including utilities, custodial services, maintenance services, security, ground maintenance, management fees, and telephone. From fair market research in this region, it is expected to cost approximately $7.00 per building square foot annually to cover each of these expenses. For instance, if the co-located TMC building was 6,000 square feet, it could cost approximately $42,000 annually for operating expenses of the building.

4.10.2 Operating Costs of Personnel

Based on the assumption that the joint operator would provide full-time hours and have secondary operators for peak-period times, the budget for operators is $90,000 annually. The costs for additional personnel that would utilize the workstations would continue to be budgeted within their respective agency's TMC budget.

5 Feasibility Assessments

5.1 Costs of Each TMC Scenario

5.1.1 Co-Located

If the City of Naples and Collier County were to be co-located they would leverage their resources and infrastructure to potentially improve the operations for both agencies. Costs associated with operators, facility overhead costs, and operational costs will be shared and would provide an overall cost savings. For purposes of this study, the following assumptions were made for the new co-located TMC:

- Two joint-shared systems operator for 12 hour/day - 6 day/week coverage – average salary of each operator $45,000. $90,000 annually.
- Overhead utility, maintenance services, ground maintenance, etc. is approximated at $7.00 per square foot annually. Assuming a 6,000-square foot stand-alone building. $42,000 annually.

With the assumptions above, the total operational costs would be approximately $132,000 annually.

5.1.2 Separate

5.1.2.1 Collier County

Collier County currently budgets around $900,000 annually for their TMC operations. This includes a full-time equivalent (FTE) operator to monitor the TMC, as well as other personnel as shown in Section 3.1, overhead costs, operational costs (computers, electronics, service repairs, software upgrades, and other miscellaneous operational costs), and capital costs (servers, cameras, controllers, monitors, new software, and other hardware devices).

5.1.2.2 City of Naples

City of Naples currently budgets around $201,175 annually for their TMC operations. This includes a full-time equivalent (FTE) operator to monitor the CCTV Cameras and calls that come into the City. Costs also include overhead costs (leased space, power, communications), operational costs (computers, electronics, service repairs, software upgrades, and other miscellaneous operational costs), and capital costs (servers, cameras, controllers, monitors, new software, and other hardware devices).

5.2 Decision Scoring Matrix and Criteria

To be as objective as possible, the decision matrix and scoring criteria were established by each agency. Each agency provided their top specific goals and how much weight is associated with

each, based on importance. We then used the following scoring system to rank each goal. The goals were ranked by option: separate operations and co-located operations. The rankings are shown in the following table.

1	2	3	4	5
Unsatisfactory	Satisfactory	Good	Excellent	Optimized
No monitoring ability. Slow/no response to incidents. Minimal technology.	Limited monitoring ability. Reactive approach to incidents. Outdated technology. Processes are developing. Limited accountability.	Monitors regularly. Responds to incidents. Changes signal timing as needed. Limited regional interconnectivity. Coordination with partners is limited. Mix of outdated technology and new technology. Documented processes.	Monitors regularly, has automated alarms. Proactive approach to incidents. Pre-defined signal timing plans for incident response. Seamless coordination process with region. Newer technology. Data sharing.	Automated monitoring alerts. Fully connected network. New technology. Highest level of capability. Real-time reporting.

5.2.1 Criteria Included

5.2.1.1 Collier County Goals

After discussions with Collier County, the top 5 specific goals and objectives for Collier County TMC Operations are as follows:

1. To monitor the traffic signal system and Intelligent Transportation System (ITS) devices in order to provide an optimal level of service throughout the network.
2. To manage incident impacts by adjusting signal timings as they occur while coordinating with the Collier County Sheriff's office.
3. To monitor the health of the network and associated devices to ensure continual connectivity.
4. To implement new technologies to improve traffic operations and reduce congestion.
5. To manage Variable Message Boards that advise the public, concerning special events that will impact traffic.

5.2.1.2 City of Naples Goals

After discussions with the City of Naples, the top 3 specific goals and objectives for their TMC Operations are as follows:

1. To provide the most safe and efficient multi-modal, interconnected transportation network system to all users.

2. To provide the highest level of response to incidents by way of emergency notification, signal timing adjustments, and general support.
3. To collect and share data, video, and other information to designated partners and in limited form to the general public.

5.2.2 Agency Scoring

Each agency is scored separately by evaluating the agency's performance in relation to its own goals and objectives. The goals listed above were directly provided by Collier County and the City of Naples, respectively. In addition, each agency was asked to provide a weight that corresponded to the importance of that goal. The scoring matrices below directly correspond to the goals and weights provided. Option 1 is looking at stand-alone separate operations, which is representative of current operations in their own facilities. Option 2 is looking at the potential co-location scenario and how the agency's performance would change in relation to the same goals and objectives evaluated for Option 1.

5.2.2.1 Collier County Scoring Matrix

Collier County Scoring Matrix					
Goal #	Weight (%)	Option 1 - Separate	Option 1 Weighted	Option 2 - Co-locate	Option 2 Weighted
1	45	3	135	4	180
2	20	3	60	4	80
3	20	3	60	3	60
4	10	2	20	2	20
5	5	3	15	3	15
		Total Option 1	**290**	**Total Option 2**	**355**

Scoring for Collier County was determined based on current operations, technology, and interconnectivity. Key changes between Option 1 and Option 2 are the regional resources and ability to coordinate with the City quickly when an incident occurs along a corridor that affects both the County and City. Being co-located would provide a better-coordinated response to incidents. Therefore, the first two goals would score higher for Option 2. The other three goals would not change with the co-location since they are Collier County specific. However, Goal 4 could potentially increase in the future if they could leverage contracts together for newer technology. After looking at the overall scoring matrix, it is determined that Option 2, co-location of Collier County and City of Naples, would benefit the County and their overall objectives.

5.2.2.2 City of Naples Scoring Matrix

City of Naples Scoring Matrix					
Goal #	Weight (%)	Option 1 - Separate	Option 1 Weighted	Option 2 - Co-locate	Option 2 Weighted
1	70	3	210	4	280
2	20	4	80	3	60
3	10	3	30	4	40
		Total Option 1	**320**	**Total Option 2**	**380**

Scoring for the City of Naples was determined using the same scoring criteria above. The City provided the top three goals and placed heavy weight on the first goal. The key increases in scoring from Option 1 to Option 2 correlated to goals 1 and 3, having to do with coordination and interconnectivity. Both goals would be better met with faster and better information sharing of data as well as coordination at jurisdictional boundaries. As for goal number 2, we did score Option 2 slightly lower than Option 1 due to the ability to respond to incidents at the highest level of response. It was indicated during the stakeholder meetings that incident response could slightly decrease due to the proximity of technicians to the warehouse or signal shop. While the intent is to not move the technicians to the co-located TMC location, a slight delay might still be experienced from having to relay the incident to the technicians. This may not be completely accurate, but in this study, we did want to show Goal 2 slightly lower to capture this. However, it is believed that the dispatching would not actually create a delay and this option could still be scored as a 4. After looking at the overall scoring matrix in relation to the City's goals and objectives, Option 2, co-location of the TMCs is expected to benefit the City and their overall objectives.

6 Final Professional Recommendation

6.1 Overall Recommendation

After looking at the scoring for each agency in relation to its own goals and objectives and looking at the potential cost savings by leveraging resources, co-locating the City of Naples and Collier County TMCs is recommended. Co-location would provide the motorists in that region a seamless transportation network with reliable incident response. Each agency would still be able to successfully meet their own goals and objectives, with the potential to exceed current performance due to quicker coordination efforts between agencies.

6.2 Project Constraints and Possible Mitigation

Now that we have analyzed the feasibility of co-locating the Collier County and City of Naples TMCs in terms of operations, next steps are to identify project constraints and possible mitigation. The first constraint will be deciding on a location for the co-located TMC. The TMC needs to be within a reasonable distance to the existing TMCs as to not add additional burden or hardship to personnel that would now work at the new TMC on a regular basis. Early coordination with both agencies would help mitigate this constraint.

The second constraint would be identification of institutional barriers. Both agencies were asked, during the stakeholder coordination meetings, if they saw any institutional barriers that would be impossible to overcome. Collier County voiced that the City of Naples has unionized employees and was not sure how that would or would not affect the operations if they were co-located. After discussions with the City of Naples regarding this matter, it was discovered that only four employees within their Traffic Operations were union members. Since the City has both union and non-union members within the same division, they did not believe that this would affect the co-located TMC since it has not posed as an issue for them.

Lastly, creating the MOU and MOA to better understand the different roles and responsibilities of all parties will be vital. This will take the most coordination and requires buy-in from both agencies. To mitigate any delay, starting the conversations early for these memorandums will be critical.

Appendix A – Performance Measure Dashboards

Appendix B – Meeting Minutes

EXECUTIVE SUMMARY
DISTRIBUTION
ITEM 10A

MPO & FDOT Vision Zero Safety Performance Targets

OBJECTIVE: For the Committee to receive a copy of the MPO & FDOT Vision Zero Safety Performance Targets

CONSIDERATIONS: The MPO Board adopted FDOT's Vision Zero Safety Performance Targets at its February 9th meeting. Safety is the first national goal identified in the Fixing America's Surface Transportation (FAST) Act. Under the Highway Safety Improvement Program and Safety Performance Management Measures Rule published in the Federal Register in March 2016, all Metropolitan Planning Organizations (MPOs) are required to adopt Safety Performance Targets by the end of February 2018. The rule requires MPOs to set targets for the following safety-related performance measures and report progress to the State DOT. FDOT has adopted "Vision Zero" targets to meet its goal of no fatalities or injuries for the State. MPOs have the option of adopting the State's targets or developing and adopting their own targets based on a defensible method of analysis. By adopting FDOT Vision Zero safety targets, the MPO is able to rely upon FDOT's annual reporting to the Federal Highway Administration (FHWA) on safety performance in the Statewide Transportation Improvement Program (STIP), which greatly simplifies the reporting requirements associated with the MPO's Transportation Improvement Program (TIP) and Long Range Transportation Plan (LRTP).

The Safety Performance Targets are as follow:

1. Number of Fatalities - 0
2. Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT) - 0
3. Number of Serious Injuries - 0
4. Rate of Serious Injuries per 100 million VMT - 0
5. Number of Non-motorized Fatalities and Serious Injuries - 0

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STAFF RECOMMENDATION: That the Committee receive a copy of the MPO & FDOT Vision Zero Safety Performance Targets

Prepared By: Anne McLaughlin, MPO Executive Director