

TECHNICAL ADVISORY COMMITTEE (TAC) MEETING

CHARLOTTE COUNTY – PUNTA GORDA
METROPOLITAN PLANNING ORGANIZATION
Tel: (941) 883-3535

AGENDA

9:30 a.m., Wednesday, September 28, 2022
East Port Environmental Campus
Training Room B
25550 Harbor View Road
Port Charlotte, FL 33980

The MPO will hold this meeting in a hybrid meeting format, in person and on-line. Persons wishing to provide public comment still will be allowed to do so by alternative means. Written comments may be submitted by either emailing the comments to office@ccmpo.com or mailing the comments to the address below. Comments must be received for the TAC meeting by noon September 27, 2022. The comments will be read by an MPO staff member during the meeting for that item to be placed in the record. More information regarding TAC Agenda items and transportation issues are available on the MPO website at www.ccmpo.com.

- 1. Call to Order & Roll Call**
- 2. Public Comments on Agenda Items**
- 3. Consent Agenda:**
 - A. Approval of Minutes: July 6, 2022 Meeting**
 - B. MPO Board and Advisory Committees Meeting Schedule for Calendar Year 2023**
- 4. Chair's Report**
- 5. Florida Department of Transportation (FDOT) Report**
- 6. Charlotte County Automated Traffic Management System (ATMS) / Intelligent Transportation System (ITS) Master Plan Presentation**
- 7. Public Comments**

TECHNICAL ADVISORY COMMITTEE(TAC) MEETING

CHARLOTTE COUNTY – PUNTA GORDA
METROPOLITAN PLANNING ORGANIZATION
9:30 a.m., Wednesday, September 28, 2022

8. Staff Comments

9. Member Comments

10. Adjournment (Next TAC Meeting – November 16, 2022)

No stenographic record by a certified court reporter is made of these meetings. Accordingly, anyone seeking to appeal any decisions involving the matters herein will be responsible for making a verbatim record of the meeting/testimony and evidence upon which any appeal is to be based. (F.S. 286.0105)

IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT AND CHAPTER 286.26 FLORIDA STATUTES, PERSONS NEEDING SPECIAL ACCOMMODATIONS TO PARTICIPATE IN THIS PROCEEDING SHOULD CONTACT THE CHARLOTTE COUNTY-PUNTA GORDA METROPOLITAN PLANNING ORGANIZATION AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO THE MEETING. CALL (941) 883-3535 BETWEEN 8:00 A.M. AND 4:00 P.M., MONDAY THROUGH FRIDAY.

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 he or she has been discriminated against because of race, color, religion, sex, age, national origin, disability, or familial status may file a complaint with the Charlotte County-Punta Gorda MPO Title VI Coordinator Wendy W. Scott at (941) 883-3535 or by writing her at 25550 Harbor View Road, Suite 4, Port Charlotte, FL 33980.

CHARLOTTE COUNTY-PUNTA GORDA METROPOLITAN PLANNING ORGANIZATION
25550 Harbor View Road, Suite 4, Port Charlotte, FL 33980-2503 Telephone: (941) 883-3535 Fax: (941) 883-3534

SEPTEMBER 28, 2022
TECHNICAL ADVISORY COMMITTEE (TAC) MEETING

CONSENT AGENDA # 3

SEPTEMBER 28, 2022
TECHNICAL ADVISORY COMMITTEE MEETING

AGENDA ITEM #3-A
APPROVAL OF MINUTES: JULY 6, 2022 MEETING

- Purpose:** To review and approve the Minutes of the previous Technical Advisory Committee Meeting (TAC)
- Agenda Item Presented by:** MPO Staff
- Discussion:** To Be Determined
- Recommendation:** Motion to approve the Minutes of the TAC Meeting of July 6, 2022
- Attachment:** Minutes of the July 6, 2022 TAC Meeting.



**CHARLOTTE COUNTY - PUNTA GORDA
METROPOLITAN PLANNING ORGANIZATION**

**MINUTES OF THE JULY 6, 2022
TECHNICAL ADVISORY COMMITTEE (TAC) MEETING**

MEMBERS PARTICIPATING

Mitchell Austin, City of Punta Gorda, TAC Chair
Ravi Kamarajugadda, Vice Chair, Charlotte County Public Works (Virtual)
Ron Ridenour, Charlotte County Airport Authority
Shaun Cullinan, Charlotte County Community Development (Virtual)
Patrick Fuller, Charlotte County Emergency Management (Virtual)
Joshua Hudson, Charlotte County Economic Development (Virtual)
Linda Sposito, City of Punta Gorda (Virtual)
Noah Fossick, City of North Port (Virtual)
Ron Gogoi, Lee County MPO
Slade Downs, Sarasota Manatee MPO
Wenonah Venter, Sarasota Manatee MPO

OTHERS PARTICIPATING

April Santos, Charlotte County Public Works
Tony Conte, Charlotte County Public Schools
D’Juan Harris, MPO Director
Betty-Ann Sherer, MPO Planner
Lakshmi N. Gurram, MPO Principal Planner
Bekie Leslie, MPO Administrative Services Coordinator
Tanya Merkle, FDOT District One
Vitor Suguri, FDOT
Dave Bogner, FDOT
Patrick Bateman
Babuji Ambikapathy, VHB (FDOT Consultant) (Virtual)
Srinivas Kandala, VHB (FDOT Consultant) (Virtual)
Henry Belrose, WGI
Lilli O’Steen WGI

MEMBER ABSENT

Rick Kolar, Charlotte County, Transit Division

1. Call to Order & Roll Call

Chair Mitchell Austin called the TAC Meeting to order at 9:30 A.M. The roll call was taken; a quorum was present

2. Pledge of Allegiance

All attendees recited the Pledge of Allegiance.

3. Public Comments on Agenda Items

There were no public comments received.

4. Reports

A. Chair's Report

Chair Austin reported:

City and County Staff had a few meetings to better coordinate on planning issues specifically on Baynard Dr, Jones Loop Road Annexation, and the proposed signalization project adjacent to the Home Depot on Burnt Store Road.

5. Consent Agenda

A. Approval of Minutes: April 13, 2022 Meeting

B. FY 2022/2023 Unified Planning Work Program (UPWP) – Task 8 – FFY 2021 FTA Section 5305(d)/Public Transportation Grant Agreement (PTGA) Amendment

Ravi Kamarajugadda made a motion to approve the Consent Agenda items. Ron Ridenour seconded the motion, and it was passed unanimously.

6. Florida Department of Transportation (FDOT) Report

Tanya Merkle announced the following upcoming events:

- FMPP - August 18th & 19th at the Florida Turnpike Auditorium in Orlando, FL - Hotel Block information was e-mailed out on June 4, 2022
- MPO and Transit Provider Coordination Webinar September 17th
- Mobility Week October 21st – 28th
- Work Program Development Cycle is now open

7. North Jones Loop Road (CR 768) Feasibility Study – FINAL UPDATE

Patrick Bateman gave a PowerPoint presentation on the North Jones Loop Road (CR 768) Feasibility Study from Burnt Store Road to Piper Road.

The FDOT conducted extensive public outreach to obtain input on the types of improvements to be considered along the North Jones Loop Road and Punta Gorda Airport corridor. The purpose of this research was to determine multimodal transportation solutions to prepare for planned regional developments within the vicinity of this corridor. The outreach included meetings and presentations to elected/appointed officials. FDOT met with staff from the City of Punta Gorda, Charlotte County and the Punta Gorda Airport. FDOT also coordinated with the Charlotte County-Punta Gorda Metropolitan Planning Organization's (MPO) Committees, Board Members, and business stakeholders. The FDOT prepared a newsletter, website, and an online comment form to seek additional input from the public. Based on all input received, the FDOT developed and evaluated the feasibility of various control options at intersections along the corridor and prepared preliminary draft alternatives that included pedestrian/bicycle accommodations to meet future transportation demand. The preliminary alternatives were discussed and shared with various local agency stakeholders for comment. The FDOT is in the process of coordinating additional meetings with elected/appointed officials and business stakeholders to discuss concerns regarding the preliminary draft alternatives. Once the coordination and revision of the alternatives is complete, a feasibility study report will be compiled to document the recommended alternatives.

More information on this project and others can be found on the newly updated SWFL Roads website:

<http://swflroads.com/project/436563-1>

Comments and Questions:

How would the future FDOT Truck Parking facility be accessed from Piper Road?

A: A possible median opening for a u turn could be provided at the interchange on Piper Road. David Bogner added currently a second entrance to that area is not planned; the design is still in the concept phase.

The MPO was told there may be some advance NEPA required for the truck parking?

A: The truck parking could not be included in this study because this feasibility study was almost completed. The truck parking will likely require something more, and this will have different funding available. What needs to be done is still being evaluated. This is an SIS facility and will be designed by FDOT.

In looking at the slide labeled segment 1- looking at the quadrant intersections where will the displaced left turn go, from Taylor Road?

A: If traveling Jones Loop to Taylor Road, instead of turning left on Taylor Road, you could turn on Indian Springs Cemetery Road or Knight's Drive. Currently all intersections are signalized, but some of the angles are dangerous.

What is the difference between discretionary SIS and SIS Discretionary funding?

A: Discretionary SIS funding is limited and is used for “push button” projects. The district usually has \$5M in funding or less to allocate toward design build/push button projects.

8. Taylor Road (CR 765A) Feasibility Study – UPDATE

Patrick Bateman gave a PowerPoint presentation on the Taylor Road Feasibility Study from Royal Road to Airport Road.

The purpose of this project is to improve safety for bicyclists and pedestrians, which are particularly vulnerable to conflicts with vehicles on shared facilities, by providing a pathway separated from general traffic. Provide connectivity to the City of Punta Gorda's neighborhoods with the region's bicycle and pedestrian amenities, parks and recreational facilities, and conservation lands in the area. The need for the proposed shared use path project is based on the following criteria:

- Area Wide Network / System Linkage: Improve bicycle and pedestrian mobility
- Safety Conditions: Enhance safety along the corridor
- Social and Economic Demand: Improve bicycle and pedestrian accessibility

The Taylor Road Project is the MPO's number one project priority for the Transportation Alternatives Program (TAP). The project has been programmed in two segments because of the complexity of the roadway. The first segment, Taylor Road from Jones Loop Road to Airport Road is programmed for Design in FY 2023/2024 for \$656,521. The estimated construction is currently unfunded with a projected cost of \$5.1 million dollars. The second segment, Taylor Road from US 41 (South) to Jones Loop Road is currently not programmed in FDOT'S Five Year Work Program for design or Construction.

More information on this project and others can be found on the newly updated SWFL Roads website:

http://www.swflroads.com/us41/taylorroad/about_project.html

Comments

It was noted the design for phase 1 is funded in 2024. That area has been designated as a hazardous walk zone for schools, the sidewalk ends at Airport Road and Taylor Road and is within the 2 mile walk zone. Because of the existing 20' ditch on the north side, will it be placed on the opposite side?

A: It's cited for the future road widening on the west side, as there are powerlines on the east.

This phase 2 now begins at Royal Road and was originally proposed to cross the railroad, how will this now achieve the goal to connect to Punta Gorda Pathways?

A: Seminole Gulf Railway was approached; their conditions of agreement were quite onerous. So, the limits of the study ended at Royal Road. Jones Loop Road

and Airport Road have existing crossings that could connect to the US 41 Multi Use Recreational Trail. Those crossings could potentially be upgraded since they are already existing crossings, that would have to be discussed with Seminole Gulf Railroad.

It was noted the crossing concern may trigger an LRTP amendment.

9. Veteran's Boulevard Corridor Planning Study – Draft Recommendations

Vitor Suguri, FDOT, and Babuji Ambikapathy, VHB, who provided an informational presentation.

The Florida Department of Transportation (FDOT), District One, is conducting a Corridor Planning Study for Veterans Boulevard between US 41 and Kings Highway in Charlotte County, Florida. The subject corridor is a 6.9-mile, 4-lane divided roadway. The overall objective of this study is to improve mobility, safety, reliability, and connectivity for people who drive, walk, bike, and use transit within the study corridor.

This study will document the following:

- 1) Existing conditions including corridor characteristics, travel patterns, operational analysis of all modes, and safety assessment
- 2) Future conditions including traffic forecasts, access management review (for 2045), operational analysis of all modes and safety analysis, to develop potential safety, operational, ADA and multimodal improvements for the Veterans Boulevard corridor. The identified improvements will be prioritized for short-term (2025), mid-term (2035), and long-term (2045) conditions through close coordination with the Project Steering Committee. The proposed recommendations are subject to change and will be implemented by Charlotte County Staff contingent upon the availability of funds.

Based on the results of the existing and future conditions analysis recommendations (based on safety, operational, and multi-modal) along Veterans Boulevard within the study limits will be developed. These improvements can include (but are not limited to) signalization, mid-block crosswalks, access management, intersection lighting, basic and enhanced intersection improvements, and improved signage.

After this meeting, the priority list will be distributed, and there will be an opportunity to comment. The Final Draft will be presented at the July 18, 2022 MPO Board Meeting for final recommendations of the study.

Comments:

Are the proposed U turns like “Jughandles” as used in New Jersey?

A: Yes, similar design.

Since Restricted Crossing U- Turn Intersection (R-CUT) median modifications are new to this area, it might be useful for the road segments be presented with an overlay to better visualize how this would work in this area here?

It was noted the FDOT’s Electric Vehicle (EV) Master Plan is being deployed today.

FDOT Staff was thanked for their quick response to the Commissioners comments at the May 2022 MPO Board Meeting and for including the Norman Street intersection in this study.

10. Public Comments

There were no public comments.

11. Staff Comments

Betty-Ann Sherer presented a short, animated video created by MPO Staff which provided an overview of “What is an MPO”.

Comments:

It was recommended to make the language provided more specific to Charlotte County.

Laks Gurram welcomed Slade downs and Wenonah Venter , planning partners from the Sarasota/Manatee MPO, as we have been working on having stronger connections to our regional partners.

Director Harris presented an overview of the Safe Streets and Roads for All (SS4A) grant opportunity which was created as a part of the Bipartisan Infrastructure Law. These grants will leverage funding to reinforce the US DOT’S paradigm shift towards a Safe Transportation System Approach. The MPO is currently in the early data collection stage of this effort and is actively seeking partners, along with letters of support to submit with the grant application for potential funding of a Charlotte County Comprehensive Safety Action Plan.

Mr. Harris will present an overview of the Safe Streets and Roads for all grant opportunity at next week’s City of Punta Gorda Council meeting.

12. Member Comments

There were no member comments.

13. Adjournment (Next CAC Meeting – September 28, 2022)

There being no further business, the meeting was adjourned at 10:56 a.m. The next regularly scheduled TAC meeting will be held on Wednesday, September 28, 2022, both

07 06 2022 Draft TAC Minutes

virtually and in-person at the Eastport Environmental Campus, 25550 Harbor View Road, Port Charlotte in Training Room B beginning at 9:30 a.m.

SEPTEMBER 28, 2022
TECHNICAL ADVISORY COMMITTEE (TAC) MEETING

AGENDA ITEM # 3-B
MPO BOARD AND ADVISORY COMMITTEES MEETING SCHEDULE FOR
CALENDAR YEAR 2023

Purpose: To establish a 2023 Meeting Schedule for the MPO Board, its standing committees and the Charlotte County Technical Advisory Committee (TAC)

Agenda Item Presented by: MPO Staff

Discussion:

The MPO staff has prepared a draft Meeting Schedule for the MPO Board, its standing committees and the TAC for calendar year 2023. This draft meeting schedule is being presented for consideration.

Recommendation: Motion to recommend approval of the 2023 Meeting Schedule

Attachment: 2023 Meeting Schedule (Draft)



DRAFT 2023 Meeting Schedule

Charlotte County-Punta Gorda MPO
 25550 Harbor View Road, Suite 4
 Port Charlotte, FL 33980
www.ccmpto.com | 941-883-3535

STRIKETHROUGH = CANCELLED MEETING OR CHANGES TO MEETING DATE

Metropolitan Planning Organization (MPO) Board Meeting – 2 p.m.		
Charlotte County Administration Building, Room #119, 18500 Murdock Circle, Port Charlotte, Florida		
*Monday, January 23, 2023	**Friday, February 17, 2023	Monday, March 20, 2023
Monday, May 15, 2023	Monday, July 17, 2023	Monday, October 16, 2023
Monday, December 18, 2023		
*11:00 a.m. JOINT MEETING with SARASOTA/MANATEE MPO – Venice Community Center, 326 Nokomis Avenue S, Venice, FL		
**9:30 a.m. JOINT MEETING with LEE MPO – Burnt Store Road Presbyterian Church, Stewart Hall, 11330 Burnt Store Road, Punta Gorda, Florida		

Technical Advisory Committee (TAC) Meeting – 9:30 a.m.		
East Port Environmental Campus, Training Room B, 25550 Harbor View Road, Port Charlotte, Florida		
*Monday, January 9, 2023	Thursday, March 2, 2023	Wednesday, April 26, 2023
Wednesday, June 28, 2023	Wednesday, September 27, 2023	Wednesday, November 8, 2023
*10:00 a.m. JOINT TAC MEETING with SARASOTA/MANATEE MPO – Venice Community Center, 326 Nokomis Avenue S, Venice, FL		

Citizens’ Advisory Committee (CAC) Meeting – 1:30 P.M		
East Port Environmental Campus, Training Room B, 25550 Harbor View Road, Port Charlotte, Florida		
Thursday, March 2, 2023	Wednesday, April 26, 2023	Wednesday, June 28, 2023
Wednesday, September 27, 2023 Wednesday, November 8, 2023		

Bicycle/Pedestrian Advisory Committee (BPAC) Meeting – 2 P.M.	
East Port Environmental Campus, 25550 Harbor View Road, Port Charlotte, Florida	
Thursday, February 23, 2023	Thursday, June 15, 2023
Thursday, October 5, 2023	Thursday, November 16, 2023

Charlotte County Transportation Disadvantaged Local Coordinating Board (LCB) – 10 A.M.	
East Port Environmental Campus, Training Room B, 25550 Harbor View Road, Port Charlotte, Florida	
Thursday, January 5, 2023	Thursday, May 4, 2023
Thursday, September 7, 2023	Thursday, November 9, 2023

PLEASE NOTE THESE MEETING DATES ARE TENTATIVE AND SUBJECT TO CHANGE.

SEPTEMBER 28, 2022
TECHNICAL ADVISORY COMMITTEE (TAC) MEETING

AGENDA ITEM # 5
FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT)
REPORT

AGENDA ITEM # 6
CHARLOTTE COUNTY ATMS/ITS MASTER PLAN PRESENTATION

Purpose: To outline the goals of Charlotte County's Advanced Traffic Management System (ATMS)/Intelligent Transportation System (ITS) Master Plan Study.

Presented by: Robert Fakhri, P.E. - Charlotte County Public Works

Discussion:

Charlotte County Public Works is developing an Advanced Traffic Management System (ATMS)/ Intelligent Transportation System (ITS) Master Plan to improve the flow of vehicle traffic and improve safety on Charlotte County's roadways.

Goals of the Master Plan include:

- 1) Improve Charlotte County's ability to manage traffic signals and equipment
- 2) Provide Traffic Management Center with real time data for network operations
- 3) Improve incident response times
- 4) Prepare for implementation of emerging transportation technologies
- 5) Analyze performance measures to assess the overall effectiveness of the system

The Master Plan study is scheduled to be completed in December 2022. Based on the results provided from the study, the County will move forward with developing cost estimates and an implementation plan for ATMS/ITS recommendations.

Recommendation: No action required, informative presentation only

Attachment: Charlotte County ATMS/ITS Master Plan Presentation

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83 Veterans

and B

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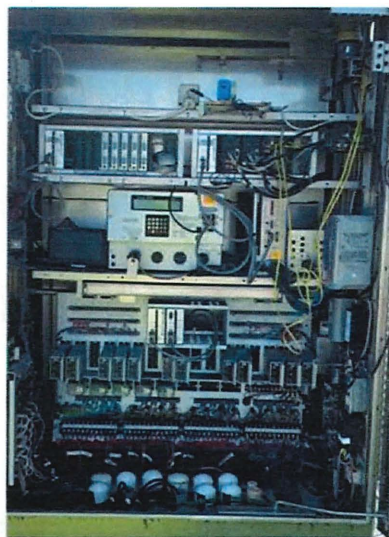
ATMS/ITS Master Plan

Charlotte County, FL
FPID: 438261-1-32-01



CAC/TAC September 28, 2022
MPO October 17, 2022

Riverwood Dr 89A
Newcomb Rd



Hub #4

Pellam Blv

review Bl

Tarpon

VK Pea

64

Midway Blvd

38A

Suncoast Bl

Elmira Blvd

Westchester Blvd

33

Melbourne St

Bays Hub #3

AGENDA

- > Introduction
- > Regional Systems
- > Existing ATMS
- > ATMS Analysis and Recommendations
- > Charlotte County Traffic Management Center (TMC)
- > Next Steps



INTRODUCTION

Charlotte County ITS/ATMS System Goals

> Traffic Control

- Improve County’s ability to manage traffic signals, CCTVs, radar detection units, etc.

> Capabilities

- Provide the TMC with real time data for network operations

> Regional Connectivity

- Provide local stakeholders with a means for improved data sharing

> Responsiveness & Reliability

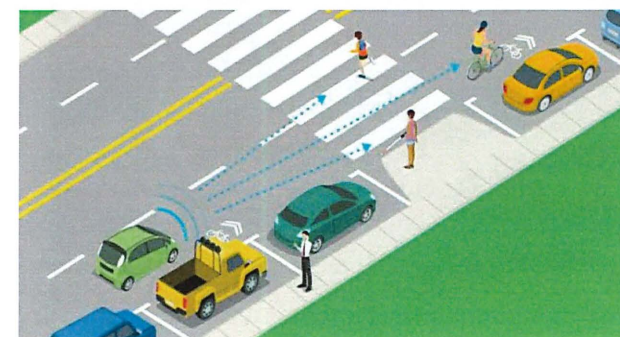
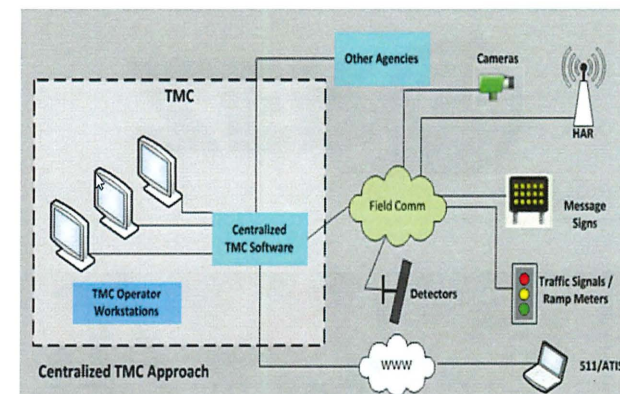
- Improve incident response time
- Reduce network failures

> Innovation

- Prepare and implement new wave of transportation technologies (such as CV)

> Analysis of Performance Measures

- Evaluate the effectiveness of the system



INTRODUCTION

State and Local Priorities

> Charlotte County-Punta Gorda MPO

- 1.) Ensure Efficient Travel for all Modes of Transportation
- 2.) Expand Transportation Choices for Everyone
- 3.) Preserve Natural Spaces While Promoting a Healthy Community
- 4.) Support Vibrant Centers and the Local Economy
- 5.) Enhance Safety and Security for Everyone

> FDOT Vision Zero

- Eliminate all transportation-related fatalities and serious injuries for all modes of travel.



INTRODUCTION

Project Stakeholders/Partners

> The primary stakeholders identified for the Charlotte County ATMS / ITS Plan are listed below:

- Charlotte County
- FDOT District One
- City of Punta Gorda
- Federal Highway Administration (FHWA)
- FDOT Central Office
- Charlotte County - Punta Gorda Metropolitan Planning Organization (MPO)
- Local Mass Transit Agency: Charlotte County Transit
- Sarasota County Area Transit (SCAT)
- Charlotte County ITS Stakeholder Committee (ITSSC)
- Charlotte County Traffic Operations Coordinating Committee (TOCC)
- MPO Citizen Advisory Committee (CAC)
- MPO Technical Advisory Committee (TAC)



FLORIDA REGIONAL ITS/ATMS SYSTEMS

Connection to Regional Systems and System Plans

> FDOT D1 Regional ITS Architecture (RITSA)

- Ten-year plan for the integration of the five MPO's in the region

> FDOT D1 TMC "Swift Center"

- Primarily used to control ITS devices along I-75

> Lee County TMC

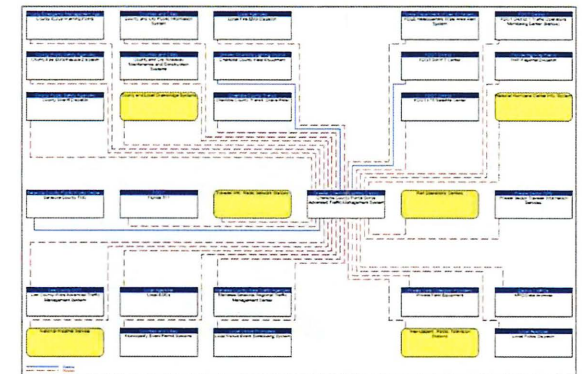
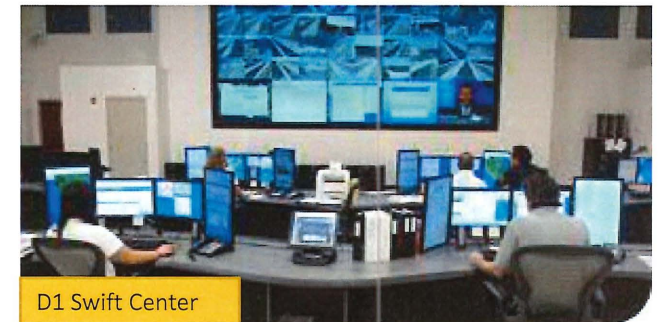
- ATMS for Lee County.
- Signal maintenance and operations handled by local municipalities

> Manatee-Sarasota Regional TMC

- Joint TMC between Manatee and Sarasota Counties

> Florida 511

- Source of real time traveler information for all motorists through live CCTV footage and weather, traffic, construction, and other alerts.



EXISTING ATMS

KCA Proprietary GIS/GPS Data Collection Tool using "esri"

ATMS Inventory System

Submitted by: dpowell_KCA
Submitted time: Sep 8, 2021, 10:14:04 AM

Intersection/Signal Information

Intersection Location
Lat: 26.94584 Lon: -81.76106



**CHARLOTTE COUNTY
ATMS/ITS MASTER
PLAN**
FPID: 438261-1-32-01
Prepared by:
**Kisinger Campo
& Associates Corp.**
201 N Franklin Street,
Suite 400,
Tampa, FL 33602

INTERSECTION INVENTORY FORM (Intersection No.: 13)

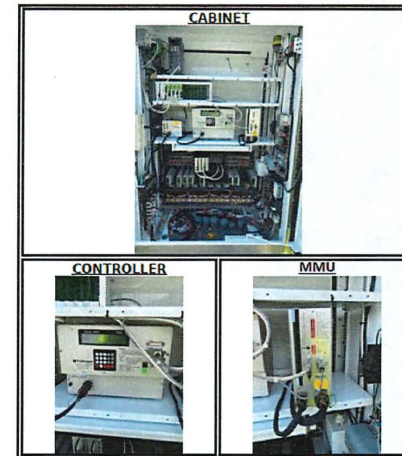
Major Street	Manon Avenue
Minor Street	Bal Harbor Boulevard
Date	September 7, 2021
Data Collected By	dpowell_KCA
Signalization Type	Mast Arm
Signalization Condition	Fair
Signalization Comment	NA



CABINET DATA	
Location (Corner)	SW Southwest
Manufacturer	Naztec
Installation Date	June 15, 2009
Condition	Good
Size	Type VI (77" x 44" x 26")
Mounting	Base
Foundation Type	Concrete
Interconnect Conduit	No
Interconnect Conduit Size	NA
Spare Conduit	3
Spare Conduit Size	2"
Best Cabinet Entry Point	Existing Communication Conduit

CONTROLLER DATA	
Manufacturer	Trafficware
Model Number	980-A2300-1
Installation Date	December 8, 2014
Condition	Good

MMU DATA	
Manufacturer	Naztec
Model Number	MMU-516
Installation Date	December 8, 2014
Condition	Very Good
Number of Channels	16



PEDESTRIAN SIGNAL DATA	NE Corner	NW Corner	SW Corner	SE Corner
Pedestrian Signal	Yes	Yes	No	Yes
Pedestrian Signal Type	Two Signals	One Signal	None	One Signal
Push Button(s)	2 Buttons	1 Button	None	1 Button
Pedestrian Signal Condition	Good	Good	NA	Good

SW Approach	WB Approach
Pedestrian Signal	No
...	NA
...	None
...	Black (No Yellow)
...	Good
...	Radar
...	None

EXISTING ATMS

ATMS Hardware Review

> Intersection Inventory

- 124 intersections were inventoried by KCA's Traffic Engineers and Field Team

> Signalized Intersection Interconnectivity

- 82% of signalized intersections are currently interconnected.

> Traffic Devices Inventoried

- Signal Cabinets
- Traffic Controllers
- Vehicle Detection
- Traffic Monitoring (CCTV)

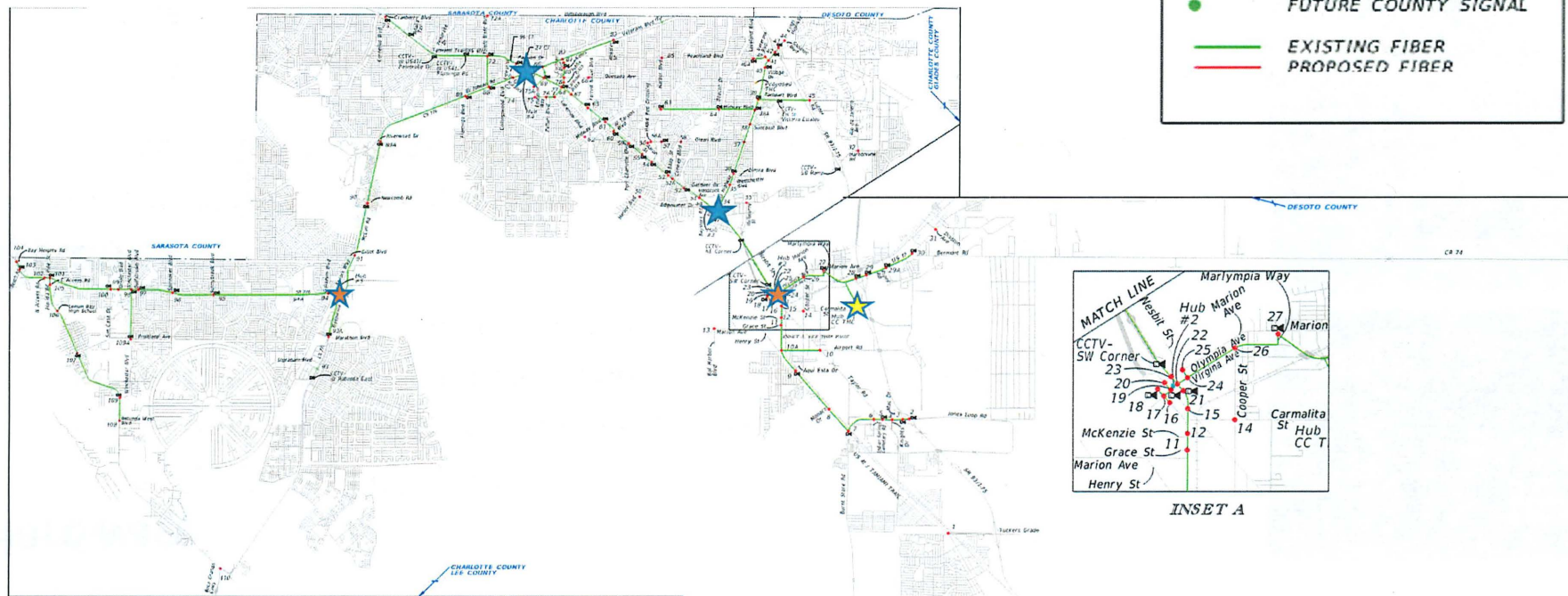


EXISTING ATMS

Existing ATMS System Map

> Existing communication network

– Point-to-point “tree” fiber network topology



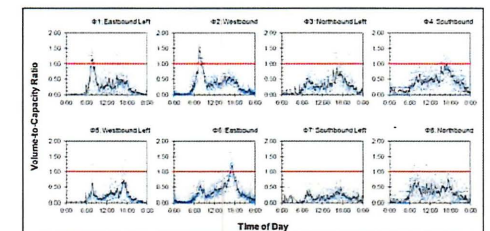
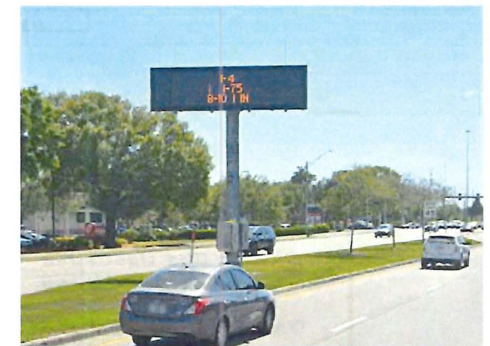
ATMS RECOMMENDATIONS

Hardware

- > Replace current signal controllers
- > Increase the existing 82% interconnected intersections to 100%
- > Enhance the existing 15 control sections with three new ones
- > Update the CCTV and detection systems

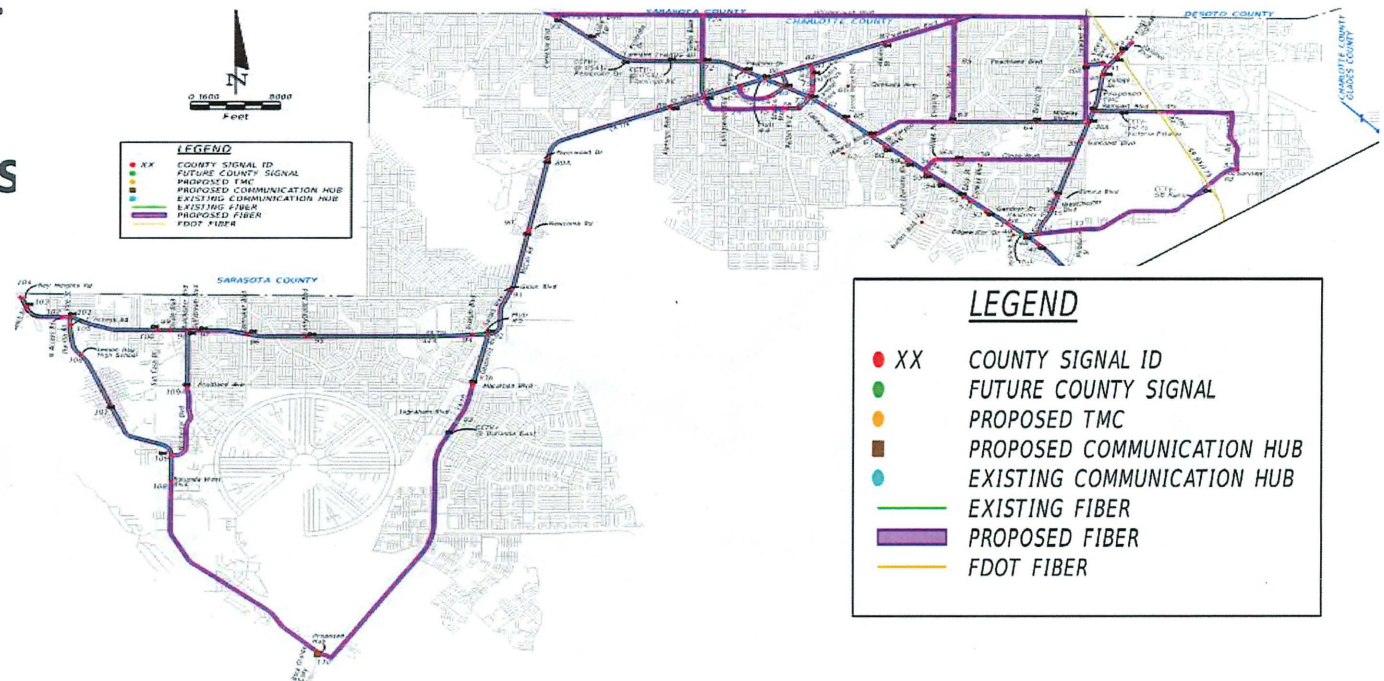
System

- > Install units for CAV along US41 to prepare for CAV connectivity
- > Increase motorists' access to information through ADMS signs and other outlets
- > Update central control and traffic control software
 - YUNEX: Concert or Symphony
 - Trafficware: ATMS.now
 - Econolite: Centrac (with Mobility)
 - Q-Free: Kinetic
- > Reroute fiber from tree to ring topology to avoid single point of failure.



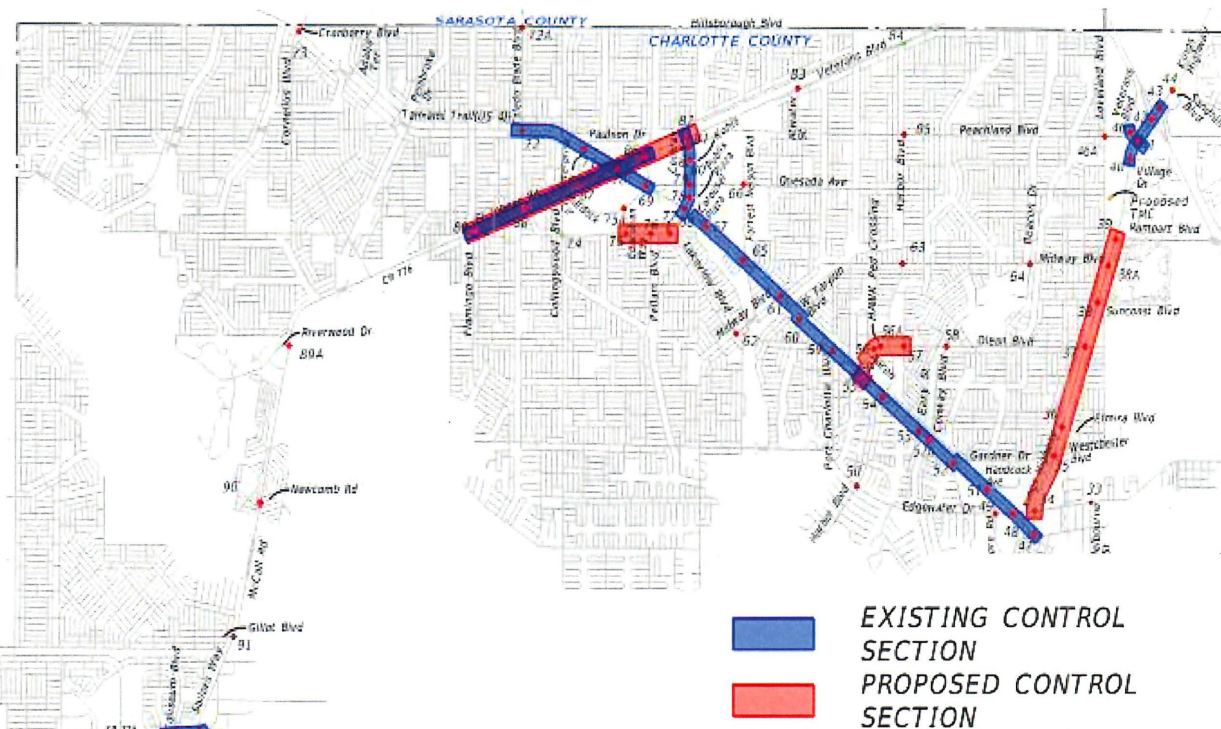
ATMS RECOMMENDATIONS – FIBER LINES

- ▲ Upgrade all existing fiber lines with 144 strands
- ▲ Add new fiber lines to cover all signals and for network redundancy



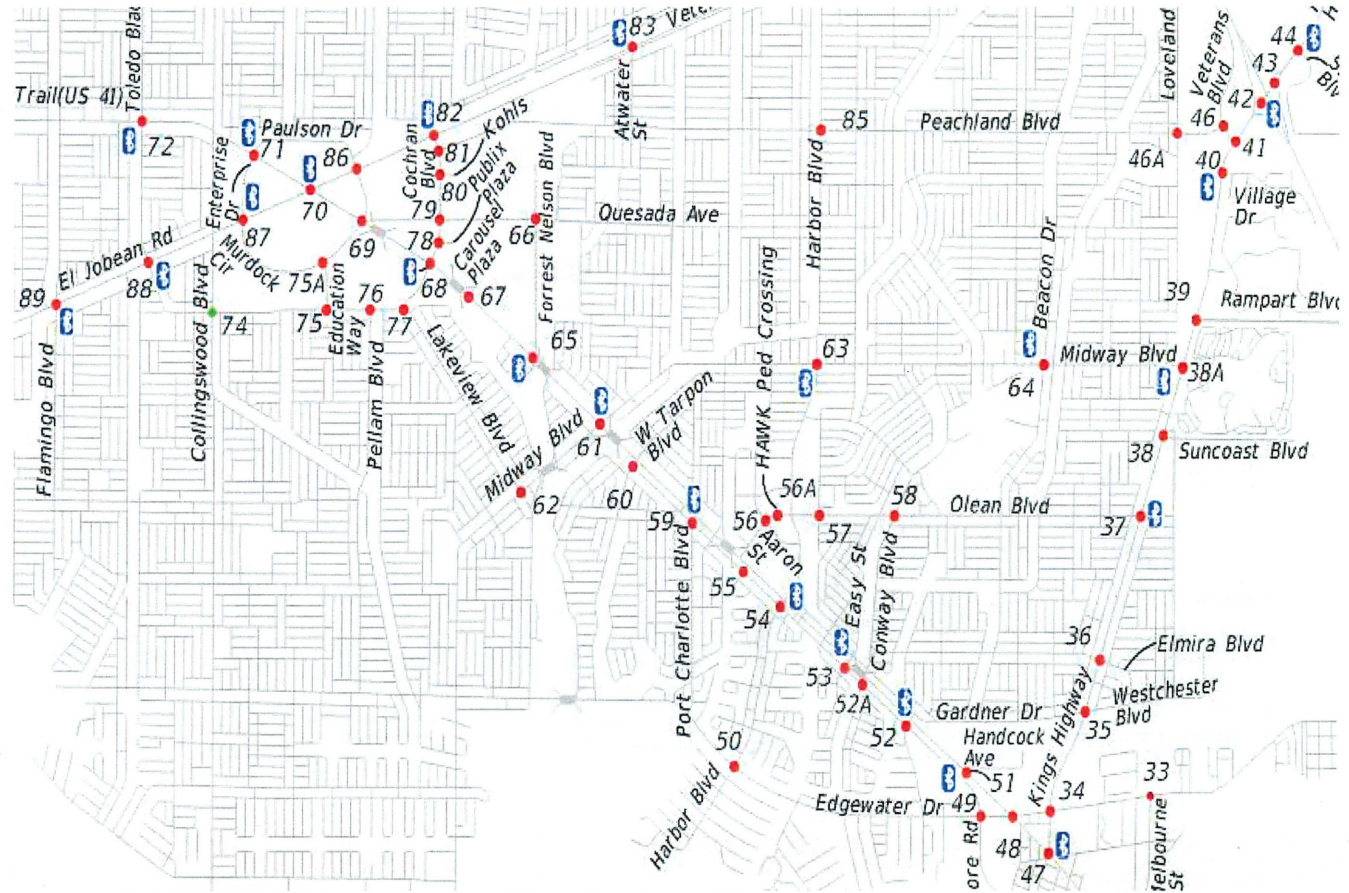
ATMS RECOMMENDATIONS – CONTROL SECTIONS

- Extend existing Control Sections
- Add new Control Sections



ATMS RECOMMENDATIONS – BLUETOOTH READERS

- Add new Bluetooth readers to capture travel time
- Gain full control on network



ATMS RECOMMENDATIONS – DYNAMIC MESSAGE SIGNS

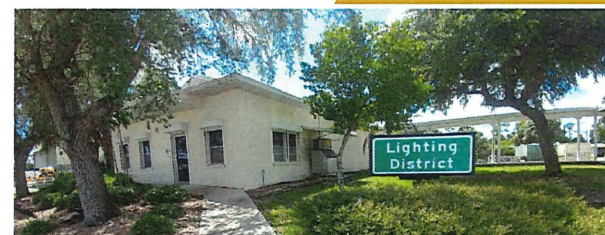
- Add new Dynamic Message Signs
- Provide ability to direct motorists and tourists



TRAFFIC MANAGEMENT CENTER

Existing TMC

- Located at 7000 Florida Street, Punta Gorda, FL 33950
- Building is about 1,800 SF
 - Relatively old, small, and insufficient to accommodate demand
 - TMC is quite small, 17' x 14' with one workstation
- Not considered hurricane resistant



TRAFFIC MANAGEMENT CENTER

Existing TMC

- 15 video monitors
- 1 employee
- 1 workstation
- Operates in business hours only
- Relatively old, small, and insufficient to accommodate demand
- TMC viewing room is quite small
 - 17' x 14'
 - One workstation

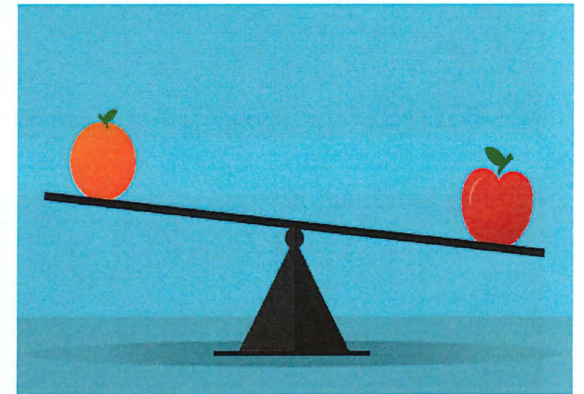


TRAFFIC MANAGEMENT CENTER

Other TMCs

> KCA Review of other TMCs

- Hillsborough County
- Pasco County
- Pinellas County
- Sarasota County (ongoing)



TRAFFIC MANAGEMENT CENTER

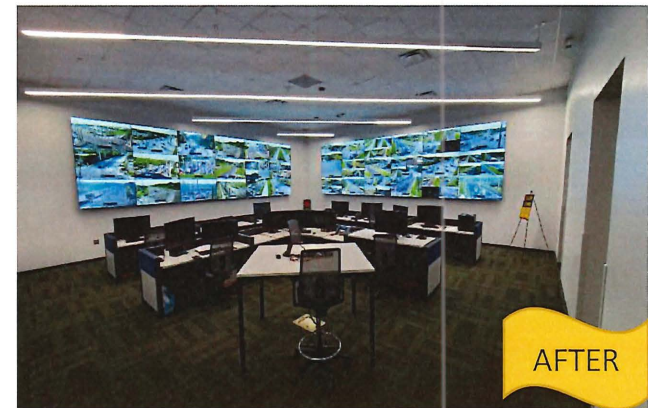
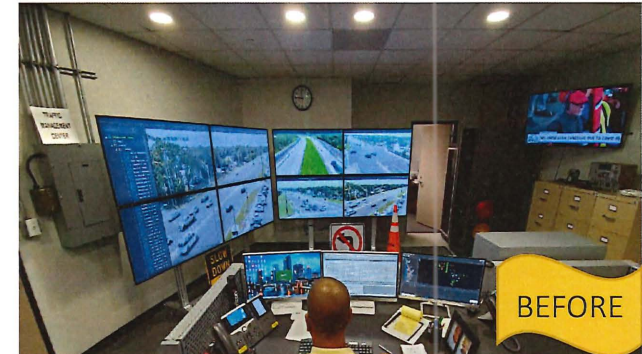
📍 Hillsborough County TMC

> Facility Details (recently built!)

- 1,500 SF
- 36 – 65” wall screens
- 9 workstations – 4 offices
- Hiring operators now

> Facility Demand

- 556 connected signalized intersections
- 100 CCTVs
- 240 miles of fiber runs



TRAFFIC MANAGEMENT CENTER

▲ Pasco County TMC

> Facility Details

- 700 SF
- 12 – 70” wall screens
- 5 workstations – 3 offices
- 1 operator – adding 2 more

> Facility Demand

- 100 connected signalized intersections
- 80 CCTVs



TRAFFIC MANAGEMENT CENTER

📍 Pinellas County TMC

> Facility Details

- 1,500 SF
- 18 screens
- 6 floor workstations – 4 offices
- 3-5 operators (1 at night and weekends)

> Facility Demand

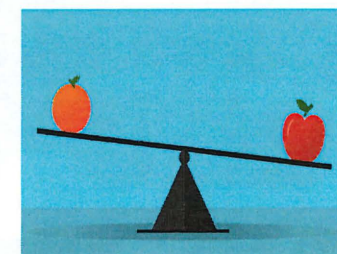
- 500 signalized intersections
- 80 CCTVs



TMC SUMMARY

> Comparison Summary and Prediction

	Hillsborough	Pasco	Pinellas	Charlotte (Exist)	Charlotte (20 year projected)
Signalized Intersections	556	100	427	124	140
No. of CCTVs	100	80	250	80	160
Control Room Area (SF)	1,500	700	1,500	238	800
No. of Monitors	36	12	18	15	20
No. of Workstations	9	5	6	1	2-3
No. of Offices/conf. room	4	3	4	1	2
No. of Operators	4	3	5	1	2-3

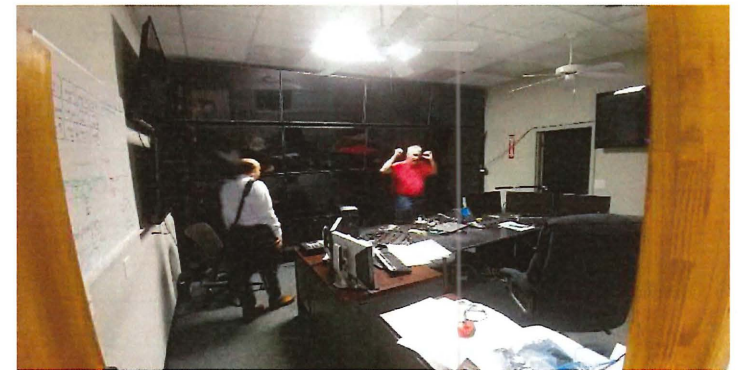


TMC UPGRADE OPTIONS

▲ Three options were considered to upgrade the TMC.

▲ **Option A: Retrofit Existing Facility**

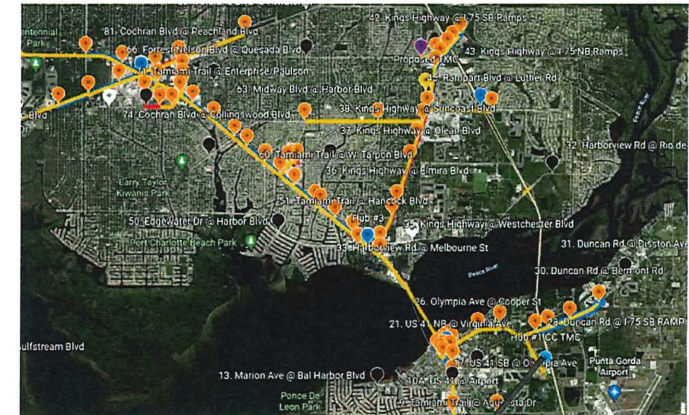
- > Remodel and expand TMC control room area
- > Add workstations/monitors
- > Strengthen the building to a better hurricane resistant level
- > Likely will lose the office and/or conference area



TRAFFIC MANAGEMENT CENTER UPGRADE OPTIONS

Option B: Reconstruct TMC building in existing location

- Increase size of the building
- Customize the layout of the TMC's rooms and workspaces for efficiency
- Increase structural resistance to CAT 5 hurricane level winds
- Existing location requires I-75 FDOT fiber sharing data



Existing
TMC

TRAFFIC MANAGEMENT CENTER UPGRADE OPTIONS

Option C: Relocate the TMC (new or existing building)

- Increase size of the building
- Customize the layout of the TMC's rooms and workspaces for efficiency
- Increase structural resistance to CAT 5 hurricane level winds
- A relocation of the TMC could provide more practical connection to the communication hub stations in a different location

TMC SUMMARY

Comparison Matrix

	Option A: Retrofit existing building	Option B: Reconstruct in existing location	Option C: Relocate to elsewhere
TMC Size and Capacity	Reallocation subtracts space from other rooms	Flexibility in room spacing and layout	
Number of Workstations	Workstations can be added, but is still limited to the total building area	Exact workstations demand can be met	
Risk of Network Disruption	Redundant connection will require FDOT fiber sharing		New location will provide a practical connection to ring network topology
Improved Hurricane Resistance	Structural upgrades are needed. Could be major renovation	Resistant materials can be used in construction	
Upgrade Cost	Moderate	High	High

NEXT STEPS

> System Components

- Alternative System Analysis
- Select ATMS components
 - CCTV, Fiber connections, Dynamic message Board, Bluetooth Readers, etc.
 - TMC managing software

> Implementation

- Develop an Implementation and phasing plan that includes costs for the selected ATMS components and software

> Evacuation and Routes Analysis

- Develop Hurricane Evacuation Timing plan
- Develop Incident Management plan

> Study Completion

- Study completion date is December 2022

