2022

Florida Department of Transportation – District 5

Integrated Corridor Management (ICM) Operations: *Regional Traffic Management Center (RTMC) Standard Operating Procedures (SOP)*

Prepared For:
Florida Department of Transportation – District 5
719 South Woodland Boulevard
DeLand, Florida 32720

STANDARD OPERATING PROCEDURES

DOCUMENT MANAGEMENT		
File Name:	D5 ICM RTMC- SOP	
File Location:	T:\Metric\ICM Supervisors\SOG_SOP	
Version Number:	2.0	
	Name	**Date**
Created By:	Edward Grant	9/1/2017
Reviewed By:	Penny Kamish	5/14/2018
	Dale W. Cody, P.E., PTOE	9/3/2018
	Dale W. Cody, P.E., PTOE	11/13/2018
	Ryan Clark	11/22/2022
	Eddy Stinson	8/24/2022
	Rajib Saha, Ph.D., E.I.T.	11/22/2022
	Michael Hudson	12/1/2022
Modified By:	Penny Kamish	6/17/2018
	Dale W. Cody, P.E., PTOE	9/3/2018
	Dale W. Cody, P.E., PTOE	11/13/2018
	Charles Stinson	09/29/2021
	Edward Grant	07/28/2022

TABLE OF CONTENTS

Acronyms and Abbreviations

AAM	Active Arterial Management
AVL	Automated Vehicle Location
CCTV	Closed Circuit Television
CFX	Central Florida Expressway Authority
CMS	Central Management System
DMS	Dynamic Message Sign
EOC	Emergency Operation Center
FEMA	Federal Emergency Management Agency
FHP	Florida Highway Patrol
FHWA	Federal Highway Administration
FMS	Freeway Management Systems
FWC	Fish and Wildlife Commission
ICM	Integrated Corridor Management
ITS	Intelligent Transportation System
IVEDS	Inter-agency Video and Event Data Distribution System
JTF	Joint Task Force
LEO	Law Enforcement Officer
MIMS	Maintenance and Inventory Management System
MOT	Maintenance of Traffic
MUTCD	Manual on Uniform Traffic Control Devices
MVDS	Microwave Vehicle Detection System
OPD	Orlando Police Department
PIO	Public Information Officer
ORCC	Orlando Regional Communication Center
RISC	Rapid Incident Scene Clearance
RR	Road Ranger
RRMA	Road Ranger Mobile Application
RTMC	Regional Traffic Management Center
SOG	Standard Operating Guidelines
SOP	Standard Operating Procedure
SLERS	State Law Enforcement Radio System
TMC	Traffic Management Center
TIM	Traffic Incident Management
TSM&O	Transportation Systems Management and Operations
TSS	Transportation Sensor Subsystem
TVT	Travel Time
WWD	Wrong Way Driver

Appendix

Appendix A- Desktop Login
Appendix B- ITS Resources
Appendix C- Battle Rhythm
Appendix D- Avoxi
Appendix E- Zello
Appendix F- Event Workflow
Appendix G- Incident Workflow
Appendix H- TPAS
Appendix I- MIMS
Appendix J- Creating an Event
Appendix K- Event Details
Appendix L- Approved DMS
Appendix M- Associated/Cloned Events
Appendix N- Wrong Way Driver
Appendix O- PSA
Appendix P- Special Events
Appendix Q- FDLE Statewide Alerts
Appendix R- Interagency Coordination
Appendix S- RISC
Appendix T- COIN
Appendix U- ICAT
Appendix V- Performance Measure Report
Appendix W- Queue Warning System
Appendix X- Express Lanes Operation Procedure
Appendix y- National Weather Service System
Appendix Z- Drone Operations
Appendix AA- Recovery Disaster Plan
Appendix AB- WebEOC
Appendix AC- Emergency Management Plan
Appendix AD- RTMC Building Area Allocation
Appendix AE- I-4 ESU Plan
Appendix AF- I-95 ESU Plan
Appendix AG- QA/QC Working Instructions
Appendix AH- TIM Self-Assessment
Appendix AI- TIM Procedural Plan
Appendix AJ- TIM Vehicle Inspection
Appendix AK- TIM Specialist
Appendix AL- First Responder Share
Appendix AM- Orlando Fire Radio
Appendix AN- FHP Radio
Appendix AO- Active Alert
Appendix AP TIM Performance Measure
Appendix AQ- TIM Monthly Performance Measure Sharepoint, Monthly Data

Appendix AR- SR 408 TIM
Appendix AS- PTSU Plan
Appendix AT- Ramp Metering
Appendix AU- Arterial Road Ranger
Appendix AV- RISC/SafeTow/RR-Wekiva 8

FDOT District Five Integrated Corridor Management (ICM) Operations

Transportation Systems Management and Operations (TSM&O) is a performance-driven approach for solving congestion and traffic problems in which technology is paired with management and operational strategies to locate and attempt to reduce or eliminate congestion in a timely manner. The objective of applying TSM&O to the arterial network is to improve the travel time reliability of the existing transportation network (arterials and freeways), accomplished through the utilization of Integrated Corridor Management (ICM) Operators.

This document serves as the Standard Operating Procedures (SOPs) for the Integrated Corridor Management (ICM) Operations. The ICM Operators, Supervisors and Engineers have been designated to assist the district in monitoring the freeway and arterial corridors and to notify the appropriate personnel of observed degradation throughout these systems. The ICM Operators will be co-located within the District Five Regional Traffic Management Center (D5-RTMC or RTMC); this document provides basic instructions for ICM Operations while operating at the D5-RTMC.

The base of operations for the ICM program is the D5-RTMC. Dedicated workstations for ICM program are in the RTMC Ops room. The ICM Operators, Supervisors and Engineers work closely with both freeway management and traffic operations staff daily. The ICM Operators, Supervisors and Engineers will be stationed in the RTMC twenty-four hours per day, seven days per week, in three shifts (6:00 AM – 2:00 PM, 2:00 PM – 10:00 PM, and 10:00 PM – 6:00 AM).

This document has been created to provide procedures that covers FDOT Freeways & Express Lanes, CFX Expressways, Arterial Operations, & Traffic Incident Management. All procedures in this document are performed daily. The document is broken down into four volumes shown below:

- Volume I: ICM Requirements
- Volume II: Freeway/Expressway/Express Lanes Operations
- Volume III: Arterial Operations
- Volume IV: TIM Operations

The SOP is intended to provide staff with step-by-step procedures to ensure they are following protocols that have been established over the years. Updates to this document are on-going and will be delivered to the Department on a yearly basis.

Volume I: ICM Requirements

1. ICM Employment Requirements

Due to the exposure of potentially sensitive information within the RTMC as well as RTMC security, new employees of all levels are required to fulfill the requirement and paperwork before reporting for work. These requirements are addressed in upcoming sections

- Applicant Forms:
  - Metric Engineering Application for Employment
  - USCIS Form I-9
  - Form W-4
  - Submit & pass drug test
  - Drug-Work Workplace Company Policy
  - Acknowledgement of Metric's Code of Ethics and Business Conduct Guidelines
  - Receipt & Acknowledgement of Metric's Employee Manual
  - Metric Engineering, Inc. Personal Data
  - Distracted Driving Policy

2. Badge Requirements

- FDOT Annual Ethics Training
- FDOT Fire Prevention Training
- FDOT Public Records
- FDOT Equal Employment Opportunity
- FDOT Safety Orientation
- FDOT Computer Security Awareness
- FDOT Zero Tolerance for Violence
- FDOT Safety Indoctrination

3. Access to the RTMC

- SLERS background check
- CJIS Online Certification

4. Security Access Request form

- All employees must fill out this form electronically to gain access to FDOT's computer.
- http://www.cflsmartroads.com/security/docs/Security%20Access%20Request%20(SAR)%20Forms.pdf
- Create a FDOT Jira ticket. This procedure can be found in Volume II.

5. FDOT Computer Security Access Request

- Once the FDOT Computer Security Awareness has been completed, one will request a FDOT email from FDOT's Administrative Assistant.
- Once requested, the new employee will fill out the FDOT Computer Security Access Request form, also known as AUA, from the Administrative Assistant.
- Return the form and attach the Computer Security Awareness and CJIS certifications.

6. Employee Guidelines

- Schedule
  - All employees are responsible for reviewing the week's schedule and working their shift.
  - Our team currently uses the when to Work application.
  - Schedules are posted by Wednesday for the upcoming week.
  - The work week begins on Saturday and ends on Friday.
  - Employees are responsible for knowing their schedule.
- Timesheets
  - All employees (operators, lead operators, supervisors, engineers and RTMC Manager) will fill out a timesheet to be recorded and saved for auditing.
  - All operators will have their supervisor or lead operator initial their time at the end of each shift or week.
  - By end of day Thursday, or by the end of your last shift. Paper and electronic timesheets will be completed so they can be sent to HR on Friday, for a comparative review with Deltek (Metric's electronic timesheet software) or to an authorized representative if from a subconsultant company.
  - Timesheets are located on the T-Drive.
- Time-off Request
  - All employees are responsible for informing management two weeks in advance when they are requesting time off.
  - If an emergency happens and you cannot make it to work, you must contact your supervisor or RTMC Manager eight hours before your shift.
  - All categories must be filled out when requesting time off:
    - Employee's name
    - Type of Absence requested
    - Dates of Absence
    - Number of PTO hours to be used
    - Reason for Absence if "Other" is selected.
  - Time-off request forms are found on the T-drive.

7. RTMC Etiquette

- General
  - Every time an employee enters the RTMC floor they must badge in. No tailgating (when an individual enters behind someone without scanning their badge). All entries must be logged.
  - All visitors must always sign in at the front desk and have a visitor's badge on them.
  - All visitors must be accompanied by someone who has their SLERS background check when in the RTMC.
  - Media and tour requests must be approved by FDOT and FHP Management prior to following the visitor's access process to the secured area.
  - Workstation telephones are not to be used for personal phone calls, except under emergency situations.
  - Personal cell phones and other electronic devices are to be used by ICM personnel only during breaks outside the RTMC unless otherwise directed by management.
  - During tours or meetings within the RTMC, the highest level of professionalism and diligence to operations is mandatory.
  - Visitors are not permitted within the RTMC Floor, unless permitted by management.
  - Standard Operating Guidelines (SOG), these SOPs, reference materials, and equipment are located on the T-drive for easy access.
  - All workstations must be kept clean and organized. Any work-related items that are normally stored in cabinets or drawers must be stored properly when not in use.
  - Only work-related material should be visible at each workstation.
  - No profanity or foul language is permitted; proper business etiquette should always be upheld.
  - Only approved websites should be accessed.
  - Operators are required to come into work with a neat and professional appearance. Any deviation from the accepted attire must be approved by the ICM RTMC Manager.
- Food and Beverage
  - All meals should be consumed in the Break Room(s), Offices, or side tables.
  - Only snack and drinks that have sealable lids are allowed on the RTMC Floor.
  - No coffee pots are allowed on the RTMC Floor.
  - The person who makes coffee will be responsible for its clean up.
  - The first refrigerator is for RTMC Staff and others are for FHP.
  - Food in the microwave MUST be covered.
  - All food in the fridge needs to be dated and marked with a name. The fridge will be cleaned out monthly and a minimum of one weeks' notice will be provided to staff.
  - Dishes are not allowed to be left in the sink of the breakroom. Dishes must be cleaned and put away immediately.

- Any gatherings or parties must have the room reserved (break room included) so all partnering agencies are aware. This will be compiled by the RTMC Supervisors and stored within that office.
- Have food deliveries sent to the secure entrance.

- Grooming
  - No grooming is allowed on the RTMC Floor. This includes:
    - Brushing hair
    - Trimming of nails
    - Brushing teeth
    - Use of dental floss
  - Keep all grooming to the restrooms.
- Smoking
  - Smoking is only allowed in the designated smoking areas outside and during approved breaks.
  - Deposit cigarette/ Cigar butts in the smoking receptacle.
  - All indoor tobacco is banned under the Florida Indoor Clean Air Act.
- Electronics
  - Employees shall not utilize or have out on display a personal cellular telephone while on duty, within the communications center. Unless specifically directed to do so by an appropriate supervisor. Other forms of electronic communications, i.e., personal computers, or the utilization of personally owned equipment, shall not be used or be on display while on duty in the communications center. This directive shall not prohibit a member from having a personal cell phone on their person or in a bag if the ringer is on vibrate/silent mode and the phone is answered outside of the RTMC Operations floor and only when an emergency exists.
  - Radio, personal laptops, television and/or video-DVD playback recorders shall not be permitted in, or near the immediate area of the communications center where it may be observed or heard by the communications employees. Unless such equipment has been assigned by the Department for use during emergency or other critical situations (hurricanes, civil disturbances, etc.) under the direction and monitoring of the communications supervisor.
  - There will be NO recording of the CCTV streaming video. TMC personnel will remain the primary users of the ITS devices and CCTV movements.
  - TMC Cameras are for the explicit use for monitoring traffic and shall not be used for any other purpose.
- Parking

Only personnel with SLERS clearance, who work in the secure RTMC area, may park in the secure parking lot. All others must park in general parking.

- Conduct
  - All employees must follow the following policies:
    - Drug Free Workplace
    - Sexual Harassment
    - General Civility Code of Conduct

- All employees must remain alert and awake during their shifts.
- Breaks, absences, tardiness, and shift changes has been developed by Metric staff to follow.
- Obscene language will not be tolerated.

8. ICM Workforce Development

- Training
  - The following modules will be completed as required by the ICM RTMC Manager:
    - Module 1: Introduction to RTMC
    - Module 2: RTMC Communication Fundamentals and FDOT Hierarchy
    - Module 3: SunGuide® 101
    - Module 4: Advanced SunGuide
    - Module 5: Road Ranger Overview
    - Module 6: CFX Review
    - Module 7: Wrong Way Driver Essentials
    - Module 8: Arterial Operation Workshop
    - Module 9: Arterial Corridor Manager Workshop
    - Module 10: ICAT Basics – *How we track our progress*
    - Module 11: MIMS vs. TSM&O Helpdesk Insight
    - Module 12: SunGuide Reporting
    - Module 13: COIN & RISC Awareness
    - Module 14: Construction Protocol
    - Module 15: Asset Maintenance vs ITS Asset Maintenance understanding
    - Module 16: Express Lanes – SELS Software
  - Operators, advanced operators, lead operators, supervisors, and managers are administered the modules.
  - Each module comes with a pre and post-test to evaluate progress and expectation.
  - ICM Operator Shadowing and Classroom training
    - New employees will sit with an ICM staff for 15 shifts to job shadow before they operate a workstation alone.
    - New employee will work with management to complete the virtualize training, FDOT CBT, and other required certs before released from training.
    - New employees will be required to do a Road Ranger ride-along to better understand their roles and responsibilities and how they play a vital role within the RTMC.

9. Monitoring Tools

- The RTMC floor staff are giving access to numerous resources to help them achieve the mission to effectively execute the scope of work.
  - The following are some of the monitoring tools used daily:
    - FDOT SunGuide
    - CFX SunGuide
    - ATMS

- Maxview
- Centracs
- Tactics
- ATMS.now
- Central Management Software (CMS)
- Gridsmart
- ATSPM
- R-ICMS
- BlinkLink
- Blank Out Signs (BOS)
- Bridge Security
- RTMC Map
- FDOT Jira
- ICAT
- HDTV (Event List Video Dashboard)
- PTT Cellular phones
- SLERS Radio
- Video walls
- External phone and Avoxi
- Network drives
- Approved work-related websites
- FDOT provided applications
- Video dashboards
- Mutualink
- TPAS
- TDMS
- SELS
- Google Maps
- RTMC Map
- FD Radio

Volume II: Freeway/Expressway/Express Lanes Operations

1. Desktop login essentials

- As an operator, you will need to understand the basics pertaining to logging into the FDOT system and what resources that need to be used to do the job effectively.
- To gain a understand of the resources and login essentials, please reference Appendix A- Desktop Login, and Appendix B- ITS Resources.

2. Battle Rhythm

- The purpose of the Battle Rhythm is to provide the operator, supervisor, and TIM Specialist the requirements that one must complete.
- Within the Battle Rhythm one will find what to do in the beginning of the shift, during the shift, and the end of the shift.
- The standard operating procedures for the Battle Rhythms are found in Appendix C

3. Communications

- RTMC operators have several ways to communicate with each other and our partners.
- For our external partners, we utilize the Avoxi system. All operators will be required to take the Avoxi training.
  - Use this time for the training: Home • FLEX Portal (cflsmartroads.com
- For our road rangers, RTMC Operators utilize the Zello application.
  - Operators a PC or the PTT application. These applications are installed at each workstation.
- As a part of the ICM Workforce Development training, specific details on proper communication can be found in Module 2 – RTMC Communication Fundamentals and FDOT Hierarchy.
- The standard operating procedures for Avoxi and Zello can be found in Appendix D and Appendix E.

4. Freeway Operational Goals

- The freeway operational goals, identify below, are goals that can be measured and can be found in our team's ICM daily, weekly, monthly, quarterly, and annually reports.
- This standard operation procedures in this document were designed to focus on these goals.
- RTMC Operators shall use this SOP to help aid them to meet operational targets. When properly preformed, the team shall achieve the following goals:
  - Reduce secondary crashes.
  - Reduce emergency response times.
  - Lower Incident Detection System alarm speed.
  - Improve DMS accuracy.
  - Improve incident locations.
  - Improve communication by deliberative action.

5. RTMC Operator Responsibilities

- Event Management

- The event management workflow diagram can be found in Appendix F.
- Also, in Appendix G, ICM operators shall use the event management workflow diagram, quality control checklist, and priority diagram to meet operational expectations and performance measure.
  - Dispatch road rangers within 3 minutes of initial notification to the RTMC.
  - DMS Activations within 3 minutes of activation of event.
  - Email Notifications within 3 minutes of activation of event.
  - Publish event to FL511 within 3 minutes of activation of event.
  - Notify asset maintenance within 15 minutes of event activation or if it's been reported that there are life-threatening injuries.
- Notify the Traffic Incident Management Team (TIM)
- Notify the Active Arterial Management Team (AAM)
- Gather event details
  - Identify event attributes.
  - Make comments to provide a narrative for management for post reviews.

- Truck Parking Availability System Logging
  - Provide QA/QC to report an accurate number of available spaces.
  - Each TPAS location shall be checked every 4 hours at a minimum per CO's directive.
  - As a part of the ICM Workforce Development training, specific details, and instructions on how to performance the TPAS QA/QC can be found in Module 15- TPAS.
  - The standard operating procedures for TPAS operations can be found in Appendix H.
- System Validation
  - Verify ITS devices are operational by using SunGuide.
  - All devices that are malfunctioned shall be entered into MIMS. Reference the MIMS section for more details.
  - The standard operating procedures for system validations can be found in Appendix I.
- Call taking
  - Operators will take all external calls.
  - The standard operating procedures for proper call taking can be found in Appendix D.

6. Event Management

- As a part of the ICM Workforce Development training, specific details on FDOT Event Management can be found in Module 4- Advanced SunGuide workshop training. Operators are trained on use-case scenarios during the workshop covering all situations described within section 1- Event Management.
- **Creating an event (FDOT and CFX)**
- Follow these steps when creating an event with these specific event types. These events include but are not limited to the following event types:
  - Crash
  - Disabled Vehicle
  - Debris on roadway
  - Vehicle fire

  - Off-ramp backup
  - Police Activity
  - Emergency Vehicles
  - Road Work: Emergency or Scheduled
  - Flooding
  - Interagency Coordination
  - Other
- All event types are defined in the District 5 Standard Operating Guidelines.
- **Event with Blockage**
- Create event type in Event Manager. See Appendix J & Appendix K for more details.
  - Contact the respective road ranger for the area.
    - Goal- notify within 3 minutes
    - If the event is a police activity, DO NOT send a road ranger.
  - Create event as an unconfirmed, if no information is known or we do not have visual through CCTV.
  - Once located on camera, set the event active.
  - Inform Traffic Incident Management (TIM) Team.
  - Inform Arterial Team.
  - Enter details pertaining to lane blockage, direction, location.
  - Save and get suggested response plan to activate.
  - Before activating, QA/QC the response plan: DMS, Email groups, 511 messages.
    - Goal- activate RPG within 3 minutes of road blockage.
    - DMS activations need to meet the required distance.
      - Level 1- 10 miles of DMS
      - Level 2- 25 miles of DMS
      - Level 3- 50 miles of DMS and adjacent roadways.
      - For proper DMS Messages, see Appendix L
    - Email activation needs to be sent to respective group per region or roadway.
    - Publish to 511
    - Republish every 30 minutes while active.
  - Associate appropriate camera.
  - Enter additional details
    - First responders
    - Notified
    - On-scene
    - Departed
    - Weather conditions
    - Vehicles involved
    - Operator observed comments.

- Congestion needs to be included in all events, if applicable.

- Property Damage (i.e., guardrail, attenuator, fence, structures, poles, cabinets, etc.)
  - If yes, contact the respective Asset Maintenance Contractor.
  - Contact information can be found on the T-drive.
    - T:/Maintenance/Maintenance Contact List by County
  - If no, make appropriate comment.
- Injuries
  - If life-threatening Injuries occur, immediately contact Asset Maintenance for mobilization to assist with long-term MOT.
  - If fatal injuries occur, immediately contact Asset Maintenance.
  - Goal: notify asset maintenance within 15 minutes.
- Associate event- See Appendix M.
  - If this event is a secondary, associate to the primary event.
- Associate with IDS FHP CAD event.
  - Validate the FHP CAD event is not a duplicate.
    - If a new FHP CAD event populates within the IDS, verify it's not a duplicate but a secondary.
    - If it is a secondary, see Appendix D to associate event procedure.
  - Modify event throughout its duration
    - Include but not limited to lane blockage, location/offset, responders (notified, on-scene and departed time stamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
- Close and terminate "Response Plan" when roadway is clear.
- Update the lane blockage to appropriate shoulder.
- Close Event once all responders and involved vehicles have cleared.

- **Event with Shoulder Blockage**
  - Create event type in Event Manager.
  - Contact the respective road ranger for the area.
    - Goal- notify within 3 minutes
  - Create event as an unconfirmed if no information is known.
  - Locate on camera and make the event active.
  - Inform Traffic Incident Management (TIM) Team.
  - Enter details pertaining to lane blockage, direction, location.
  - Since this occurred on the shoulder, no DMS, email, or publication is not needed.
  - Associate appropriate camera.
  - Enter additional details
    - First responders
    - Notified
    - On-scene

- Departed
- Weather conditions
- Vehicles involved
- Operator observed comments.
- Congestion needs to be included in all events, if applicable.

- Property Damage (i.e. guardrail, attenuator, fence, structures, poles, cabinets, etc.)
  - If yes, contact the respective Asset Maintenance Contractor.
  - If no, make appropriate comment.
- Injuries
  - If life-threatening Injuries occur, immediately contact Asset Maintenance.
  - If fatal injuries occur, immediately contact Asset Maintenance.
  - Goal: notify asset maintenance within 15 minutes.
- Associate event-See Appendix M.
  - If this event is a secondary, associate to the primary event.
- Associate with IDS FHP CAD event.
  - Validate the FHP CAD event is not a duplicate.
  - If a new FHP CAD event populates within the IDS, verify its not a duplicate but a secondary.
  - If it is a secondary, see Appendix C to associate event procedure.
  - Modify event throughout its duration
    - Include but not limited to lane blockage, location/offset, responders (notified, on-scene and departed time stamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
- Close and terminate “Response Plan” when roadway is clear.
- Update the lane blockage to appropriate shoulder.
- Close Event once all responders and involved vehicles have cleared.

- **Congestion events**
  - If found as an IDS alarm, create the event through the TSS alert.
  - If found on camera, create event in Event Manager and include the appropriate notifying agent.
    - Add the head and tail of the event.
      - The head is the beginning of the event or where the congestion clears.
      - The tail is the location where the queue begins.
    - Once the head and tail are established, save, and get the response plan.
    - Please see Appendix L for the DMS message for congestion events.
  - Modify event throughout its duration
  - Close and terminate “Response Plan” when roadway is clear.
- **Pedestrian event**
  - Create event type in Event Manager
  - Enter additional details:
    - Location and direction

    - Notify the TIM Team
    - If TIM is not present, notify LEO.
    - Operator observed comments (i.e., male/female and details of ped).
  - Monitor on camera until support is present.
- **Abandon Vehicle event**
  - Create event type in Event Manager
  - Enter additional details.
    - Weather conditions
    - Vehicles type and color.
    - Location and direction.
    - Travel lane or shoulder blockage.
    - Operator observed comments.
    - Congestion needs to be included in all events, if applicable.
  - Each abandoned vehicle must have a pre-set.
  - Modify event throughout its duration.
  - Check the preset to verify if vehicle is still on scene.
    - This must be done every shift.
  - If no camera or preset is available. Ask a road ranger to verify it.
  - Provide comments daily for existing abandoned vehicles.
  - If the abandon vehicles are present for five days, notify the TIM team.
  - If abandon vehicle is in an unsafe place, the TIM team needs to be notified.
    - If the TIM team not present, notify law enforcement and make a comment in the event.
  - Terminate response plan and close event when the vehicle is gone.
- **Fog, Smoke, or Smog Event**
  - If fog, smoke, or smog is reported by road rangers, LEO, or by observing on CCTV, follow these steps:
  - Create event type in Event Manager.
  - Enter event details:
    - Location
    - Direction
    - Weather
  - Save information and generate response plan to activate
    - Activate DMS for all directions. Follow the DMS message matrix, see Appendix L.
    - Publish to FL511.
  - Notify the TIM team so they can inform executive leaders.
  - Activate a floodgate.
  - Add comment as needed.
  - Monitor the area until FHP clears the road.

- Terminate the response plan and close the event.

- **Wildfires or prescribed burn events**
  - When a prescribed burn or a wildfire impacts the roadway, follow these steps.
  - Create event type in Event Manager.
  - Enter event details:
    - Location
    - Direction
    - Weather
  - Save information and generate response plan to activate
    - Activate DMS for all directions. Follow the DMS message matrix, see Appendix L.
    - Publish to FL511.
  - Notify the TIM team so they can inform executive leaders.
  - Activate a floodgate.
  - Add comment as needed.
  - Monitor the area until FHP clears the road.
  - Terminate the response plan and close the event.
- **Wildlife event**
  - When a wildlife impacts the roadway, follow these steps.
  - Create event type in Event Manager.
  - Enter event details:
    - Location
    - Direction
    - Weather
  - Save information and generate response plan to activate
    - Activate DMS for all directions. Follow the DMS message matrix, see Appendix L.
    - Publish to FL511.
  - Notify the TIM team.
  - Notify FWC dispatch, located on the RTMC floor.
  - Add comment as needed.
  - Monitor the area until FHP clears the road.
  - Terminate the response plan and close the event.
- **Wrong Way Driver event (WWD)**
  - Please reference Appendix N for the Wrong Way Driver procedures.
- **Public Safety Announcement (PSA)**
  - Follow the procedures in Appendix O for details on how to handle PSAs.
- **Special Event (SE)**
  - Follow the procedures in Appendix P for details on how to handle Special Events.
- **Statewide FDLE Alerts**

- Follow the procedures in Appendix Q for details on how to handle Statewide FLDE Alerts.

- **Other**
  - Follow the procedures in Appendix J for details on how to handle "Other" events.

7. Regional Coordination

- Interagency Coordination
  - Incidents occurring along the arterial streets adjacent to a portion of the Interstate Highway System may impact the operations of the ramps or mainline. In turn, incidents occurring on the mainline or ramps may impact arterial operations. The ICM operators working on the freeway system and the ICM operators working on the arterial system shall share information for incidents that may impact the other's operations. The information sharing may lead to coordination of DMS messages on either or both the freeway and arterial DMS, adjustments to signal timing near ramps or for diversion routing, posting of traveler information on the 511 system: or in the future, changes to ramp meter timing, etc. Signal timing plan changes will be made by the local maintaining agency.
  - Likewise, when incidents occur on roads shared by multiple agencies, it is managements intent for operators to coordinate with neighboring agencies for interagency coordination. This will require activating DMS messages for major adjacent roadways to provide advance warning to motorists at critical decision-making points or major intersections. This will always occur during level 3 Events and may occur on Level 2 Events if requested.
  - For more information regarding the procedures with interagency coordination, see Appendix R.

8. Rapid Incident Scene Clearance (RISC)

- As a part of the ICM Workforce Development training, specific details can be found in Module 13-COIN & RISC Awareness
  - Initial Notification
    - Open a new SunGuide® Event if one is not already started. (Most RISC events may start as a crash event type before it is considered a RISC event.)
    - Note the time the incident was identified as a RISC event and by whom.
    - Obtain and document in the SunGuide® Event comments section as much information as possible from responders on scene (exact location, number and types of vehicles involved, load type and status, debris or spilled loads, and any infrastructure damage).
    - Contact RISC Vendor, (reference the *RISC Vendor Rotation* document to determine which vendor is next for activation in the designated zone) and document the time, who you spoke with and whether they accepted the activation within the comments section.
    - When you talk with the RISC Vendor tell them, "This is Orlando RTMC, and we have an incident that requires RISC activation." Give the RISC Vendor detailed information on what and where the incident is. Provide all available information about the scene so that the RISC Vendor can

determine what additional equipment they may need. Provide FHP with the name of the RISC Vendor and their ETA once known.

- Dispatch regular Maintenance Contractor be sure they know this is a RISC incident and document this within the SunGuide® event.
- Provide all available details to Maintenance Contractor.
- Once RISC activation is completed, make a phone call to the TIM Program Manager, or designee, as it is essential for the monitoring and managing of the event as it unfolds, and to assist, when necessary.
- When the RISC Vendor is reported as having arrived on scene, ask what equipment has arrived and who verified it. Document this within in the SunGuide® event's comments section.
- If additional equipment is requested, note in SunGuide® the time the Vendor was informed of the additional equipment request, who authorized its use in the recovery, and the time that the additional equipment was requested.
- Document in SunGuide® when the NTP (Notice to Proceed) is given.
- Document in SunGuide® who authorized activation and use of additional equipment.
- Document in SunGuide® the time and authorizing agency for any stoppages/re-starts and the reason.
- Document in SunGuide® when all lanes have been cleared (RISC all clear).
- Document in SunGuide® when the scene has been cleared of all crash-related debris and the vendor has left the scene.

- **RISC Recordkeeping and Response Time Requirements**
  - Utilizing SunGuide®, the RTMC will record all pertinent timestamps and point of contacts. In addition to SunGuide® documentation, a RISC log sheet should be completed. Once FHP has authorized the activation of RISC, the following timestamps will need to be recorded within the SunGuide® Event:
    - Activation Time
    - Responding RISC Vendor
    - Estimated Time of Arrival (ETA)
    - Arrival Times (1st wrecker, 2nd wrecker, support vehicle)
    - Notice to Proceed
    - Any stops or starts to the clock
    - RISC Clearance Time (all lanes open)
    - Vendor Clearance Time (vendor has removed all equipment and personnel from scene)
    - Scene Clearance Time (all responders have cleared from the scene)
  - Please note the times all lanes are opened (this may differ from the "Scene Clearance Time" in cases of emergency property damage repair). It is also important to note the source of all RISC times being provided.
- **RISC Cancellation**

- If FHP cancels a RISC activation, the RTMC should advise FHP that the vendor is expected to respond to the scene or an FHP designated staging area. FHP will release the vendor if not needed.
- The RTMC should immediately notify TIM Manager Sheryl Bradley or TIM Specialist on duty, the responding Roadway Maintenance Contractor of the request for cancellation.
- Any correspondence by the RTMC, including COIN and TIM emails should be documented just as with any other qualifying event.
- When a vendor is canceled the vendor shall be rotated to the bottom of the rotation list for the zone in which they were activated.

- **RISC Form**
  - The RISC form and additional RISC info can be found as Appendix S.

9. Central Office Incident Notification Event (COIN)

- **Executive notifications shall be made for incidents meeting the following criteria**:
  - Any limited access highway crash involving the death of five or more persons.
  - Any fatality in a FDOT work zone or fatality or serious injury to a FDOT employee or contractor performing work along the roadway.
  - Any limited access highway crash involving multiple vehicles where fog or smoke is involved.
  - Any limited access highway crash involving more than 10 vehicles in a chain reaction collision.
  - Any bus crashes (including school buses) with fatalities or injuries.
  - Police activity involving a shooting or investigation that closes a limited access highway for more than 1 hour. All lanes blocked including shoulders. Do not make notifications for a ramp being closed.
  - Any incident that causes a limited access highway to be closed for an estimated duration of more than 1 hour in one or both directions of travel. All lanes blocked, including shoulders. No notifications for a ramp closure.
  - All bridge failures or closures (not scheduled construction events).
  - Wildfire that closes a limited access highway. All lanes blocked including shoulder. We do not want notifications for a ramp being closed.
  - Any wrong way driver event that results in a crash.
- For the procedure in writing and handling a COIN incident can be found in Appendix T.

10. Management And Inventory Management (MIMS)

- As a part of the ICM Workforce Development training, specific details can be found in Module 11 – MIMS Insight.
- Ticket creation for devices
  - When a device fails, goes offline, or errors the operator, lead operator, or supervisor will create a MIMS ticket

- On the desktop locate the MIMS icon and double click it.
- Log in with your windows Username and Password.
- Click on Inventory.
- Select “Device” from the drop-down menu.
- Type the mile marker of the device you are looking for or the ID number of the device. Note: If the field is already populated, you can delete the text or click on the “X” in the top right corner of the search box.
- Once the mile marker is added, the results will narrow.
- After you select the device, select “add ticket.”
- Once you have selected “Add ticket,” Click on the drop-down and select D5-RTMC as the Submitting Group.
- Under the “Issue/Task Description” select the device issue (i.e., Detector failure).
- In the “Issue/Task Comment” section, type out what the problem is.
- Once this information has been entered, perform a final review, and then select the “Save” button to finalize the ticket.

- Network Outage
  - Click the “tasks” dropdown.
  - Click on “Trouble tickets.”
  - Click the “Add New Ticket.”

  - The submitting group will automatically be filled in.
  - Add the appropriate “Managing Group.”
  - Add an “Issue Description.”
  - Add an “Issue Comment.”
  - This usually includes what the operator sees within SunGuide.
    - Example: There is a network outage from mile marker “X” to mile marker “Y.”
  - All devices within the outage need to be included in the ticket by clicking on “Add Devices”

  - Select the inventory by click on the specific device and holding the control button to add multiple devices.
  - You will need to search for the device by name. Remember to continue to hold the control button so all devices can be added.
  - After creating the MIMS ticket, send an email to the FDOT ITS email group as a “SYS” describing the outage.
- For more information regarding procedure in navigating through MIMS, see Appendix I.

11. FDOT JIRA

- As a part of the ICM Workforce Development training, specific details can be found in Module 10 – ICAT Basics.

- Ticket creation
  - Go to https://fdotd5.atlassian.net/servicedesk/customer/portal/1
  - Sign in by clicking "log in" on top right corner.
  - Once logged in, you may choose from the following items:
    - Logins and Accounts
    - Network Support
    - New ITS Construction
    - PoC System
    - Report a System Issue
    - System Maintenance or Change
    - SunGuide Support
    - Server and Infrastructure
    - Signals
    - Workstation Support
    - Common Requests
      - Each topic is defined within the website for your information.

12. Integrated Corridor Action Tracker (ICAT)

- As a part of the ICM Workforce Development training, specific details can be found in Module 10-ICAT and Appendix U.

13. Performance Measure

- Freeway, Expressway, and Express Lane performance measures have been developed in District 5 to coincide with statewide initiatives.
- The Freeway, Expressway, and Express Lanes Performance Measure Reports are delivered to District 5 in the following reports:
  - Daily Report
  - Quarterly Report
  - Annual Report
- Please note, the Arterial Performance Measure Reports are done weekly and monthly in addition to daily, quarterly, and annually.
- The standard operating procedures for the performance measure reports for freeway, expressway, and express lanes are found in Appendix V.

14. Queue Warning System

- Each year, there are more than 100,000 rear end collisions in Florida. In fact, more than one in four auto crashes in Florida involves a rear end collision. Unfortunately, while these crashes are among the most common types of crashes, they are also among the most dangerous.
- According to a report from the National Highway Transportation Safety Administration, rear-end crashes are the most frequently occurring type of collision. About 29% of all car crashes are rear-end collisions. These crashes result in substantial number of injuries and fatalities each year.

- As a result, our team has developed a Queue Warning System (QWS) that will provide motorists with advance warning through automation while utilizing Microwave Vehicle Detection Systems (MVDS) among other detector types.
- For more specific details, see Appendix W.

15. Express Lanes Operations

- In February 2022, District Five opened the I-4 Express Lanes facility. This required our staff to develop the Express Lanes Operational Procedure known as ELOP.
- For step-by-step procedures pertaining to the ELOP, see Appendix X for details.

16. National Weather Service Warning System

- When the National Weather Service sends an advisory email of current or changed weather conditions, DMS advisory messages will update automatically using pre-approved messages per advisory, per county. The priority level for these messages are low so messages with higher priority, such as events with lane blockage, will override the advisory message.
- For more information regarding the procedures with interagency coordination, see Appendix Y.

17. Drone Operation

- The Metric team utilizes drone operations for the following purposes:
    - Bottleneck Analysis
    - Signal Retiming
    - Alternative Intersection Design
    - Alterative to CCTV
    - Locating Congestion
    - Freeway & Arterial Traffic Incident Management
    - Event Management
    - ITS Device Verification
    - Hurricane Evacuation
    - Construction Engineering & Inspection (CEI)
        - Structures/Bridges/Roadway
    - Recovery Phase in Emergency Management
- For more information regarding the procedures with Drone Operations, see Appendix Z.

18. Emergency Management

The RTMC Emergency Operations Plan is designed to provide instruction to RTMC staff during declared emergencies. Declared emergencies can be any of the following, but are not limited to:

- Severe weather (hurricanes, tornadoes, flooding, etc.)
- Damage/Closure of building and facilities
- Evacuation due to eminent danger within the building

The RTMC operates devices which can be useful to convey information, but also gather information during emergencies. Each Operator will follow the chain of command during an emergency by reporting to their Lead Operator and Supervisor jointly. Any calls received or sent shall be made by those with knowledge and authority to make or receive such calls, usually the RTMC Manager, but also the Supervisor when the Manager is not available. If you are directed to make a call, make sure you have the proper information. This is intended so that no information is omitted or misrepresented.

The RTMC may receive information and requests from many entities during an emergency. Any such requests must adhere to FDOT policy. The key to responding effectively is consistency, requests which would violate FDOT policy but warrant merit, as well as requests you are unsure of, should be forwarded to the RTMC Manager. It is vital to capture names, agency information and contact numbers in this case.

During an Emergency Hurricane Situation, the RTMC will have the following plans in place to easily shift operational focus to the state of emergency. Shown below are the three plans prepared for pre, during, and post hurricane activations.

For more information regarding pre, during, and post emergency activations, see Appendix AA, AB, and AC. To view the RTMC Building Area Allocation please reference Appendix AD.

19. Emergency Shoulder Use (ESU)

ESU is Florida's innovative strategy to temporarily increase traffic flow and capacity during major hurricane evacuations using existing paved shoulders. First developed in 2017 and covering key corridors within the state, ESU replaced the former one-way plans, also known as contraflow and lane reversal.

When ESU is operational, all motorists except large trucks, buses, and trailers may use the shoulder as a travel lane. Motorists may enter and exit the shoulder at designated locations where law enforcement officers and posted signage indicate. ESU uses the left or inside shoulder on six-lane roadways, while the right or outside shoulder is used on four-lane roadways.

When driving in the shoulder — which are about two feet narrower than standard lanes — motorists need to slow down, navigate carefully, and watch for gutters, inlets, and places where the shoulder narrows for obstacles such as bridges, overpasses, guardrails, and barrier walls. Motorists in the shoulder will also notice a continuous noise due to the presence of rumble strips.
ESU was first implemented during Hurricane Irma in September 2017. Evacuees were able to drive on the inside shoulder of Interstate 75 northbound from Wildwood to Georgia and on Interstate 4 northbound from Tampa to Kissimmee.

ESU Routes for the Central/Coastal Team is as follows:

- I-4 - Eastbound from US 41 in Tampa (Hillsborough) to SR 417 in Celebration (Osceola)
- I-95 - Northbound from SR 706 in Jupiter (Palm Beach) to south of Interstate 295 in Jacksonville (Duval)

ESU Benefits:

- ESU provides additional capacity and improves traffic flow.
- ESU may be used all day and night, while one-way operations are restricted to daytime only.

- Far fewer resources such as cones, signs, barriers, law enforcement officers, and FDOT personnel are required to implement ESU.
- Shorter notice is required for implementation and deactivation of ESU.
- Flexibility exists to implement ESU by corridor or section as needed.
- ESU does not impact opposing traffic flow, such as first responders travelling toward an incident.
- Arterial and local roadways are not disrupted during ESU operations.

For more information regarding the ESU Plans for I-4 and I-95, see Appendix AE (I-4) and Appendix AF (I-95).

20. QA/QC Operations

To improve operator's performance and to standardize operations, the ICM team has implemented a QA/QC position to help mentor and train operators in real-time. A QA/QC operator montiors active events to validate targets are being reach while also providing guidance to educate operators.

Most common performance measures recorded are identified below:

- Event Confirmation
- Time to publish to FL511.com
- Time to notify via email
- Time to Post to DMS
- Time to Dispatch Road Ranger
- Time to Unpublish Event

For more information regarding the QA/QC working instructions, see Appendix AG

Volume III: Arterial Operations

The primary function of the ICM Program can be described by a decision cycle known as the OODA (Observation, Orientation, Decision, Action) Loop. This originally was developed as an Air Force strategy, with the idea being that the key to victory was to be able to make decisions more quickly than one's opponent. The concept broke down the decision cycle into four interrelated and overlapping processes – ***Observation, Orientation, Decision, and Action***.

In applying this concept to the ICM Program:

- **Observation:** The operators observe arterial conditions by reviewing travel time plots, system alarm reports, and other data streams.
- **Orientation:** The operators compare current observed conditions against their knowledge of historic conditions to understand what is occurring and what their options are. For example, if the observations indicate that congestion is occurring along a section of an arterial, the operator determines if this is recurring or non-recurring, and if non-recurring, decides what is the cause and will identify the options to mitigate it.
- **Decision:** Based on the operator's identification of the current situation and the various options for mitigation, a selection of a strategy is made. This might be contacting the local maintaining agency to implement a minor timing change or to generate a repair request.
- **Action:** The system operator implements the action identified in the decision process. The more quickly an operator can go through this process, and respond to a situation, the less the impact to the transportation network.

There are multiple maintaining agencies involved within the ICM-AAM corridors; operational issues can arise in Seminole County, Orange County, Osceola County, Volusia County, Brevard County, City of Orlando, City of Winter Park, and City of Maitland.

The tasks of the ICM-AAM Staff can be described in two broad categories: 1. Operation, and 2. Reporting. Tasks details along with standard operating procedure are described below.

1. Operation

Operational tasks are described in the following.

1.1 Normal Traffic Conditions

Daily, the operator will monitor for traffic incidents on the subject corridors through real-time maps and video or text feeds including those produced through the RTMC, BlueTOAD, BlueMAC, 511, FHP, local maintaining agencies, and local media outlets. Concurrently, the operator will review the alarm logs of the traffic management system(s) for the corridors being monitored, if available, to determine if there are any issues that may create a problem for the future (for example, stuck pedestrian push buttons, constant calls on a vehicle detector, loss of communications, excessive preemption calls, etc.); in this scenario, no significant issues are identified.

- Simultaneous to the work being done by the Operator, ICM Corridor Managers are also reviewing the corridors. Regularly, the Corridor Manager performs field visits, prepares reports and documentation and/or develops recommendations for corridor improvements and enhancements, and/or corresponds with citizens about issues they may have raised about the corridor operations.
- Monthly, the ICM Analyst will also review the BlueMAC and BlueTOAD-based arterial travel time reports, origin-destination data, and traffic volume data for all ICM corridors.
- Quarterly, each corridor will be observed in the field, comparing actual operations with their intended, approved operation, using such tools as Tru-Traffic. Intersection hardware will be physically reviewed, looking for malfunctioning or damaged signal and control hardware, worn signs or markings, or other issues that might affect traffic.

1.2 Unanticipated Bottleneck due to Road Maintenance

During the review of the weekly travel time data, the ICM Corridor Manager identifies a significant and recurring increase in travel time in one direction on one link of the corridor.

- If video images of the corridor are available, the Corridor Manager will contact the ICM Operator to review the video to determine if a cause is visible. In this case, a work zone/lane closure is in place, creating a queue upstream from the work zone site. The Corridor Manager will then review the existing signal timing patterns to determine if a temporary pattern change would be feasible. In this scenario, the review indicates that a split change could be implemented, resulting in the Corridor Manager contacting the local maintaining agency with a request for them to implement the temporary split change.
- The Operator (and those on subsequent shifts) will continue to monitor the work zone, to determine if the temporary split change was effective in improving traffic flow. If not, a decision to make further adjustment may be made. The Operator will advise with the Corridor Manager and subsequently the local maintaining agency should the work zone's presence continue into the next scheduled timing pattern or if the lane closure has been eliminated.

1.3 Traffic Demand Change due to New Development

The ICM Corridor Manager reviews the weekly analysis of travel time data for a corridor and compares that to the historic values; a significant increase in travel time is identified on one link of the corridor. In this scenario, video images are not available.

- The Corridor Manger reviews the alarm log from the corridor's traffic management system; no indications of failed detectors or other local intersection issues are identified. The Corridor manger adds this to a list of sites for field review, to occur later in the week. The Corridor Manager visits the site and determines that a new convenience store has opened, and traffic demands are not being accommodated by the traffic signal. The corridor manager coordinates a follow-up evaluation and/or retiming effort.

1.4 Major Freeway Incident Diverting Traffic to the Corridor

A gasoline tanker crash and resulting fire has destroyed a freeway overpass; a detour that could last three months will be routed along an arterial corridor. The ICM Operator will be notified by freeway operations staff that the detour will be necessary; the Operator contacts the ICM Manager, who then becomes the lead for the development and implementation of timing patterns designed to accommodate the additional traffic demand. The ICM Manager will coordinate with the local Maintaining Agency for their implementation.

- Diversion routes have been developed as part of the AAM project to be implemented by the ICM Manager when appropriate.

1.5 Detector Failure

The ICM Operator reviews the weekly analysis of travel time data for a corridor and compares that to the historic values; a significant increase in travel time is identified on one link of the corridor. In this scenario, video images are not available.

- The Operator reviews the alarm log from the traffic management system and determines that a side street pedestrian push button is providing a constant call. The Operator advises the local maintaining agency of the malfunction with a request for maintenance.

1.6 Citizen Complaint

A citizen complaint about traffic congestion is received by the District. As it is on one of the system corridors, it is forwarded by District staff to the ICM Corridor Manager for review. The Corridor Manager uses the diagnostic tools (travel time monitoring, critical alarm logs, video monitoring, etc., as available) to determine if a degradation of operations has occurred. If so, they then add this location to a list of sites for field review. The Corridor Manager visits the site and determines that the intersection now has traffic demands that exceed capacity. The Corridor Manager coordinates a follow-up evaluation and/or retiming effort to determine if any countermeasures can be implemented, then works with the Maintaining Agency or Department staff to plan the implementation of the countermeasures selected. Finally, the Corridor Manager follows up with the citizen to advise them of the outcome.

Operators should refer to the Corridor Smart Books for specific details related to each of the managed corridors. Corridor Smart Books include detailed specifics for each intersection along ICM corridors. Details include but-not-limited-to Communication status, CCTV locations, BlueTOAD locations, traffic signal head types, intersection geometry, etc. A step by step procedure of citizen complaints resolution is described below.

1.6.1 Resolution of Citizen Stakeholder Complaints

As defined in the Concept of Operations for the Integrated Corridor Management - Active Arterial Management (ICM-AAM), the objective is "To ensure that critical Department arterial corridors are being operated at a high level of efficiency and effectiveness by establishing baseline conditions for each corridor, identifying any deficiencies, monitoring the corridor on a regular basis to identify any degradation of the corridor requiring corrective action, and then initiating such corrective action."

One opportunity to address operational needs within the ICM-AAM is to manage citizen and stakeholder complaints. This document serves as the Standard Operating Procedures (SOPs) for the resolution of citizen and stakeholder complaints. It will be updated, as needed, to reflect current procedures. It is the intent that these guidelines will be referenced by the ICM-AAM corridor managers.

ICM-AAM corridor managers are signal timing specialists that are experienced in the field of arterial traffic operations and are extremely familiar with the traffic operations along the program corridors. The role of the ICM-AAM corridor manager is to identify operational concerns that are affecting traffic flow and to initiate the implementation of strategies to eliminate or mitigate those concerns.

1.6.2 Procedure

Citizen and stakeholder complaints are generally forwarded from District staff to the ICM-AAM manager for review and distribution to the corridor manager. The following procedure has been established to assure thorough and complete attention is given to every complaint/issue received:

- Step 1: The initial complaint is received
  - Most of the traffic complaint issues are received by the ICM-AAM manager and corridor managers via email. The corridor manager will read through the email and print the entire "email chain" to assemble as much information as possible.

- Step 2: Contact the citizen/stakeholder
  - The corridor manager will contact the citizen/stakeholder as soon as possible, normally within two business days of receipt; the manager contacts the citizen directly via telephone using the contact information provided in the original email and will ask the following questions to be logged in the Citizen Complaint Form:
    - What was the time of day and date when the issue occurred?
    - What was the direction of travel that experienced the issue?

- What was the duration of the issue? (i.e. How long has this issue been occurring? Did the issue just recently begin?)

The corridor manager will use the information gathered from the citizen, in combination with diagnostic tools (travel time monitoring, critical alarm logs, video monitoring, etc., as available) to determine if a degradation of operations has occurred. The corridor manager will take one of two actions on the issue:

1.6.3 Closure

If the issue is to be automatically closed, the corridor manager will thank the citizen for bringing the issue to their attention and will advise that the optimal operations are constrained (due to capacity, infrastructure, etc.) and therefore a better solution is not available at that time.

1.6.4 Further Investigation

If the issue is to be further investigated, the corridor manager will thank the citizen for bringing the issue to their attention and will advise that they will respond back to the citizen with an outcome in 2-3 weeks, after their analysis.

- Step 1: Logging information into Integrated Corridor Action Tracker (ICAT)
  - Once a complaint has been received and the issue has been validated, the complaint should be entered into an ICAT ticket. The Issue Type should be set to Complaint. The Citizen Complaint Form should be attached.

- Step 2: Assigning observation review and follow up
  - Once the corridor manager has determined that further investigation is required, an ICAT ticket with an Opportunities Issue Type should be created.

- Step 3: Escalation
  - The corridor manager investigates the issue in the field. If the corridor manager determines that a modification could adjust the operations to improve or resolve the issue, the next step will be the implementation of the solution, which varies according to the maintaining agency. Examples of possible modifications include signal timing pattern adjustments, phase changes, split changes, detection and infrastructure modifications.
  - Below are escalation procedures per maintaining agency:
    - *Orange County:* If Orange County is the maintaining agency, the corridor manager will contact the County to discuss the recommended change that the County could implement. Orange County will implement any changes in TACTICS at their TMC.

- ❖ *City of Orlando:* If City of Orlando is the maintaining agency, the corridor manager will contact the City to discuss the recommended change that the City could implement. City of Orlando will implement any changes in ATMS at their TMC.
- ❖ *Seminole County:* If Seminole County is the maintaining agency, the corridor manager will contact the County to discuss the recommended change that the County could implement. The signal timing engineer will implement any changes in ATMS at the RTMC.

- Step 4: Issue Closure
  - To close out an issue, the corridor manager must perform three tasks:
    - Citizen contact - At this point, the issue has been resolved, if possible, and the corridor manager will contact the citizen via telephone to advise them of the outcome.
    - Close-out email - The corridor manager will send an email to the ICM-AAM manager to summarize the actions taken to resolve the citizen or stakeholder complaint.
    - Update/complete the ICAT ticket for the assigned task - the corridor manager will add a comment to the ICAT ticket to show all actions are complete. The traffic engineer will close out the ticket.

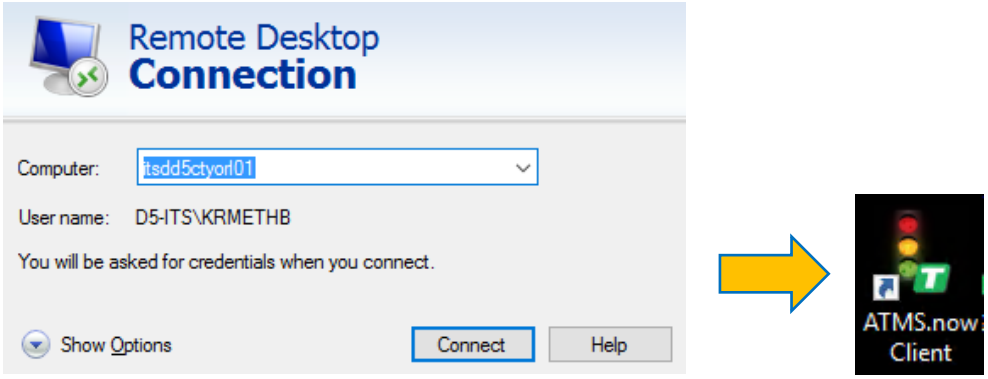
2. Reporting

ICM-AAM staff verify ITS devices, analyze traffic data, record the findings and report it daily, weekly, monthly and quarterly. The details of the reporting are described below.

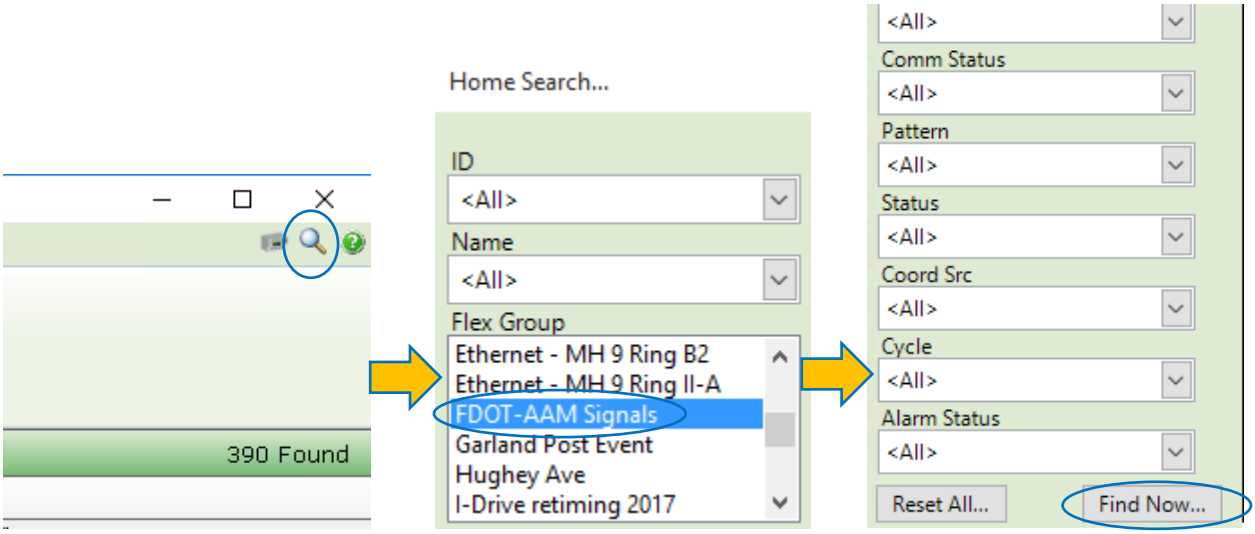
2.1 Morning and Afternoon ICM-AAM Communications Reports

City of Orlando Daily Communications Reports

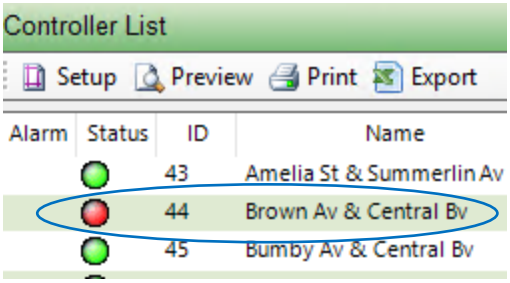
- The City of Orlando ATMS program is accessed by logging into 'itsdd5ctyorl01' with the Remote Desktop Connection application. Use your normal computer login for the remote desktop. Open the ATMS.now shortcut and Login with **Username = rtmc and Password = rtmc.** If the shortcut is not visible, it needs to be added by an administrator.



- Click the Search button (magnifying glass) in the top right corner of ATMS, choose the 'FDOT-AAM Signals' flex group, then click 'Find Now' to filter out the non-FDOT/AAM signals.



- Scroll through the list of signals and look for red circles in the Status column that indicate a signal has a communications failure. Signals with communications failure should be logged in the 'Com Log' sheet of the 'Orlando ATMS Report' excel workbook: R:\ICM-Arterials\City of Orlando\Orlando ATMS Report.xlsx. For each signal that is currently offline, a "1" should be placed in the cell that is in the row of the signal that is offline and the column corresponding to the current day and time of day. When completed, the Check Sum (top row) should be equal to the total number of offline signals.



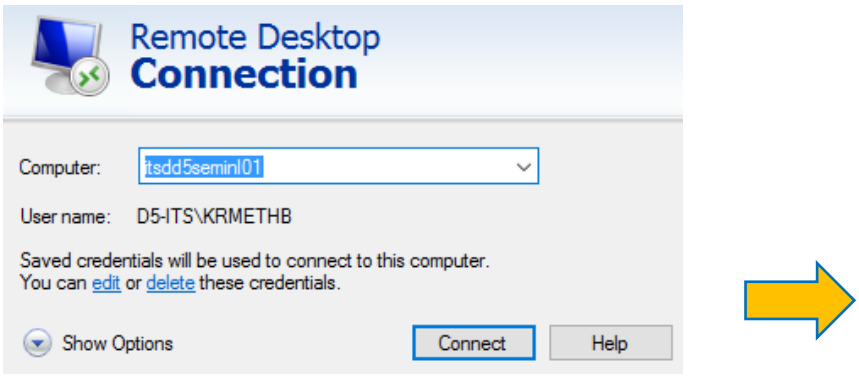
Signal ID	Intersection	Sun 12/10/17 PM	Mon 12/11/17 AM
42	Amelia St & Mills Av		
44	Brown Av & Central Bv		1
48	Bumby Av & Robinson St		

- City of Orlando does not receive daily communications reports. The log needs to be kept up to date, but no daily reports need to be PDFed.

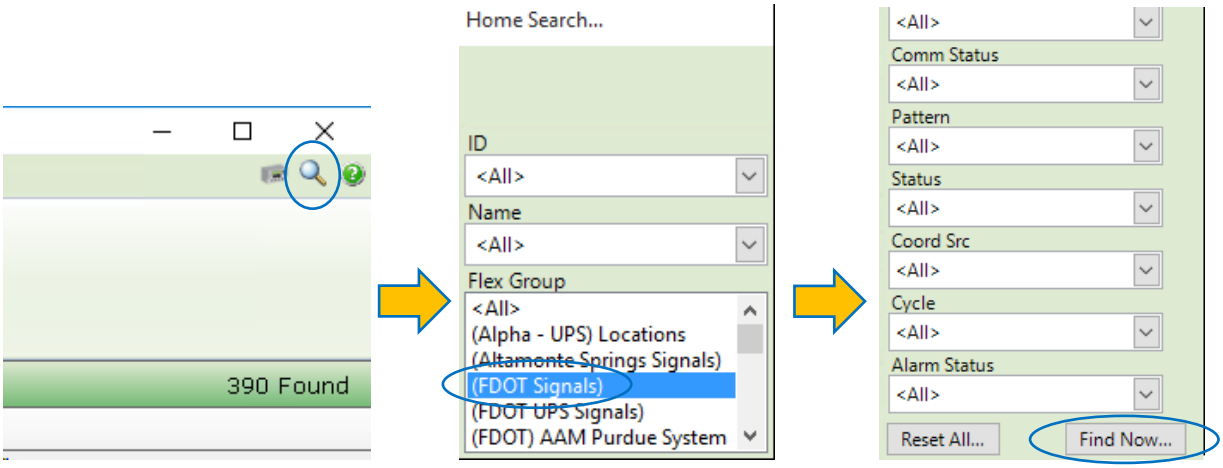
- Sign out of the remote desktop when finished.

Seminole/Brevard County Daily Communications Reports

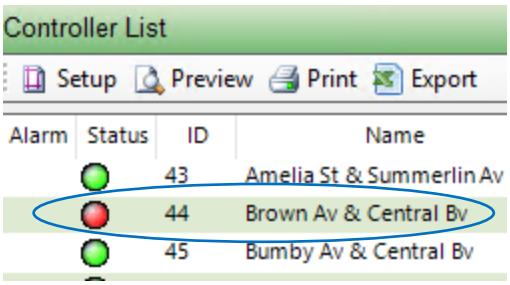
- The Seminole County ATMS program is accessed by logging into 'itstd5seminl03' with the Remote Desktop Connection application. Use your normal computer login for the remote desktop. Open the ATMSStart shortcut and Login with Username = AGI and Password = AGI4AAM. If the shortcut is not visible, it needs to be added by an administrator.



- Click the Search button (magnifying glass) in the top right corner of ATMS, choose the '(FDOT Signals)' flex group, then click 'Find Now' to filter out the non-FDOT/AAM signals.



- Scroll through the list of signals and look for red circles in the Status column that indicate a signal has a communications failure. Signals with communications failure should be logged in the 'Com Log' sheet of the 'Seminole ATMS Report' excel workbook: R:\ICM-Arterials\Seminole County\Seminole ATMS Report.xlsx. For each signal that is currently offline, a "1" should be placed in the cell that is in the row of the signal that is offline and the column corresponding to the current day and time of day. When completed, the Check Sum (top row) should be equal to the total number of offline signals.



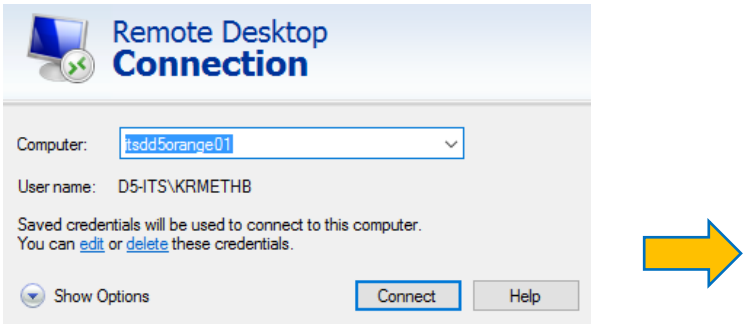
Signal ID	Intersection	Sun 12/10/17 PM	Mon 12/11/17 AM
42	Amelia St & Mills Av		
44	Brown Av & Central Bv		1
48	Bumby Av & Robinson St		

- The daily report ('Daily Com Report' worksheet) is automatically updated based on the information in the 'Com Log' worksheet and should be printed or saved to PDF to the 'Report PDFs_Daily' folder: R:\ICM-Arterials\Seminole County\Report PDFs_Daily with the format of 'Seminole ATMS Report Daily <date> <AM/PM>' (ex: Seminole ATMS Report Daily 12-11-17 PM).

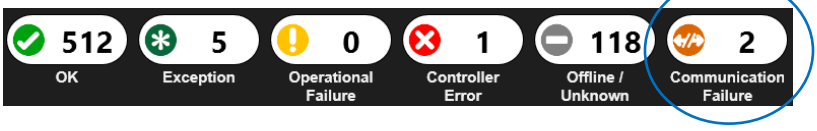
- Sign out of the remote desktop when finished.

Orange County Daily Communications Reports (TACTICS)

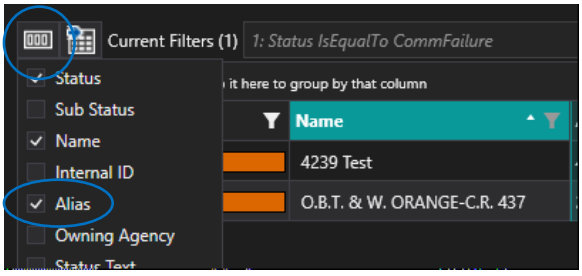
- The Orange County TACTICS program is accessed by logging into 'itsdd5orange01' or 'itsdd5orange02' with the Remote Desktop Connection application and opening the TACTICS Central program (Username = fdot and Password = tacticsread)



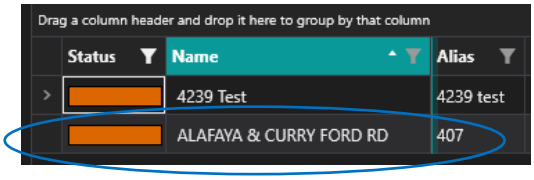
- Click the 'Communication Failure' button at the top to show the traffic signals that have communication failure.



- Click the 'Choose Columns' button and check 'Alias' box to show the Alias (Signal ID) for each traffic signal.



- The communications status of FDOT and ICM-AAM signals in Orange County's TACTICS should be logged in the 'Com Log' sheet of the 'Orange TACTICS Report' excel workbook. For each signal that is currently offline (ignore any "Test" connections), a "1" should be placed in the cell that is in the row of the signal that is offline and the column corresponding to the current day and time of day. When completed, the Check Sum (top row) should be equal to the total number of offline signals.



Signal ID	Intersection	Sun 12/10/17 PM	Mon 12/11/17 AM
406	APOPKA VNLD & WESTMINSTER ABBY		
407	ALAFAYA & CURRY FORD RD		1
408	DR PHILLIPS & S/W MIDDLE SCH		

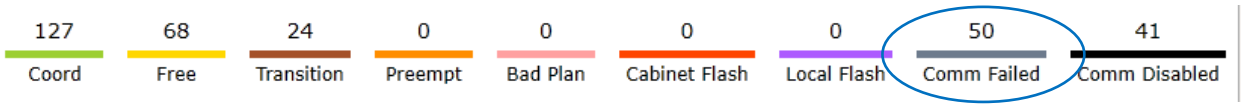
- The daily report ('Daily Com Report' worksheet) is automatically updated based on the information in the 'Com Log' worksheet and should be printed or saved to PDF to the 'Report PDFs Daily' folder: R:\ICM-Arterials\Orange County\Report PDFs Daily with the format of 'Orange TACTICS Report Daily <date> <AM/PM>' (ex: Orange TACTICS Report Daily 12-8-17 PM).

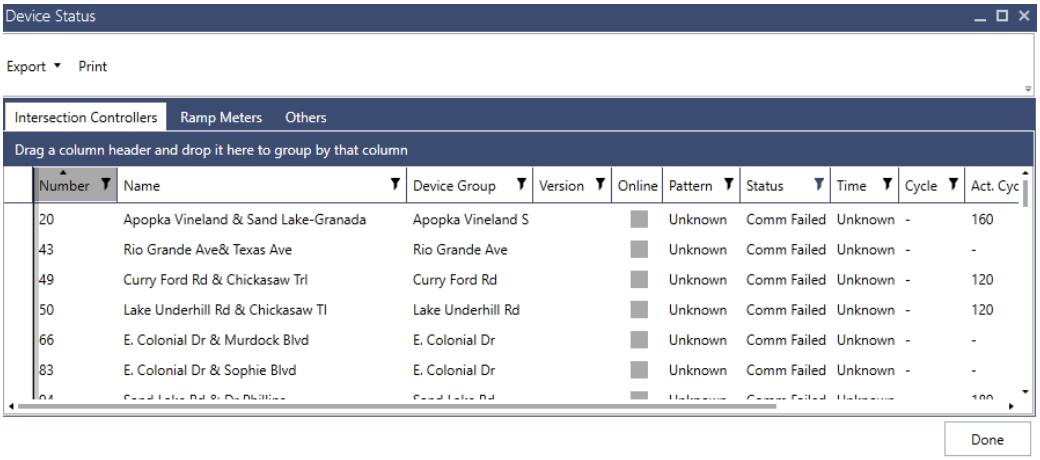
- Sign out of the remote desktop when finished.

Orange County Daily Communications Reports (MaxView)

- Daily alarm reports for "Intelight" Controllers are viewed and downloaded from the Orange County MaxView via Internet Explorer and can accessed by logging into: http://ocmaxview/maxview/

- Click the 'Comm Failed" button at the bottom to show the traffic signals that have communication failure.



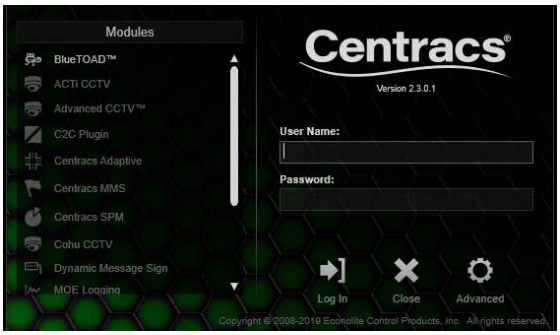


- The communications status of FDOT and ICM-AAM signals in Orange County's MaxView should be logged in the 'Com Log' sheet of the 'Orange County Report' excel workbook. For each signal that is currently offline, a "1" should be placed in the cell that is in the row of the signal that is offline and the column corresponding to the current day and time of day.

- The daily report ('Daily Com Report' worksheet) is automatically updated based on the information in the 'Com Log' worksheet. Please note that the report combines both TACTICS and MaxView daily communications log.

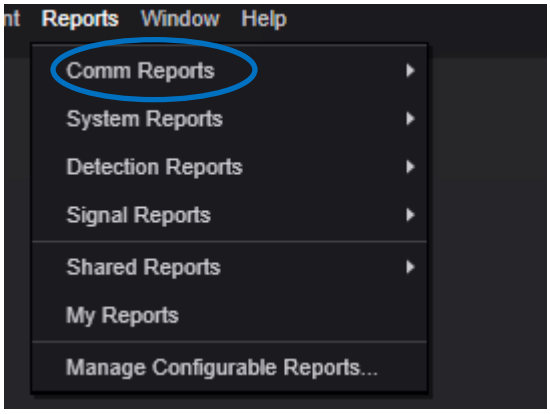
Osceola/Volusia County Daily Communications Reports (MaxView)

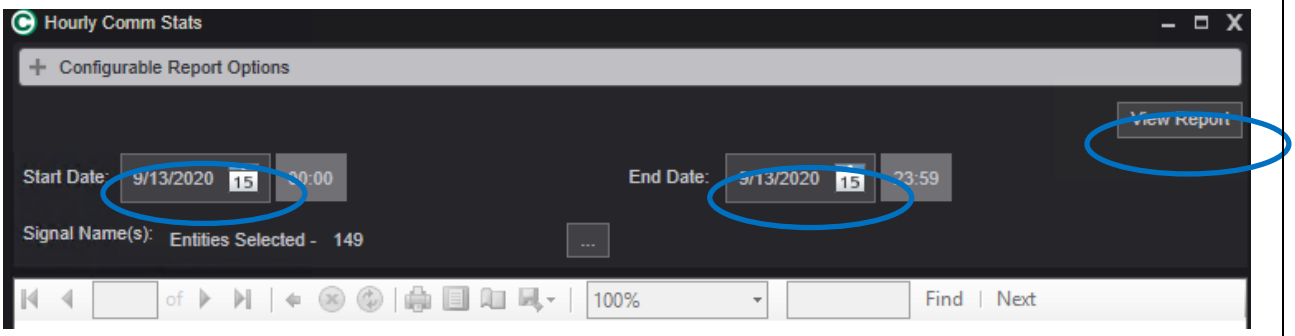
- Daily alarm reports are downloaded from Osceola County "Centracs", accessed by logging into 'itsdd5Osceola04' (or 05 or 06) with the Remote Desktop Connection application. Use your normal computer login for the remote desktop. Open the "Centracs" shortcut and Login with the Username assigned to you by an administrator.



- Click the 'reports' in the display menu

- Click "Comm Reports" →" Hourly Comm Stats"





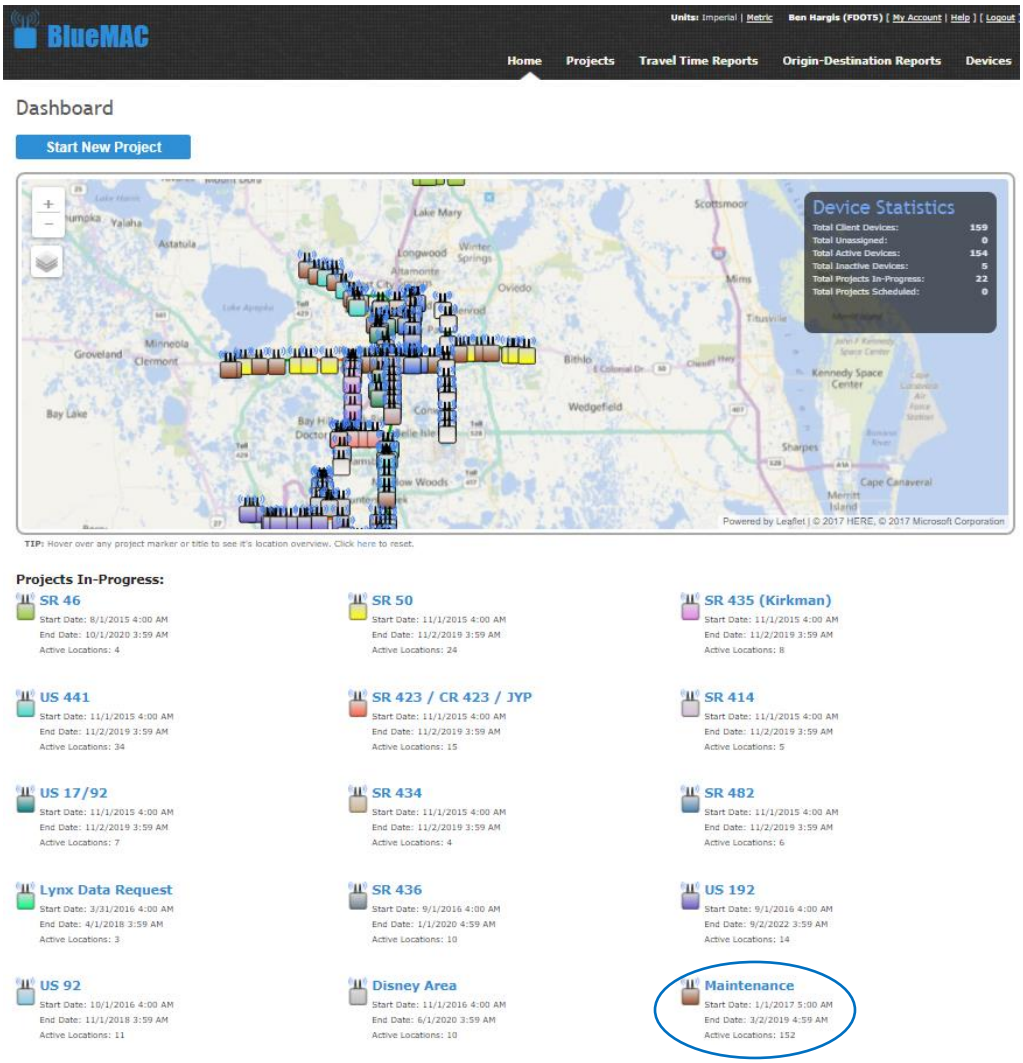
- Export a PDF version of the Report to R:\ICM-Arterials\Osceola\Comm

- The communications status of FDOT and ICM-AAM signals in Osceola County's Centracs should be logged in the 'Com Log' sheet of the 'Osceola Report' excel workbook. For each signal that is currently offline, a "1" should be placed in the cell that is in the row of the signal that is offline and the column corresponding to the current day and time of day.

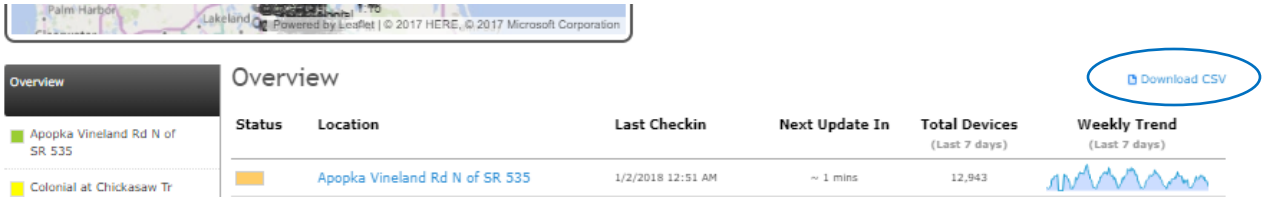
- The daily report ('Daily Com Report' worksheet) is automatically updated based on the information in the 'Com Log' worksheet.

BlueMAC Daily Communications Reports

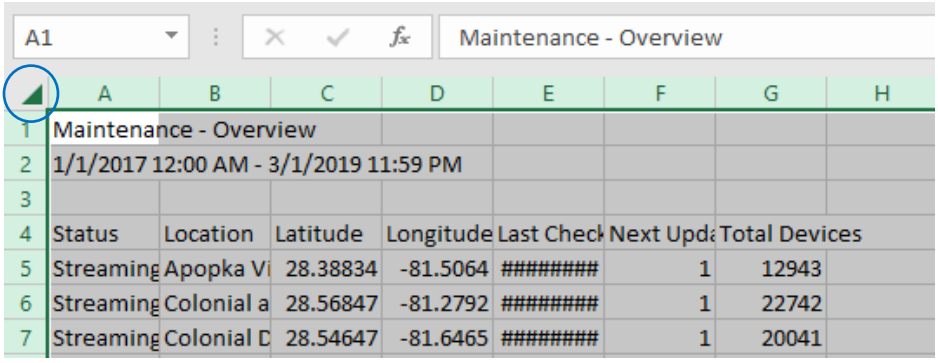
- The BlueMAC website can be accessed at http://d5bluemac/. Each individual user has their own login information (created by an administrator). The communications status of BlueMAC devices can be viewed by selecting 'Maintenance' on the Dashboard screen.



- Select 'Download CSV' to download the CSV file containing the last check-in information for BlueMAC devices.



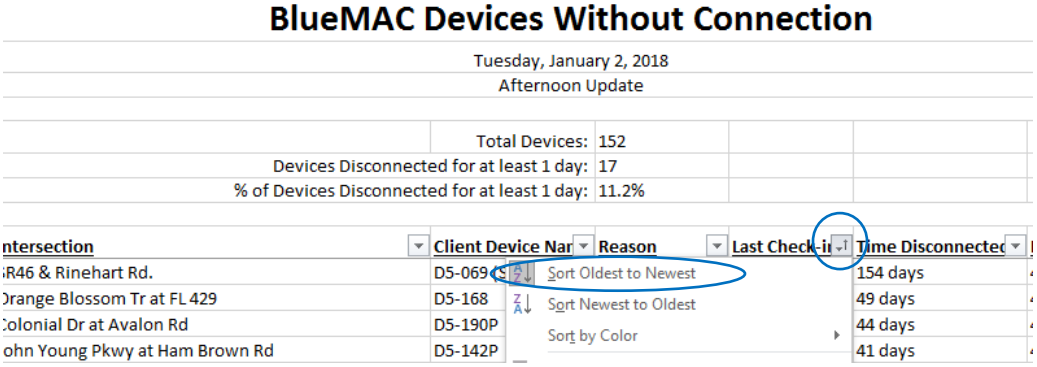
- Open the downloaded file (named "Maintenance – Overview.csv"), select all data by clicking the arrow adjacent to the 'A' Column and "1" Row, and copy.



	A	B	C	D	E	F	G	H
1	Maintenance - Overview							
2	1/1/2017 12:00 AM - 3/1/2019 11:59 PM							
3								
4	Status	Location	Latitude	Longitude	Last Check	Next Upda	Total Devices	
5	Streaming	Apopka Vi	28.38834	-81.5064	########	1	12943	
6	Streaming	Colonial a	28.56847	-81.2792	########	1	22742	
7	Streaming	Colonial D	28.54647	-81.6465	########	1	20041	

- Go to the 'Data Paste' worksheet tab in the 'BlueMAC Report' excel workbook, select all data, and paste.

- Go to the 'Daily Report' worksheet tab where the 'Last Check-in' and 'Time Disconnected' columns are automatically updated based on the pasted data. Select the filter arrow in the 'Last Check-in' cell and Sort Oldest to Newest to get disconnected devices to appear in order of longest to shortest time disconnected.



BlueMAC Devices Without Connection

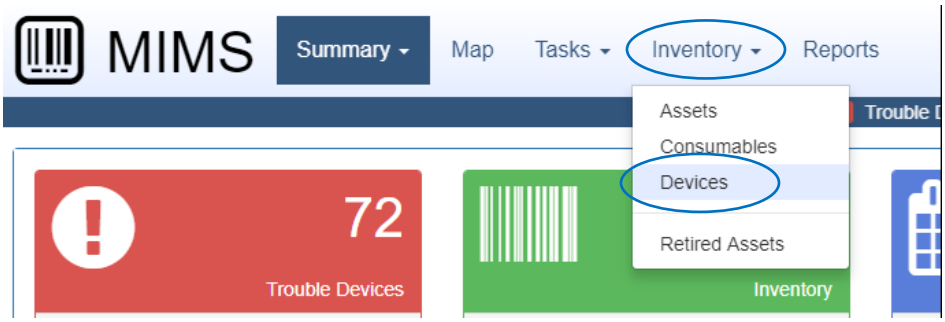
Tuesday, January 2, 2018
Afternoon Update

Total Devices:	152
Devices Disconnected for at least 1 day:	17
% of Devices Disconnected for at least 1 day:	11.2%

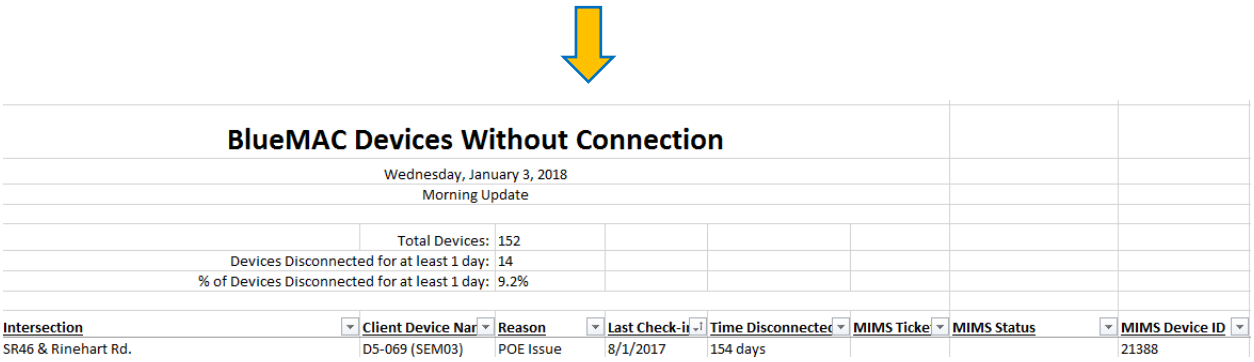
ntersection	Client Device Nar	Reason	Last Check-in	Time Disconnected
R46 & Rinehart Rd.	D5-069			154 days
Orange Blossom Tr at FL 429	D5-168			49 days
Colonial Dr at Avalon Rd	D5-190P			44 days
ohn Young Pkwy at Ham Brown Rd	D5-142P			41 days

Sort Oldest to Newest
Sort Newest to Oldest
Sort by Color

- Each device that has been offline for 1 day or more (indicated in the 'Time Disconnected' column) needs to have a MIMS ticket created for it. To create a MIMS ticket, first open http://d5mims:8080/#/dashboard in a browser and login with the same Username/Password that you login to your PC. Click the 'Inventory' drop-down and select 'Devices'.



- Locate the disconnected device by entering the MIMS Device ID (located in the 'MIMS Device ID' column of the BlueMAC Report spreadsheet) into the ID filter. Click on the device in MIMS and click 'Add Ticket' to open the Add Trouble Ticket dialog box.

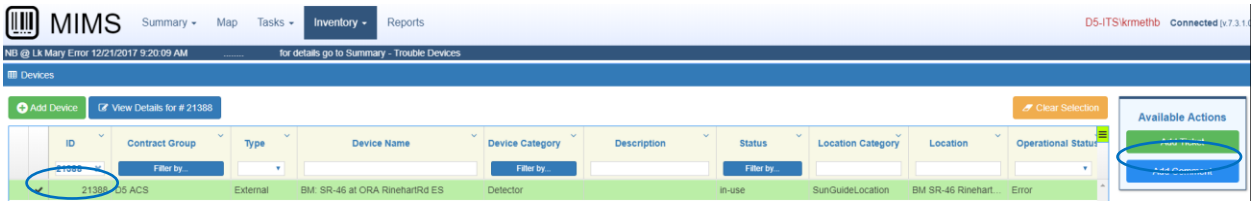


BlueMAC Devices Without Connection

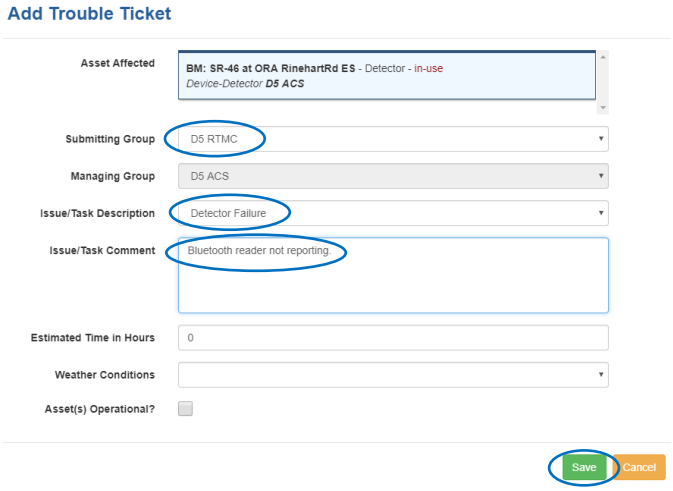
Wednesday, January 3, 2018
Morning Update

Total Devices:	152
Devices Disconnected for at least 1 day:	14
% of Devices Disconnected for at least 1 day:	9.2%

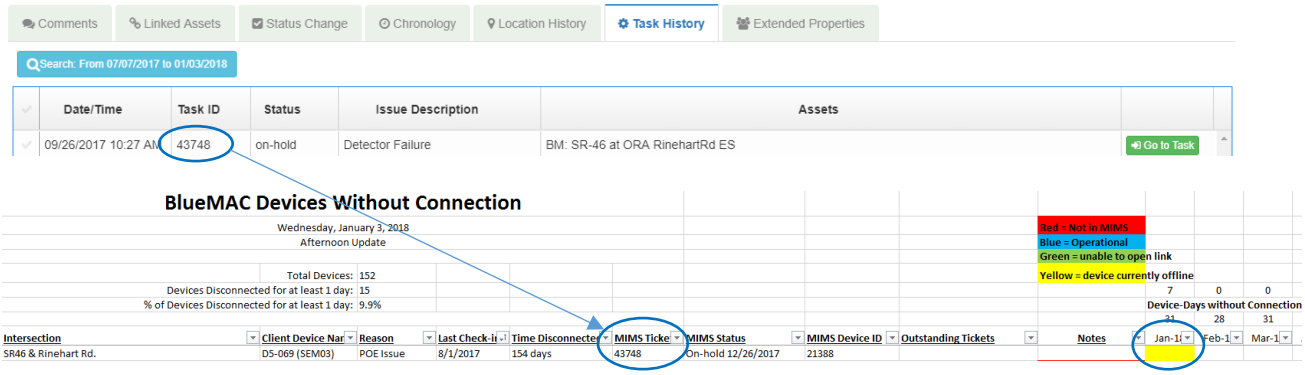
Intersection	Client Device Nar	Reason	Last Check-i	Time Disconnected	MIMS Ticke	MIMS Status	MIMS Device ID
SR46 & Rinehart Rd.	D5-069 (SEM03)	POE Issue	8/1/2017	154 days			21388



- Select D5 RTMC in the 'Submitting Group' drop-down menu, select Detector Failure in the 'Issue/Task Description' drop-down menu, enter "Bluetooth reader not reporting." in the 'Issue/Task Comment' data entry box, and click 'Save'.

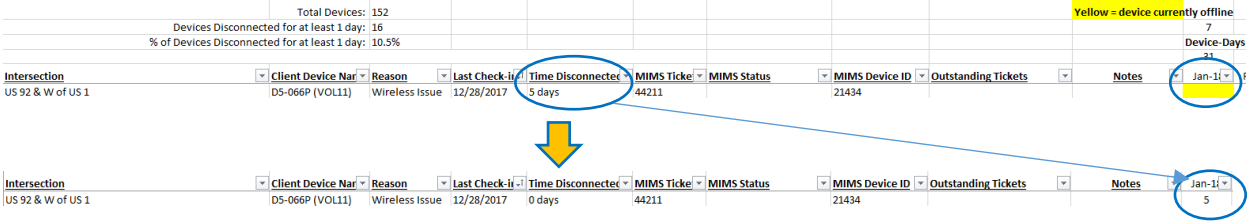


- Find the newly created ticket by double clicking on the device to open the 'Device Details' dialog box. Click the 'Task History' tab and note the Task ID. Enter the Task ID into the 'MIMS Ticket' column of the BlueMAC Report spreadsheet. The cell in the current month under 'Device-Days without Connection' should be highlighted yellow to indicate that the number of offline days will need to be entered when the device comes online again.

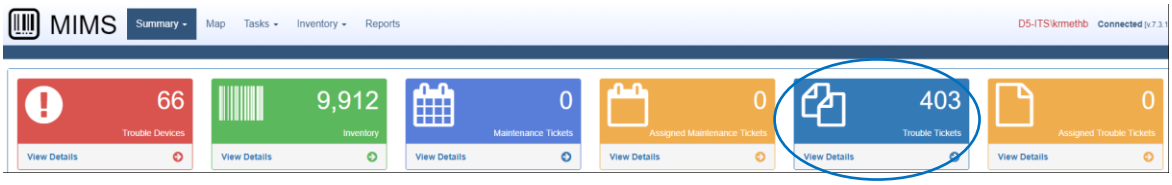


- Each device that was previously disconnected for more than a day, but is now online, needs to have the number of days offline entered in the appropriate month, and the MIMS ticket marked operational.

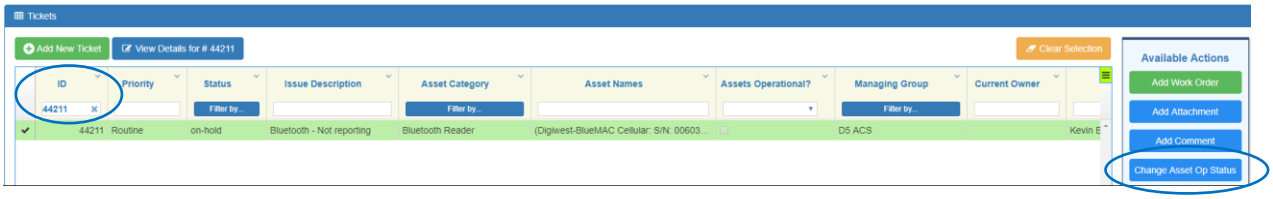
- Enter the number of days disconnected before the device came back online into the highlighted cell then remove the highlight from the cell. This number is most easily obtained from previous BlueMAC daily reports in the [R:\ICM-Arterials\BlueMAC\Report PDFs_Daily](R:\ICM-Arterials\BlueMAC\Report PDFs_Daily) folder.



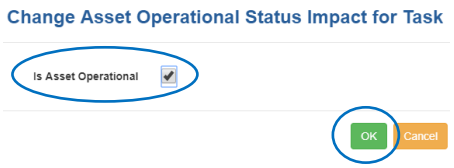
- In MIMS, click 'View Details' in the Trouble Tickets status box.



- Enter the MIMS Ticket ID into the ID filter box, click on the ticket, and click 'Change Asset Op Status' to open the 'Change Asset Operational Status' dialog box and



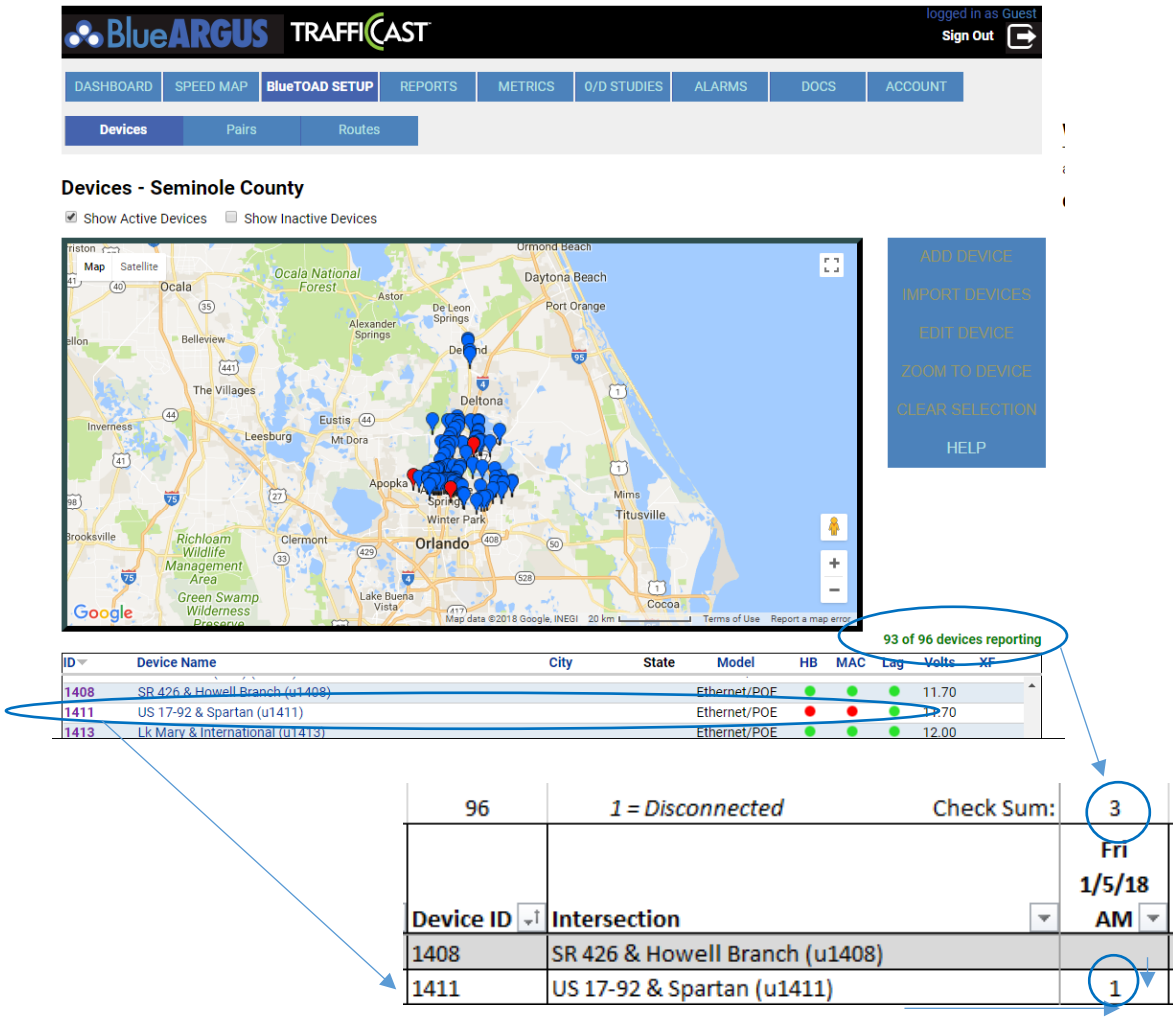
- Check the 'Is Asset Operational' checkbox, and click 'OK' to mark the device operational.



- After the data has been sorted by 'Last Check-in' and a MIMS Ticket has been created for each offline device and the ticket # added to the 'MIMS Ticket' column, the report can be printed or saved to PDF to the 'Report PDFs_Daily' folder: R:\ICM-Arterials\BlueMAC\Report PDFs_Daily with the format of 'BlueMAC Report <date> <AM/PM>' (ex: BlueMAC Report 12-8-17 PM).

BlueTOAD Daily Communications Reports

- The BlueTOAD (BlueARGUS) website can be accessed at https://bluetoad.trafficcast.com/. The login is Username = guest and Password = traffic. Select 'BlueTOAD SETUP' to view the communications status of all BlueTOAD devices. Each device has a row of three colored dots (HB/MAC/Lag); any one of these three dots being red indicates that the device is not reporting. The "93 of 96 devices reporting" at the top indicates that three devices are not reporting (each non-reporting device is also represented by a red pin on the map). Each device that is not reporting needs to be logged in the 'Com Log' worksheet tab of the BlueTOAD Report excel workbook. For each device that is currently not reporting, a "1" should be placed in the cell that is in the row of the device that is not reporting and the column corresponding to the current day and time of day. When completed, the Check Sum (top row) should be equal to the total number of devices not reporting.

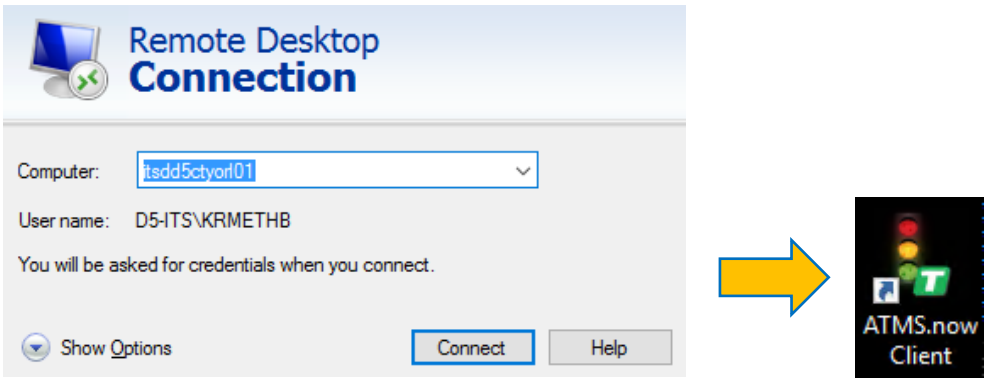


- The daily report ('Daily Com Report' worksheet) is automatically updated based on the information in the 'Com Log' worksheet and should be printed or saved to PDF to the 'Report PDFs_Daily' folder: R:\ICM-Arterials\BlueTOAD (BlueARGUS)\Report PDFs_Daily with the format of 'BlueTOAD Report <date> <AM/PM>' (ex: BlueTOAD Report 12-8-17 PM).

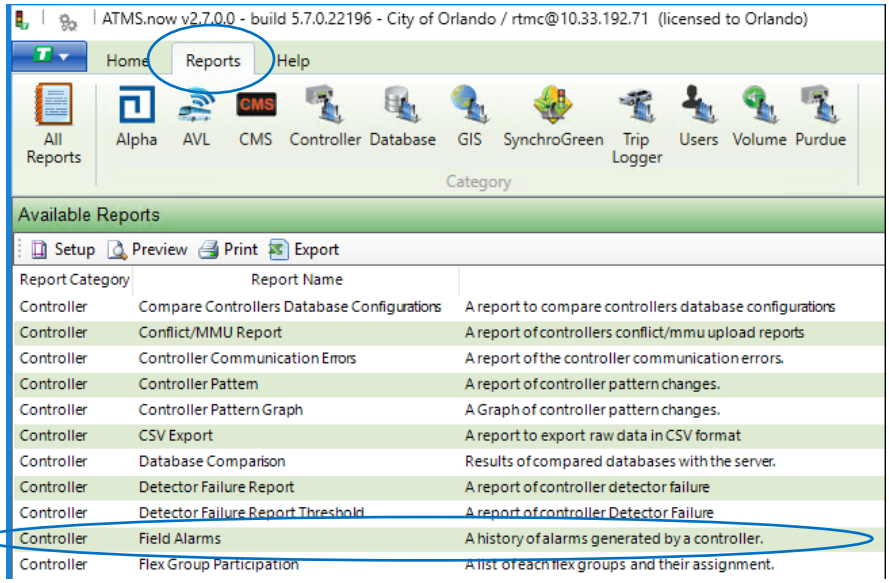
2.2 Daily Alarms and Issue Tracking

City of Orlando Daily Alarm Tracking

- Daily alarm reports are downloaded from the City of Orlando ATMS program, accessed by logging into 'itsdd5ctyorl01' with the Remote Desktop Connection application. Use your normal computer login for the remote desktop. Open the ATMS.now shortcut and Login with Username = rtmc and Password = rtmc. If the shortcut is not visible, it needs to be added by an administrator.



- Click the 'Reports' tab at the top and choose the 'Field Alarms' report; the 'Field Alarms' dialog box will come up.



- Change the 'Saved Criteria' drop-down to 'Dailyalarms'. This will automatically fill in the 'Flex Group', 'Alarm', 'Begin Time', and 'End Time' choices.

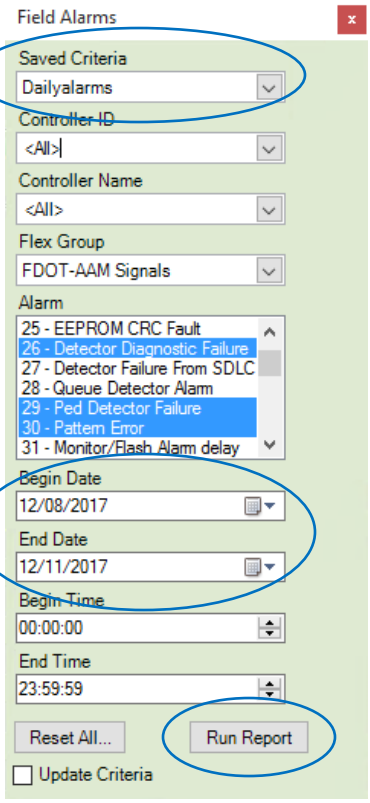
- Change the 'Begin Date' to the previous weekday (i.e. if today is Tuesday-Friday, then the 'Begin Date' will be yesterday; if today is Monday, then the 'Begin Date' will be last Friday). Change the 'End Date' to today.

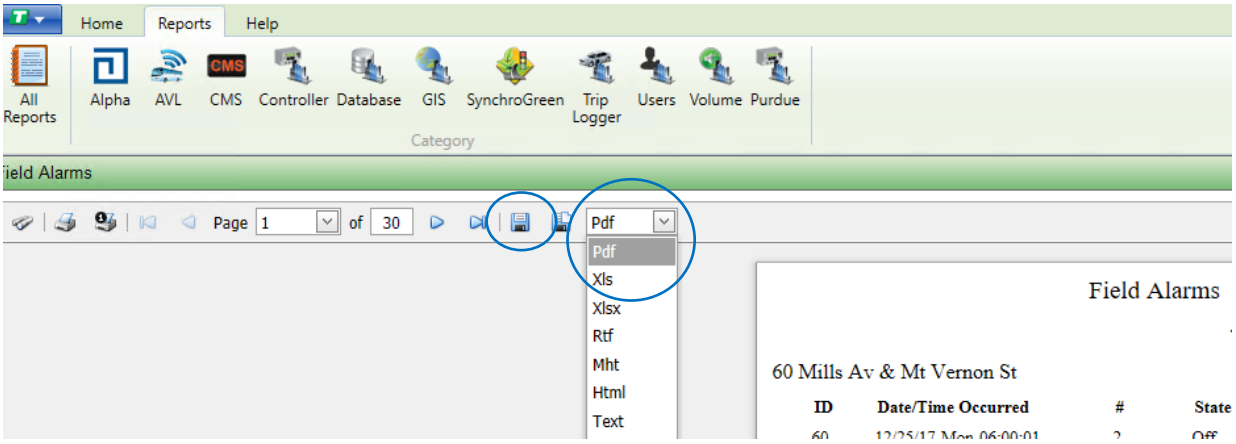
- Click 'Run Report'

- Save PDF and XLS copies of the alarm report to the R:\ICM-Arterials\City of Orlando\Alarm Reports_Daily folder:

- The default file type should be 'Pdf'. Click the 'Export a report and save to a disk', click 'Save' when the 'File Download' dialog box pops up, and save with the format of 'Orlando Daily Alarm Report <date>' using the YY-MM-DD format (ex: Orlando Daily Alarm Report 18-02-27).

- In ATMS, change the drop-down menu that says 'Pdf' to 'Xls'. Click the 'Export a report and save to a disk', click 'Save' when the 'File Download' dialog box pops up, and save with the format of 'Orlando Daily Alarm Report <date>' using the YY-MM-DD format (ex: Orlando Daily Alarm Report 18-02-27).





- These reports contain a log of time-stamped alarms for every signal in the selected Flex Group for the selected Time/Date Range. The reports should be reviewed for the following issues:

- Flashing Operation – Indicated by an MMU Flash Input alarm. "On" indicates the signal is in flashing operation and "Off" indicates the signal is no longer in flashing operation. If a signal is currently in flashing operation, the local agency should be notified immediately.

- Cabinet Door Open – Indicated by a TS-1 or TS-2 Cabinet Door Open alarm. Note that for TS-2 cabinets, "On" indicates door open and "Off" indicates door closed; for TS-1 cabinets, "On" indicates door closed and "Off" indicates door open. If the alarms indicate that a door was opened and was not closed later, this potentially indicates that a cabinet door was left open. If the cabinet is located in an area with camera coverage, the camera can be used to verify whether the door is open or not. If no camera view is available, the status of the cabinet door should be verified by a corridor manager. If the cabinet door has been left open, the local agency should be notified immediately.

- Coordination Errors – Indicated by Cycle Fault, Coordination Fault, or Pattern Error alarms. "On" indicates that an error in the coordinated operation has caused the signal to operate in FREE mode. "Off" indicates that the error no longer exists, and the signal is back to operating in coordinated mode. If these errors are only occurring for a few minutes or less, there is likely not a significant issue. If they are occurring for a significant enough period of time to disrupt traffic operations, the issue should be investigated, and the local agency notified.

- Detector Failures – Indicated by Ped Detector Failure (pedestrian detectors) or Detector Diagnostic Failure (vehicle detectors) alarms. "On" indicates that the detector has met one of the criteria for a detector failure alarm (duration or frequency of calls large enough to meet pre-set threshold) and "Off" indicates that the alarm condition no longer exists. The number in the 'Data' column of the report indicates the detector number (only shown for the "On" state). These failures should be logged in 'Det Log' worksheet tab of the Orlando ATMS Report with the following process:

- Enter the signal ID of the intersection into the 'Signal ID' column. This will automatically populate the intersection name.

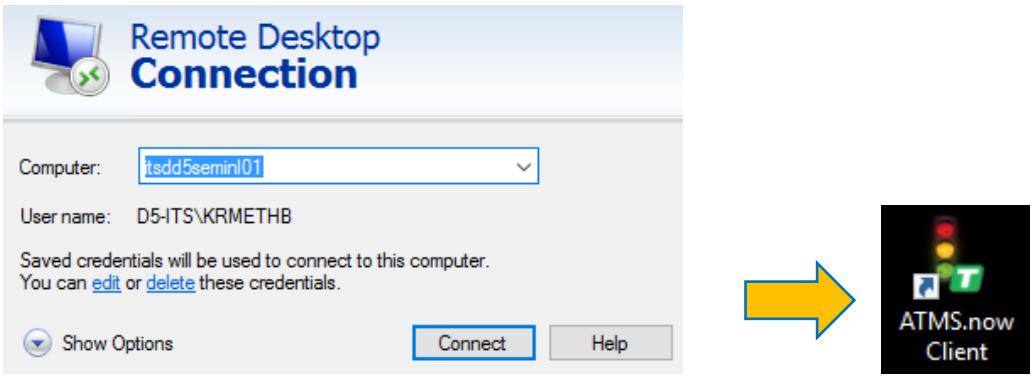
- Enter the detector number into the 'Det #' column (vehicle detector on phase 2 would be "2", pedestrian detector on phase 2 would be "P2"). This will automatically populate the rest of the detector information.

- For each detector with a failure, a "1" should be placed in the cell that is in the row of the failed detector and the column corresponding to the current day and time of day.

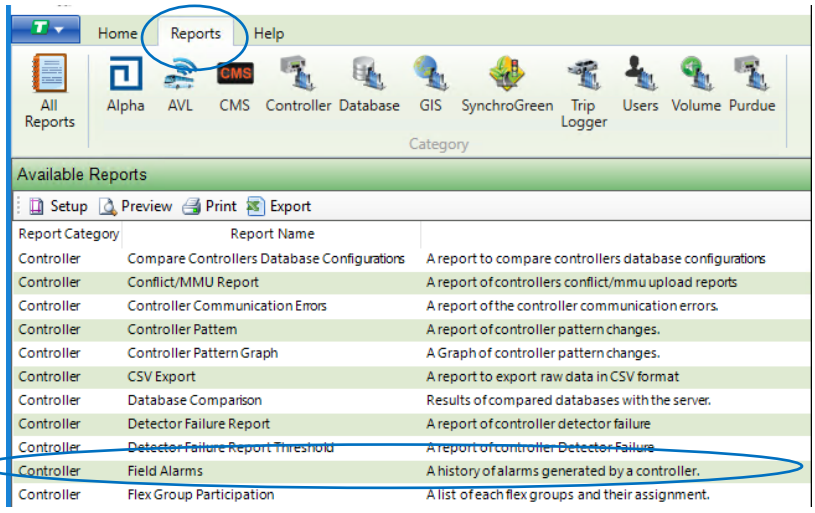
- Sign out of the remote desktop when finished.

<u>Seminole/Brevard County Daily Alarm Tracking</u>

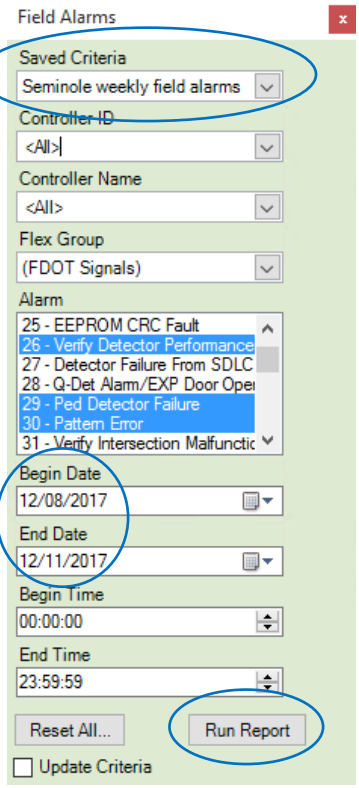
- Daily alarm reports are downloaded from the Seminole County ATMS program, accessed by logging into 'itstd5seminl03' with the Remote Desktop Connection application. Use your normal computer login for the remote desktop. Open the ATMSStart shortcut and Login with Username = rtmc and Password = rtmc. If the shortcut is not visible, it needs to be added by an administrator.



- Click the 'Reports' tab at the top and choose the 'Field Alarms' report; the 'Field Alarms' dialog box will come up.



- Change the 'Saved Criteria' drop-down to 'Seminole weekly field alarms'. This will automatically fill in the 'Flex Group', 'Alarm', 'Begin Time', and 'End Time' choices.



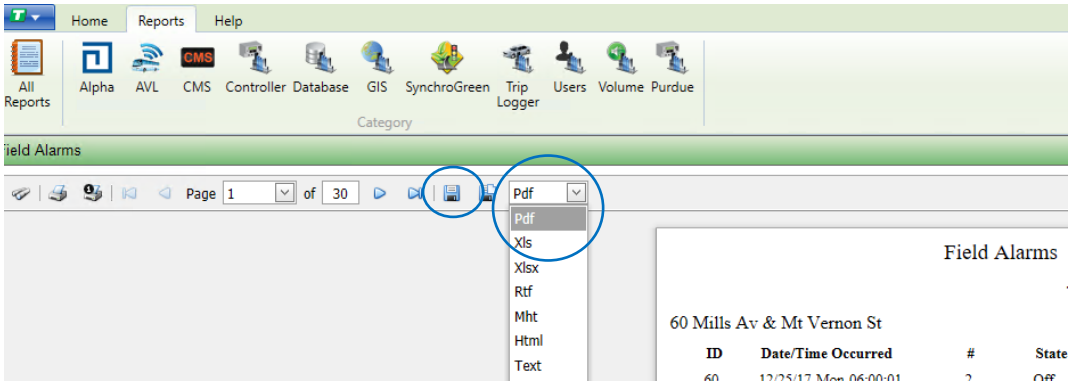
- Change the 'Begin Date' to the previous weekday (i.e. if today is Tuesday-Friday, then the 'Begin Date' will be yesterday; if today is Monday, then the 'Begin Date' will be last Friday). Change the 'End Date' to today.

- Click 'Run Report'

- Save PDF and XLSX copies of the alarm report to the R:\ICM-Arterials\Seminole County\Alarm Reports_Daily folder:

- The default file type should be 'Pdf'. Click the 'Export a report and save to a disk', click 'Save' when the 'File Download' dialog box pops up, and save with the format of 'Seminole Daily Alarm Report <date>' (ex: Seminole Daily Alarm Report 12-8-17).

- In ATMS, change the drop-down menu that says 'Pdf' to 'Xlsx'. Click the 'Export a report and save to a disk', click 'Save' when the 'File Download' dialog box pops up, and save with the format of 'Seminole Daily Alarm Report <date>' (ex: Seminole Daily Alarm Report 12-8-17).



- These reports contain a log of time-stamped alarms for every signal in the selected Flex Group for the selected Time/Date Range. The reports should be reviewed for the following issues:

- Flashing Operation – Indicated by an MMU Flash Input alarm. "On" indicates the signal is in flashing operation and "Off" indicates the signal is no longer in flashing operation. If a signal is currently in flashing operation, the local agency should be notified immediately.

- Cabinet Door Open – Indicated by a TS-1 or TS-2 Cabinet Door Open alarm. Note that for TS-2 cabinets, "On" indicates door open and "Off" indicates door closed; for TS-1 cabinets, "On" indicates door closed and "Off" indicates door open. If the alarms indicate that a door was opened and was not closed later, this potentially indicates that a cabinet door was left open. If the cabinet is located in an area with camera coverage, the camera can be used to verify whether the door is open or not. If no camera view is available, the status of the cabinet door should be verified by a corridor manager. If the cabinet door has been left open, the local agency should be notified immediately.

- Coordination Errors – Indicated by Cycle Fault, Coordination Fault, or Pattern Error alarms. "On" indicates that an error in the coordinated operation has caused the signal to operate in FREE mode. "Off" indicates that the error no longer exists, and the signal is back to operating in coordinated mode. If these errors are only occurring for a few minutes or less, there is likely not a significant issue. If they are occurring for a significant enough period of time to disrupt traffic operations, the issue should be investigated, and the local agency notified.

- Detector Failures – Indicated by Ped Detector Failure (pedestrian detectors) or Detector Diagnostic Failure (vehicle detectors) alarms. "On" indicates that the detector has met one of the criteria for a detector failure alarm (duration or frequency of calls large enough to meet pre-set threshold) and "Off" indicates that the alarm condition no longer exists. The number in the 'Data' column of the report indicates the detector number (only shown for the "On" state). These failures should be logged in 'Det Log' worksheet tab of the Seminole ATMS Report with the following process:

- Enter the signal ID of the intersection into the 'Signal ID' column. This will automatically populate the intersection name.

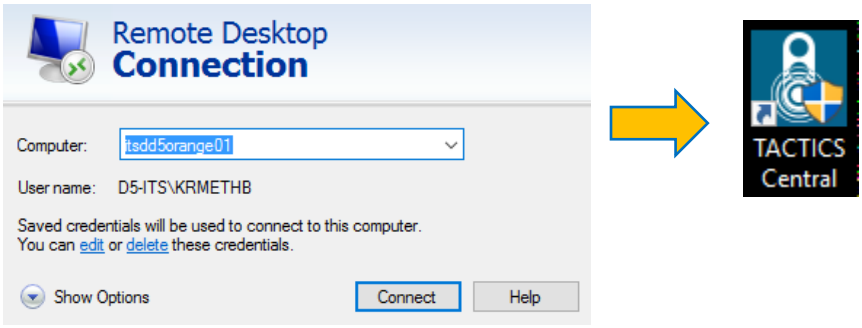
- Enter the detector number into the 'Det #' column (vehicle detector on phase 2 would be "2", pedestrian detector on phase 2 would be "P2"). This will automatically populate the rest of the detector information.

- For each detector with a failure, a "1" should be placed in the cell that is in the row of the failed detector and the column corresponding to the current day and time of day.

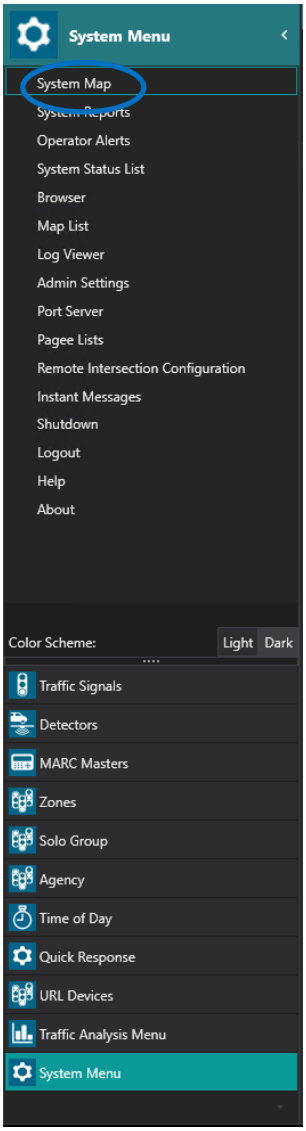
- Sign out of the remote desktop when finished.

<u>Orange County Daily Alarm Tracking (TACTICS)</u>

- Daily alarm reports are downloaded from the Orange County TACTICS program, accessed by logging into 'itsdd5orange01' or 'itsdd5orange02' with the Remote Desktop Connection application and opening the TACTICS Central program (Username = fdot and Password = tacticsread)


Remote Desktop
Connection
Computer:
tsdd5orange01
User name:
D5-ITS\KRMETHB
Saved credentials will be used to connect to this computer.
You can edit or delete these credentials.
Show Options
Connect
Help
TACTICS
Central

- Click the 'System Menu' in the bottom-left corner.

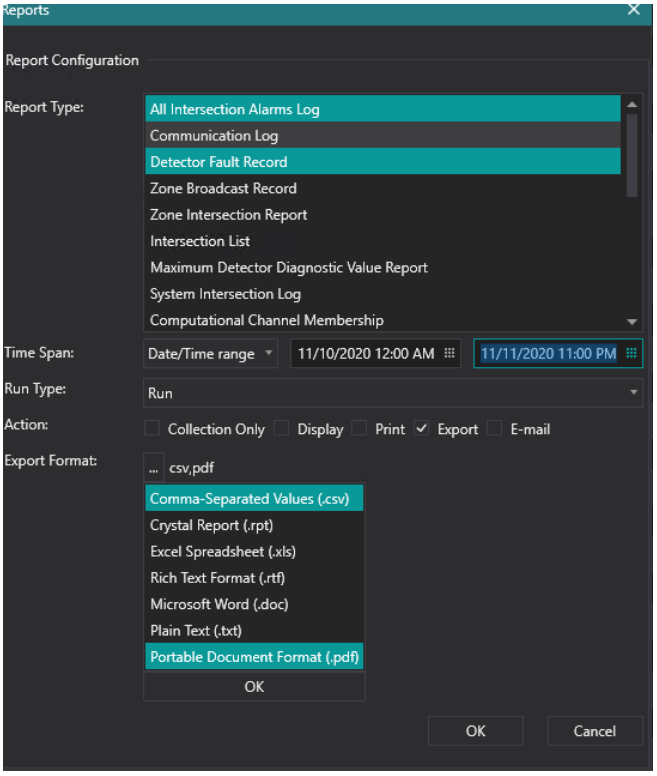


- Click System Reports to load the Report display menu.

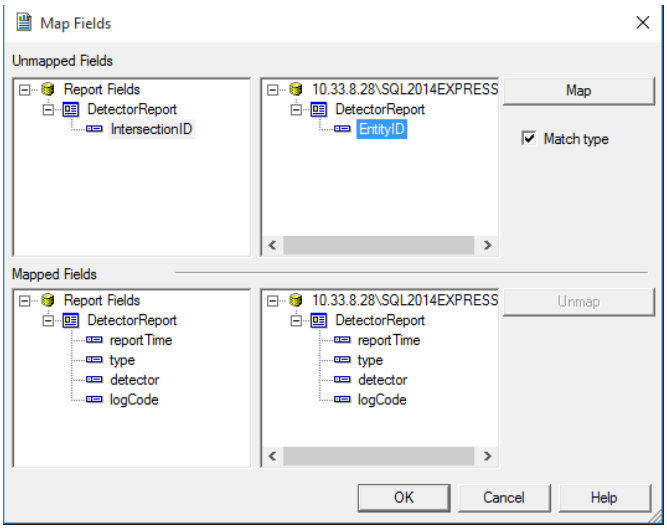
- Hold Ctrl and click on 'All Intersection Alarms Log' and 'Detector Fault Record' under 'Report Type'. Under 'Time Span', click the dropdown and choose 'Date/Time Range', set the begin date to the previous weekday (i.e. if today is Tuesday-Friday, then the begin date will be yesterday; if today is Monday, then the begin date will be last Friday), and set the end date to tomorrow. The time will automatically set to 12:00 AM.

- Uncheck the 'Display' box and check the 'Export' box. Choose the 'Export Format' dropdown, hold Ctrl and click on 'Comma Separated Values (.csv)', and 'Portable Document Format (.pdf)'.

- Click Ok.



- In the 'Map Fields' dialog pop-up, click on 'EntityID' in the top right box, choose 'Map', and click Ok.



- TACTICS reports are exported to the C:\Program Files (x86)\ITS Software\TACTICS Central\Report Data. These reports should be copied into the R:\ICM-Arterials\Orange County\Alarm Reports_Daily folder. The 'All Intersection Alarms Log' PDF should be renamed with the format of 'Orange Daily Alarm Report <date>' (ex: Orange Daily Alarm Report 12-8-17). The 'Detector Fault Record' PDF should be renamed with the format of 'Orange Daily Detector Report <date>' (ex: Orange Daily Detector Report 12-8-17). The excel files do not need to be renamed.

- The alarm reports contain a log of time-stamped alarms (not including detectors) for every signal for the selected Time/Date Range. The alarm reports should be reviewed for the following issues:

- Flashing Operation – Indicated by an MMU Flash Input alarm. "On" indicates the signal is in flashing operation and "Off" indicates the signal is no longer in flashing operation. If a signal is currently in flashing operation, the local agency should be notified immediately.

- Cabinet Door Open – Indicated by a TS-1 or TS-2 Cabinet Door Open alarm. Note that for TS-2 cabinets, "On" indicates door open and "Off" indicates door closed; for TS-1 cabinets, "On" indicates door closed and "Off" indicates door open. If the alarms indicate that a door was opened and was not closed later, this potentially indicates that a cabinet door was left open. If the cabinet is located in an area with camera coverage, the camera can be used to verify whether the door is open or not. If no camera view is available, the status of the cabinet door should be verified by a corridor manager. If the cabinet door has been left open, the local agency should be notified immediately.

- Coordination Errors – Indicated by Cycle Fault, Coordination Fault, or Pattern Error alarms. "On" indicates that an error in the coordinated operation has caused the signal to operate in FREE mode. "Off" indicates that the error no longer exists, and the signal is back to operating in coordinated mode. If these errors are only occurring for a few minutes or less, there is likely not a significant issue. If they are occurring for a significant enough period of time to disrupt traffic operations, the issue should be investigated, and the local agency notified.

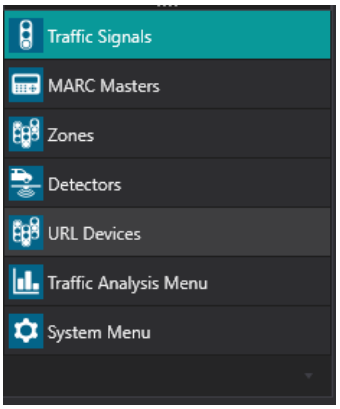
- The detector reports contain a log of time-stamped detector alarms for every signal for the selected Time/Date Range. The detector reports should be reviewed for the following issues:

- Detector Failures – Indicated by “FAIL MAX PRES” (duration of pedestrian/vehicle detector call has met failure threshold), “FAIL ERR CNTS” (frequency of pedestrian/vehicle detector calls has met failure threshold). The detector number and whether it is a pedestrian or vehicle detector is indicated in the ‘Detect Name’ column. “ON LINE” indicates that the failure is no longer occurring. These failures should be logged in ‘Det Log’ worksheet tab of the Orange TACTICS Report with the following process:

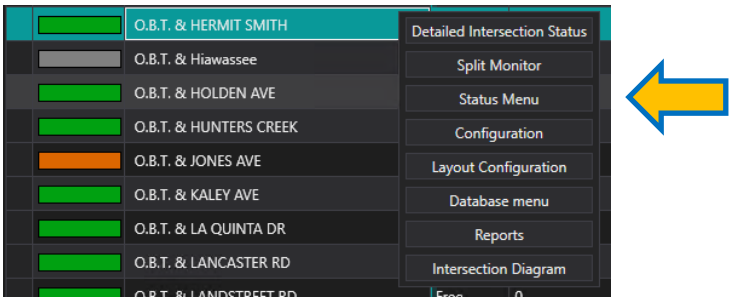
- Enter the signal ID of the intersection into the ‘Signal ID’ column. This will automatically populate the intersection name.

- Enter the detector number into the ‘Det #’ column (vehicle detector on phase 2 would be “2”, pedestrian detector on phase 2 would be “P2”). This will automatically populate the rest of the detector information.

- The detector fault should be confirmed in TACTICS by first clicking on ‘Traffic Signals’ in the lower left corner of the screen.



- Scroll through to find the intersection name, hover over the intersection name to reveal the ‘Actions’ menu, and choose ‘Status Menu’.



- When the Intersection Status Module List loads, click on ‘Detector Status’.

- For each detector with a failure showing in the ‘Detector Status’ screen of TACTICS, in the ‘Det Log’ worksheet tab of the Orange TACTICS Report, a “1” should be placed in the cell that is in the row of the failed detector and the column corresponding to the current day and time of day.

- If the 'Det Log' worksheet tab shows a detector failure that does not show in the 'Detector Status' screen, the "1" for the current day and row highlight should be removed.

- Sign out of the remote desktop when finished.

<u>Orange County Daily Alarm Tracking (MaxView)</u>

- Daily alarm reports for "Intelight" Controllers are viewed and downloaded from the Orange County MaxView via Internet Explorer and can accessed by logging into: http://ocmaxview/maxview/

- Click the 'System' in the display menu

- Click "Reports"

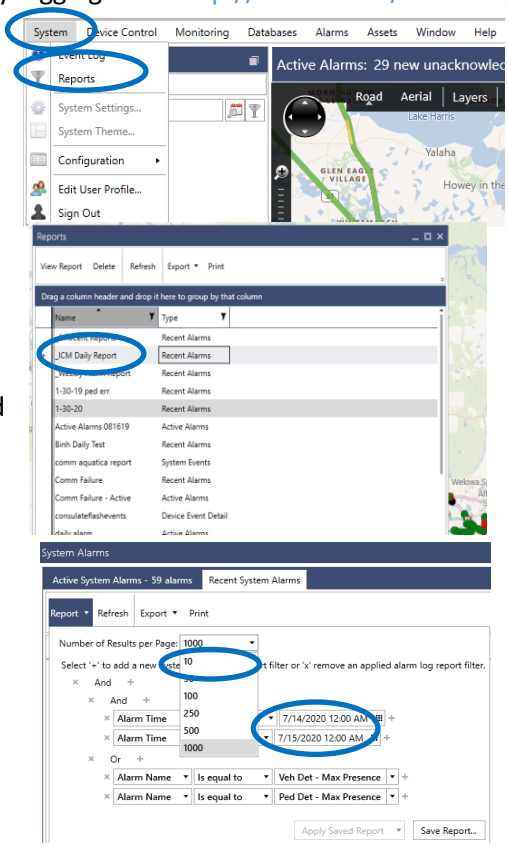
- Choose "_ICM Daily Report"

- Click "Report"

- Change the "Number of Results per page" to 1000

- Change the "Alarm Time" between yesterday and today dates

- Click "refresh"



- Export a PDF and Excel version of the Report to R:\ICM-Arterials\Orange County\Alarm Reports Daily\MaxView Daily (Note: You may need more than one page)

- The alarm reports contain a log of time-stamped alarms (not including detectors) for every signal for the selected Time/Date Range. The alarm reports should be reviewed for the following issues:

- The detector reports contain a log of time-stamped detector alarms for every signal for the selected Time/Date Range. The detector reports should be reviewed for the following issues:

- Detector Failures – Indicated by "FAIL MAX PRES" (duration of pedestrian/vehicle detector call has met failure threshold). The detector number and whether it is a pedestrian or vehicle detector is indicated in the 'Detect Name' column. These failures should be logged in 'Det Log' worksheet tab of the Orange County Report with the following process:

- Enter the signal ID of the intersection into the 'Signal ID' column. This will automatically populate the intersection name.

- Enter the detector number into the 'Det #' column (vehicle detector on phase 2 would be "2", pedestrian detector on phase 2 would be "P2"). This will automatically populate the rest of the detector information.

FDOT Daily Alarm Tracking (MaxView-FDOT)

- Daily alarm reports for "Intelight" Controllers are viewed and downloaded from the FDOT MaxView via Internet Explorer and can accessed by logging into: http:// 10.32.90.68/maxview/

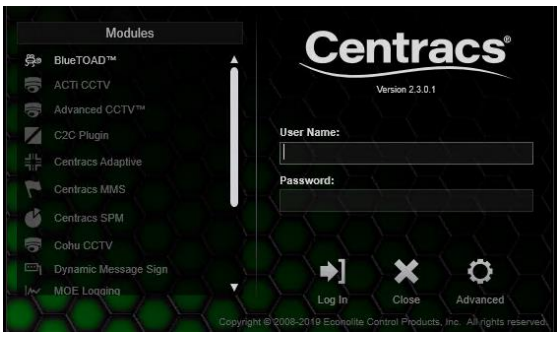
- FDOT Maxview is used to track alarms & communication for City of Winter Park & City of Maitland.

- Reporting Folders for City of Winter Park & City of Maitland can be found in Reports(R:)-ICM - Arterial

- The procedure is similar to Orange county Maxview for all the reporting.

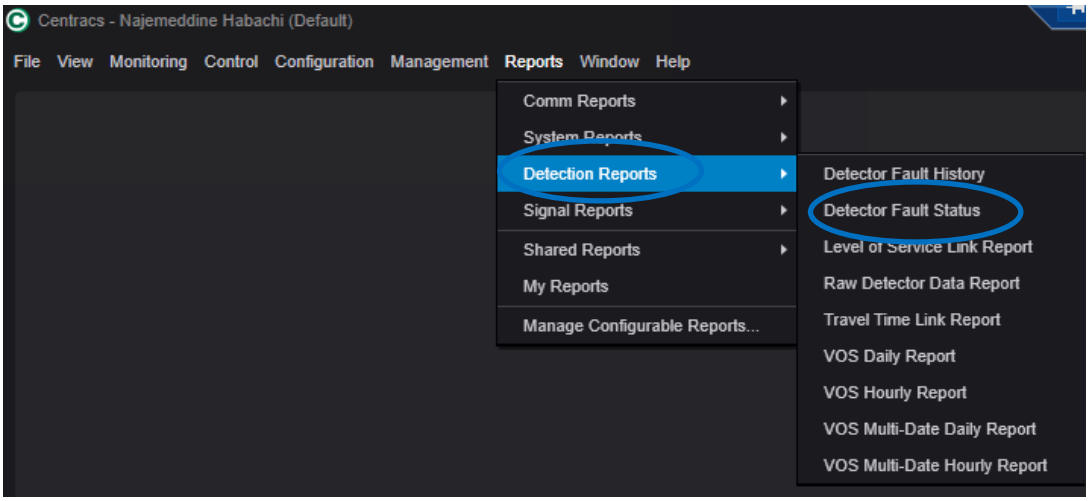
Osceola/Volusia County Daily Alarm Tracking (Centracs)

- Daily alarm reports are downloaded from Osceola County "Centracs", accessed by logging into 'itsdd5Osceola04 (or 05 or 06) with the Remote Desktop Connection application. Use your normal computer login for the remote desktop. Open the "Centracs" shortcut and Login with the Username assigned to you by an administrator.



- Click the 'reports' in the display menu

- Click "Detection reports" →" Detector Fault Status "→"View Report"



- Export a CSV file and the Report to R:\ICM-Arterials\Osceola\Daily

- The alarm reports contain a log of time-stamped alarms (not including detectors) for every signal for the selected Time/Date Range. The alarm reports should be reviewed for the following issues:

- The detector reports contain a log of time-stamped detector alarms for every signal for the selected Time/Date Range. The detector reports should be reviewed for the following issues:

- Detector Failures – Indicated by “MAX PRESENCE FAULT” (duration of pedestrian/vehicle detector call has met failure threshold), “OPEN LOOP FAULT” “SHORTED LOOP FAULT”. The detector number and whether it is a pedestrian or vehicle detector is indicated in the ‘Detect Name’ column. These failures should be logged in ‘Det Log’ worksheet tab of the Orange County Report with the following process:

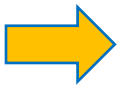
- Enter the signal ID of the intersection into the ‘Signal ID’ column. This will automatically populate the intersection name. **Note:** Signals ID numbers for Osceola County were created to simplify the reporting process and are **for internal use only** and will not be shown in any of the reports or correspondence with the agency. Signals ID numbers can be found in the “Com log” of Osceola County spreadsheet.

- Enter the detector number into the ‘Det #’ column (vehicle detector on phase 2 would be “2”, pedestrian detector on phase 2 would be “P2”). This will automatically populate the rest of the detector information.

Opticom CMS Error Tracking

- Open Opticom Central Management Software.
- Click 'Monitoring' in the lower left corner.
- Intersections with errors should be logged in the 'Com Log' sheet of the 'Opticom CMS Report' excel workbook: R:\ICM-Arterials\Opticom CMS\Opticom CMS Report.xlsx. For each intersection with an error, a "1" should be placed in the cell that is in the row of the signal that is offline and the column corresponding to the current day and time of day. When completed, the Check Sum (top row) should be equal to the total number of signals with errors.

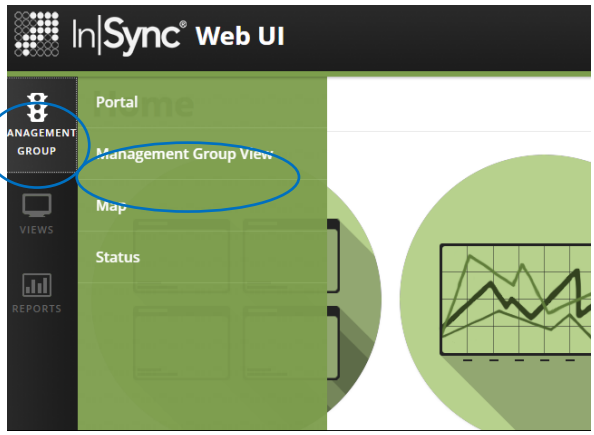
Status: Error ((9))	
Seminole County	CR 427 @ 09-Dogtrack Rd #4005
Seminole County	Hunt Club @ 03-Needles #1762
Seminole County	SR 434 @ 10-Manor Ave #1621
Seminole County	SR 434 @ 23-Grant #4287
Seminole County	SR 434 @ E Lake Brantley Dr
Seminole County	SR 434 @ Florida Central Parkway
Seminole County	SR 434 @ Wekiva Springs Lane
Seminole County	SR 436 @ 06-Post Lk #99993
Seminole County	US 17/92 & SR 434
Status: Normal ((59))	
Seminole County	1st St @ 01-Park #6854
Seminole County	1st St @ 03-Sanford #7731



	J	CB
	1 = Disconnected Check Sum:	9
	Intersection	Fri 12/29/
	CR 427 @ 09-Dogtrack Rd #4005	1
	Hunt Club @ 03-Needles #1762	1
	SR 434 @ 10-Manor Ave #1621	1
	SR 434 @ 23-Grant #4287	1
	SR 434 @ E Lake Brantley Dr	1
	SR 434 @ Florida Central Parkway	1
	SR 434 @ Wekiva Springs Lane	1
	SR 436 @ 06-Post Lk #99993	1
	US 17/92 & SR 434	1

InSync Camera Issue Tracking

- The InSync cameras are accessed by entering the IP address corresponding to a signal into the web browser. The IP addressed currently being monitored are as follows:
- 10.32.75.11 – US 17/92 (DeLand) from Beresford Ave to Firehouse Rd
- 10.32.63.11 – SR 46 from International Pkwy to Airport Blvd
- The login username and password are individual for each user and need to be created by an administrator. Once you reach the Home page, click the 'Management Group' button on the side bar, then the 'Management Group View' button.



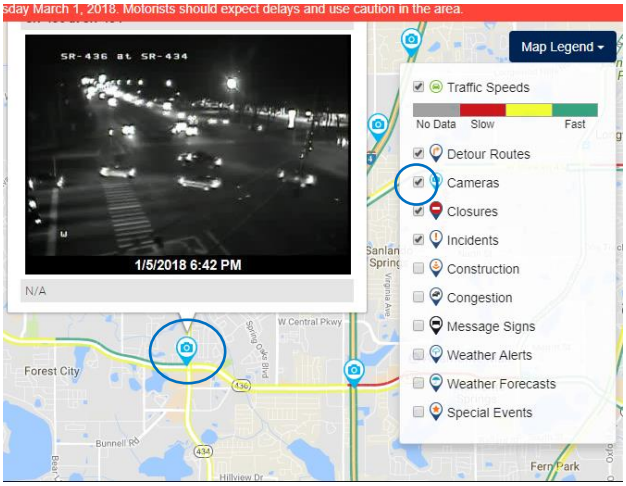
- A screen will appear showing every camera in the system corresponding with the IP address. Each camera has the movement direction labeled in the top-left corner and the intersection name in the bottom-left corner.

- Any cameras that are offline will show a black screen and should be logged into the 'InSync Report' excel workbook: R:\ICM-Arterials\InSync\InSync_Report.xlsx. For each camera that is currently offline, a "1" should be placed in the cell that is in the row of the camera (intersection and movement direction) that is offline and the column corresponding to the current day and time of day. When completed, the Check Sum (top row) should be equal to the total number of offline cameras.

SunGuide/Florida 511 Camera Issue Tracking

- The statuses of arterial cameras (found in SunGuide and FL511) are tracked in the 'Cameras' excel workbook: R:\ICM-Arterials\SunGuide\Cameras\Cameras.xlsx.

- For each camera listed in the 'Cameras' workbook, open a video feed in SunGuide. If the video is functioning, enter a "1" in the 'Status (Video)' column. If the video is black (offline), enter a "0" in the 'Status (Video)' column.

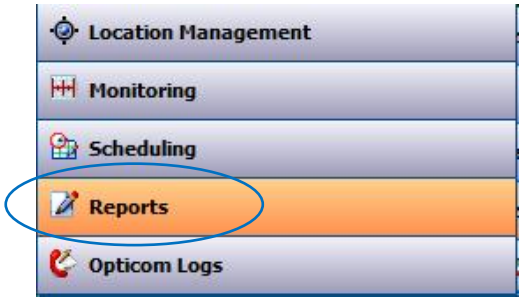


- Access the Florida 511 website at https://fl511.com/. Check the 'Cameras' box and zoom in on Orlando to view the cameras on the map. For each camera listed in the 'Cameras' workbook, click on the corresponding pin on the Florida 511 map to open the most recent still image (updated frequently) from the camera. If the image is visible, enter a "1" in the 'Status (511)' column. If the image is unavailable, enter a "0" in the 'Status (511)' column.

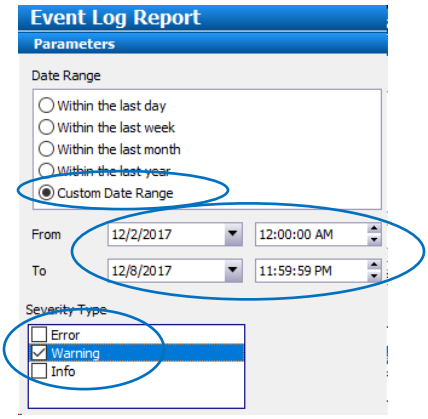
2.3 Weekly ICM-AAM Reports

Opticom CMS TSP/Preemption Weekly Report

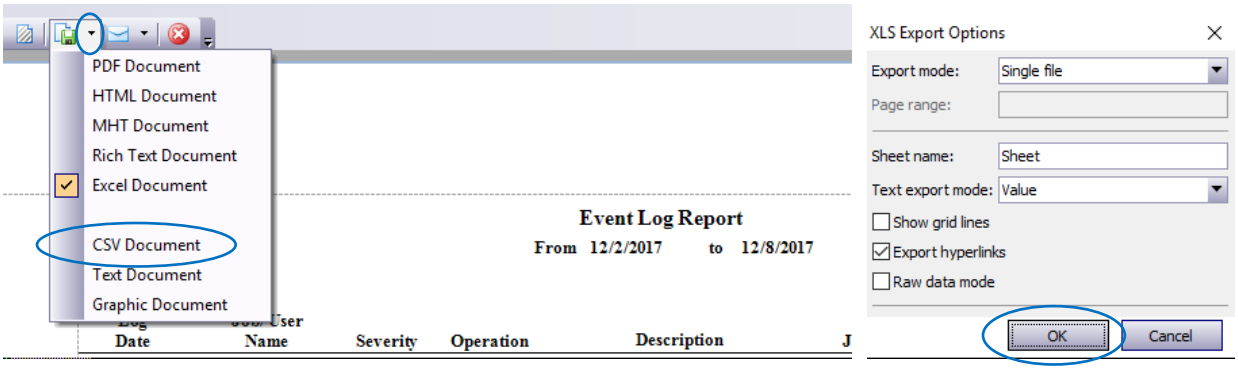
- Open Opticom CMS and click on the 'Reports' button in the lower left corner. Choose 'Event Log Report'.



- Click the 'Custom Date Range' radio button. Set the 'From' date to the beginning of the weekly report period (usually previous Saturday), the 'From' time to 12:00:00 AM, the 'To' date to the end of the weekly report period (usually today or Friday), and the 'To' time to 11:59:59 PM. Uncheck 'Error' in the Severity Type options ('Warning' should be the only Severity Type that is checked). Click 'Run Report'.



- When the Event Log Report is generated, click the arrow by the 'Export Document' button and choose 'CSV Document'. Press 'OK' in the 'XLS Export Options' dialog box.



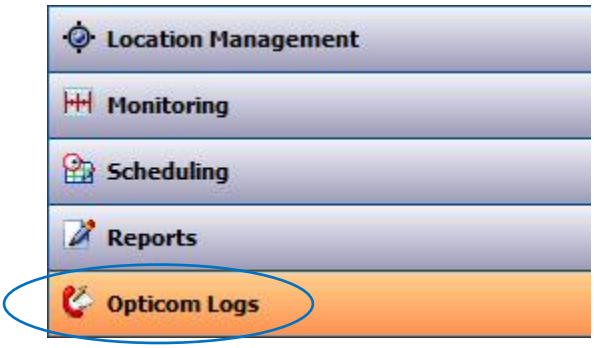
- Save the csv file to the R:\ICM-Arterials\Opticom CMS\Opticom Issue Reports folder with the format of '<date>' (ex: 12-8-17).

- Open the file

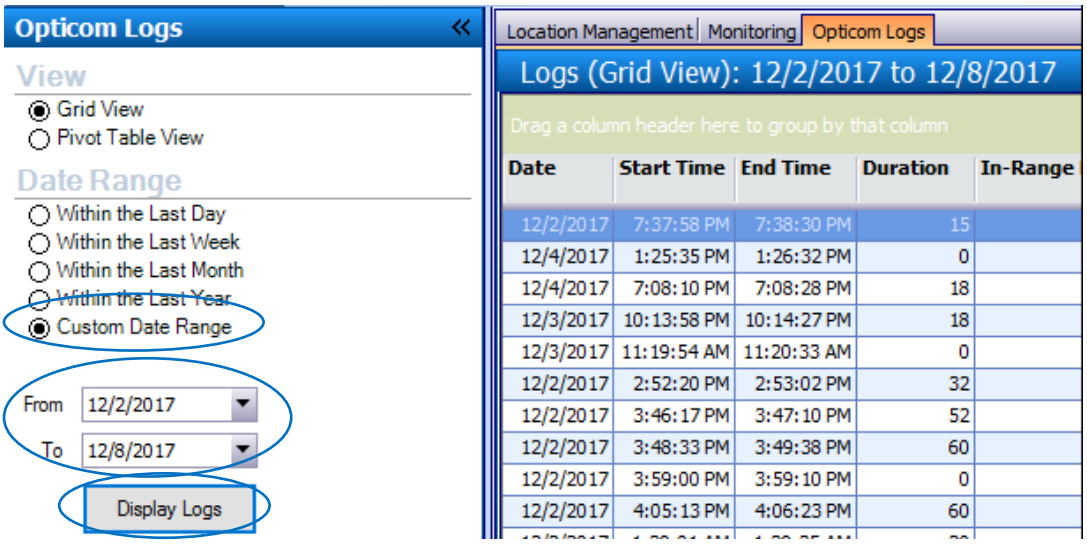
- Copy the file into "CMS Weekly Paste" and paste into agency spreadsheet and the Weekly Opticom report will be automatically generated.

- The Opticom CMS weekly report is found in the 'Weekly TSP Report' and 'Weekly Preempt Report' worksheet tabs of the 'Opticom CMS Report' excel workbook: R:\ICM-Arterials\Opticom CMS\Opticom CMS Report.xlsx. By default, the weekly reports will summarize data for the date range ending today (should be done on Friday) and starting six days previously (should be the previous Saturday). If a different weekly range is desired, the end date should be specified in the 'Specify Date:' highlighted field adjacent to 'Week of:' (cell D3) in the 'Data Output' worksheet tab.

- Open Opticom CMS and click on the 'Opticom Logs' button in the lower left corner.

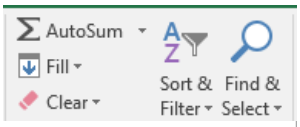


- Click the 'Custom Date Range' radio button. Set the 'From' date to the beginning of the weekly report period (usually previous Saturday) and the 'To' date to the end of the weekly report period (usually today or Friday). Click 'Display Logs'.

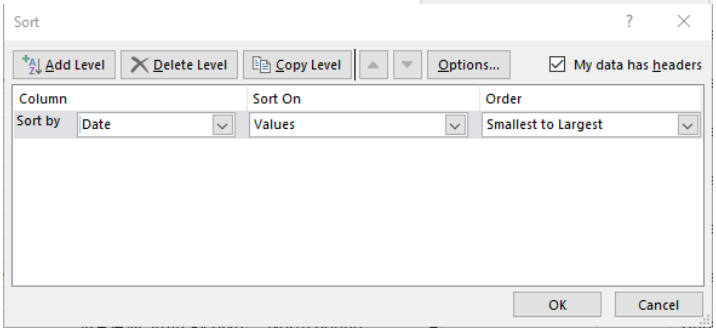


- Export the document in excel (.xlsx) format to the Opticom TSP-Preempt Logs folder: R:\ICM-Arterials\Opticom CMS\Opticom TSP-Preempt Logs with the name of the end date (ex: 12-22-17)

- Open the Opticom Logs spreadsheet, delete row one, select all data, click on the 'Sort & Filter' drop-down in the 'Editing' ribbon in the top right corner of the Home tab, and click on 'Custom Sort'.



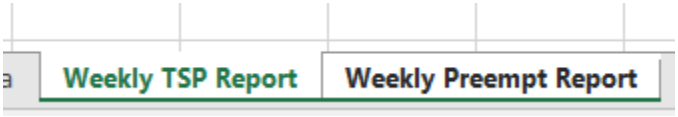
- In the 'Sort' display window, check the 'My data has headers' box, choose 'Date' in the 'Sort by' drop-down menu, and click Ok.



- Navigate to the Data tab in excel, click on 'Remove Duplicates' in the Data Tools ribbon, ensure that all categories are checked in the 'Remove Duplicates' display menu, and click Ok.

- Select all data in the Opticom Logs spreadsheet, copy, go to the 'CMS Weekly Paste' worksheet in the 'Opticom CMS Report' workbook, select all existing data, and paste over it.

- Select the 'Weekly TSP Report' and 'Weekly Preempt Report' worksheet tabs (click the first tab then hold Shift and click last tab) and save to PDF in the 'Report PDFs_Weekly' folder: R:\ICM-Arterials\Opticom CMS\Report PDFs_Weekly with the format of 'Opticom CMS Report Weekly <date>' (ex: Opticom CMS Report Weekly 12-11-17).



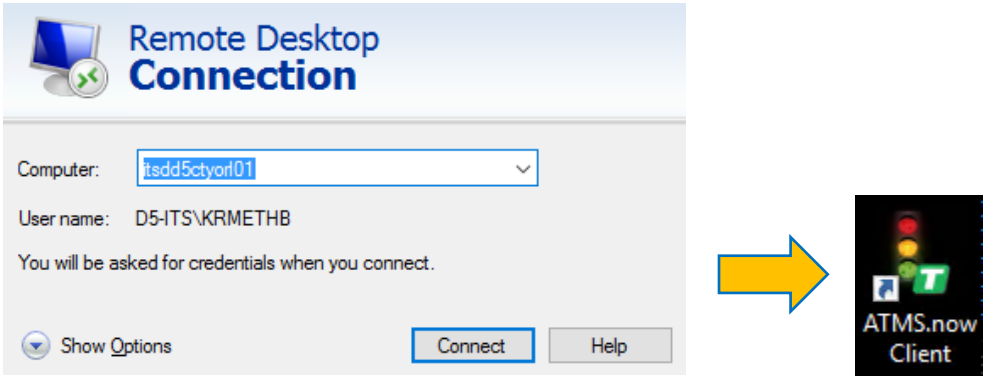
- Keep the Opticom CMS Report' workbook open while working on the weekly report for each agency. Opticom Com tab for each agency spreadsheet will automatically populate. No further action is needed.

City of Orlando Weekly Report

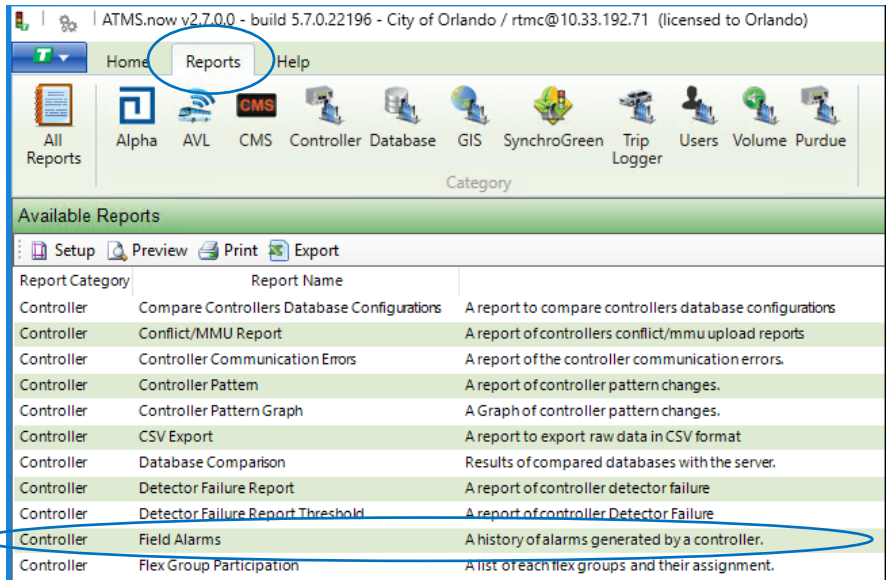
- The City of Orlando weekly report is found in the 'Weekly Com Report', 'Weekly Det Report', and 'Weekly Alarm Report' worksheet tabs of the 'Orlando ATMS Report' excel workbook: R:\ICM-Arterials\City of Orlando\Orlando ATMS Report.xlsx. By default, the weekly reports will summarize data for the date range ending today (should be done on Friday) and starting six days previously (should be the previous Saturday). If a different weekly range is desired, the end date should be specified in the 'Specify Date:' highlighted field adjacent to 'Week of:' (cell D3) in the 'Data Output' worksheet tab.

- The 'Weekly Com Report' is automatically generated based on the 'Com Log'. No additional entry is necessary.

- Weekly alarm reports are downloaded from the City of Orlando ATMS program, accessed by logging into 'itsdd5ctyorl01' with the Remote Desktop Connection application. Use your normal computer login for the remote desktop. Open the ATMS.now shortcut and Login with Username = rtmc and Password = rtmc. If the shortcut is not visible, it needs to be added by an administrator.



- Click the 'Reports' tab at the top and choose the 'Field Alarms' report; the 'Field Alarms' dialog box will come up.



- Change the 'Saved Criteria' drop-down to 'Dailyalarms'. This will automatically fill in the 'Flex Group', 'Alarm', 'Begin Time', and 'End Time' choices.

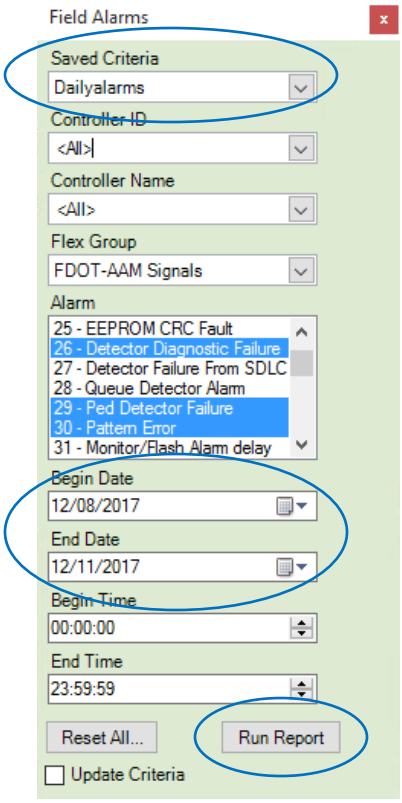
- Change the 'Begin Date' to the beginning of the weekly period (typically the previous Saturday) and the end date to the end of the weekly period (typically today or Friday).

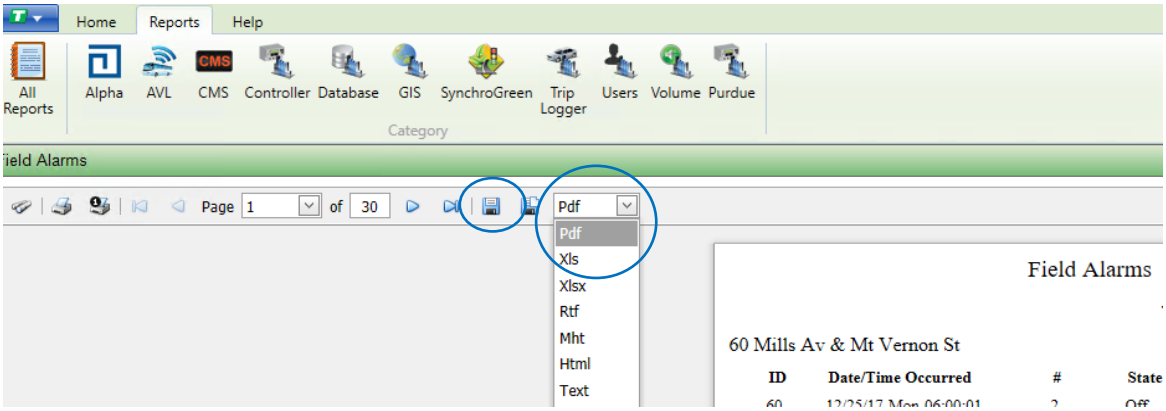
- Click 'Run Report'

- Save PDF and XLS copies of the alarm report to the R:\ICM-Arterials\City of Orlando\Alarm Reports_Weekly folder:

- The default file type should be 'Pdf'. Click the 'Export a report and save to a disk', click 'Save' when the 'File Download' dialog box pops up, and save with the format of 'Orlando Weekly Alarm Report <date>' using the YY-MM-DD format (ex: Orlando Weekly Alarm Report 18-02-27).

- In ATMS, change the drop-down menu that says 'Pdf' to 'Xlsx'. Click the 'Export a report and save to a disk', click 'Save' when the 'File Download' dialog box pops up, and save with the format of 'Orlando Weekly Alarm Report <date>' using the YY-MM-DD format (ex: Orlando Weekly Alarm Report 18-02-27).



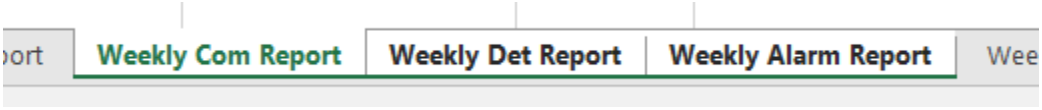


- The excel format of the weekly alarm report should be pasted into the 'Weekly Alarm Paste' worksheet tab. Select all data in weekly alarm report spreadsheet, copy, select all data in 'Weekly alarm paste' worksheet, and paste. This will update the "List of vehicle detectors that experienced 6 or more alarms" section of the 'Weekly Det Report' worksheet.

- The 'Weekly Det Report' is divided into four sections. The data in all four sections are automatically generated from the 'Det Log' and 'Weekly Alarm Paste' data. The only revisions required in this worksheet are hiding and unhiding rows. To start, unhide all rows in the worksheet (select all rows, right-click, Unhide). Each section has a title row (italics) which should never be hidden, a row that says "NONE" which should be hidden any time there is data for that section, a header row (bold & underlined) which should be hidden any time there is no data for that section, and formula-generated data rows of which the blank rows should be hidden. If after hiding the appropriate rows any of the sections are breaking between pages, unhide enough blank rows before that section to force that section onto the next page.

- The 'Weekly Alarm Report' is a list of relevant information from the alarm reports that is sent to City of Orlando because they requested to receive alarm reports weekly instead of daily. All data is manually entered into the worksheet. The weekly alarm report should be reviewed and all relevant information should be summarized.

- Select the 'Weekly Com Report', 'Weekly Det Report', and 'Weekly Alarm Report' worksheet tabs (click first tab then hold Shift and click last tab) and save to PDF in the 'Report PDFs_Weekly' folder: R:\ICM-Arterials\City of Orlando\Report PDFs_Weekly with the format of 'Orlando ATMS Report Weekly <date>' using the YY-MM-DD format (ex: Orlando ATMS Report Weekly 18-02-27).

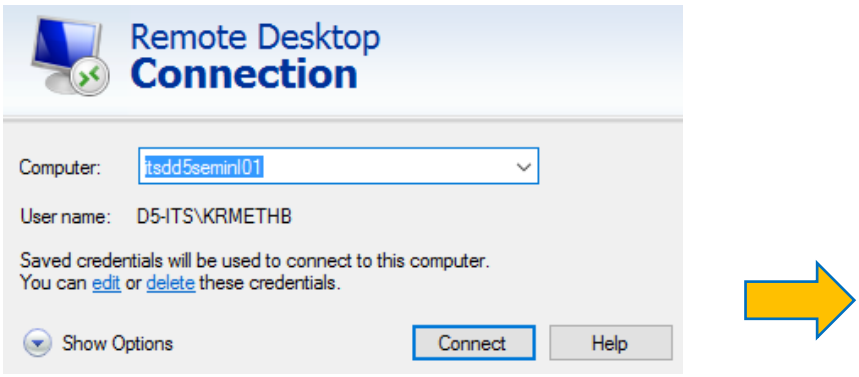


Seminole/Brevard County Weekly Report

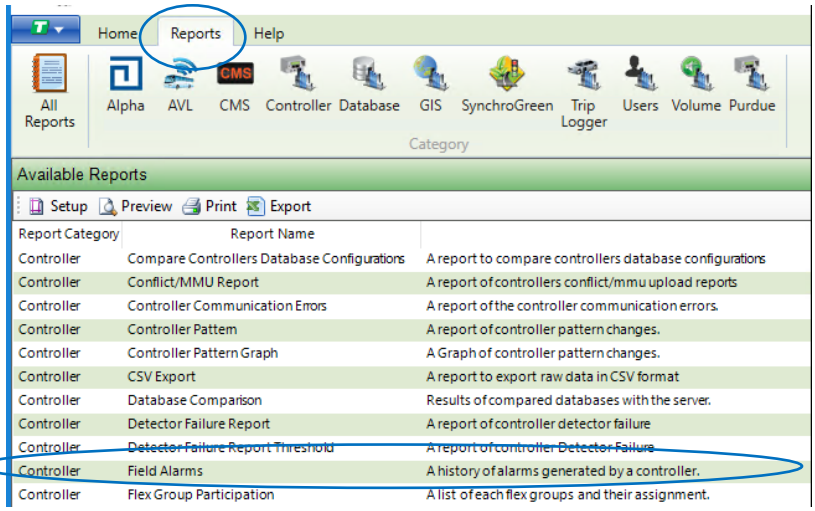
- The Seminole County weekly report is found in the 'Weekly Com Report', 'Weekly Det Report', and 'Weekly Opticom Report' worksheet tabs of the 'Seminole County ATMS Report' excel workbook: R:\ICM-Arterials\Seminole County\Seminole ATMS Report.xlsx. By default, the weekly reports will summarize data for the date range ending today (should be done on Friday) and starting six days previously (should be the previous Saturday). If a different weekly range is desired, the end date should be specified in the 'Specify Date:' highlighted field adjacent to 'Week of:' (cell D3) in the 'Data Output' worksheet tab.

- The 'Weekly Com Report' is automatically generated based on the 'Com Log'. No additional entry is necessary.

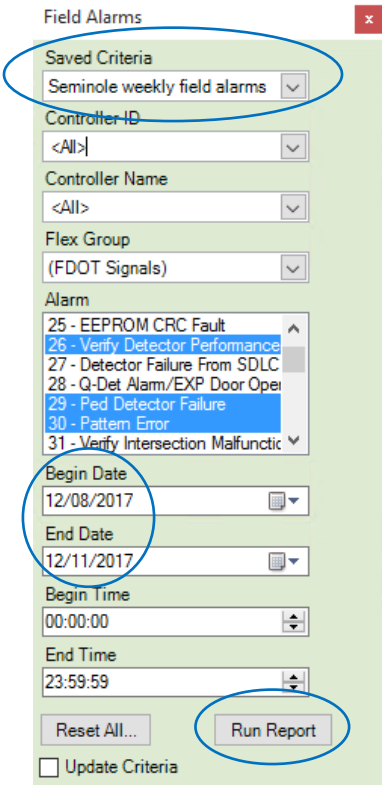
- Weekly alarm reports are downloaded from the Seminole County ATMS program, accessed by logging into 'itstd5seminl03' with the Remote Desktop Connection application. Use your normal computer login for the remote desktop. Open the ATMSStart shortcut and Login with Username = rtmc and Password = rtmc. If the shortcut is not visible, it needs to be added by an administrator.



- Click the 'Reports' tab at the top and choose the 'Field Alarms' report; the 'Field Alarms' dialog box will come up.



- Change the 'Saved Criteria' drop-down to 'Seminole weekly field alarms'. This will automatically fill in the 'Flex Group', 'Alarm', 'Begin Time', and 'End Time' choices.



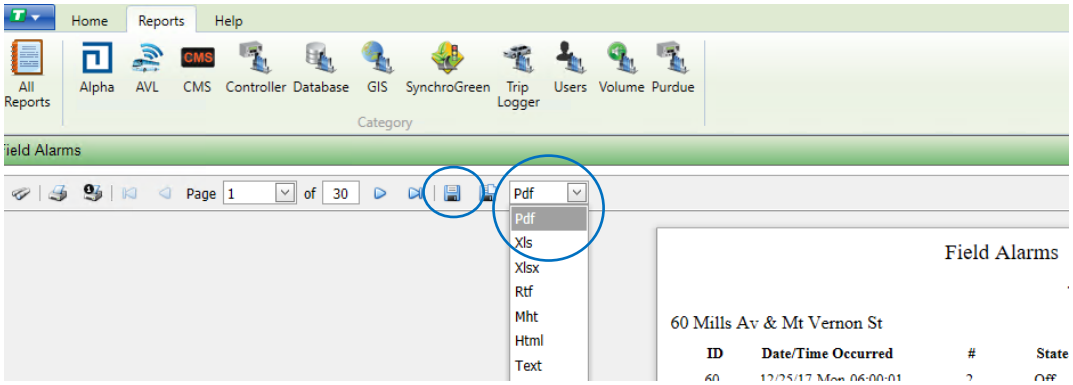
- Change the 'Begin Date' to the begin of the weekly period (typically the previous Saturday) and the end date to the end of the weekly period (typically today or Friday).

- Click 'Run Report'

- Save PDF and XLS copies of the alarm report to the R:\ICM-Arterials\Seminole County\Alarm Reports_Weekly folder:

- The default file type should be 'Pdf'. Click the 'Export a report and save to a disk', click 'Save' when the 'File Download' dialog box pops up, and save with the format of 'Seminole Weekly Alarm Report <date>' (ex: Seminole Weekly Alarm Report 12-8-17).

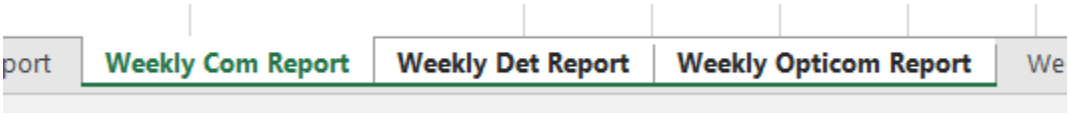
- In ATMS, change the drop-down menu that says 'Pdf' to 'Xls'. Click the 'Export a report and save to a disk', click 'Save' when the 'File Download' dialog box pops up, and save with the format of 'Seminole Weekly Alarm Report <date>' (ex: Seminole Weekly Alarm Report 12-8-17).



- The excel format of the weekly alarm report should be pasted into the 'Weekly Alarm Paste' worksheet tab. Select all data in weekly alarm report spreadsheet, copy, select all data in 'Weekly alarm paste' worksheet, and paste. This will update the "List of vehicle detectors that experienced 6 or more alarms" section of the 'Weekly Det Report' worksheet.

- The 'Weekly Det Report' is divided into four sections. The data in all four sections are automatically generated from the 'Det Log' and 'Weekly Alarm Paste' data. The only revisions required in this worksheet are hiding and unhiding rows. To start, unhide all rows in the worksheet (select all rows, right-click, Unhide). Each section has a title row (italics) which should never be hidden, a row that says "NONE" which should be hidden any time there is data for that section, a header row (bold & underlined) which should be hidden any time there is no data for that section, and formula-generated data rows of which the blank rows should be hidden. If after hiding the appropriate rows any of the sections are breaking between pages, unhide enough blank rows before that section to force that section onto the next page.

- Seminole County has requested that the 'Weekly Opticom Report' be separated from the 'Weekly Com Report' and 'Weekly Det Report'. Select the 'Weekly Com Report' and 'Weekly Det Report' worksheet tabs (click first tab then hold Shift and click last tab) and save to PDF in the 'Report PDFs_Weekly' folder: R:\ICM-Arterials\Seminole County\Report PDFs_Weekly with the format of 'Seminole ATMS Report Weekly <date>' (ex: Seminole ATMS Report Weekly 12-11-17). Select the 'Weekly Opticom Report' worksheet tab and save to PDF in the 'Report PDFs_Weekly' folder with the format of 'Seminole ATMS Report Weekly Opticom <date>' (ex: Seminole ATMS Report Weekly Opticom 12-11-17).

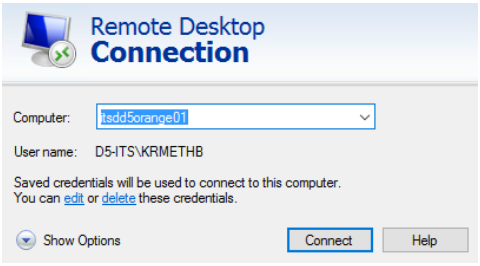


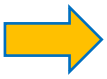
Orange County Weekly Report/SR 414 (City of Maitland/SR 426 (city of Winter Park) (TACTICS)

- The Orange County weekly report is found in the 'Weekly Com Report', 'Weekly Det Report', and 'Weekly Opticom Report' worksheet tabs of the 'Orange County ATMS Report' excel workbook: R:\ICM-Arterials\Orange County\Orange TACTICS Report.xlsx. By default, the weekly reports will summarize data for the date range ending today (should be done on Friday) and starting six days previously (should be the previous Saturday). If a different weekly range is desired, the end date should be specified in the 'Specify Date:' highlighted field adjacent to 'Week of:' (cell D3) in the 'Data Output' worksheet tab.

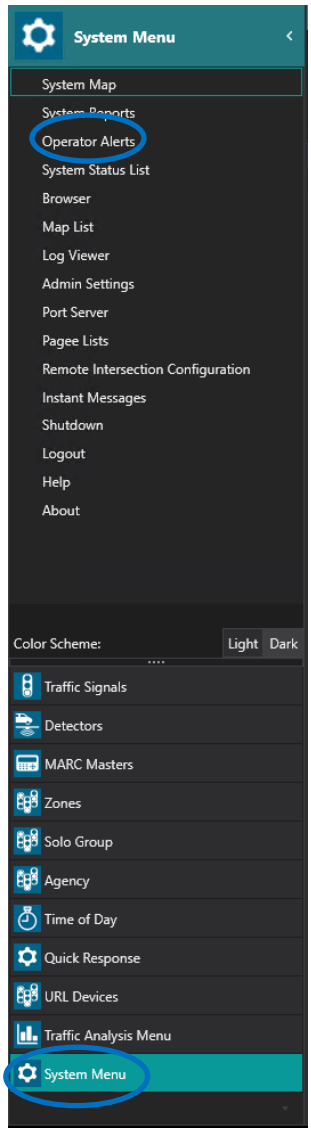
- The 'Weekly Com Report' is automatically generated based on the 'Com Log'. No additional entry is necessary.

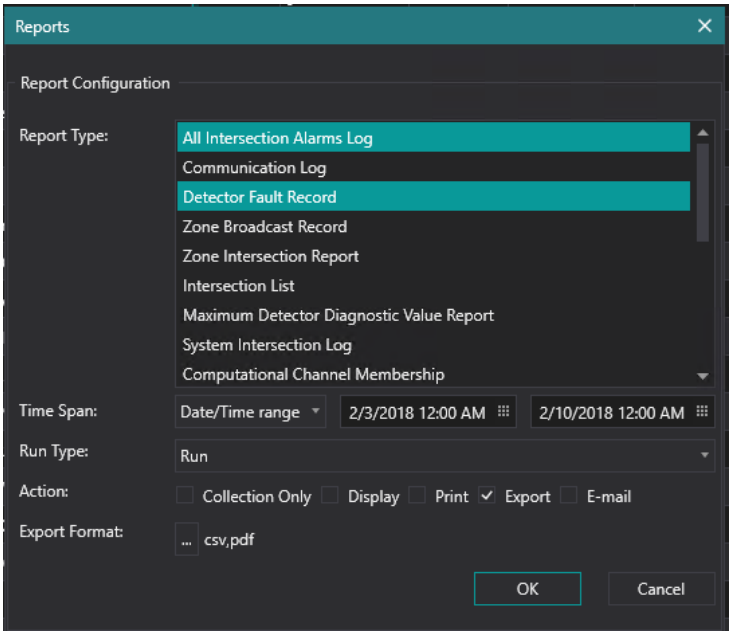
- Weekly alarm reports are downloaded from the Orange County TACTICS program, accessed by logging into 'itsdd5orange01' or 'itsdd5orange02' with the Remote Desktop Connection application and opening the TACTICS Central program (Username = fdot and Password = tacticsread)



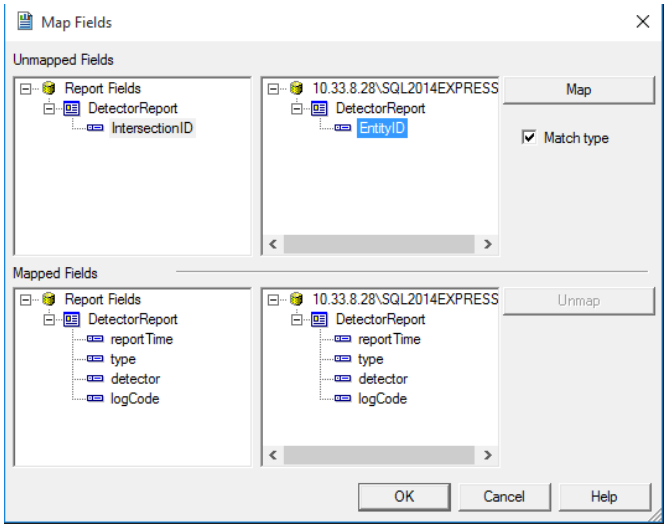


- Click the 'System Menu' in the bottom-left corner.
- Click 'System Reports' to load the Report display menu.
- Hold Ctrl and click on 'All Intersection Alarms Log' and 'Detector Fault Record' under 'Report Type'. Under 'Time Span', click the dropdown and choose 'Date/Time Range', set the begin date to the begin of the weekly period (typically the previous Saturday) and the end date to the day after the end of the weekly period (typically Saturday). The time will automatically set to 12:00 AM.
- Uncheck the 'Display' box and check the 'Export' box. Choose the 'Export Format' dropdown, hold Ctrl and click on 'Comma-Separated Values (.csv)', and 'Portable Document Format (.pdf)'.
- Click Ok.





- In the 'Map Fields' dialog pop-up, click on 'EntityID' in the top right box, choose 'Map', and click Ok.



- TACTICS reports are exported to the C:\Program Files (x86)\ITS Software\TACTICS Central\Report Output Files. System Status reports go into the 'SystemStatus' folder. These reports should be copied into the R:\ICM-Arterials\Orange County\Alarm Reports_Weekly folder. The 'All Intersection Alarms Log' PDF should be renamed with the format of 'Orange Weekly Alarm Report <date>' (ex: Orange Weekly Alarm Report 12-8-17). The 'Detector Fault Record' PDF should be renamed with the format of 'Orange Weekly Detector Report <date>' (ex: Orange Weekly Detector Report 12-8-17). The excel files do not need to be renamed.

Orange County Weekly Report (MaxView)

- The Orange County weekly report is found in the 'Weekly Com Report', 'Weekly Det Report', and 'Weekly Opticom Report' worksheet tabs of the 'Orange County Report' excel workbook: R:\ICM-Arterials\Orange County\Orange TACTICS Report.xlsx. By default, the weekly reports will summarize data for the date range ending today (should be done on Friday) and starting six days previously (should be the previous Saturday). If a different weekly range is desired, the end date should be specified in the 'Specify Date:' highlighted field adjacent to 'Week of:' (cell D3) in the 'Data Output' worksheet tab.

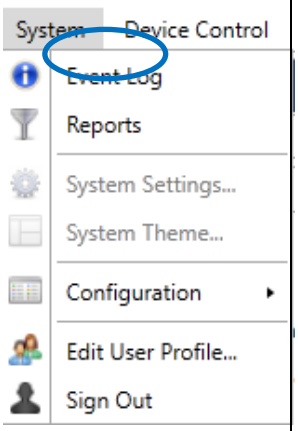
- The 'Weekly Com Report' is automatically generated based on the 'Com Log' entered daily for MaxView. MaxView Communication status are viewed daily and are automatically included in the weekly report along with Tactics. No additional entry is necessary.

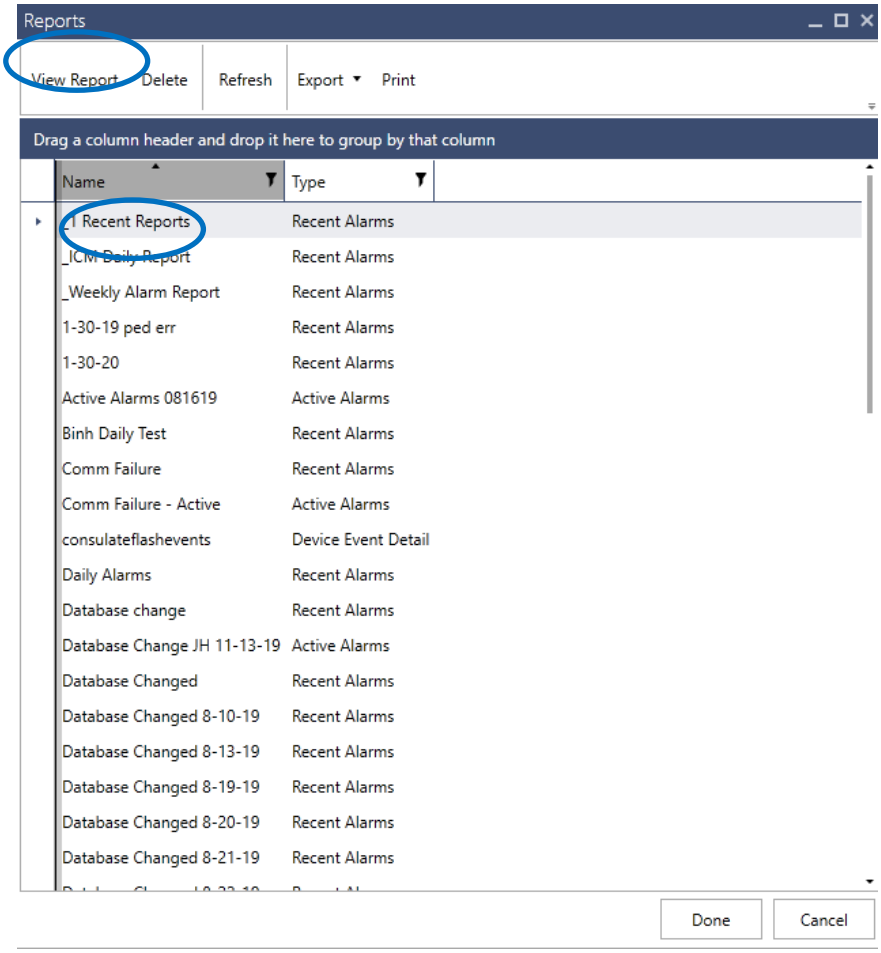
- Weekly alarm reports are downloaded from the Orange County MaxView via Internet Explorer in the same manner as daily reports, accessed by logging into: http://ocmaxview/maxview/ (Username = mrodriguez and Password = AG!4ICM)

- Click the 'System' in the top-left corner.

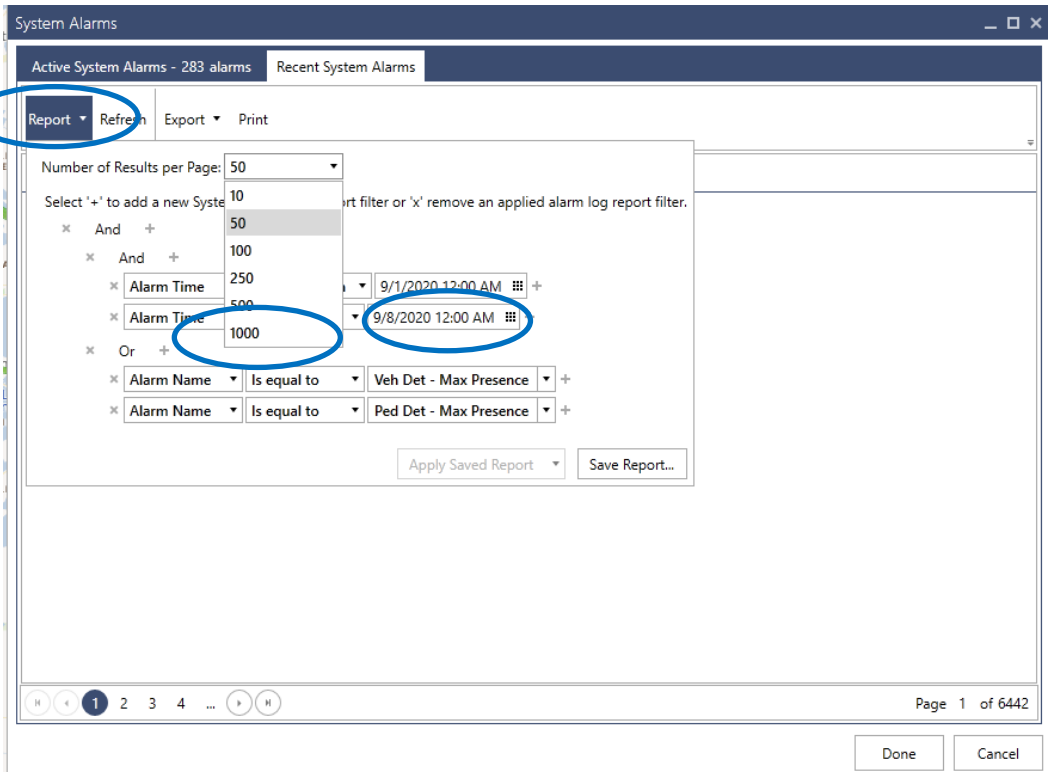
- Click "Reports" to load the Report display menu.

- Choose 'ICM Daily Report, Recent Alarm and then "View Report Click the 'System Menu' in the bottom-left corner.





- The System Alarm Menu will pop-up. Change the number of results per page to "1,000" and set the "Alarm Time" dates to be greater than Friday's date 12:00 AM and less than today's Date (Friday at 12:00 AM) then click "refresh" and export a PDF and Excel version of the Report to R:\ICM-Arterials\Orange County\Alarm Reports Daily\MaxView Weekly

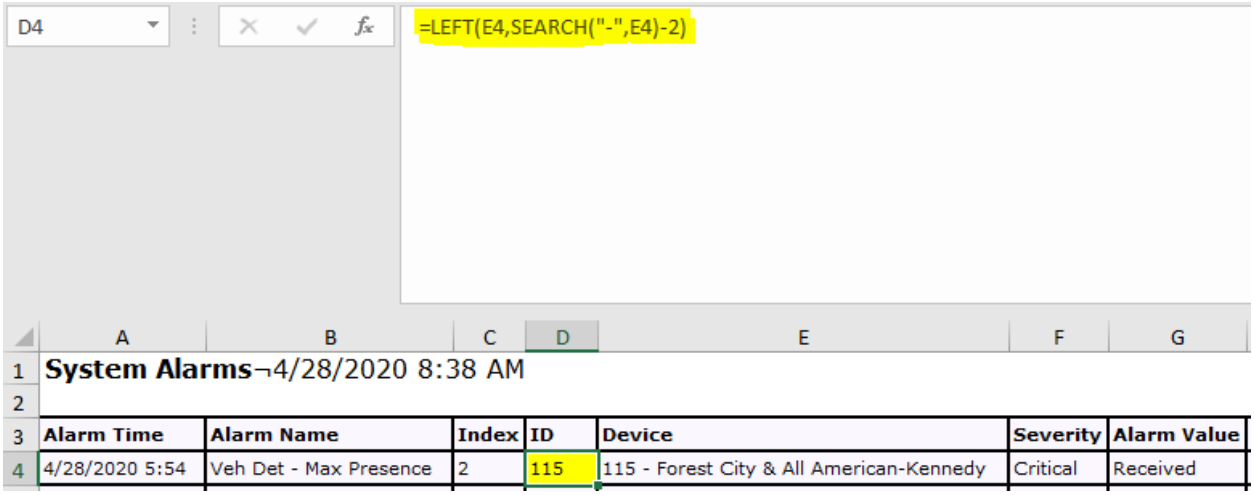


- Insert a new column and name it “ID” between the “Index” column and the “Device” column.

Alarm Time	Alarm Name	Index	Device	Severity	Alarm Value	Notified Users
8/23/2019 5:58	Veh Det - Max Presence	11	299 - S. OBT & SR417 NB ramp	Critical	Received	fpulla
8/23/2019 5:50	Veh Det - Max Presence	16	624 - N. Orange Blossom Tr- SR 441 & SR Connector-Kitt Av	Critical	Cleared	drodriguez
8/23/2019 5:40	Veh Det - Max Presence	16	- N. Orange Blossom Tr- SR 441 & SR Connector-Kitt Av	Critical	Received	drodriguez
8/23/2019 5:39	Veh Det - Config Fault	6	- N. Orange Blossom Trail- SR 441 & erland	Critical	Received	drodriguez
8/23/2019 5:39	Veh Det - Max Presence	11	- N. Orange Blossom Trail- SR 441 & erland	Critical	Received	drodriguez
8/23/2019 5:39	Veh Det - Config Fault	11	N. Orange Blossom Trail- SR 441 & erland	Critical	Received	drodriguez

Insert

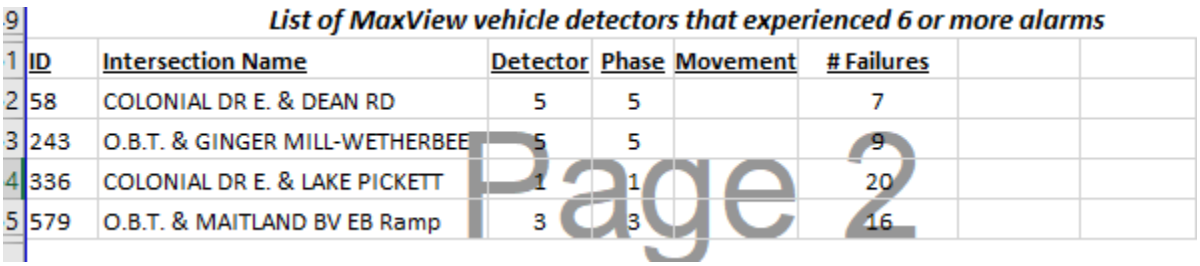
- Populate the new column created “ID” by using the highlighted formula and apply it to the entire column, then use “Sort & Filter” →” Custom Sort” →” Sort By ID” →” Cell Values” →” A to Z”. Make sure to edit the formula for single digit and 2 digits “ID” numbers if needed.



D4 | =LEFT(E4,SEARCH("-",E4)-2)

	A	B	C	D	E	F	G
1	**System Alarms**¬4/28/2020 8:38 AM						
2							
3	**Alarm Time**	**Alarm Name**	**Index**	**ID**	**Device**	**Severity**	**Alarm Value**
4	4/28/2020 5:54	Veh Det - Max Presence	2	115	115 - Forest City & All American-Kennedy	Critical	Received

- When finished, paste the sorted table in the "Intelight Weekly Alarm Paste" tab of the "Orange Tactics Report". This will automatically populate the List of "MaxView" vehicle detectors that experienced 6 or more alarms of the Weekly det. Report. No further action is required.



List of MaxView vehicle detectors that experienced 6 or more alarms

ID	Intersection Name	Detector	Phase	Movement	# Failures
58	COLONIAL DR E. & DEAN RD	5	5		7
243	O.B.T. & GINGER MILL-WETHERBEE	5	5		9
336	COLONIAL DR E. & LAKE PICKETT	1	1		20
579	O.B.T. & MAITLAND BV EB Ramp	3	3		16

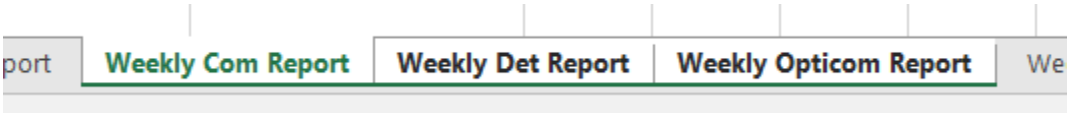
Page 2

- **Please note that if the excel export do not cover all days of the week (Max export of 1,000 pages in MaxView), make sure to combine multiple pages into one weekly report to paste in Orange County Spreadsheet!**

- The excel format of the weekly 'Detector Fault Record' spreadsheet should be pasted into the 'Weekly Alarm Paste' worksheet tab. Select all data in 'Detector Fault Record' spreadsheet, copy, select all data in 'Weekly alarm paste' worksheet, and paste. This will update the "List of vehicle detectors that experienced 6 or more alarms" section of the 'Weekly Det Report' worksheet.

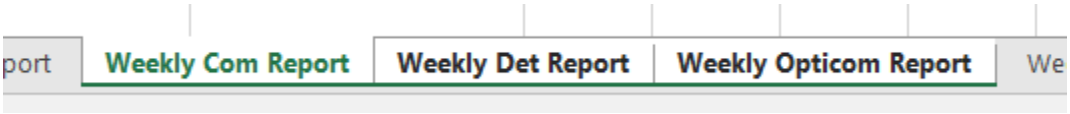
- The 'Weekly Det Report' is divided into four sections. The data in all four sections are automatically generated from the 'Det Log' and 'Weekly Alarm Paste' data. The only revisions required in this worksheet are hiding and unhiding rows. To start, unhide all rows in the worksheet (select all rows, right-click, Unhide). Each section has a title row (italics) which should never be hidden, a row that says "NONE" which should be hidden any time there is data for that section, a header row (bold & underlined) which should be hidden any time there is no data for that section, and formula-generated data rows of which the blank rows should be hidden. If after hiding the appropriate rows any of the sections are breaking between pages, unhide enough blank rows before that section to force that section onto the next page.

- Select the 'Weekly Opticom Report', 'Weekly Com Report' and 'Weekly Det Report' worksheet tabs (click first tab then hold Shift and click last tab) and save to PDF in the 'Report PDFs_Weekly' folder: R:\ICM-Arterials\Orange County\Report PDFs_Weekly with the format of 'Orange Weekly TACTICS Report <date>' (ex: Orange Weekly TACTICS Report 12-11-17).



- When finished entering all warning events, these events should be sorted by intersection (click arrow in 'Intersection' column and choose Sort Ascending. All duplicate events should be removed or combined (ex: if there are two events for the same intersection, one for Channels A and B, and the other for Channels B and C, delete the second event and add Channel C to the first event).

- Select the 'Weekly Opticom Report', 'Weekly Com Report' and 'Weekly Det Report' worksheet tabs (click first tab then hold Shift and click last tab) and save to PDF in the 'Report PDFs Weekly' folder: R:\ICM-Arterials\Orange County\Report PDFs_Weekly with the format of 'Orange Weekly TACTICS Report <date>' (ex: Orange Weekly TACTICS Report 12-11-17).

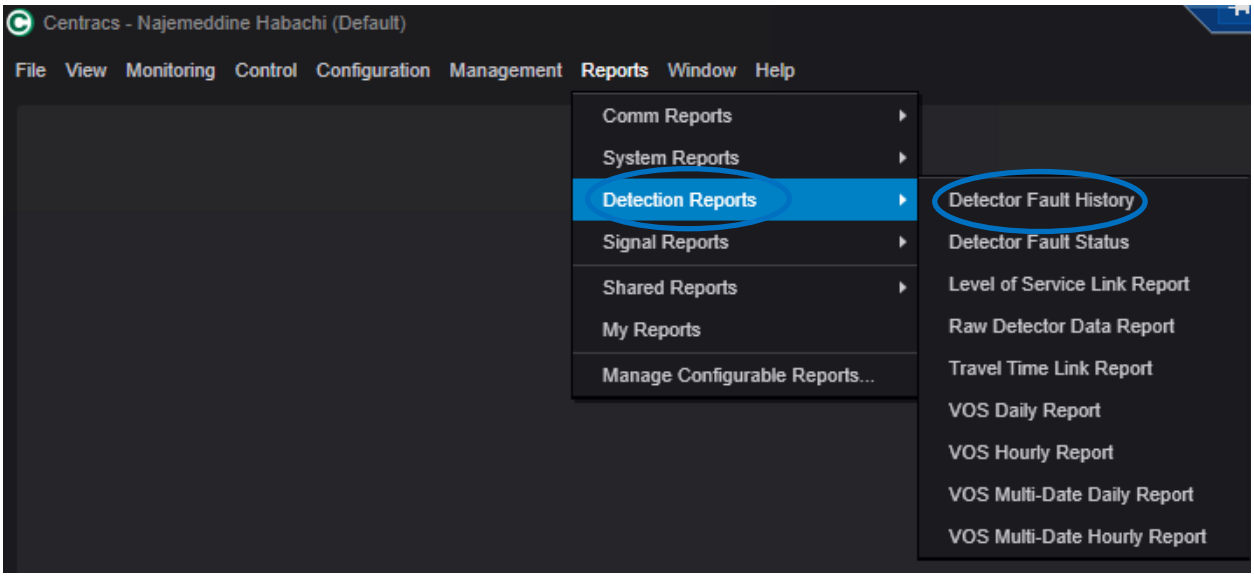


Osceola/Volusia County Weekly Report (Centracs)

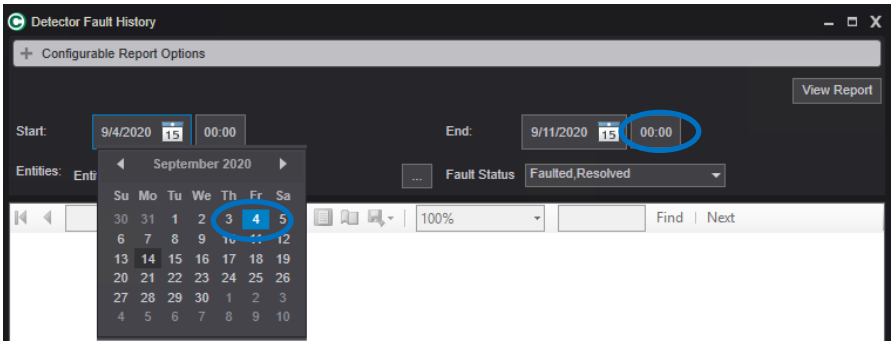
- The Osceola County weekly report is found in the 'Weekly Com Report', 'Weekly Det Report', 'Weekly Opticom Report' and 'Weekly Opticom Coms' worksheet tabs of the 'Osceola Report' excel workbook: R:\ICM-Arterials\Osceola\Osceola_Report.xlsx. By default, the weekly reports will summarize data for the date range ending today (should be done on Friday) and starting six days previously (should be the previous Saturday). If a different weekly range is desired, the end date should be specified in the 'Specify Date:' highlighted field adjacent to 'Week of:' (cell D3) in the 'Data Output' worksheet tab.

- The 'Weekly Com Report' is automatically generated based on the 'Com Log' entered daily for Centracs. Centracs Communication status are viewed daily and are automatically included in the weekly report. No additional entry is necessary.

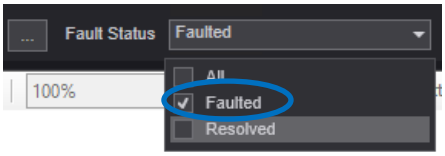
- Weekly alarm reports are downloaded from the Osceola County Centracs the same manner as daily reports, accessed by logging into the Centracs ATMS.
- Click the 'reports' in the display menu
- Click "Detection reports" →"Detector Fault History"→"View Report"



- Set the start date of the report to previous Friday at 00:00 and the end date to today's date (usually Friday at 00:00 as well)



- Filter Fault status to "Faulted"



- Export a "csv" version of the Report to R:\ICM-Arterials\Osceola\Weekly

- Delete the top 2 rows and paste the "csv" file into the "Weekly Alarm Paste" tab. This will automatically populate the List of "Centracs" vehicle detectors that experienced 6 or more alarms of the Weekly det. Report. No further action is required.

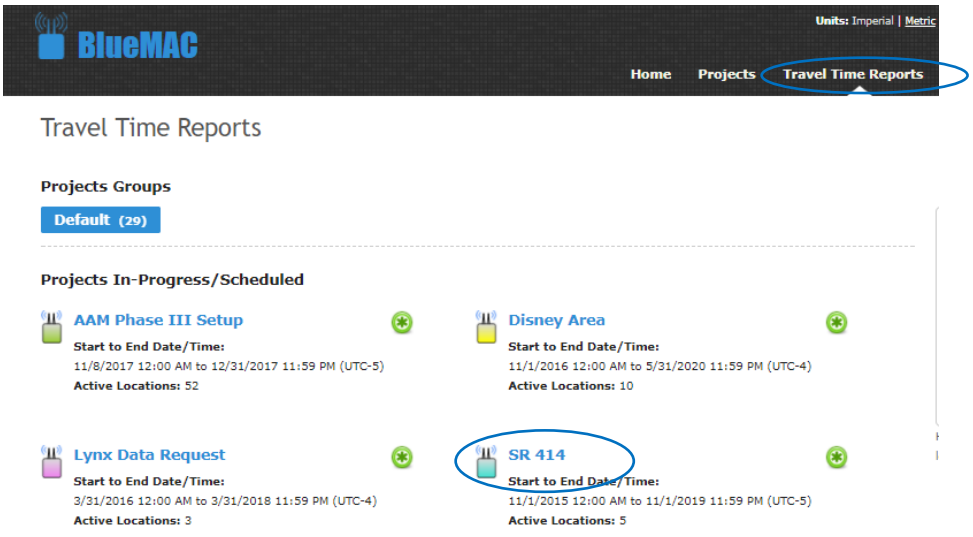
- Combine and print the weekly tabs into one Weekly PDF Report at this location R:\ICM-Arterials\Osceola\Weekly\Weekly PDF . The report is to be sent to the corresponding agency.

2.4 Monthly ICM-AAM Communications Reports

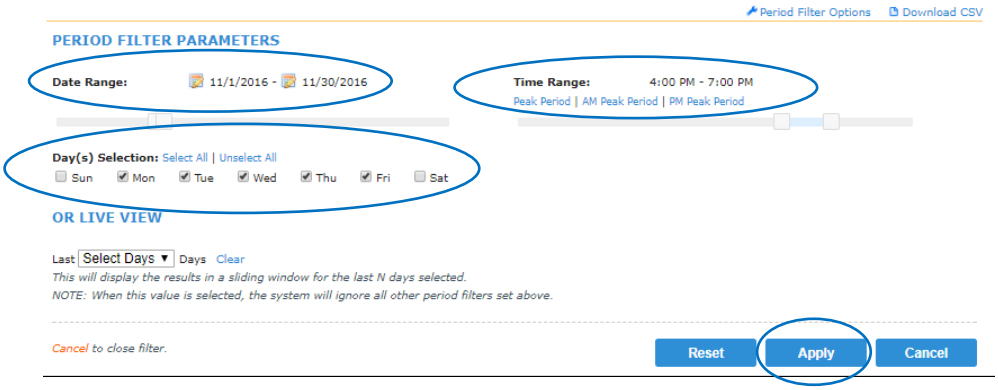
The monthly report is located in the 'D5 Monthly Report' excel workbook located in the Monthly Report folder: R:\ICM-Arterials\Monthly Report\D5 Monthly Report.xlsx. The yellow-colored worksheet tabs are the sheets that get printed for the monthly report and include an overview sheet, TSP/preemption summary, and individual sheets for each corridor summarizing the travel time and O/D study results. Data from other excel workbooks are automatically brought into the 'Data' worksheet. When the monthly report has been finalized, the excel workbook should be saved as 'D5 Monthly Report - <Month> <Year>' (ex: D5 Monthly Report - December 2017') and the data in the 'Data' worksheet should be locked in (remove external links to prevent data from changing) by selecting all data in the 'Data' worksheet and copy/pasting as values over itself. Removal of links should be verified by checking that the 'Edit Links' button in the Data menu is greyed out. Alternatively, clicking the 'Edit Links' button and clicking 'Break Link' for all links will also remove the links. The following sections describe the processes to import additional data from BlueMAC, BlueTOAD, SunGuide, Seminole County ATMS, ICAT, and Opticom CMS:

<u>BlueMAC Travel Times and O/D Studies</u>

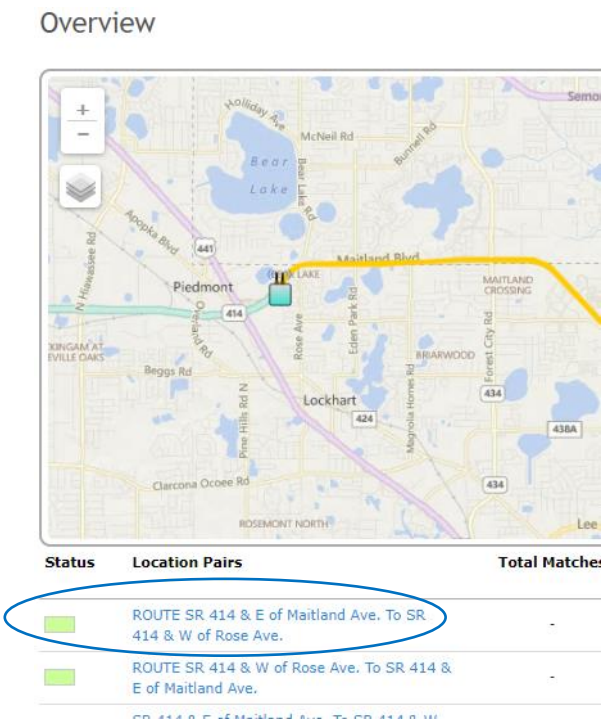
- The BlueMAC travel time information is pasted into the data worksheet tabs (colored blue) of the BlueMAC corridors. To access the travel time information, go to the BlueMAC website (http://d5bluemac/), click 'Travel Time Reports' and select a corridor.

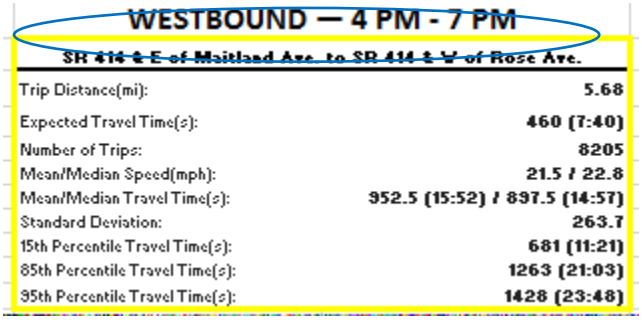


- Click 'Period Filter Options' to view the time period that will be displayed for each route. Date ranges will need to include the report month. Time ranges will need to include 6:00 AM – 9:00 AM and 4:00 PM – 7:00 PM for each date range. The Day Selection should have Mon, Tue, Wed, Thu, and Fri checked. Click 'Apply' when finished.

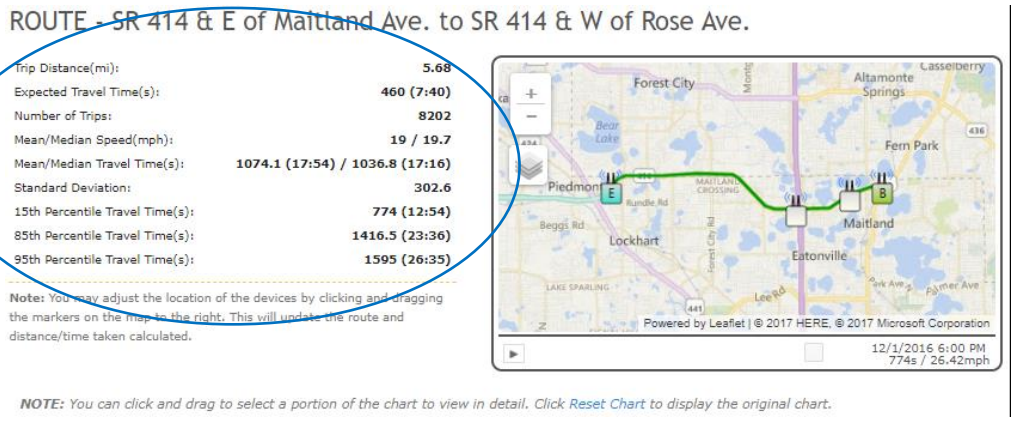


- The travel time data will be pasted into the yellow-framed boxes in the cell range of Y66:AI74 in each of the BlueMAC data (blue tab) worksheets. There are 4 boxes (5 date ranges x 2 times of day x 2 directions) that need to be completed for each corridor. The name of the route is at the top of each box. Click on the route in BlueMAC that corresponds to the route in each box to retrieve the travel time data.

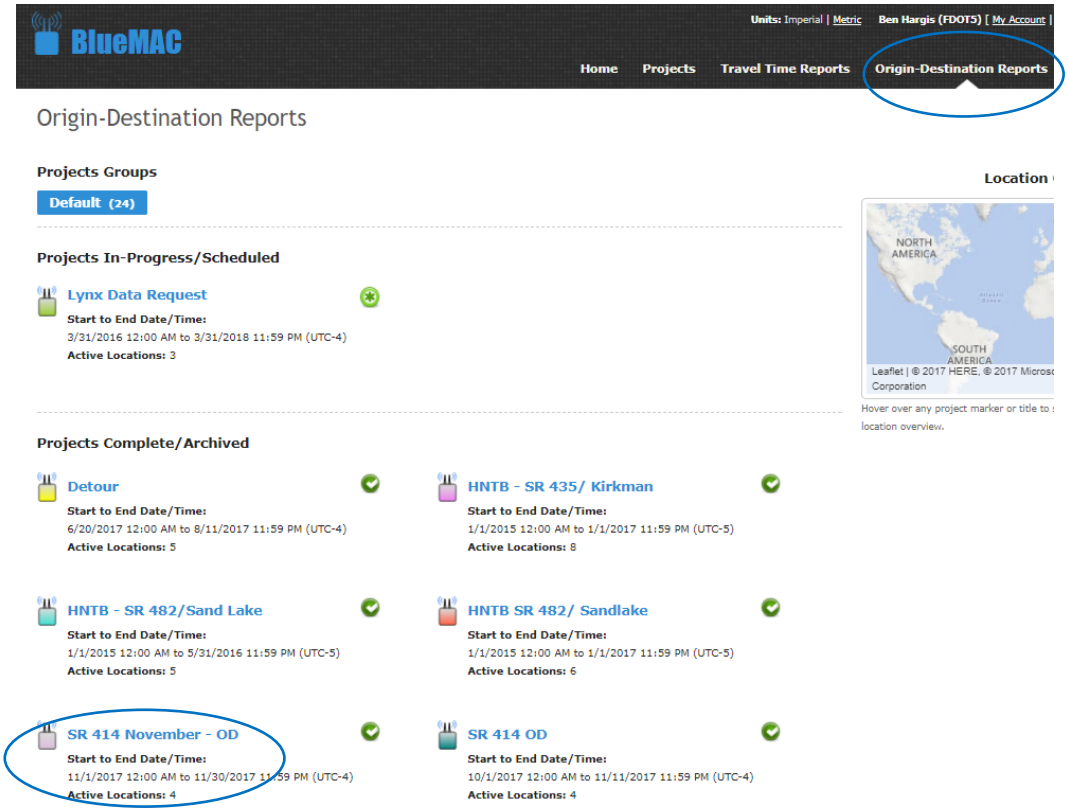




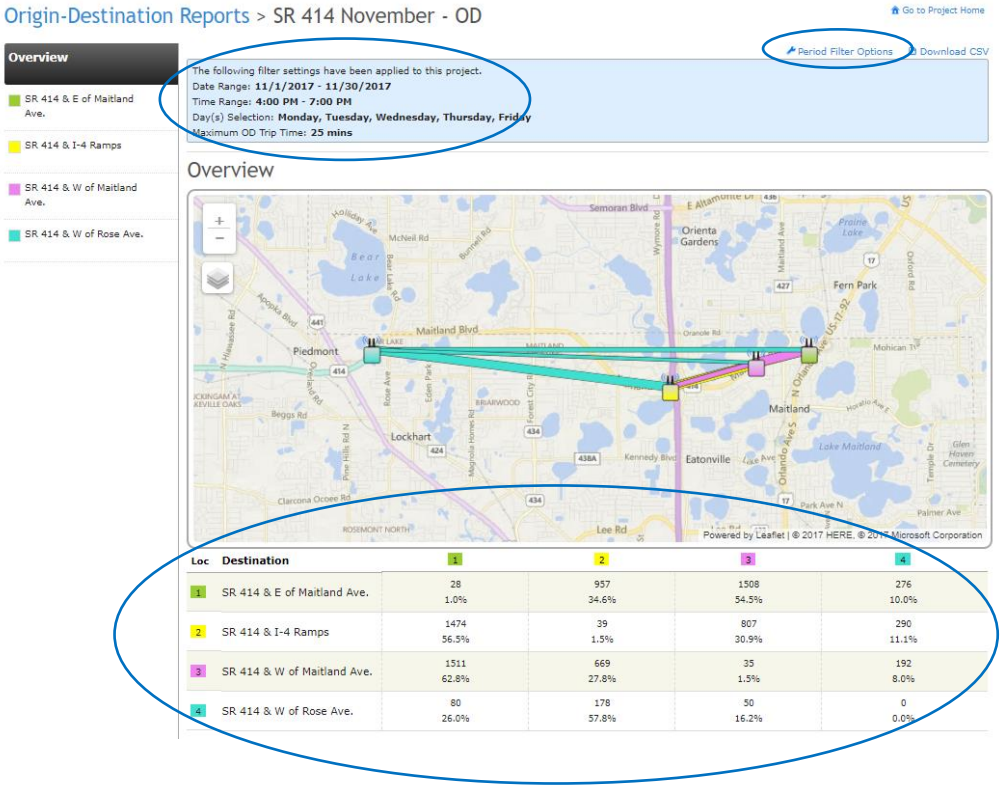
- At the top of the travel time results is a list of metrics that need to be pasted over the existing data in each of the yellow boxes. Select everything in BlueMAC from "Trip distance(mi):" to the numbers corresponding to the 95th Percentile Travel Time and paste into the yellow box of the excel worksheet.

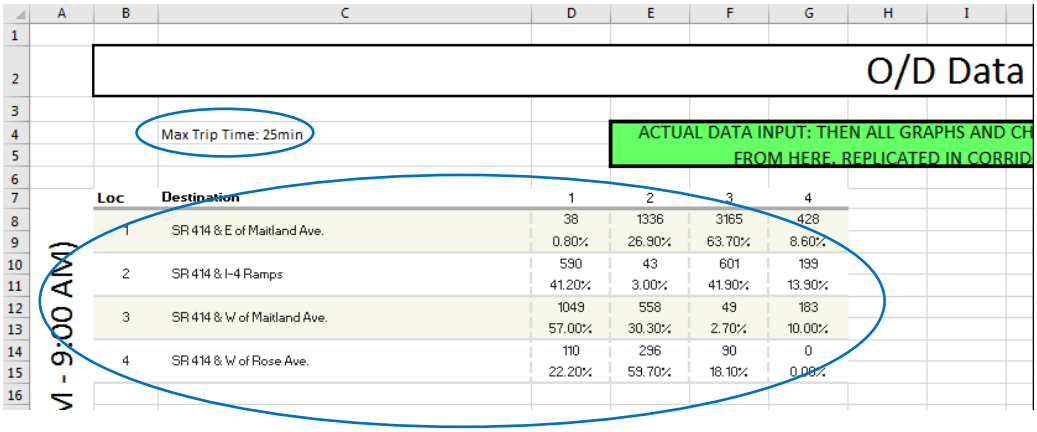


- When finished pasting BlueMAC travel time data into each yellow box in each BlueMAC corridor worksheet, the BlueMAC O/D data can be found by clicking 'Origin-Destination Reports' and then clicking on each BlueMAC corridor. These O/D studies need to be created by an administrator and each study is named with the corridor and month.



- The date range (only for report month), time range (6:00 AM – 9:00 AM and 4:00 PM – 7:00 PM), and day selection (Monday, Tuesday, Wednesday, Thursday, Friday) should be set in the 'Period Filter Options'. The Maximum OD Trip Time should be set to be equal to the Max Trip Time in the excel worksheet indicated above the O/D study tables (top-left of each BlueMAC data worksheet). Each corridor's O/D study table should be pasted over the existing O/D study table (once for AM and once for PM).





- The number-device name pairings in the yellow-highlighted cells to the right of the O/D tables need to match those in the O/D tables (ex: if SR 414 & W of Rose Ave is Loc #4 in BlueMAC, there needs to be a '4' next to SR 414 & W of Rose Ave in the yellow-highlighted cells to the right). This should typically be correct by default.

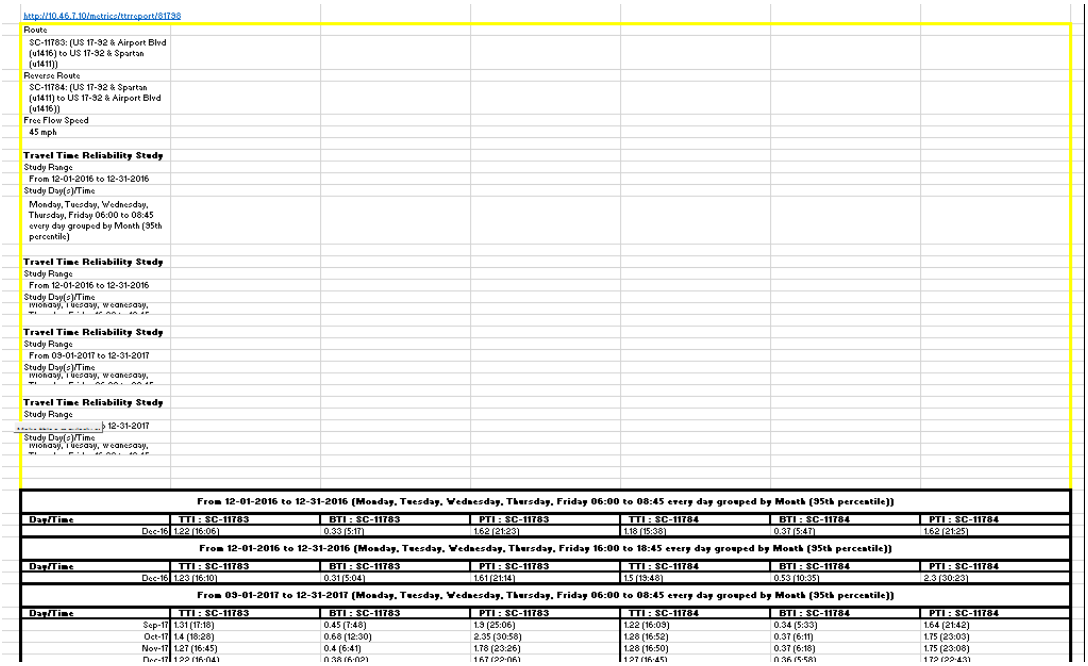
Loc	Destination	1	2	3	4
1	SR 414 & E of Maitland Ave.	38 0.80%	1336 26.90%	3165 63.70%	428 8.60%
2	SR 414 & I-4 Ramps	590 41.20%	43 3.00%	601 41.90%	199 13.90%
3	SR 414 & W of Maitland Ave.	1049 57.00%	558 30.30%	49 2.70%	183 10.00%
4	SR 414 & W of Rose Ave.	110 22.20%	296 59.70%	90 18.10%	0 0.00%

	WEST
SR 414 & W of Rose Ave.	4
SR 414 & I-4 Ramps	2
SR 414 & W of Maitland Ave.	3
SR 414 & E of Maitland Ave.	1

<u>BlueTOAD Travel Times and O/D Studies</u>

- The BlueTOAD travel time information is pasted into the data worksheet tabs (colored green) of the BlueTOAD corridors. To access the travel time information, copy the links (cell Y64) at the top of each of the travel time paste areas (yellow border) into a web browser {this may take some time to load}. These links will have the BlueTOAD travel time report from the previous month and will only need to be adjusted by moving the date ranges forward one month and clicking 'Generate'.

- Paste the data from BlueTOAD over the existing data in each BlueTOAD worksheet.



http://10.46.7.10/metricc/ttrreport/81736

Route
SC-11783: (US 17-92 & Airport Blvd (v1416) to US 17-92 & Spartan (v1411))
Reverse Route
SC-11784: (US 17-92 & Spartan (v1411) to US 17-92 & Airport Blvd (v1416))
Free Flow Speed
45 mph

Travel Time Reliability Study
Study Range
From 12-01-2016 to 12-31-2016
Study Day(s)/Time
Monday, Tuesday, Wednesday, Thursday, Friday 06:00 to 08:45 every day grouped by Month (95th percentile)

Travel Time Reliability Study
Study Range
From 12-01-2016 to 12-31-2016
Study Day(s)/Time
monday, tuesday, wednesday,

Travel Time Reliability Study
Study Range
From 03-01-2017 to 12-31-2017
Study Day(s)/Time
monday, tuesday, wednesday,

Travel Time Reliability Study
Study Range
12-31-2017
Study Day(s)/Time
monday, tuesday, wednesday,

From 12-01-2016 to 12-31-2016 (Monday, Tuesday, Wednesday, Thursday, Friday 06:00 to 08:45 every day grouped by Month (95th percentile))

Day/Time	TTI : SC-11783	BTI : SC-11783	PTI : SC-11783	TTI : SC-11784	BTI : SC-11784	PTI : SC-11784
Dec-16	1.22 (16:06)	0.33 (5:17)	1.62 (21:23)	1.18 (15:38)	0.37 (5:47)	1.62 (21:25)

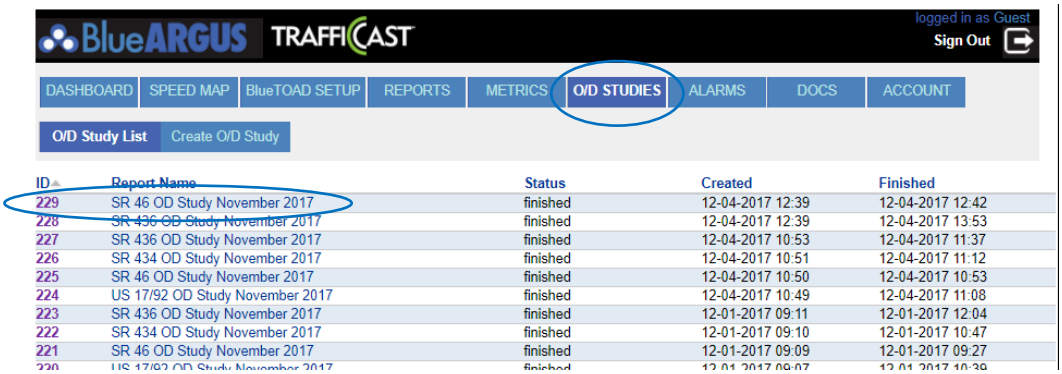
From 12-01-2016 to 12-31-2016 (Monday, Tuesday, Wednesday, Thursday, Friday 16:00 to 18:45 every day grouped by Month (95th percentile))

Day/Time	TTI : SC-11783	BTI : SC-11783	PTI : SC-11783	TTI : SC-11784	BTI : SC-11784	PTI : SC-11784
Dec-16	1.23 (16:10)	0.31 (5:04)	1.61 (21:14)	1.5 (19:48)	0.53 (10:35)	2.3 (30:23)

From 03-01-2017 to 12-31-2017 (Monday, Tuesday, Wednesday, Thursday, Friday 06:00 to 08:45 every day grouped by Month (95th percentile))

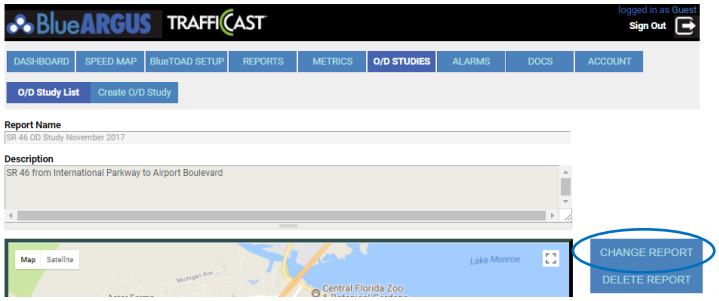
Day/Time	TTI : SC-11783	BTI : SC-11783	PTI : SC-11783	TTI : SC-11784	BTI : SC-11784	PTI : SC-11784
Sep-17	1.31 (17:18)	0.45 (7:48)	1.9 (25:06)	1.22 (16:09)	0.34 (5:33)	1.64 (21:42)
Oct-17	1.4 (18:28)	0.68 (12:30)	2.35 (30:58)	1.28 (16:52)	0.37 (6:11)	1.75 (23:03)
Nov-17	1.27 (16:45)	0.4 (6:41)	1.78 (23:26)	1.28 (16:50)	0.37 (6:18)	1.75 (23:08)
Dec-17	1.22 (16:04)	0.38 (6:02)	1.67 (22:06)	1.27 (16:45)	0.36 (5:58)	1.73 (22:43)

- When finished pasting BlueTOAD travel time data into each BlueTOAD corridor worksheet, the BlueTOAD O/D data can be found by clicking 'O/D STUDIES' (BlueTOAD website https://bluetoad.trafficcast.com/) and then clicking on the O/D study from the previous month to edit the time range.

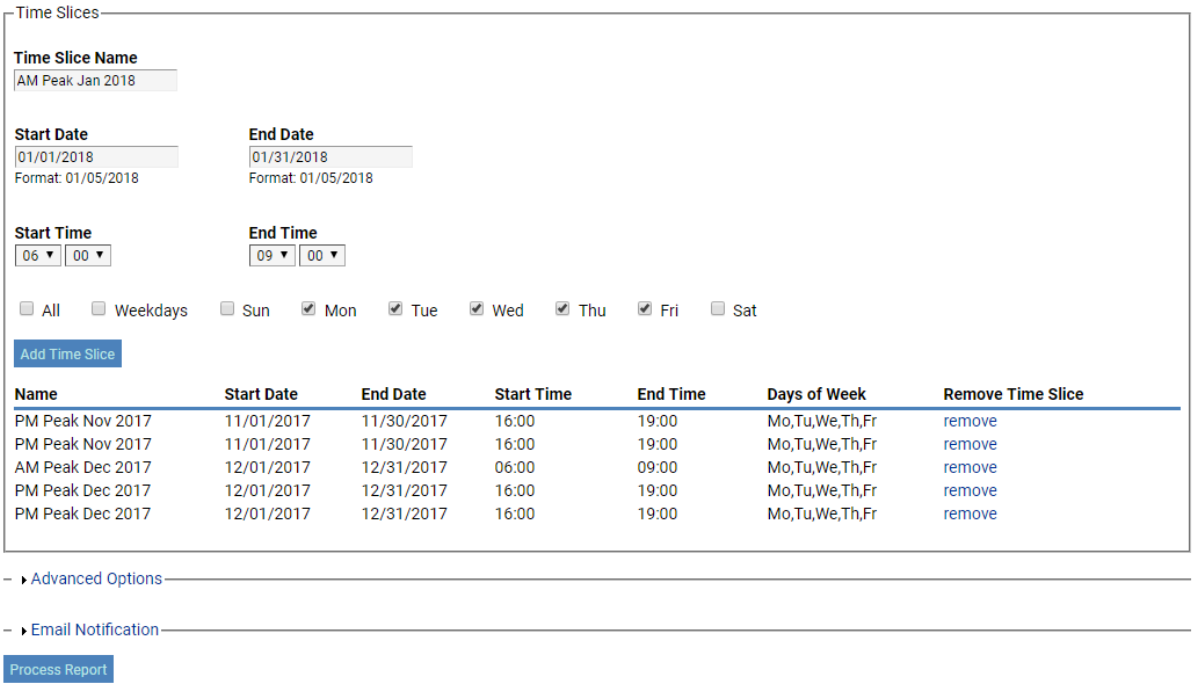


ID	Report Name	Status	Created	Finished
229	SR 46 OD Study November 2017	finished	12-04-2017 12:39	12-04-2017 12:42
228	SR 436 OD Study November 2017	finished	12-04-2017 12:39	12-04-2017 13:53
227	SR 436 OD Study November 2017	finished	12-04-2017 10:53	12-04-2017 11:37
226	SR 434 OD Study November 2017	finished	12-04-2017 10:51	12-04-2017 11:12
225	SR 46 OD Study November 2017	finished	12-04-2017 10:50	12-04-2017 10:53
224	US 17/92 OD Study November 2017	finished	12-04-2017 10:49	12-04-2017 11:08
223	SR 436 OD Study November 2017	finished	12-01-2017 09:11	12-01-2017 12:04
222	SR 434 OD Study November 2017	finished	12-01-2017 09:10	12-01-2017 10:47
221	SR 46 OD Study November 2017	finished	12-01-2017 09:09	12-01-2017 09:27

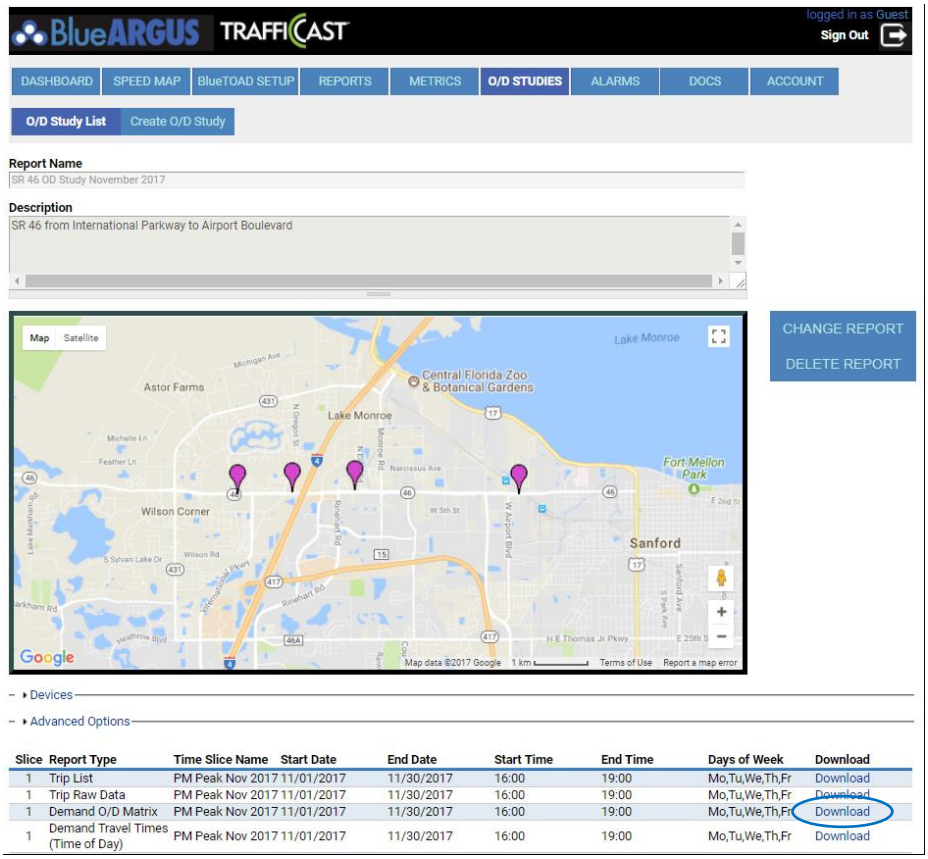
- After opening the previous O/D Study, click 'CHANGE REPORT'.



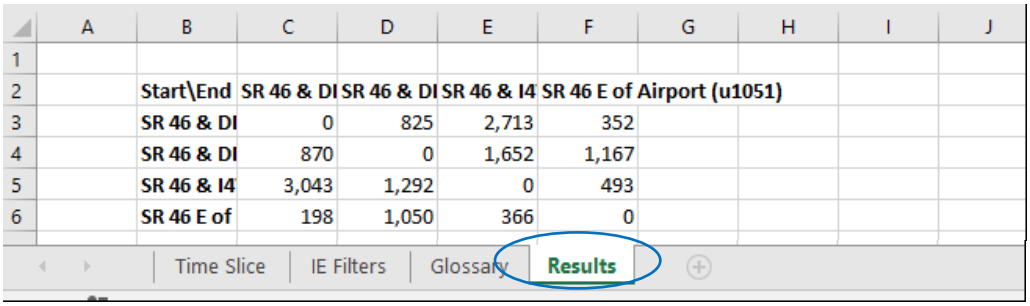
- Change the month/year in 'Report Name' to reflect the report month. Add the two new Time Slices: Time Slice Name = <AM/PM> Peak <Month> <Year> (ex: AM Peak Jan 2018 & PM Peak Jan 2018), Start Date and End Date = start/end of report month, Start Time and End Time = (6:00 to 9:00 for AM & 16:00 to 19:00 PM), and check the Mon, Tue, Wed, Thu, and Fri boxes. Click 'Add Time Slice' for each new Time Slice then click 'remove' next to the previous Time Slices to remove them. Click 'Process Report' at bottom.



- The O/D Study will take time to process. When finished, click the new O/D Study, and click 'Download' next to the Demand O/D Matrix for both time periods (AM & PM).



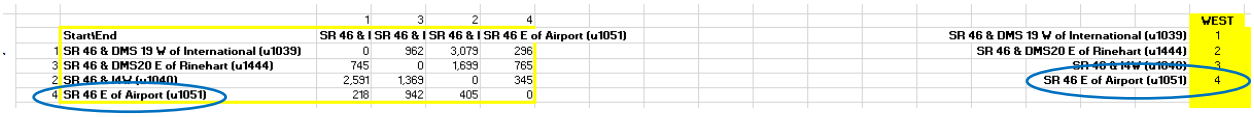
- Open each of the downloaded Demand O/D Matrix spreadsheets and go to the 'Results' worksheet tab. These tables in 'Results' should be pasted over the existing data in each of the BlueTOAD corridor worksheets (green).



	A	B	C	D	E	F	G	H	I	J
1										
2		Start\End	SR 46 & DI	SR 46 & DI	SR 46 & I4	SR 46 E of Airport (u1051)				
3		SR 46 & DI	0	825	2,713	352				
4		SR 46 & DI	870	0	1,652	1,167				
5		SR 46 & I4	3,043	1,292	0	493				
6		SR 46 E of	198	1,050	366	0				

Time Slice | IE Filters | Glossary | **Results**

- The number-device name pairings in the yellow-highlighted cells to the right of the O/D tables need to match those in the O/D tables (ex: if SR 46 E of Airport is Loc #4 in BlueTOAD, there needs to be a '4' next to SR 46 E of Airport in the yellow-highlighted cells to the right). This should typically be correct by default.



		1	3	2	4
	Start\End	SR 46 & I	SR 46 & I	SR 46 & I	SR 46 E of Airport (u1051)
1	SR 46 & DMS 19 W of International (u1039)	0	962	3,079	296
3	SR 46 & DMS20 E of Rinehart (u1444)	745	0	1,699	765
2	SR 46 & I4W (u1040)	2,591	1,369	0	345
4	SR 46 E of Airport (u1051)	218	942	405	0

	WEST
SR 46 & DMS 19 W of International (u1039)	1
SR 46 & DMS20 E of Rinehart (u1444)	2
SR 46 & I4W (u1040)	3
SR 46 E of Airport (u1051)	4

SunGuide Volume Data

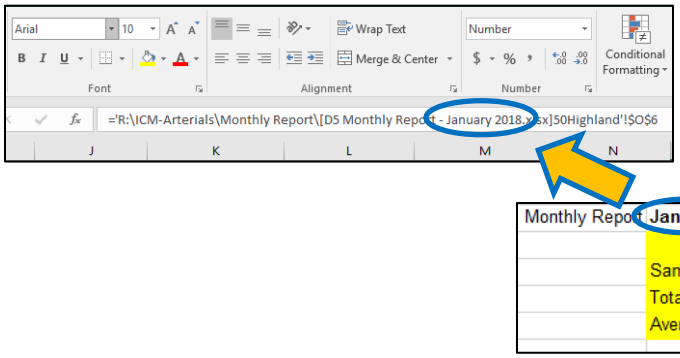
- The first volume worksheets (orange) which are named in the format of <SR #> <Side Street> (ex: 1792SR50) contain pastes from SunGuide volume reports (the rest in the format of <Signal ID> <Direction> are from Seminole County ATMS and described in next section).

- Open SunGuide, right-click on the map and click 'Reports'. Choose the 'Traffic Detection' folder and the 'Detector Volume Tabular' option, specify the date range as the report month, and select the appropriate MVDS device from the drop-down list (arterial devices are near bottom). Choose 'Excel' in the top left corner.

- When each report is finished, open the report and save it into the R:\ICM-Arterials\SunGuide\MVDS folder. Select only the columns containing numbers in the volume report and paste them over the existing data in each of the SunGuide volume worksheets.

- Scroll to the right of each sheet and update the highlighted cells with the correct data from GridSmart and Florida Traffic Online described in the following sections.

- The highlighted cells labeled with 'Monthly Report' are to be updated with data from previous monthly report spreadsheets. The equations in each cell should be updated to match the corresponding month/year (this month/year will update automatically once the dates are updated in the respective BlueTOAD/BlueMAC sheets).



Monthly Report	Jan 2018				
		AM WB	PM WB	AM EB	PM EB
	Sample Size:	276	273	276	273
	Total:	87,291	83,249	68,409	103,005
	Average Veh/hr	1,265	1,220	991	1,509

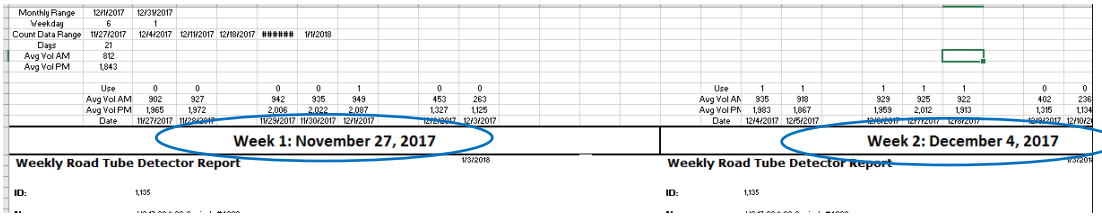
<u>Seminole County ATMS Volume Data</u>

- The last volume worksheets (orange) which are named in the format of <Signal ID> <Direction> (ex: 1135 NB) are downloaded from Seminole County ATMS.

- Open Seminole County ATMS, click the 'Reports' tab at the top, choose the 'Weekly Road Tube Detector Output' report (Controller category), and the 'Weekly Road Tube Detector Output' dialog box will come up.

Controller	Preemption	Preempts activated by the controller.
Controller	RealTime Congestion Data	A report of Realtime Congestion Data
Controller	Split History with Max/Gap/Force Off	A report of controller Split History
Controller	Split Timeline History with Termination (M/G/F)	A report of the splits during a period of time.
Controller	Transit Priority Report	Transit Priority Report
Controller	Weekly Road Tube Detector Output	A report of controller Weekly Road Tube Detector Output
Database	Timing Sheet - COH	A timing sheet layout organized for controller data entry
Database	Timing Sheet - Condensed Layout	A timing sheet layout with only essential information

- Change the 'Saved Criteria' drop-down menu to the option that corresponds with the name of each Seminole County ATMS volume worksheet tab in the 'D5 Monthly Report' (ex: 1135 NB). These reports can only be pulled on Mondays (data will include week starting the specified Monday and ending the next Sunday). In each worksheet, the Mondays that need to be pulled are specified in the header boxes for each paste area.



- For each of the Saved Criteria corresponding to the Seminole County ATMS volume worksheet tabs, reports need to be pulled for all of the Mondays listed in each worksheet (encompasses the entire report month and the report month last year). These reports should be saved in the R:\ICM-Arterials\Seminole County\ATMS Turning Movement Counts folder. Each report should be pasted over the existing data in each volume worksheet under the matching headers.

Florida Traffic Online

- Monthly data labeled 'Florida Traffic Online' for the month of the year prior can be found in the R:\ICM-Arterials\Monthly Report\FTO Pulls\2017 folder. This data should be updated to the proper site if the site location has changed along the corridor. If the site has changed, data from the new site should be pulled from Florida Traffic Online.

- The Peak Season Category Factor (PSCF) data can be found in the R:\ICM-Arterials\Monthly Report\FTO Pulls folder. The 'month' PSCF and average should be updated to the current month (i.e. December PSCF/Average to January PSCF/Average) and the PSCF for each week during the counted month should be placed in the highlighted cells.

February	**PSCFs:**	1.04	1.03	1.02	1.01	1.01
February Average:		1.022				

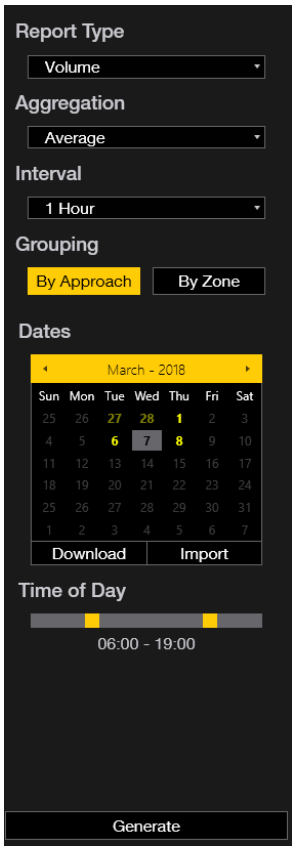
GridSmart

- Monthly Data labeled 'GridSmart' needs to be hand keyed. The location used can be found in the cell to the right of the cells to be updated and the data can be accessed via the GridSmart client.

AA	AB	AC	AD	AE	AF	AG	AH
GridSmart		**Intersection: Orlando Ave. & Packwood Ave.**					

- Once the GridSmart client is open, choose the intersection by left-clicking on the camera sphere, mouse over to the left, and select 'Reports'.

- Select 'Volume' in the Report Type drop-down menu, 'Average' in the Aggregation drop-down menu, and '1 Hour' in the Interval drop-down menu. 'By Approach' should already be highlighted under Grouping.

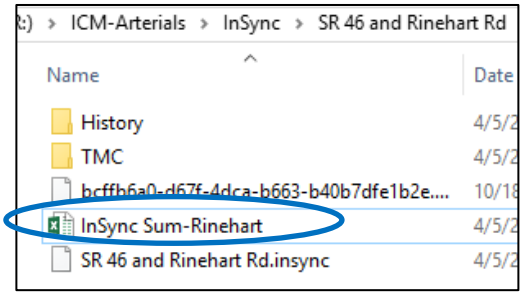


- Click 'Download' under the calendar box and choose the dates required by shift-clicking the first day to the last day of the month.
- Click 'Download' and then 'Done' after loading.
- Adjust the Time of Day to show 06:00 – 19:00 and highlight the days on the calendar to include each Tuesday, Wednesday, and Thursday of the month.
- Once all parameters are selected, click the 'Generate' radio button at the bottom left of the screen and type the directional peak hour volumes in their respective cells.

	Northbound	Eastbound	Southbound	Westbound	Total
06:00	769	1	1055	27	1852
07:00	1290	3	1354	87	2734
08:00	1215	17	1216	101	2549
09:00	954	12	940	91	1997
10:00	908	29	877	95	1909
11:00	985	29	898	105	2017
12:00	1052	39	966	134	2191
13:00	1038	19	986	143	2186
14:00	1065	20	1061	132	2278
15:00	1219	32	1156	157	2564
16:00	1313	49	1211	183	2756
17:00	1214	16	1218	237	2685
18:00	1073	3	899	106	2081
Total	**14095**	**269**	**13837**	**1598**	**29799**

InSync

- Monthly Data labeled 'InSync' in the SR 46 data tab is automatically populated from the InSync Sum spreadsheets found in their appropriate intersection folders.



- The direction/intersection being used can be found in the cell to the right of the cells to be updated and the data can be found in the respective TMC folder. Example: R:\ICM-Arterials\InSync\SR 46 and Rinehart Rd\TMC.

	InSync				EB: Upsala Rd
Dec-17	AM EB	PM EB	AM WB	PM WB	WB: Rinehart Rd
Peak Hour 1	344	690	544	769	
Peak Hour 2	565	866	772	1101	
Peak Hour 3	475	771	898	970	
Average Veh/3-hr:	1384	2327	2214	2839	
Jan-18	AM EB	PM EB	AM WB	PM WB	

- Once in the TMC folder, find the green highlighted dates to be used for that month in the 'SR 46' tab of the monthly report.

InSync Dates					
WEEKDAYS:	Monday	Tuesday	Wednesday	Thursday	Friday
Dec-18					1
	4	5	6	7	8
	11	12	13	14	15
	18	19	20	21	22
	25	26	27	28	29
Jan-18	1	2	3	4	5
	8	9	10	11	12
	15	16	17	18	19
	22	23	24	25	26
	29	30	31		

- Columns A through I from the Excel spreadsheets named '<YEAR-MONTH-DAY>' should be pasted into the InSync Sum spreadsheet for the current month and three previous months.

ICAT (JIRA) Issue Tracking Summary

- At the end of each month, all of the ICAT tickets related to traffic issues (not Tasks) from the month should be entered into the 'Issue Log' worksheet. The Subject for each ICAT ticket should be pasted into the 'Event' column, then the corresponding Date and Ticket # should be entered into the appropriate columns.

- Each event should then be categorized by entering a '1' in the column that pertains to the event. Any incident that occurred on a freeway should have a '1' entered into the 'Freeway Incident Tracked' column. Any incident that was resolved should have a '1' entered into the 'Resolved' column (not necessary for freeway incidents). For any incident that pertains to an ICM-AAM corridor, click the drop-down in the 'Road' column and select the appropriate corridor.

Opticom CMS Monthly TSP Data

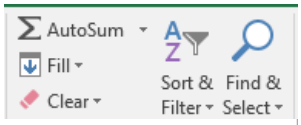
- The Opticom CMS monthly data is linked and automatically brought in from the 'Opticom CMS Report' excel workbook: R:\ICM-Arterials\Opticom CMS\Opticom CMS Report.xlsx. The process to retrieve the monthly TSP/preemption from Opticom CMS is the same as for the weekly except for the date range and the worksheet that it is pasted into ('CMS Monthly Paste'):

- Open Opticom CMS and click on the 'Opticom Logs' button in the lower left corner.

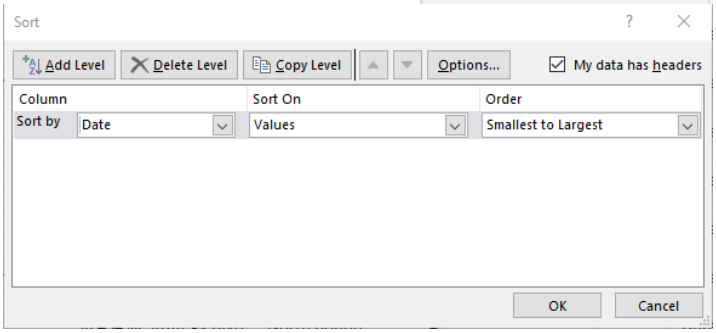
- Click the 'Custom Date Range' radio button. Set the 'From' date to the first day of the report month, and the 'To' date to the last day of the report month. Click 'Display Logs'.

- Export the document in excel (.xlsx) format to the Opticom TSP-Preempt Logs folder: R:\ICM-Arterials\Opticom_CMS\Opticom_TSP-Preempt_Logs with the name of the report month (ex: December 2017). The file is usually too large to export, break it down your export files into 3 parts if necessary and make sure to remove duplicates for each each export.

- Open the Opticom Logs spreadsheet, delete row one, select all data, click on the 'Sort & Filter' drop-down in the 'Editing' ribbon in the top right corner of the Home tab, and click on 'Custom Sort'.



- In the 'Sort' display window, check the 'My data has headers' box, choose 'Date' in the 'Sort by' drop-down menu, and click Ok.

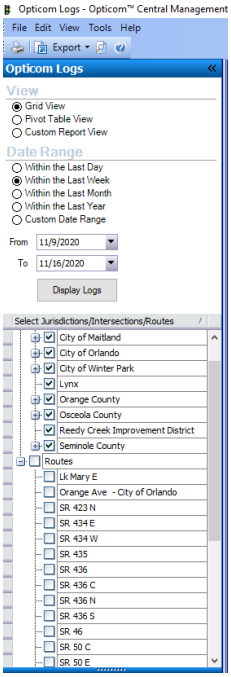


- Navigate to the Data tab in excel, click on 'Remove Duplicates' in the Data Tools ribbon, ensure that all categories are checked in the 'Remove Duplicates' display menu, and click Ok.

- Select all data in the Opticom Logs spreadsheet, copy, go to the 'CMS Monthly Paste' worksheet in the 'Opticom CMS Report' workbook, select all existing data, and paste over it.

Opticom CMS Monthly Preemption Data

- The Opticom CMS monthly Preemption data is obtained from Opticom Logs →Routes



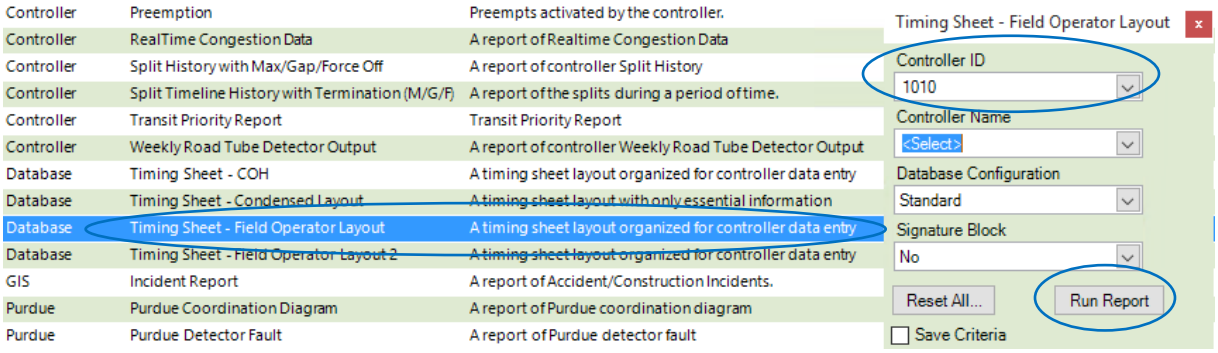
- Open Opticom CMS and click on the 'Opticom Logs' button in the lower left corner.
- Click the 'Custom Date Range' radio button. Set the 'From' date to the first day of the report month, and the 'To' date to the last day of the report month. Click 'Display Logs'.
- Check the box to the left of the route
- Export each route in excel (.xls) format to the Opticom Preemption Reports folder: R:\ICM-Arterials\Opticom CMS\Preemption Reports to a new report month folder (ex: Nov 2020).
- Copy an Old Monthly Preemption Calculation spreadsheet from a previous month and rename for the new month.
- Clear Previous data
- Paste the exported routes for the analysis month to their corresponding tabs
- Manually enter the results in the "Data Log" of the monthly report spreadsheet

2.6 Updating Databases/Data Tables

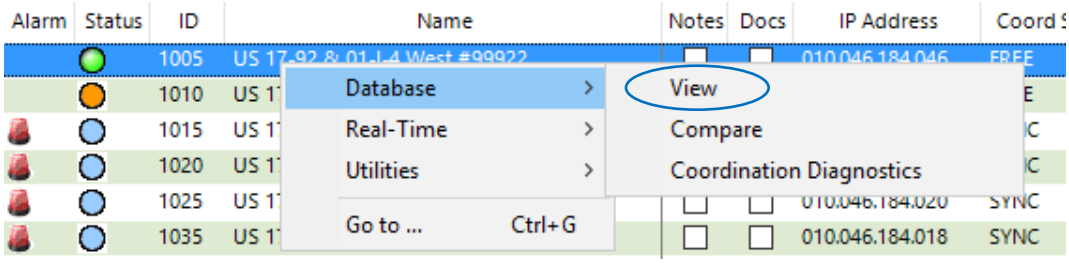
Updated controller databases for the various maintaining agencies should be periodically downloaded to maintain up-to-date databases. In addition, there are several data tables in the excel workbooks that are used as lookups by the various reports and these need to contain the most recent data to be correct. The following sections describe the processes to update databases and data tables for City of Orlando/Seminole County ATMS, Orange County TACTICS, BlueMAC/BlueTOAD Bluetooth devices, and Opticom CMS:

<u>City of Orlando/Seminole County Signal and Detector Data</u>

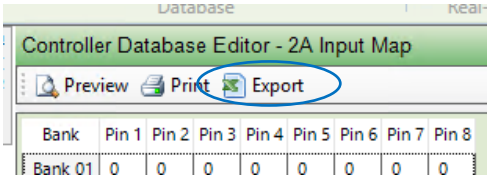
- PDF timing sheets are maintained in the 'Timing Sheets' folder for both City of Orlando and Seminole County. For either agency, open ATMS, click 'Reports', and choose 'Timing Sheet – Field Operator Layout' to open the 'Timing Sheet – Field Operator Layout' dialog box. Select the intersection's Controller ID and click 'Run Report'. Save the PDF report over the existing report in the 'Timing Sheets' folder for the corresponding maintaining agency. Repeat for each intersection.



- Excel controller databases are maintained in the 'Timing Sheets/Databases' folder for both City of Orlando and Seminole County. For either agency, open ATMS, left-click on the intersection to select it, right-click on the intersection, hover over 'Database' and click 'View' to bring up the database.

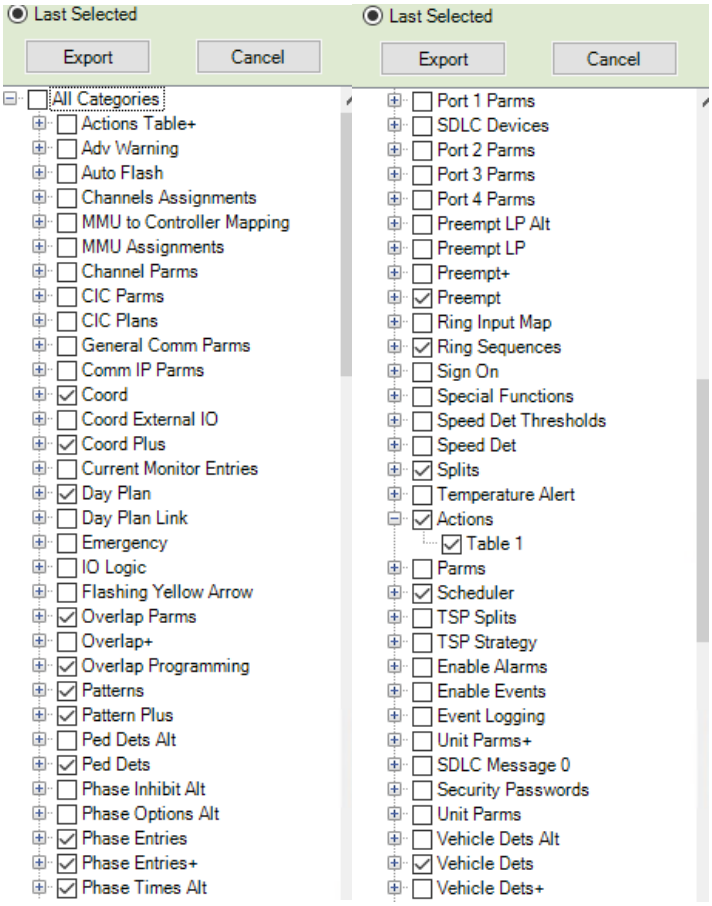


- Click 'Export' to bring up the 'Controller Database Export' dialog box.

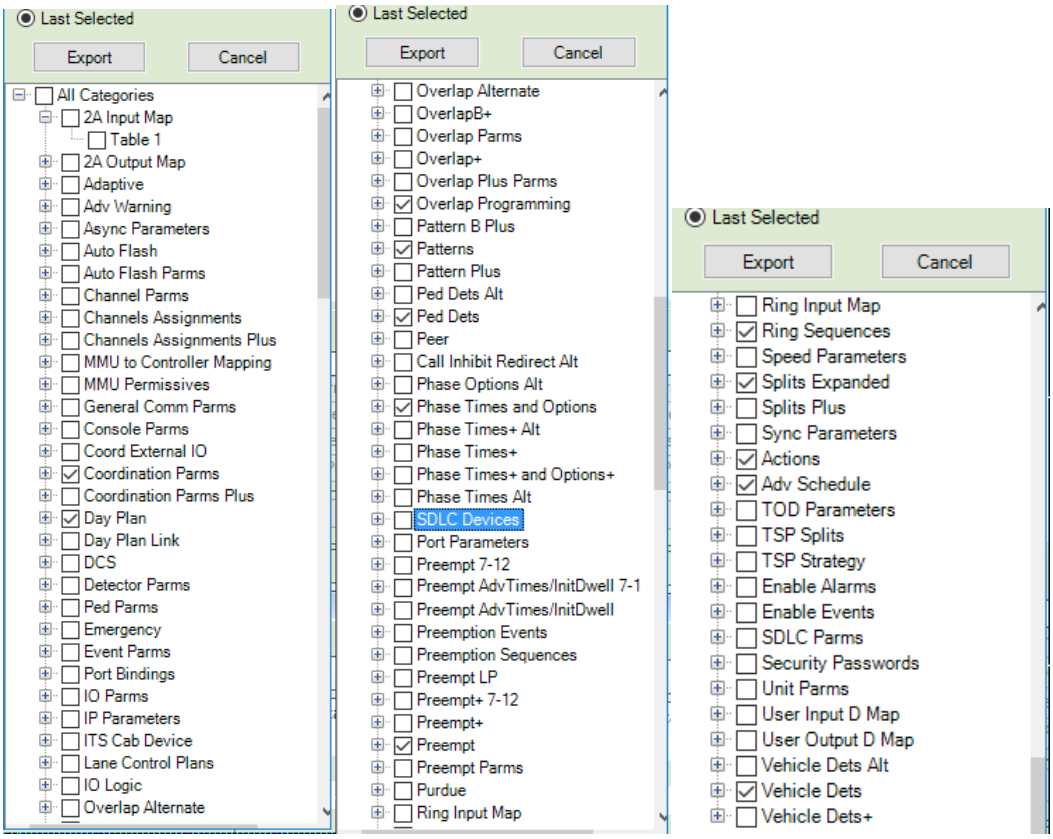


- Click the 'Last Selected' radio button to obtain manual control over which database menus get exported. There are two different database types (the basic timings menu in one is called 'Phase Times and Options' and the basic timings menu in the other is called 'Phase Entries'). The selection of database menus will be saved when going from intersection to intersection, however, when moving to a different database type, the new set of menus will need to be selected. The list of menus that should be chosen for each database type are listed below:

- Type 1 (Phase Entries)



- Type 2 (Phase Times and Options)



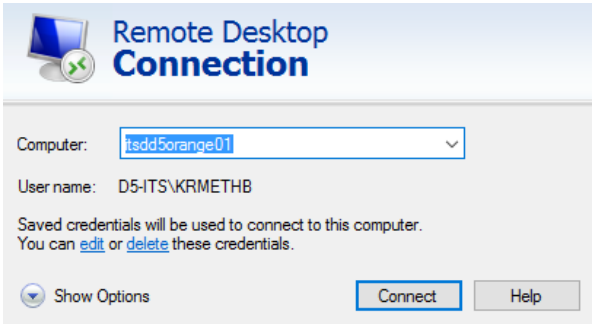
- Check the appropriate menus and click ‘Export’. These files should be saved over the existing database in the ‘Timing Sheets/Databases’ folder. Repeat for each intersection.

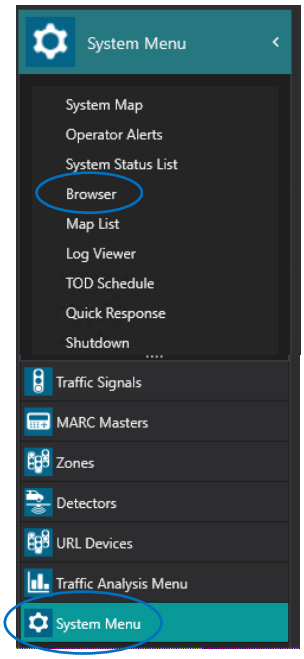
- The ‘Com Log’ (list of intersections), ‘Phases’ (movements for each phase), ‘VDets’ (phase for each vehicle detector), and ‘Pdets’ (phase for each pedestrian detector) worksheets in the ‘Seminole ATMS Report’ and ‘Orlando ATMS Report’ workbooks contain data tables that need to be periodically updated with the information from ATMS.

Orange County Signal and Detector Data

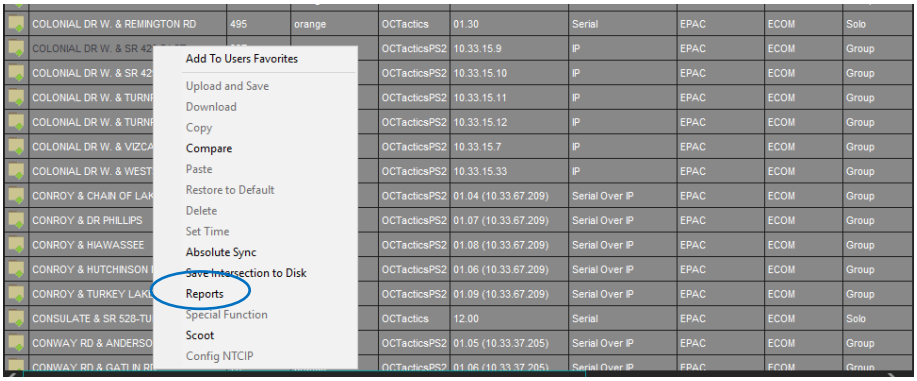
- Excel and PDF controller databases are maintained in the 'Timing Sheets/Databases' folder for Orange County.

- Open Orange County TACTICS. This can be accessed by logging into 'itsdd5orange01' with the Remote Desktop Connection application and opening the TACTICS Central program (Username = fdot and Password = tacticsread). Click on 'System Menu' in the lower left corner and open the 'Browser'.

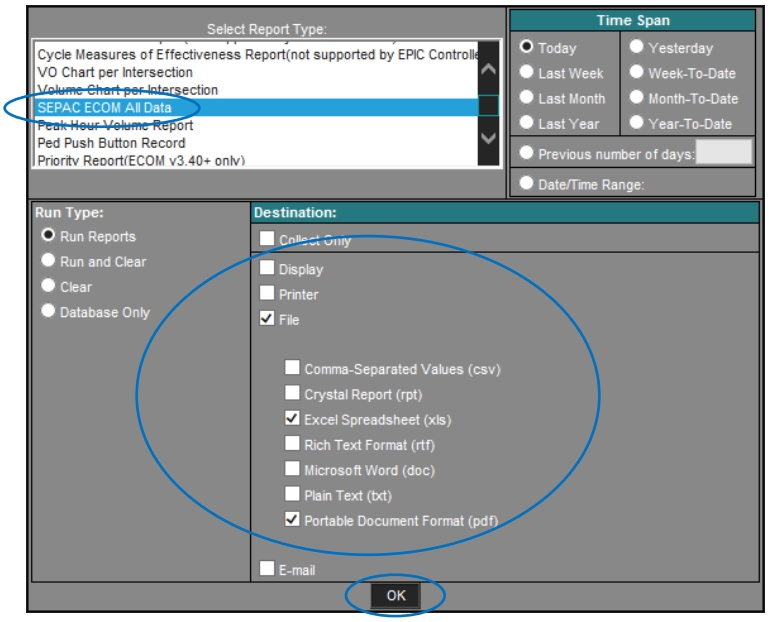




- Right click on an intersection and click 'Reports' to open the 'Reports' dialog box.



- Select 'SEPAC ECOM All Data' under Select Report Type. Uncheck 'Display' and check 'File'. Check the 'Excel Spreadsheet (.xls)' and 'Portable Document Format (.pdf)' options. Click 'OK' to generate the databases.



- The databases are generated to the C:\Program Files (x86)\ITS Software\TACTICS Central\Report Output Files folder and should be copied into the Orange County 'Timing Sheets/Databases' folder.

- The 'Com Log' (list of intersections), 'Phases' (movements for each phase), 'Vdets' (phase for each vehicle detector), and 'Pdets' (phase for each pedestrian detector) worksheets in the 'Orange TACTICS Report' workbook contain data tables that need to be periodically updated with the information from TACTICS.

BlueMAC Devices

- The following information in the 'Daily Com Report' worksheet of the 'BlueMAC Report' workbook needs to be periodically updated:

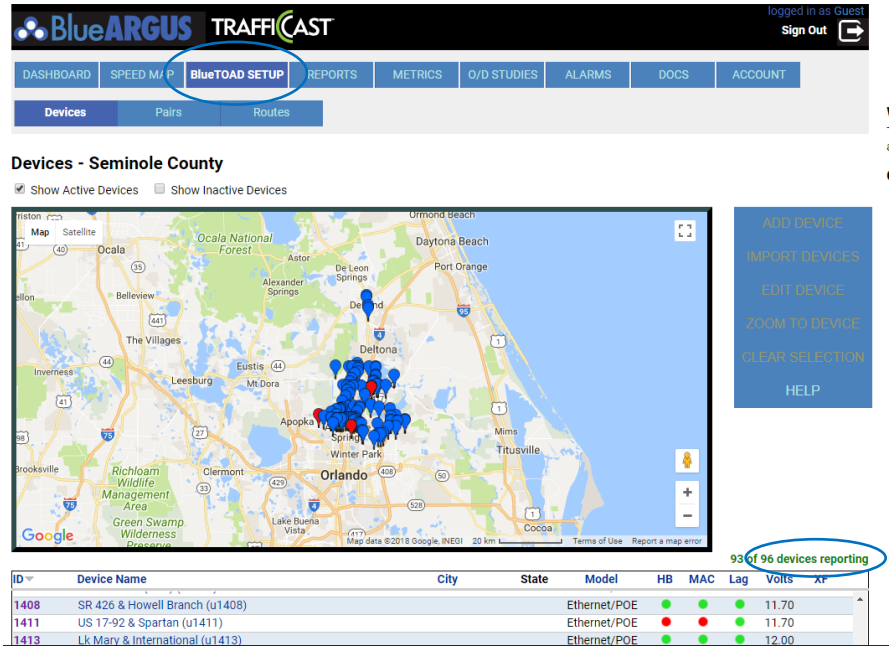
  - The list of BlueMAC devices in the spreadsheet needs to match the list on the BlueMAC website. The most efficient way to make sure these lists match is to first make sure the total number of devices are the same, then look for a "#N/A" error in the 'Last Check-in' column of the spreadsheet. Any device that displays a date matches a device in the list pasted in from BlueMAC, while any device displaying "#N/A" is not finding a match from the BlueMAC data and the name needs to be updated.

  - The client device name and wireless/POE issue need to be confirmed by opening each device in BlueMAC.

  - The status of each MIMS ticket needs to be updated by looking up the MIMS ticket in MIMS and changing the 'MIMS Status' to <status> <today's date> (ex: "On Hold 12/17/17").

BlueTOAD Devices

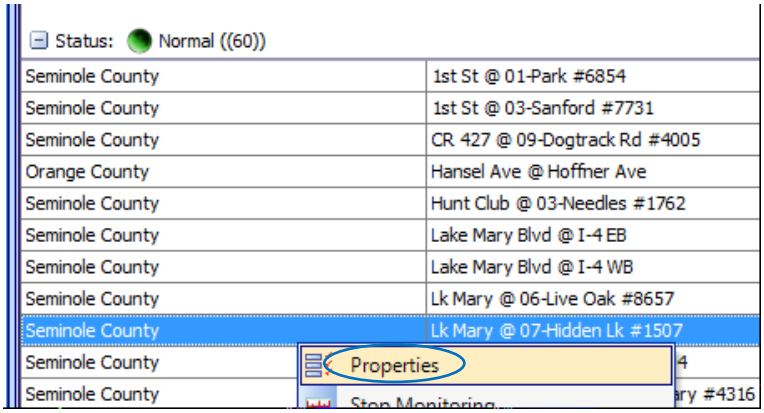
- The list of BlueTOAD devices in the 'Com Log' worksheet of the 'BlueTOAD Report' workbook needs to match the list in the 'BlueTOAD Setup' section of the BlueTOAD website. If the total number of devices on the BlueTOAD website and spreadsheet do not match, devices have been added or removed and the spreadsheet needs to be updated.



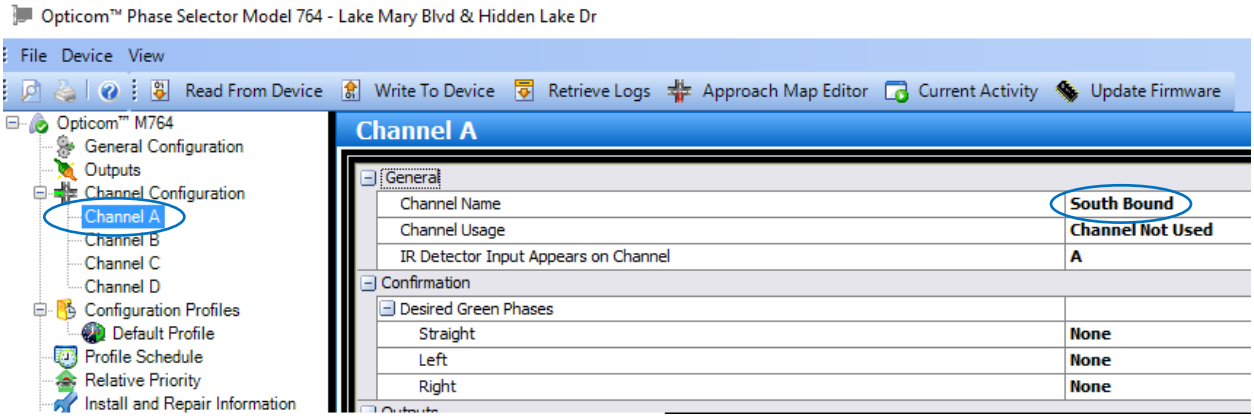
Opticom CMS Devices

- The list of intersections in Opticom CMS needs to match the list of intersections in the 'Com Log' worksheet of the 'Opticom CMS Report' workbook and should be periodically verified.

- The 'A', 'B', 'C', and 'D' columns (channel assignments) in the 'CMS Data' worksheet also needs to be updated. To view channel assignments, open Opticom CMS, right-click on an intersection, and click 'Properties'.



- Click 'Channel A' on the left side to view the properties for Channel A. The 'Channel Name' indicates the direction that should be entered into the 'A' column for the intersection. Repeat for each Channel.



Intersection	A
Lake Mary Blvd @ I-4 EB	Northbound
Lake Mary Blvd @ I-4 WB	A
Lk Mary @ 06-Live Oak #8657	Southbound
Lk Mary @ 07-Hidden Lk #1507	Southbound

2.7 Adding a new corridor and/or a sub-section to the AAM Monthly Report

Adding a new corridor (section) to the monthly report will require:

- To add a new BlueMac Or BlueToad Tab (Green Tabs are BlueToad and Blue Tabs are BlueMac) with the corresponding Travel Time Information and O/D data to the monthly report spreadsheet
- To add a new Volume Tab (Sun Guide, GridSmart, ATMS TMCs….) to the monthly report spreadsheet with the corresponding Throughtput Volumes.
- An edit of the list of intersections in the "Data Output "Tab of the Opticom CMS Spreadsheet to include the corresponding intersection with Emergency Vehicle Preemption for the reported month for the new corridor.

To add a new corridor sub-section, you will only need to add new sub-segment(s) to the BlueMac or BlueToad Tab of the original corridor.

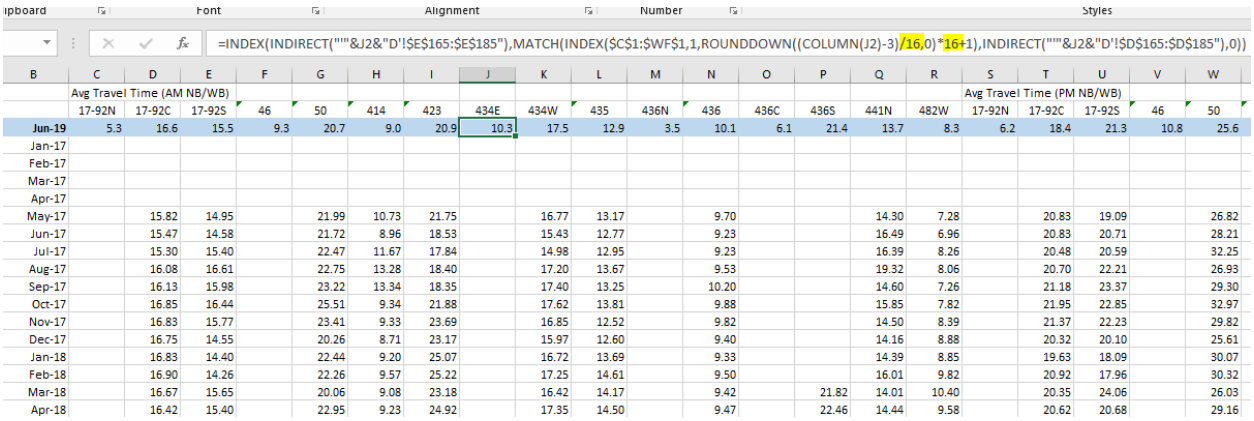
This is a summary of the steps needed to add a new corridor

Step 1: create a new Corridor tab, make sure to copy an existing preferably that uses the same Bluetooth device (If the new corridor is a BlueMac copy from another BlueMac do the same if it is a BlueToad). Copy the tab by right clicking to create a copy then change the tab name to the new corridor segment.

Step:2: Create a corresponding new BlueMac Or BlueToad tab of the new corridor segment preferably from an existing corridor using the same Bluetooth device and with the same number of subsections (usually 2 or 3 subsections are used) to minimize data edits. Label the BlueToad or the BlueMac tab as the name of the corridor ending with the letter "D" to be consistent with the previous format. Color the Tab Green for BlueToad and blue for BlueMac.

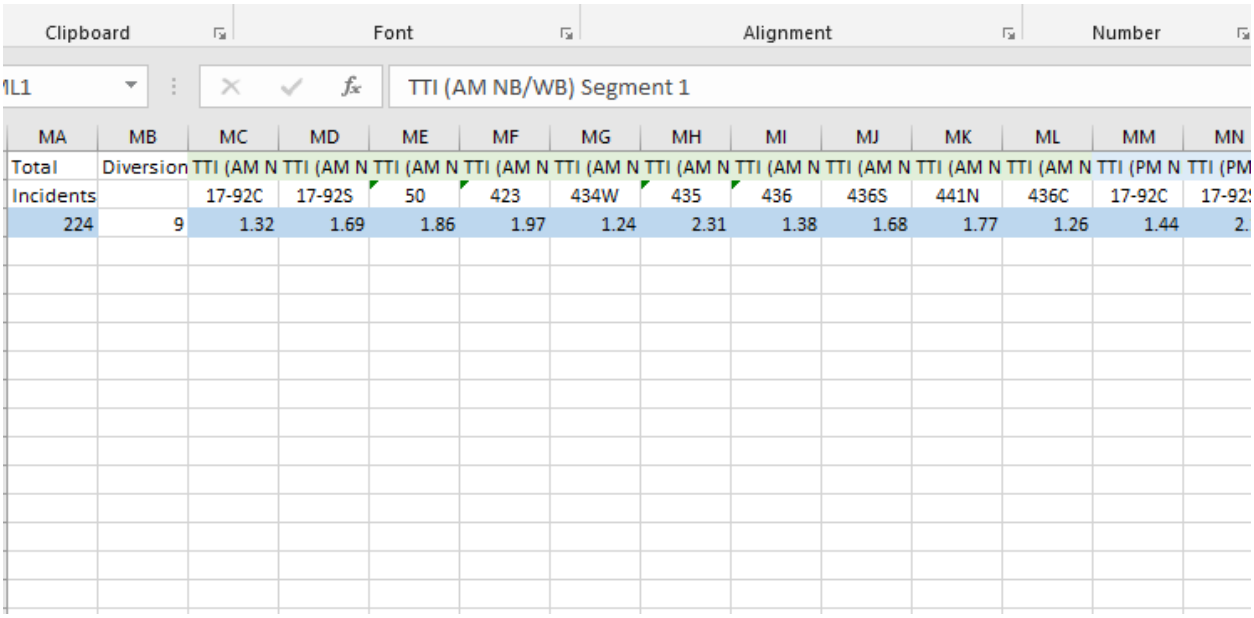
Step 3: Create the volume Tab, located at the end of the monthly workbook report, depending on the volume data source be consistent with the tab color and the tab name.

Step 4: Insert new columns in the" Data Log" while maintaining the same formulas. Remember for a new corridor, columns extend from the start "Cell C3" to the throughput volumes. (The highlighted number corresponds to the number of corridors). Make sure your number of corridors remains the same for every data input.



	Avg Travel Time (AM NB/WB)																Avg Travel Time (PM NB/WB)				
	17-92N	17-92C	17-92S	46	50	414	423	434E	434W	435	436N	436	436C	436S	441N	482W	17-92N	17-92C	17-92S	46	50
Jun-19	5.3	16.6	15.5	9.3	20.7	9.0	20.9	10.3	17.5	12.9	3.5	10.1	6.1	21.4	13.7	8.3	6.2	18.4	21.3	10.8	25.6
Jan-17																					
Feb-17																					
Mar-17																					
Apr-17																					
May-17		15.82	14.95		21.99	10.73	21.75		16.77	13.17		9.70			14.30	7.28		20.83	19.09		26.82
Jun-17		15.47	14.58		21.72	8.96	18.53		15.43	12.77		9.23			16.49	6.96		20.83	20.71		28.21
Jul-17		15.30	15.40		22.47	11.67	17.84		14.98	12.95		9.23			16.39	8.26		20.48	20.59		32.25
Aug-17		16.08	16.61		22.75	13.28	18.40		17.20	13.67		9.53			19.32	8.06		20.70	22.21		26.93
Sep-17		16.13	15.98		23.22	13.34	18.35		17.40	13.25		10.20			14.60	7.26		21.18	23.37		29.30
Oct-17		16.85	16.44		25.51	9.34	21.88		17.62	13.81		9.88			15.85	7.82		21.95	22.85		32.97
Nov-17		16.83	15.77		23.41	9.33	23.69		16.85	12.52		9.82			14.50	8.39		21.37	22.23		29.82
Dec-17		16.75	14.55		20.26	8.71	23.17		15.97	12.60		9.40			14.16	8.88		20.32	20.10		25.61
Jan-18		16.83	14.40		22.44	9.20	25.07		16.72	13.69		9.33			14.39	8.85		19.63	18.09		30.07
Feb-18		16.90	14.26		22.26	9.57	25.22		17.25	14.61		9.50			16.01	9.82		20.92	17.96		30.32
Mar-18		16.67	15.65		20.06	9.08	23.18		16.42	14.17		9.42		21.82	14.01	10.40		20.35	24.06		26.03
Apr-18		16.42	15.40		22.95	9.23	24.92		17.35	14.50		9.47		22.46	14.44	9.58		20.62	20.68		29.16

The subsections are located to the end of Row 2 (to the right of the"Diversion" column and make sure to maintain the same formulas and the same number of corridors with 2 segments or 3 segments ect….



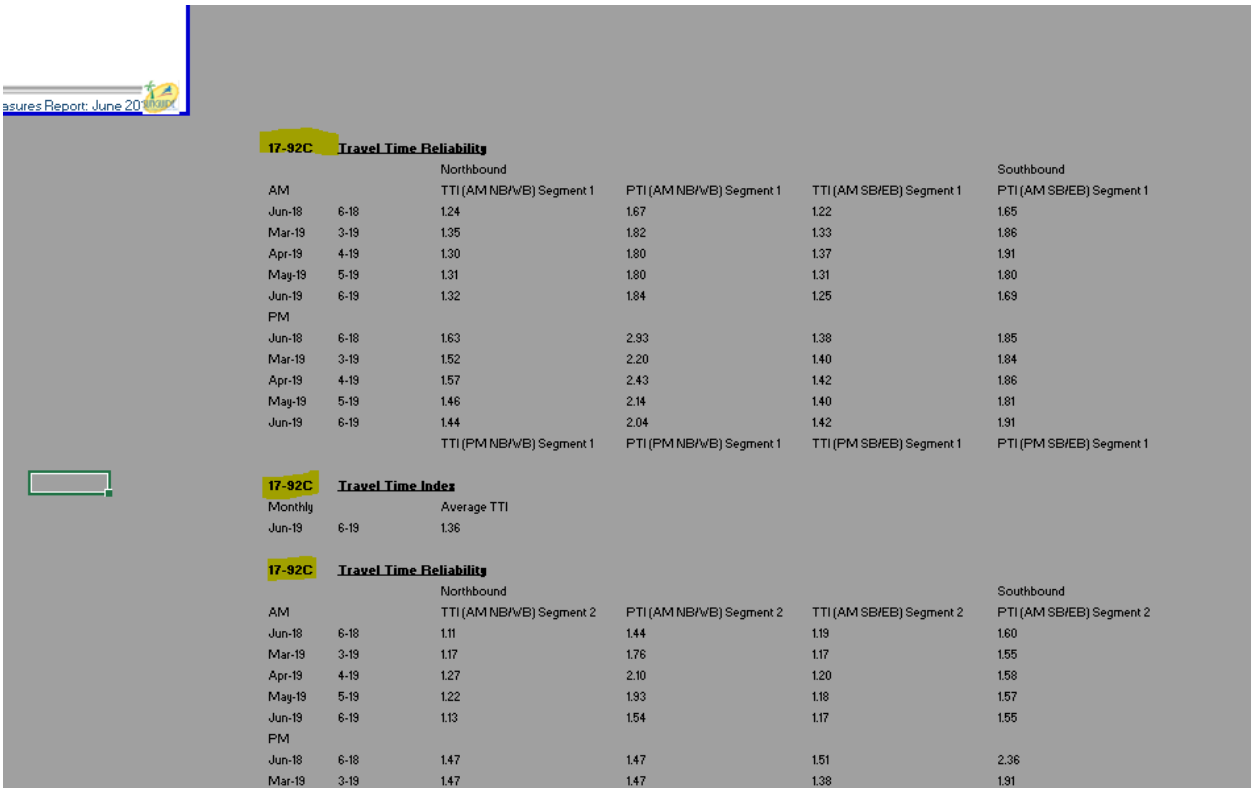
MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	MK	ML	MM	MN
Total	Diversion	TTI (AM N	TTI (AM N	TTI (AM N	TTI (AM N	TTI (AM N	TTI (AM N	TTI (AM N	TTI (AM N	TTI (AM N	TTI (AM N	TTI (PM N	TTI (PM
Incidents		17-92C	17-92S	50	423	434W	435	436	436S	441N	436C	17-92C	17-92
224	9	1.32	1.69	1.86	1.97	1.24	2.31	1.38	1.68	1.77	1.26	1.44	2.

Step 5: Go to each new corridor tab you created and make sure to change Cell "P67" to read the new corridor name

17-92C **Travel Time Information**

		Northbound	
AM		Avg Travel Time (AM NB/WB)	95th Percentile Time (
Jun-18	6-18	16.0	21.3
Mar-19	3-19	16.5	22.0
Apr-19	4-19	16.6	22.6
May-19	5-19	16.6	22.5
Jun-19	6-19	16.6	22.7
PM			
Jun-18	6-18	20.9	35.9
Mar-19	3-19	19.1	28.0
Apr-19	4-19	19.8	29.6
May-19	5-19	18.7	26.9
Jun-19	6-19	18.4	25.5

Step 6: Go to each new subsection tab and change Cells" P67". "P85", "P89", and" P105" to read the new corridor name. Edit the range of cells in the formulas in the index function (located below the print area in each new tab to read correctly the new expanded cell limits when adding a new subsection).



asures Report: June 20

17-92C **Travel Time Reliability**

		Northbound			Southbound
AM		TTI (AM NB/WB) Segment 1	PTI (AM NB/WB) Segment 1	TTI (AM SB/EB) Segment 1	PTI (AM SB/EB) Segment 1
Jun-18	6-18	1.24	1.67	1.22	1.65
Mar-19	3-19	1.35	1.82	1.33	1.86
Apr-19	4-19	1.30	1.80	1.37	1.91
May-19	5-19	1.31	1.80	1.31	1.80
Jun-19	6-19	1.32	1.84	1.25	1.69
PM					
Jun-18	6-18	1.63	2.93	1.38	1.85
Mar-19	3-19	1.52	2.20	1.40	1.84
Apr-19	4-19	1.57	2.43	1.42	1.86
May-19	5-19	1.46	2.14	1.40	1.81
Jun-19	6-19	1.44	2.04	1.42	1.91
		TTI (PM NB/WB) Segment 1	PTI (PM NB/WB) Segment 1	TTI (PM SB/EB) Segment 1	PTI (PM SB/EB) Segment 1

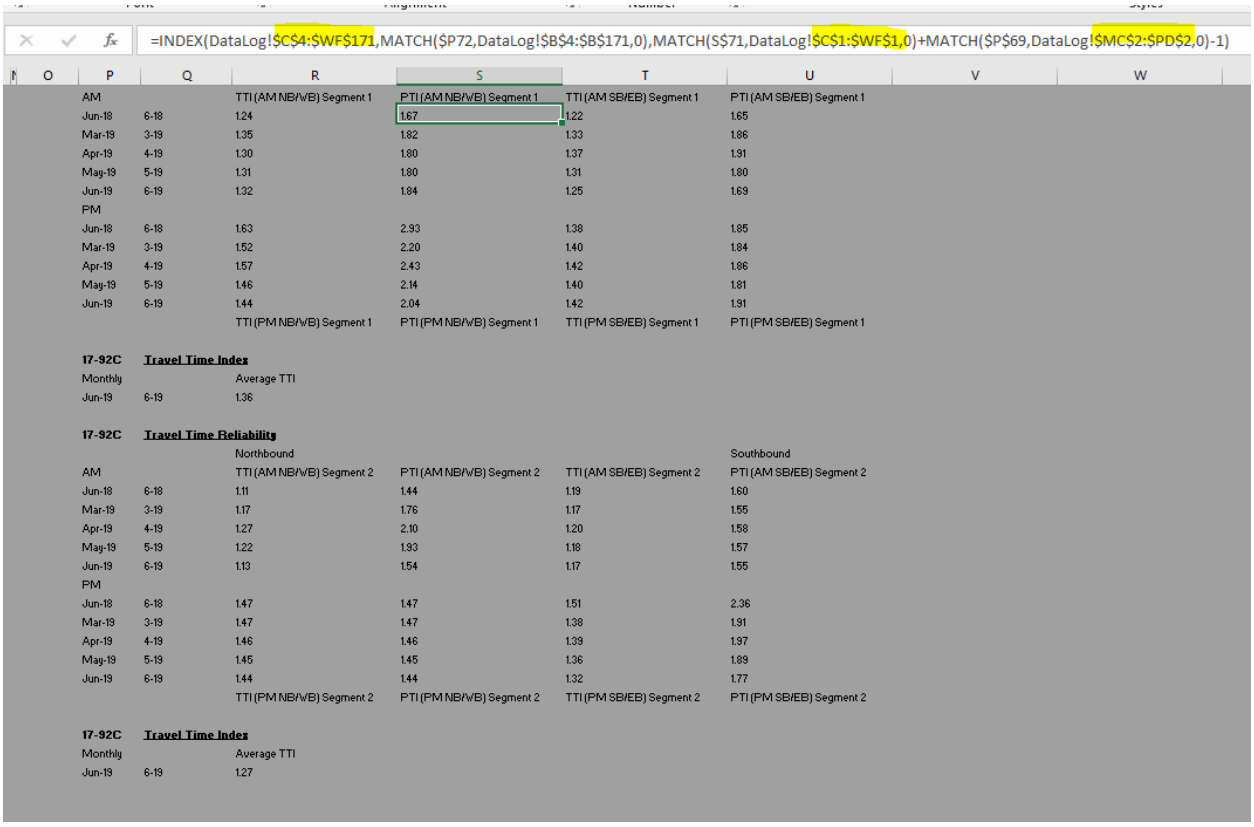
17-92C **Travel Time Index**

Monthly		Average TTI
Jun-19	6-19	1.36

17-92C **Travel Time Reliability**

		Northbound			Southbound
AM		TTI (AM NB/WB) Segment 2	PTI (AM NB/WB) Segment 2	TTI (AM SB/EB) Segment 2	PTI (AM SB/EB) Segment 2
Jun-18	6-18	1.11	1.44	1.19	1.60
Mar-19	3-19	1.17	1.76	1.17	1.55
Apr-19	4-19	1.27	2.10	1.20	1.58
May-19	5-19	1.22	1.93	1.18	1.57
Jun-19	6-19	1.13	1.54	1.17	1.55
PM					
Jun-18	6-18	1.47	1.47	1.51	2.36
Mar-19	3-19	1.47	1.47	1.38	1.91

Edit the range of cells in the formulas in the index function (located below the print area in each new tab to read correctly the new expanded cell limits when adding a new subsection).



=INDEX(DataLog!$C$4:$WF$171,MATCH($P72,DataLog!$B$4:$B$171,0),MATCH(S$71,DataLog!$C$1:$WF$1,0)+MATCH($P$69,DataLog!$MC$2:$PD$2,0)-1)

	P	Q	R	S	T	U
	AM		TTI (AM NB/WB) Segment 1	PTI (AM NB/WB) Segment 1	TTI (AM SB/EB) Segment 1	PTI (AM SB/EB) Segment 1
	Jun-18	6-18	1.24	1.67	1.22	1.65
	Mar-19	3-19	1.35	1.82	1.33	1.86
	Apr-19	4-19	1.30	1.80	1.37	1.91
	May-19	5-19	1.31	1.80	1.31	1.80
	Jun-19	6-19	1.32	1.84	1.25	1.69
	PM					
	Jun-18	6-18	1.63	2.93	1.38	1.85
	Mar-19	3-19	1.52	2.20	1.40	1.84
	Apr-19	4-19	1.57	2.43	1.42	1.86
	May-19	5-19	1.46	2.14	1.40	1.81
	Jun-19	6-19	1.44	2.04	1.42	1.91
			TTI (PM NB/WB) Segment 1	PTI (PM NB/WB) Segment 1	TTI (PM SB/EB) Segment 1	PTI (PM SB/EB) Segment 1
	17-92C	**Travel Time Index**				
	Monthly		Average TTI			
	Jun-19	6-19	1.36			
	17-92C	**Travel Time Reliability**				
			Northbound			Southbound
	AM		TTI (AM NB/WB) Segment 2	PTI (AM NB/WB) Segment 2	TTI (AM SB/EB) Segment 2	PTI (AM SB/EB) Segment 2
	Jun-18	6-18	1.11	1.44	1.19	1.60
	Mar-19	3-19	1.17	1.76	1.17	1.55
	Apr-19	4-19	1.27	2.10	1.20	1.58
	May-19	5-19	1.22	1.93	1.18	1.57
	Jun-19	6-19	1.13	1.54	1.17	1.55
	PM					
	Jun-18	6-18	1.47	1.47	1.51	2.36
	Mar-19	3-19	1.47	1.47	1.38	1.91
	Apr-19	4-19	1.46	1.46	1.39	1.97
	May-19	5-19	1.45	1.45	1.36	1.89
	Jun-19	6-19	1.44	1.44	1.32	1.77
			TTI (PM NB/WB) Segment 2	PTI (PM NB/WB) Segment 2	TTI (PM SB/EB) Segment 2	PTI (PM SB/EB) Segment 2
	17-92C	**Travel Time Index**				
	Monthly		Average TTI			
	Jun-19	6-19	1.27			

2.8 Quality Check (QC) Process for the Monthly Report

Changes to the calculation methodologies within the monthly report must be approved by a supervisor before proceeding. The monthly report must undergo a chain of review process before being published. The process is as follows:

Analyst →Corridor Manager → Analyst →Signal Timing Engineer → Analyst→ Project Manager

Paginating and page numbering are subject to change and can vary from month to month. Make sure to update the page numbers to be consistent with the freeway section of the report.

Volume IV: Traffic Incident Management

To provide an overview of D5 Traffic Incident Management and the functionality of the TIM Specialist position, both of which are intended to support Florida's Open Roads policy through the facilitation of safe, quick roadway clearance.

TIM is goal-oriented, utilizing resources to facilitate responder safety, effective communications, and safe/quick incident clearance times.

TIM Specialists are experienced personnel in emergency response who work alongside the RTMC Operator and Corridor Managers. The TIM Specialist position is responsible for monitoring D5 and CFX roadways. They are to provide communications and coordination support with outside emergency response partners, including road rangers, fire rescue, city/county law enforcement officials, towing companies, asset maintenance, among others.

TIM Specialist monitor incident scene for safety including proper vehicle and MOT placement and will request additional resources for incident specific safety-related messaging.

TIM Responsibilities:

- Monitor SunGuide and third-party applications for incident alerts
- Monitor SLERS/Zello PTT for notification of incidents, efficiency, and appropriateness of communication.
- Locate incidents on camera and alert RTMC operators and/or other outside partners
- Monitor SunGuide events and Road Ranger activity to ensure safety, contract compliance, and efficient use of resources.
- Communicate with outside partners.
- Communicate with TIM Manager about high profile incidents.
- Share video though available resources.
- Conduct incident review and identify opportunities to improve or discuss successes within TIM meetings.

The Department has four Traffic Incident Management (TIM) Teams:

1. Greater Orlando Area
2. I-95 North
3. I-95 South
4. I-75

As a part of the contractor the ICM team shall coordinate, conduct, and support these meetings. The TIM Staff is responsible for updating and maintaining contact lists, send welcoming emails to TIM members and participate in TIM Meetings. The TIM meetings are a critical performance measure for the effectiveness of the program.

The TIM Team is made up of the following positions:

- TIM Principal
- TIM Program Manager
- TIM Specialist

- TIM Coordinator

Scope Requirements are as follows:

1. After Action Reports – Major Incident Evaluation (MIE)
2. FHWA TIM Self-Assessment- Appendix AH
3. Conduct TIM Meetings
   a. Attendance at TIM Meeting
4. TIM Coordination
5. TIM Procedural Plan- Appendix AI
6. Road Ranger Oversight
   a. Vehicle Inspections- Appendix AJ
7. RISC Program Oversight- Appendix S
8. Special Event Coordination- Appendix P & Appendix AA-AD
   a. Daytona Races
   b. Space Launch
   c. VIP Visits
   d. OC Convention Center Events
   e. Orlando Venues
   f. UCF Football Games
   g. Hurricane Evacuation- ESU

TIM Specialist Standard Operating Procedures can be found in Appendix AK

Other responsibilities handled by the TIM Specialists are as follows:

- First Responder share- Appendix AL
- Orlando Fire Radio monitoring- Appendix AM
- FHP Radio Monitoring Appendix AN
- Active Alert Monitoring- Appendix AO

TIM Performance Measures

- Total Number of Events
- Total Number of Events with Lane Blockage
- Trends by Event Type
- Diversion Route Implementations
- Events by Severity Level
- Systemwide Incident Duration
- Incident Duration by Roadway
- Open Roads by Roadway
- Crash Summary by Roadway
- Secondary Crashes
- Road Ranger Events per Month
- Average Road Ranger Response and On-scene Times by Corridor

- Road Ranger Dispatch Summery by Corridor
- RISC Clearance Times
- RISC Clearance Times by Corridor

For an example of the report, see Appendix AP. For the procedure to upload the TIM data to SharePoint, see Appendix AQ.

CFX, our TIM Team, and our Freeway team worked together to develop a Traffic Incident Management Plan for SR 408. This can be found in Appendix AR. This plan allows operators and the TIM staff to utilized pre-defined detours and diversions that coincide with our signal timing plans developed around the corridor.

Arterial Road Rangers

To provide motorists assistance on arterial roadways, the Department has partnered with LYNX to have additional Road Ranger support to the arterial system in District Five within the City of Orlando. For more information pertaining to the details of the area and procedures, see Appendix AU.

RISC/Safetow & Road Ranger within Wekiva 8

The Florida's Turnpike and District Five has a shared area of responsibility at the interchange between I-4 and SR 417. To better understand the parameters between road rangers, RISC, and SafeTow responsibilities, please reference Appendix AV.