



2018

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  
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DeLand, Florida 32720



## STANDARD OPERATING PROCEDURES

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### **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



# **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 are located in the RTMC and ICM-AAM rooms. The ICM Operators, Supervisors and Engineers work closely with both freeway management and traffic operations staff on a daily basis. The ICM Operators, Supervisors and Engineers will be stationed in the RTMC and ICM-AAM rooms 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).

## **1. ICM Employment Requirements**

Due to the exposure of potentially sensitive information within the TMCs as well as TMC security, new employees of all levels are required to fulfill the requirement and paperwork before reporting for work. These requirements are addressed in Sections 2.0-6.0

### **1.1. 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

### **1.2. Badge Requirements**

- FDOT Annual Ethics Training



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- 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

### **1.3. Access to the RTMC**

- SLERS background check
- CJIS Online Certification

### **1.4. 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](http://www.cflsmartroads.com/security/docs/Security%20Access%20Request%20(SAR)%20Forms.pdf)

### **1.5. 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 received from the Administrative Assistant.
- Return the form and attach the Computer Security Awareness CBT.

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### 2. Employee Guidelines

#### 2.1. Schedule

- All employees are responsible for reviewing the week's schedule and working their shift. **See Appendix A.**
- After a schedule has been posted, and you did not submit a time-off request form for that week, and you need time off other than (sickness or emergencies), it will be your responsibility to find another operator to cover your shift either by switching shifts or having another operator accept your shift.

#### 2.2. Timesheets

- All employees (operators, lead operators, supervisors, engineers and RTMC Manager) will fill out a timesheet to be recorded and saved for auditing. **See Appendix B.**
- All operators will have their supervisor or lead operator initial their time at the end of each shift.
- Every Friday, the timesheets will be sent to HR for entering within Deltek (Metric's electronic timesheet software) or to an authorized representative if from a subconsultant company.

#### 2.3. 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 their shift.
- All categories must be filled out when requesting time off:
  - Employee's name
  - Type of Absence requested
  - Dates of Absence
  - Reason for Absence if "Other" is selected.
- Please reference **Appendix C** for Metric's Time-Off Request Form

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### 3. RTMC Etiquette

#### 3.1. General

- Every time an employee enters the secure floor they must badge in. No tailgating. All entries must be logged.
- All visitors must sign in at the front desk and have a visitor's badge always.
- All visitors must be accompanied by someone who has their SLERS background check when in the TMC.
- 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 control room 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 control room, unless permitted by management, and are only permitted during break hours.
- Standard Operating Guidelines (SOG), these SOPs, reference materials, and equipment are to be kept neatly in place and readily available at each console.
- All consoles 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 console.
- No profanity or foul language is permitted; proper business etiquette shall 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.

#### 3.2. Food and Beverage

- All Meals should be consumed in the Break Room(s), Offices or side tables. No food at the desks.
- Only small snack and drinks that have a sealable lid while on the RTMC Floor.
- FDOT/ TMC/ ITS staff will utilize a coffee carafe maintained in the Supervisor's office that must be kept on a timer to automatically turn off.
- No coffee pots are allowed on the RTMC Floor.

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- One refrigerator is for TMC Staff and two are for FHP. The TMC has the very last fridge, microwave and cabinet.
- No fish or shellfish shall be heated in the microwave.
- 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.
- See the ICM RTMC Manager to check out the grill.
- 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.

### **3.3. Grooming**

- No grooming is allowed on the RTMC Floor. This includes:
  - Brushing hair
  - Trimming of nails, brushing teeth, etc.

### **3.4. 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.

### **3.5. Electronics**

- Employees shall not utilize personal cellular telephones 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 while on duty in the communications center. This directive shall not prohibit a member from having a personal cell phone on their console as long as the ringer is on vibrate/silent mode and the phone is answered or used only when an emergency exists.
- Radio, 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 Division for use during emergency or other critical situations (hurricanes, civil

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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.

### **3.6. 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.

### **3.7. 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 will follow each agency's policies.
- Obscene language will not be tolerated.

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### 4. ICM Workforce Development

#### 4.1. Training

- The following modules will be completed as required by the ICM RTMC Manager:
  - Module 1: Introduction to RTMC (Operator); Pre-test and Post-test
  - Module 2: RTMC Communication Fundamentals and FDOT Hierarchy (Operator); Pre-test and Post-test
  - Module 3: SunGuide® 101 (Operator); Pre-test and Post-test
  - Module 4: Advanced SunGuide (Operator); Pre-test and Post-test
  - Module 5: Road Ranger training; Pre-test and Post-test
  - Module 6: CFX training; Pre-test and Post-test
  - Module 7: Wrong Way Driver Essentials (Operator); Pre-test and Post-test
  - Module 8: Arterial Operation Training (Operator);
  - Module 9: Arterial Corridor Manager Workshop (Corridor Manager Training)
  - Module 10: ICAT Basics (Supervisors)
  - Module 11: MIMS Insight; (Supervisors)
  - Module 12: SunGuide Reporting (Supervisors)
  - Module 13: COIN & RISC Awareness (Supervisors)
  - Module 14: Construction Protocol (Supervisors)

#### 4.2. ICM Operator Shadowing

- Each new employee will sit with an ICM operator for 6 to 8 shifts to job shadow before they operate a workstation.
- Each new employee will sit with an ICM operator in the AAM room for multiple shifts.



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### **5. ICM Operator IMSA Training**

- All operators will be TCSS level 1 certified within the first year of working in the RTMC.
- All lead operators and supervisors will be TCSS level 2 certified within the second year of working in the RTMC.
- All Supervisors will have the opportunity to take MOT training and IMSA Signal Technician Level 1 & 2



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### **6. Operator Abilities & Responsibilities**

Operators will be experienced in the field of freeway and/or arterial traffic operations, with the following basic requirements:

- An understanding of local intersection controller operations, phasing, detection, and infrastructure, and arterial signal timing pattern development, implementation, and fine-tuning.
- An understanding of freeway operations.
- Ability to prepare detailed technical reports with understandable non-technical summaries.
- Ability to present oral presentations on the subject matter of this system.
- Ability to communicate clearly with co-workers on technical issues related to the program.
- Ability to work with peers, superiors, and subordinates in an office environment.
- Ability to clear the security requirements necessary to work within the RTMC.
- Ability to drive automobiles and small trucks, with a valid Florida Driver's License.
- Ability to monitor the status of traffic signal and system operations, corridor congestion, and traffic flow, etc. using technology tools including advanced traffic management systems, travel time monitoring, and closed-circuit television (CCTV) cameras.
- Ability to support the ICM Manager in identifying traffic congestion along the freeway and arterial network, based on pre-defined performance measures, then develop and implement traffic mitigation measures in a timely manner.
- Ability to transmit event information to appropriate personnel and suggest appropriate signal timing adjustment as directed by the ICM Manager.
- Ability to log all activities into Integrated Corridor Action Tracker (ICAT) and ensure that the information is complete and concise.
- Ability to detect, confirm, and track equipment faults affecting arterial operations.
- Ability to coordinate with the RTMC and other operations staff with regards to external agency communications and general control room coordination, and other staff from signal maintaining agencies to obtain a full understanding of all arterial activity status.

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### 7. Monitoring Tools

- The following monitoring tools are to be used:
  - BlueTOAD and BlueMAC-based travel time data instrumentation
  - Local Agency operated Advanced Traffic Management Systems (ATMS)
  - Local Agency operated TACTICS Central Traffic Management System
  - Closed Circuit Television (CCTV) infrastructure including, but not limited to SunGuide® and camera feeds from local maintaining agencies
  - “Big Data” resources
  - Event Logging
  - Pulse Point
  - Google Maps
  - WAZE
  - MS Outlook
  - MIMS (Supervisors)
  - Access Point (Video Wall)
  - All LEO Website
  - BLINK LINK
  - ICAT
  - JIRA-FDOT Help Desk Ticketing System (Supervisors)
  - Bridge Security System
  - FDOT SunGuide
  - CFX SunGuide

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### 8. Operator Battle Rhythm

#### 8.1. Beginning of Shift

- Clean your workstation with Lysol wipes.
- Log onto Windows, SunGuide® software, BlinkLink, FL511.com, Google maps, FDOT Email, Activu video wall controller, FHP CAD, WAZE.
- SunGuide® applications: Event List, AVL, DMS Status Window, Camera Control Dialogue box.
- Check the shift change report.
- Do a system check of any out devices and notify a supervisor or lead operator to update MIMS.
- Note any observations or important event details.

#### 8.2. During the shift

- Every 5 minutes, unless working an event, review entire video tour.
- Every 30 minutes update events in FDOT's SunGuide®.
- Every hour verify FL511.com to ensure events are updating and populating on the website.
- When external calls occur answer with "Orlando RTMC, this is (your name), how can I help you?"
- Throughout the shift each operator is expected to monitor emails.
- On an as needed basis, create events and be detailed within the event.
  - Include the event type, event location, event direction, impact to roadway, notifying agency, contact the AAM room with event information, make comments based on observations and conversations between agencies, notify road rangers, if there's property damage gather the case number from OPD or FHP and send a notification with proper template.
  - TIM template should look like the example below:
    - Type:** Crash
    - Location:** 429 SB at MM 27; SR-437
    - Impact:** All lanes clear
    - First Responders on Scene:** ICA maintenance, RR in route
    - Infrastructure Impacted:** Light pole down
    - Case #:** 003407
- Once events are created, publish to FL511 by using the Response Plan Generator. (For more details refer to Section 15-Event Management)

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- Once approved by a supervisor or leading operator, create a floodgate and banner as needed. (For more details, refer to **Appendix D-** SunGuide's User Manual and Module 4- Advanced SunGuide.
- When an event is created with road blockage, utilize RPG to update DMS messages. (For more details, refer to **Appendix D-** SunGuide's User Manual and Module 4- Advanced SunGuide.
- For every event, communicate with ICA, Lynx and CFX road rangers, pending the incident location, when incident occurred; keep communication open throughout the incident duration for updates (with the same operator, if possible).
- As needed, communicate with Asset Maintenance contractors for events when property damage occurs.
  - Must be notified via email.
  - Must be verbally notified. (Use Asset Maintenance Contact List)
- Communicate with Construction Contractor/CEI for issues within a construction zone (i.e. poor MOT, damage to construction site or MOT, etc.)
- End of Shift
  - Review all devices by moving CCTVs, visually verify DMS with CCTV and make sure data is coming in from MVDS.
  - Complete your timesheet by filling out the form and having a lead operator, supervisor or RTMC Manager's initial.
  - Verify that IVEDDS is functional by checking a few CCTVs.
  - Clean the work station with Lysol wipes.

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### 9. AAM Operator Battle Rhythm

In the event an incident or event causing arterial congestion is identified, the ICM Operator shall advise the ICM Arterial Manager, the RTMC Manager/Supervisor and the appropriate maintaining agency. The operator should then log the nature, time, and duration of the event in ICAT.

Long-term events and incidents may require coordination with the District and local maintaining agencies through the ICM Arterial Manager and/or ICM RTMC Manager/Supervisor. Examples might include road closures due to construction or maintenance activities, traffic diversions due to major incidents, large events such as events at the Amway Center, or evacuations due to approaching storms. The ICM Arterial Manager and/or ICM RTMC Manager/Supervisor will determine the need for a plan based on the information available regarding the event. Previously developed street routing, diversion plans, and alternate signal timing plans will be used to manage traffic for the event. Timing plan changes may be made by the local maintaining agency unless otherwise requested by the District.

#### 9.1. AAM Corridors

Phase 1 of the ICM program consists of the following ten corridors:

- US 17/92 (Mills Avenue/Orlando Avenue), from SR 50 (Colonial Drive) to Airport Boulevard and from Firehouse Road to Beresford Avenue, 47 signalized intersections, 16.4 miles. US 17/92 in Volusia County, from Firehouse Road to Beresford Avenue, 5 signalized intersections, 2.1 miles.
- SR 46, from International Parkway to Airport Boulevard, 10 signalized intersections, 3.0 miles.
- SR 50 (Colonial Drive), from SR 435 (Kirkman Road) to SR 436 (Semoran Boulevard), 35 signalized intersections, 9.0 miles.
- SR 414 (Maitland Boulevard), from Bear Lake Road/Rose Avenue to CR 427 (Maitland Avenue), 10 signalized intersections, 5.8 miles.
- SR 423/CR 423 (John Young Parkway), from US 17/92 (Orlando Avenue) to SR 482 (Sand Lake Road), 36 signalized intersections, 14.1 miles.
- SR 434 (Forest City Road), from US 17/92 to SR 424 (Edgewater Drive), 31 signalized intersections, 11.0 miles.
- SR 435 (Kirkman Road), from SR 50 (Colonial Drive) to Carrier Drive, 17 signalized intersections, 6.6 miles.
- SR 436 (Semoran Boulevard), from SR 434 to US 17/92, 24 signalized intersections, 4.8 miles.

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- US 441 (Orange Blossom Trail), from Country Club Drive to Taft Vineland Road, 32 signalized intersections, 9.6 miles.
- SR 482 (Sand Lake Road/McCoy Road), from Turkey Lake Road to Jetport Drive, 22 signalized intersections, 7.9 miles.

Phase 2 will have corridors added as well as some existing corridors being extended.

### **9.2. Morning and Afternoon ICM-AAM Communications Reports**

#### 9.2.1 BlueMac

- Check to communication status of BlueMac devices through BlueMac software.
- Each device that has been offline for 1 day or more needs to have a MIMS ticket created for it. Annotate the device down in the appropriate spreadsheet.
- Verify that there are no existing tickets & then create a D5 RTMC ticket.
- 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'.
- Enter the number of days disconnected before the device came back online into the spreadsheet in the appropriate area.
- 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.
- Check the 'Is Asset Operational' checkbox and click 'OK' to mark the device operational.

#### 9.2.2 BlueTOAD

- Check the communication status of the BlueToad devices through BlueToad software.
- 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.
- Each device that is not reporting needs to be logged in the worksheet used for monitoring communication to BlueToad devices.

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### 9.2.3 Orange County

- Access Orange County TACTICS ATMS software to annotate locations with lost communication to the FDOT Intersections.

### 9.2.4 Seminole County

- Access Seminole County ATMS.NOW software to annotate locations with lost communication to the FDOT Intersections.

### 9.2.5 City of Orlando

- Access City of Orlando ATMS.NOW software to annotate locations with lost communication to the FDOT Intersections.

### 9.2.6 Arterial SunGuide® Monitoring

- Utilizing the websites below — add, track, & monitor events on SunGuide® for arterial roads.
  - [FHP'S Live Traffic Crash & Construction Report](#)
  - [OPD Active Calls](#)
  - [Google Maps](#)
  - [Waze](#)
- If there are cross roads missing or cameras down, send them to shift lead at shift end.

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### 10. Daily Alarms & Issue Tracking (Arterials)

#### 10.1. City of Orlando

- Daily alarm reports are downloaded from the City of Orlando ATMS program, which contains a log of time-stamped alarms for every signal within the chosen group. The reports should be reviewed for the following issues.
  - Flashing Operation
  - Cabinet Door Open
  - Coordination Errors
  - Detector Failures – Indicated by Ped Detector Failure (pedestrian detectors) or Detector Diagnostic Failure (vehicle detectors) alarms.

#### 10.2. Seminole County

- Daily alarm reports are downloaded from the Seminole County ATMS program, which contains a log of time-stamped alarms for every signal within the chosen group. The reports should be reviewed for the following issues.
  - Flashing Operation
  - Cabinet Door Open
  - Coordination Errors
  - Detector Failures – Indicated by Ped Detector Failure (pedestrian detectors) or Detector Diagnostic Failure (vehicle detectors) alarms.

#### 10.3. Orange County

- Daily alarm reports are downloaded from the Orange County ATMS program, which contains a log of time-stamped alarms for every signal within the chosen group. The reports should be reviewed for the following issues.
  - Flashing Operation
  - Cabinet Door Open
  - Coordination Errors
  - Detector Failures – Indicated by Ped Detector Failure (pedestrian detectors) or Detector Diagnostic Failure (vehicle detectors) alarms.

#### 10.4. Opticom CMS Error Tracking

- Using the monitoring feature of the CMS software Intersections with errors are to be logged in the appropriate worksheet.



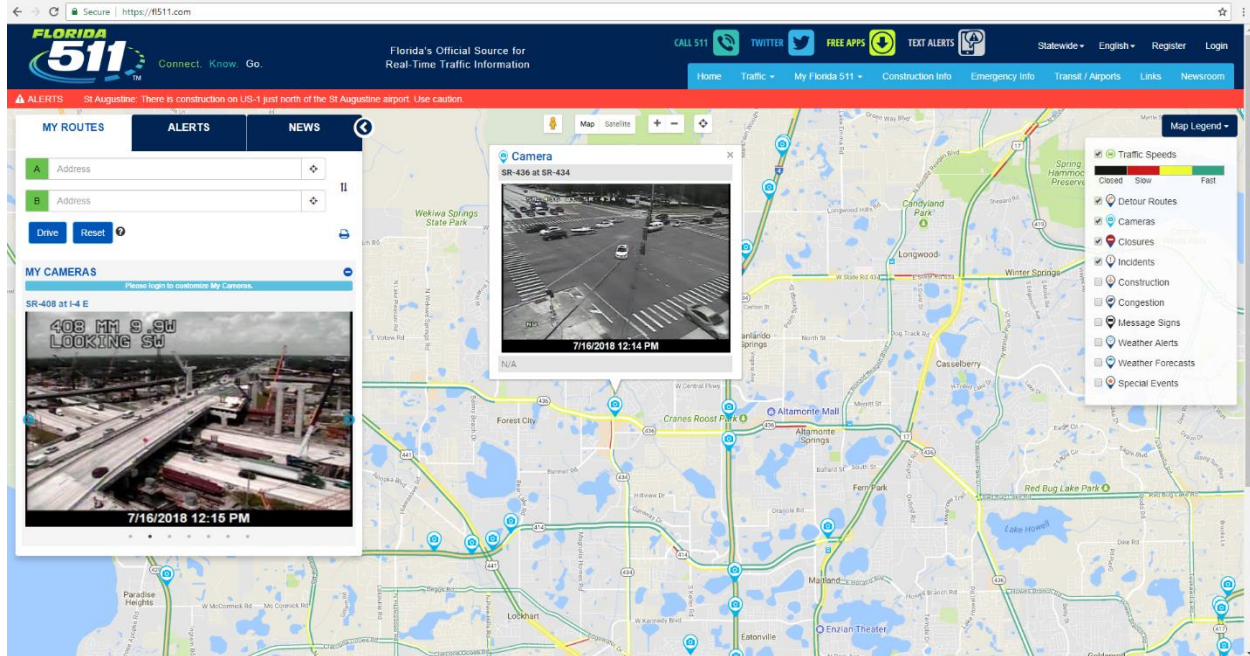
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### 10.5. InSync Camera Issue Tracking

- Any cameras that are offline will show a black screen and should be logged into the appropriate worksheet and reported to the Signal Timing Engineer.

### 10.6. SunGuide/Florida 511 Camera Issue Tracking

- The statuses of arterial cameras (found in SunGuide and FL511) are tracked in the appropriate Excel workbook and MIMS tickets are to be created for cameras that are not functioning properly.



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### **11. Weekly ICM/AAM Reports**

#### **11.1. City of Orlando Weekly Report**

- The City of Orlando weekly report are conducted every Friday and provided to the City of Orlando Staff.
- The 'Weekly Det Report' is divided into four sections:
  - Communications Issues
  - Vehicle Detector Failures
  - Pedestrian Detector Failures
  - Coordination Errors

#### **11.2. Seminole County Weekly Report**

- The Seminole County weekly report are conducted every Friday and provided to the Seminole County Staff.
- The 'Weekly Det Report' is divided into four sections:
  - Communications Issues
  - Vehicle Detector Failures
  - Pedestrian Detector Failures
  - Coordination Errors

#### **11.3. Orange County Weekly Report**

- The Orange County weekly report are conducted every Friday and provided to the Orange County Staff.
- The 'Weekly Det Report' is divided into four sections:
  - Communications Issues
  - Vehicle Detector Failures
  - Pedestrian Detector Failures
  - Coordination Errors

#### **11.4. Opticom CMS TSP/Pre-emption Weekly Report**

- The Opticom CMS weekly report is conducted every Friday and provided to City of Orlando, Seminole County and Orange County staff.
- The report uses the CMS software to pinpoint communication and hardware issues.

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### **12. Monthly ICM/AAM Reports**

The monthly report show data on TSP/preemption summary, and individual sheets for each corridor summarizing the travel time and O/D study results. The following sections describe the processes to import additional data from BlueMAC, BlueTOAD, SunGuide, Seminole County ATMS, ICAT, and Opticom CMS:

#### **12.1. BlueMAC Travel Times and O/D Studies**

- Travel time and O/D reports are conducted monthly with a 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.

#### **12.2. BlueTOAD Travel Times and O/D Studies**

- The BlueTOAD Travel time and O/D reports are conducted monthly with a 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.

#### **12.3. SunGuide Volume Data**

- Arterial throughput detectors are used to gather volume data through SunGuide.

#### **12.4. Seminole County ATMS Volume Data**

- ATMS system collects count data from traffic signal advance loops which can be used to collect count throughput data.

#### **12.5. ICAT Issue Tracking Summary**

- At the end of each month, the ICAT tickets related to traffic issues (not Tasks) from the month are logged into monthly worksheet.

#### **12.6. Opticom CMS Monthly TSP/Pre-emption Data**

- The Opticom CMS monthly preemption and TSP data are collected and entered to the appropriate worksheet which will be used in the monthly report.

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### **12.7. Updating Databases and Data Tables**

Updated controller databases for the various maintaining agencies should be periodically downloaded in order 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.

#### **12.7.1 City of Orlando/Seminole County Signal & Detector Data**

- The list of intersections, Phases, Vehicle detection and pedestrian detection 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.

#### **12.7.2 Orange County Signal & Detector Data**

- Excel and PDF controller databases are maintained in the appropriate folders and worksheets.

### **12.8. BlueMac Devices**

- The following information in the Daily communications 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 status of each MIMS ticket needs to be updated by looking up the MIMS ticket in MIMS and changing the status.

### **12.9. BlueToad Devices**

- The list of BlueTOAD devices in the communication log worksheet of the BlueTOAD Report workbook needs to match the list in 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.

### **12.10. Opticom CMS Devices**

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

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### 13. Supervisor's Battle Rhythm

#### 13.1. Start of Shift

- Log onto Windows, SunGuide® software, BlinkLink, FL511.com, Google Maps, FDOT Email, Activu video wall controller, FHP CAD, WAZE and ICAT.
- SunGuide® applications: Event List, AVL, DMS Status Window, Camera Control Dialogue box.
- Review the shift change report.
- Verify MIMS tickets are current and updated.
- Note any observations or important event details.

#### 13.2. During the Shift

- Every hour verify FL511.com to ensure events are updating and populating on the website.
- Every 30 minutes, update events in FDOT's SunGuide®.
- Every 30 minutes verify events are correct in FDOT's SunGuide®.
- Responsible for creating, updating and sending Central Office Incident Notification (COIN).
- Handle any Wrong Way Driver event and create the events within SunGuide®.
  - Make sure to include when FHP was notified (as a timestamp), location of the WWD, direction of the WWD and any details pertaining to the event.
- When external calls occur answer with "Orlando RTMC, this is (your name), how can I help you?"
- Ensure that operators are following Road Ranger policies while using proper radio etiquette.
- Throughout the shift each operator is expected to monitor emails.
- On an as needed basis, to assist Operators, create events and be detailed within the event.
  - Include the event type, event location, event direction, impact to roadway, notifying agency, contact the AAM room with event information, make comments based on observations and conversations between agencies, notify road rangers, if there's property damage gather the case number from OPD or FHP and send a notification with proper template, including the following:
    - TIM Template should look like the example below:
      - Type:** Crash
      - Location:** 429 SB at MM 27; SR-437
      - Impact:** All lanes clear
      - First Responders on Scene:** ICA maintenance, RR in route
      - Infrastructure Impacted:** Light pole down

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### Case #: 003407

- Once events are created publish to FL511 by using the Response Plan Generator. (For more details, refer to **Appendix D**- SunGuide's User Manual and Module 4- Advanced SunGuide Training)
- Once approved by a Supervisor or Lead Operator, create a floodgate and banner as needed. (For more details, refer to **Appendix D**- SunGuide's User Manual and Module 4- Advanced SunGuide Training)
- When an event is created with road blockage utilize RPG to update DMS messages. (For more details, refer to **Appendix D**- SunGuide's User Manual and Module 4- Advanced SunGuide Training)
- For every event, communicate with ICA, Lynx and CFX Road Rangers, pending the incident location, when incidents occur; keep communication open throughout the incident duration for updates.
- As needed, communicate with Asset Maintenance contractors for events when property damage occurs.
- Must be notified via email.
- Must be verbally notified. (Use Asset Maintenance Contact List)
- Communicate with Construction Contractor/CEI for issues within a construction zone (i.e. poor MOT, damage to construction site or MOT, etc.)

### 13.3. End of Shift

- Review all devices by moving CCTVs, visually verify DMS with CCTV and make sure data is coming in from MVDS.
- Complete your timesheet by filling out the form and have the ICM RTMC Manager initial.
- Verify that IVEDDS is functional by checking a few CCTVs.
- Clean the work station with Lysol wipes.

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### **14. Communications Specialist Battle Rhythm**

#### **14.1. Beginning of Shift**

- Log onto Windows, SunGuide® Event List, Blinklink, FL511.com, Google maps, Global-5 and FDOT Email, WAZE and ICAT.
- As a part of a QC check, verify cameras are updated on FL511.com.
- Listen to any unheard voicemails
- Walk into the RTMC to check in with ICM RTMC manager and supervisors for potential incident outreach.

#### **14.2. During the Shift**

- Every 30 minutes check traffic reporter Twitter pages for accuracy of incidents.
- Every 30 minutes check FL511.com to make sure incidents are posting properly.
- Continuously monitor emails.
- Every month update and share calendar of planned events with RTMC Manager and group in ICM meeting.
- Every month update and share outreach and editorial calendar with ICM Project Manager.
- Every month locate and write good news stories for monthly report.
- Create, assign, and update tasks in ICAT.
- Check spelling and pronunciation of 511 Floodgates.
- Update contact database with names, emails, phone numbers, organizations and the results of the meeting.
- Answer calls and reply to public questions and complaints regarding traffic signals and closures.
- Communicate with I-4 Ultimate PIO when necessary to find more information on project construction or unexpected issues.
- Write award submissions for ICM and D5 as requested by District 5.
- Create presentations for ICM and D5 to be shown at the RTMC, conferences, maintaining agencies, schools, etc.
- Organize and host tours of the RTMC.
- Organize and host media events at the RTMC. (Thanksgiving, July 4th, etc.)
- Write scripts and provide support and direction for videos as requested by District 5.
- Provide support, content and direction for CFL Smart Roads website.



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### **14.3. End of Shift**

- Make sure cameras are updated on FL511.com.
- Walk in to RTMC to check in with RTMC Manager and Supervisors for potential incident outreach necessary before leaving for day.
- Clean the workstation with Lysol wipes.



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### 15. Event Management (EM)

**15.1.** *As a part of the ICM Workforce Development training, specific details can be found in Module 4- Advanced SunGuide Training.*

#### 15.2. FDOT Event Types

##### 15.1.1 Crashes with Blockage

- *Create event type in Event Manager*
  - Include lane blockage, direction, location, responders (notified, On-scene and departed timestamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
  - Save and get response time.
  - QA/QC generated response plan: DMS, Email groups, 511 messages
  - Include lane blockage, direction, location, responders (notified, on-scene and departed time stamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
- *Modify event chronology throughout its duration*
  - Include lane blockage, direction, location, responders (notified, on-scene and departed time stamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
  - Save and get response time.
  - QA/QC generated response plan: DMS, Email groups, 511 messages
- *Close and terminate event when scene is clear.*

##### 15.1.2 Crashes with Shoulder Blockage

- *Create event type in Event Manager*
  - Include lane blockage, direction, location, responders (notified, On-scene and departed timestamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
  - Save and get response time.
  - QA/QC generated response plan: DMS, Email groups, 511 messages
  - Include lane blockage, direction, location, responders (notified, on-scene and departed time stamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
- *Modify event chronology throughout its duration*
  - Include lane blockage, direction, location, responders (notified, on-scene and departed time stamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
  - Save and get response time.

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- QA/QC generated response plan: DMS, Email groups, 511 messages
- *Close and terminate event when scene is clear.*

### 15.1.3 Crash with Lane Blockage and Property Damage

- *Create event type in Event Manager*
  - Include lane blockage, direction, location, responders (notified, On-scene and departed timestamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
  - Save and get response time.
  - QA/QC generated response plan: DMS, Email groups, 511 messages
  - Include lane blockage, direction, location, responders (notified, on-scene and departed time stamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
- *Modify event chronology throughout its duration*
  - Include lane blockage, direction, location, responders (notified, on-scene and departed time stamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
  - Save and get response time.
  - QA/QC generated response plan: DMS, Email groups, 511 messages
- *Close and terminate event when scene is clear.*
- *Begin attenuator damage process*
  - RTMC Operator, lead or supervisor takes a snap shot and documents the following information:
    - Camera Location and name
    - Data/Time of incident
    - SunGuide® Event #
    - Roadway and direction of travel
    - Mile Marker/Cross Street (if applicable)
- *The RTMC Supervisor or lead will then send the information to the following recipients:*
  - CO-ISPED5
  - Jim Stroz; [Jim.Stroz@dot.state.fl.us](mailto:Jim.Stroz@dot.state.fl.us)
  - D5-RTMC ICM Operators
  - Sheryl Bradley; [Sheryl.Bradley@dot.state.fl.us](mailto:Sheryl.Bradley@dot.state.fl.us)

### 15.1.4 Crash with Congestion

- *Create event type in Event Manager*

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- Include lane blockage, direction, location, responders (notified, On-scene and departed timestamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
- Save and get response time.
- QA/QC generated response plan: DMS, Email groups, 511 messages
- Include lane blockage, direction, location, responders (notified, on-scene and departed time stamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
- *Modify event chronology throughout its duration*
  - Include lane blockage, direction, location, responders (notified, on-scene and departed time stamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
  - Save and get response time.
  - QA/QC generated response plan: DMS, Email groups, 511 messages
  - Before closing the event, clone the event and make it a congestion event when travel lanes are open.
- *Close and terminate the crash event and use the cloned event for remaining congestion.*

### 15.1.5 Congestion Event

- *Create event type in Event Manager*
  - Include direction, location, weather condition, and operator observed comments.
  - Save and get response plan
  - QA/QC generated response plan: 511 messages.
  - Do not activate an email or DMS message.
- *Modify event chronology throughout its duration*
  - Include direction, location, weather condition, and operator observed comments.
  - Save and get response plan
  - QA/QC generated response plan: 511 messages.
  - Do not activate an email or DMS message.
- *Close and terminate event when scene is clear.*

### 15.1.6 Debris in the Road

- *Create event type in Event Manager*

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- Include lane blockage, direction, location, responders (notified, On-scene and departed timestamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
- Save and get response time.
- QA/QC generated response plan: DMS, Email groups, 511 messages
- Include lane blockage, direction, location, responders (notified, on-scene and departed time stamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
- *Modify event chronology throughout its duration*
  - Include lane blockage, direction, location, responders (notified, on-scene and departed time stamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
  - Save and get response time.
  - QA/QC generated response plan: DMS, Email groups, 511 messages
- *Close and terminate event when scene is clear.*

### 15.1.7 Disabled Vehicle

- *Create event type in Event Manager*
  - Include lane blockage, direction, location, responders (notified, On-scene and departed timestamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
  - Save and get response time.
  - QA/QC generated response plan: DMS, Email groups, 511 messages
  - Include lane blockage, direction, location, responders (notified, on-scene and departed time stamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
- *Modify event chronology throughout its duration*
  - Include lane blockage, direction, location, responders (notified, on-scene and departed time stamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
  - Save and get response time.
  - QA/QC generated response plan: DMS, Email groups, 511 messages
- *Close and terminate event when scene is clear.*

### 15.1.8 Abandoned Vehicle without lane blockage

- *Create event type in Event Manager*

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- Include lane blockage, direction, location, responders (notified, On-scene and departed timestamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
- Each abandoned vehicle must have a pre-set set by a Lead Operator or Supervisor.
- *Modify event chronology throughout its duration.*
  - Provide comments daily for existing abandoned vehicles.
- *Close event when vehicle is removed or leaves.*

### 15.1.9 Abandoned Vehicle with lane blockage

- *Create event type in Event Manager*
  - Include lane blockage, direction, location, responders (notified, On-scene and departed timestamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
  - Each abandoned vehicle must have a pre-set set by a Lead Operator or Supervisor.
- *Modify event chronology throughout its duration.*
  - Include lane blockage, direction, location, responders (notified, On-scene, and departed timestamps), weather condition, Road Ranger, vehicle types, operator observed comments.
  - Save and get response plan
  - QA/QC generated response plan: 511 messages
  - Send out “TIM” email to corresponding distribution group “D5-RTMC CFX Incidents”
  - Re-activate DMS messaging. (Minor – 5 miles; Intermediate -10 miles; Major or all lanes blocked-15 miles or at any major interchanges for motorists to make appropriate decision.)

### 15.1.10 Police Activity

- *Create event type in Event Manager*
  - Include lane blockage, direction, location, responders (notified, On-scene and departed timestamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
  - Save and get response time.
  - QA/QC generated response plan: DMS, Email groups, 511 messages
  - Include lane blockage, direction, location, responders (notified, on-scene and departed time stamps), weather conditions, Road Ranger, vehicle types, operator observed comments.

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- *Modify event chronology throughout its duration*
  - Include lane blockage, direction, location, responders (notified, on-scene and departed time stamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
  - Save and get response time.
  - QA/QC generated response plan: DMS, Email groups, 511 messages
- *Close and terminate event when scene is clear.*

### 15.1.11 Emergency Vehicles

- *Create event type in Event Manager*
  - Include lane blockage, direction, location, responders (notified, On-scene and departed timestamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
  - Save and get response time.
  - QA/QC generated response plan: DMS, Email groups, 511 messages
  - Include lane blockage, direction, location, responders (notified, on-scene and departed time stamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
- *Modify event chronology throughout its duration*
  - Include lane blockage, direction, location, responders (notified, on-scene and departed time stamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
  - Save and get response time.
  - QA/QC generated response plan: DMS, Email groups, 511 messages
- *Close and terminate event when scene is clear.*

## 15.3. CFX Event Types

### 15.2.1 Crashes with Blockage

- *Create event type in Event Manager*
  - Include lane blockage, direction, location, responders (notified, on-scene and departed timestamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
  - Save and get response plan.
  - QA/QC generated response plan: 511 messages
  - Send out "TIM" email to corresponding distribution group "D5-RTMC CFX Incidents"

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- Activate DMS messaging. (Minor crash-5 miles; Intermediate-10 miles; Major or all lanes blocked-15 miles or at any major interchanges to allow motorists to make appropriate decisions.)
- *Modify event chronology throughout its duration*
  - Include lane blockage, direction, location, responders (notified, On-scene, and departed timestamps), weather condition, Road Ranger, vehicle types, operator observed comments.
  - Save and get response plan
  - QA/QC generated response plan: 511 messages
  - Send out “TIM” email to corresponding group “D5-RTMC CFX Incidents”
  - Re-activate DMS messaging. (Minor crash-5 miles; Intermediate-10 miles; Major or all lanes blocked-15 miles or and at any major interchanges for motorists to make appropriate decision.)
- *Close and terminate event when scene is clear.*

### 15.2.2 Crash with Shoulder Blockage

- *Create event type in Event Manager*
  - Include lane blockage, direction, location, responders (notified, on-scene and departed timestamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
  - Save and get response plan.
  - QA/QC generated response plan: 511 messages
  - Send out “TIM” email to corresponding group “D5-RTMC CFX Incidents”
  - Activate DMS messaging. (Minor crash-5 miles; Intermediate-10 miles; Major or all lanes blocked-15 miles or at any major interchanges to allow motorists to make appropriate decisions.)
- *Modify event chronology throughout its duration*
  - Include lane blockage, direction, location, responders (notified, On-scene, and departed timestamps), weather condition, Road Ranger, vehicle types, operator observed comments.
  - Save and get response plan
  - QA/QC generated response plan: 511 messages
  - Send out “TIM” email to corresponding group “D5-RTMC CFX Incidents”

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- Re-activate DMS messaging. (Minor crash-5 miles; Intermediate-10 miles; Major or all lanes blocked-15 miles or and at any major interchanges for motorists to make appropriate decision.)
- *Close and terminate event when scene is clear.*

### 15.2.3 Crash with Lane Blockage and Property Damage

- *Create event type in Event Manager*
  - Include lane blockage, direction, location, responders (notified, on-scene and departed timestamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
  - Save and get response plan.
  - QA/QC generated response plan: 511 messages
  - Send out “TIM” email to corresponding group “D5-RTMC CFX Incidents”
  - Activate DMS messaging. (Minor crash-5 miles; Intermediate-10 miles; Major or all lanes blocked-15 miles or at any major interchanges to allow motorists to make appropriate decisions.)
- *Modify event chronology throughout its duration*
  - Include lane blockage, direction, location, responders (notified, On-scene, and departed timestamps), weather condition, Road Ranger, vehicle types, operator observed comments.
  - Save and get response plan
  - QA/QC generated response plan: 511 messages
  - Send out “TIM” email to corresponding group “D5-RTMC CFX Incidents”
  - Re-activate DMS messaging. (Minor crash-5 miles; Intermediate-10 miles; Major or all lanes blocked-15 miles or and at any major interchanges for motorists to make appropriate decision.)
- *Close and terminate event when scene is clear.*
- *Begin attenuator damage process.*
  - RTMC Operator, lead or supervisor takes a snap shot and documents the following information:
    - Camera Location and name
    - Data/Time of incident
    - SunGuide® Event #
    - Roadway and direction of travel
    - Mile Marker/Cross Street (if applicable)



## STANDARD OPERATING PROCEDURES

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- *The RTMC Supervisor or lead will then send the information to the following recipients:*
  - CO-ISPED5
  - Jim Stroz
  - D5-RTMC ICM Operators
  - Sheryl Bradley

### 15.2.4 Crash with Congestion

- *Create event type in Event Manager*
  - Include lane blockage, direction, location, responders (notified, on-scene and departed timestamps), weather conditions, Road Ranger, vehicle types, operator observed comments.
  - Save and get response plan.
  - QA/QC generated response plan: 511 messages
  - Send out “TIM” email to corresponding group “D5-RTMC CFX Incidents”
  - Activate DMS messaging. (Minor crash-5 miles; Intermediate-10 miles; Major or all lanes blocked-15 miles or at any major interchanges to allow motorists to make appropriate decisions.)
- *Modify event chronology throughout its duration*
  - Include lane blockage, direction, location, responders (notified, On-scene, and departed timestamps), weather condition, Road Ranger, vehicle types, operator observed comments.
  - Save and get response plan
  - QA/QC generated response plan: 511 messages
- *Modify event chronology throughout its duration*
  - Include lane blockage, direction, location, responders (notified, On-scene, and departed timestamps), weather condition, Road Ranger, vehicle types, operator observed comments.
  - Save and get response plan
  - QA/QC generated response plan: DMS, Email groups, 511 messages
- *Before closing the event, clone the event and make it a congestion event when travel lanes are open.*
- *Close and terminate the crash event and use the cloned event for remaining congestion.*

### 15.2.5 Congestion Event

- *Create event type in Event Manager*

## STANDARD OPERATING PROCEDURES

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- Include direction, location, weather condition, and operator observed comments.
- Save and get response plan
- QA/QC generated response plan: 511 messages.
- *No congestion messages need to be posted. CFX uses travel times only.*
- *Modify event chronology throughout its duration*
  - Include direction, location, weather condition, and operator observed comments.
  - Save and get response plan
  - QA/QC generated response plan: 511 messages.
- *Do not activate an email or DMS message.*
- *Close and terminate event when scene is clear.*

### 15.2.6 Debris in the Road

- *Create event type in Event Manager*
  - Include lane blockage, direction, location, responders (notified, On-scene, and departed timestamps), weather condition, Road Ranger, vehicle types, operator observed comments.
  - Save and get response plan
  - QA/QC generated response plan: DMS, Email groups, 511 messages
- *Modify event chronology throughout its duration*
  - Include lane blockage, direction, location, responders (notified, On-scene, and departed timestamps), weather condition, Road Ranger, vehicle types, operator observed comments.
  - Save and get response plan
  - QA/QC generated response plan: 511 messages
- *Send out "TIM" email to corresponding group "D5-RTMC CFX Incidents"*
- *Re-activate DMS messaging. (Minor crash-5 miles; Intermediate-10 miles; Major or all lanes blocked-15 miles or and at any major interchanges for motorists to make appropriate decision.)*
- *Close and terminate event when scene is clear.*

### 15.2.7 Disabled Vehicle

- *Create event type in Event Manager*
  - Include lane blockage, direction, location, responders (notified, On-scene, and departed timestamps), weather condition, Road Ranger, vehicle types, operator observed comments.

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- Save and get response plan
- QA/QC generated response plan: DMS, Email groups, 511 messages
- *Modify event chronology throughout its duration*
  - Include lane blockage, direction, location, responders (notified, On-scene, and departed timestamps), weather condition, Road Ranger, vehicle types, operator observed comments.
  - Save and get response plan
  - QA/QC generated response plan: 511 messages
- *Send out "TIM" email to corresponding group "D5-RTMC CFX Incidents"*
- *Re-activate DMS messaging. (Minor crash-5 miles; Intermediate-10 miles; Major or all lanes blocked-15 miles or and at any major interchanges for motorists to make appropriate decision.)*
- *Close and terminate event when scene is clear.*

### 15.2.8 Abandoned Vehicle without lane blockage

- *Create event type in Event Manager.*
  - Include lane blockage, direction, location, responders (notified, On-scene, and departed timestamps), weather condition, Road Ranger, vehicle types, and operator observed comments.
- *Each abandoned vehicle must have a preset set by a lead or supervisor.*
- *Modify event chronology throughout its duration.*
- *Provide comments daily for existing abandoned vehicles.*
- *Close event when vehicle is removed or leaves.*

### 15.2.9 Abandoned Vehicle with lane blockage

- *Create event type in Event Manager*
  - Include lane blockage, direction, location, responders (notified, On-scene, and departed timestamps), weather condition, Road Ranger, vehicle types, and operator observed comments.
- *Each abandoned vehicle must have a preset set by a lead or supervisor.*
- *Modify event chronology throughout its duration*
  - Include lane blockage, direction, location, responders (notified, On-scene, and departed timestamps), weather condition, Road Ranger, vehicle types, operator observed comments.
  - Save and get response plan
  - QA/QC generated response plan: 511 messages

## STANDARD OPERATING PROCEDURES

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- *Send out "TIM" email to corresponding group "D5-RTMC CFX Incidents"*
- *Re-activate DMS messaging. (Minor -5 miles; Intermediate-10 miles; Major or all lanes blocked-15 miles or and at any major interchanges for motorists to make appropriate decision.)*
- *Close and terminate event when scene is clear.*

### 15.2.10 Police Activity

- *Create event type in Event Manager*
  - Include lane blockage, direction, location, responders (notified, On-scene, and departed timestamps), weather condition, Road Ranger, vehicle types, operator observed comments.
  - Save and get response plan
  - QA/QC generated response plan: DMS, Email groups, 511 messages
- *Modify event chronology throughout its duration*
  - Include lane blockage, direction, location, responders (notified, On-scene, and departed timestamps), weather condition, Road Ranger, vehicle types, operator observed comments.
  - Save and get response plan
  - QA/QC generated response plan: 511 messages
- *Send out "TIM" email to corresponding group "D5-RTMC CFX Incidents"*
- *Re-activate DMS messaging. (Minor -5 miles; Intermediate-10 miles; Major or all lanes blocked-15 miles or and at any major interchanges for motorists to make appropriate decision.)*
- *Close and terminate event when scene is clear.*

### 15.2.11 Emergency Vehicles

- *Create event type in Event Manager*
  - Include lane blockage, direction, location, responders (notified, On-scene, and departed timestamps), weather condition, Road Ranger, vehicle types, operator observed comments.
  - Save and get response plan
  - QA/QC generated response plan: DMS, Email groups, 511 messages
- *Modify event chronology throughout its duration*
  - Include lane blockage, direction, location, responders (notified, On-scene, and departed timestamps), weather condition, Road Ranger, vehicle types, operator observed comments.
  - Save and get response plan

## STANDARD OPERATING PROCEDURES

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- QA/QC generated response plan: 511 messages
- *Send out "TIM" email to corresponding group "D5-RTMC CFX Incidents"*
- *Re-activate DMS messaging. (Minor -5 miles; Intermediate-10 miles; Major or all lanes blocked-15 miles or and at any major interchanges for motorists to make appropriate decision.)*

### **15.4. Regional 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.

## STANDARD OPERATING PROCEDURES

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### 16. Rapid Incident Scene Clearance (RISC)

**16.1.** *As a part of the ICM Workforce Development training, specific details can be found in Module 13- COIN & RISC Awareness*

#### 16.2. 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.

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- 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.

### **16.3. 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 RISC Clearance Time in cases of emergency property damage repair). It's also important to note the source of all RISC times being provided.

#### **16.2.1 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 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.



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## D5 RISC Operator Log

SunGuide Event # \_\_\_\_\_

Location: SR \_\_\_\_\_ MM \_\_\_\_\_ NB SB EB WB

RISC Requested: \_\_\_\_:\_\_\_\_ By: \_\_\_\_\_

**Ask Caller: Cargo? Spill? Additional Equipment Needed?**

RISC Authorization By (FHP): \_\_\_\_\_

RISC Vendor: \_\_\_\_\_ (See Vendor Rotation Map)

RISC Activated (1<sup>st</sup> call to vendor): \_\_\_\_:\_\_\_\_

Spoke with: \_\_\_\_\_ at \_\_\_\_:\_\_\_\_ Accepted Declined

Vendor ETA: \_\_\_\_\_ **Notify FHP and Asset Mgmt of vendor name and ETA**

**TIM Program Manger Notified? \_\_\_\_:\_\_\_\_ (Sheryl 321-377-4284)**

**TIMES:**  
 1<sup>st</sup> wrecker arrived: \_\_\_\_:\_\_\_\_ Per: \_\_\_\_\_  
 2<sup>nd</sup> wrecker arrived: \_\_\_\_:\_\_\_\_ Per: \_\_\_\_\_  
 Support vehicle arrived: \_\_\_\_:\_\_\_\_ Per: \_\_\_\_\_  
 Notice to Proceed: \_\_\_\_:\_\_\_\_ Per: \_\_\_\_\_  
 Stop/Start: \_\_\_\_:\_\_\_\_ / \_\_\_\_:\_\_\_\_ Per: \_\_\_\_\_  
 Reason: \_\_\_\_\_ (Name & Agency)  
 Stop/Start: \_\_\_\_:\_\_\_\_ / \_\_\_\_:\_\_\_\_ Per: \_\_\_\_\_  
 Reason: \_\_\_\_\_ (Name & Agency)  
 RISC Clearance Time: \_\_\_\_:\_\_\_\_ Per: \_\_\_\_\_  
 Vendor Clearance Time: \_\_\_\_:\_\_\_\_ Per: \_\_\_\_\_  
 \*\* Note RISC Clearance is the time all travel lanes cleared. Vendor Clearance is the time all equipment/personnel have left the scene.

\_\_\_\_ Executive Alert Reminder \_\_\_\_ 511 Floodgate Reminder

**RISC Contacts:**  
 Sheryl Bradley 321-377-4284  
 Mike Hudson 321-202-6425  
 (Asset Management & RISC vendor contacts on back)

### 16.4. Central Office Incident Notification Event (COIN)

- As a part of the ICM Workforce Development training, specific details can be found in Module 4- Advanced SunGuide Training
- **Executive notifications shall be made for incidents meeting the following criteria:**
  - Any limited access highway crash involving the death of five or more person;
  - 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 investigating that closes a limited access highway for more than 1 hour. All lanes blocked including shoulders. we do not want 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.
- **Within the first hour of a COIN event you shall follow the procedure below:**



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- Within the first 15 minutes
  - Create Event with as much detail as possible;
  - Publish the event to 511;
  - Page the location distribution group (i.e. D5-RTMC I-4 Ultimate, D5-RTMC CFX Incidents);
  - Create local floodgate (District "Central"/County/Roadway) (i.e. Central/Orange/I-4 or Central/Orange/SR 408);
  - Activate DMS (20 miles back) with lane blockage and detour information if available;
  - Contact Road Rangers;
  - Disable travel times within the TVT subsystem;
  - Call other districts if necessary (i.e. I-4 eastbound at MM 58- District 7 will need to create signs heading into D5).
- Next 10-15 minutes (at the 30-minute mark)
  - Continue to collect information from Road Rangers and First Responders.
  - Provide any vehicle information and/or information for the template.
- Following 15 minutes (at the 45-minute mark)
  - With all the gathered information send the initial template with filled out information to the on-call supervisor to QC.
- Last 15 minutes (by the 60-minute mark)
  - Send to the COIN distribution group.

***Appendix E*** shows an example COIN event.

## STANDARD OPERATING PROCEDURES

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### 17. Executive Email Notifications

#### 17.1. Executive Email Notifications Overview

- Initial notification of the event (at the 60-minute mark from when it meets the criteria).
- Updates shall occur at the following times:
  - Significant change in status (i.e., reopening of a travel lane for a facility that was completely closed, closure of additional travel lanes, etc.)
  - Requests made by FDOT Executive Leadership or the FDOT Emergency Management Watch Officer.
  - Send an update no more than 2 hours after the last Executive Email notification.
  - Final clearance for the event.

#### 17.2. Notification Content

- The Subject line read: SunGuide® # [Event Number], Facility Name, Direction, County, Event Type/Description.
- Notifications will be sent to D5-RTMC COIN Master List
- The red portions are the portions of the email that the RTMC fills out and that can be changed. Other than the red portions, do not change the template except to add your District leadership, PIO, etc. into the cc: line.
- If the facility occurs in a FDOT work zone, identify the related information in the “Narrative.”
- If any portion of the notification template is unknown or unavailable, simply write Unknown in the associated field. The RTMC does not need to wait until all notification fields are known to send the email.
- Executive Email notifications should not be sent for Scheduled Road Work and Special Events.
- If Executive Leadership or the FDOT Emergency Management Team needs additional information, they may request information over the phone or request that an email notification be sent out using the template.

## STANDARD OPERATING PROCEDURES

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### 18. Shift Change Report Procedure

- The supervisor or lead operator will utilize the same file the entire month so all data is collected in one Excel file.
- Every hour the supervisor or lead operator on shift will verify the FL511 website is updating.
  - Any issues will be noted at the bottom of the shift change report.
  - If no issues are present, add “FL511.com is update.”
  - Add a  once verified.
- One half hour before the end of each shift change, the lead operator or supervisor will begin the ICM Shift Change Report.
- Any current SunGuide® Event will be entered at the top of the report.
  - Add the event #.
  - Enter the last time it was updated
  - Enter any DMS’s that are activated.
- The supervisor or lead operator on shift will identify any devices that go offline during the shift.
  - If a device goes out, fails, or goes offline this will be identified under the device outage section.
  - A MIMS ticket will also be created for the failed device (see MIMS SOP section).
- The supervisor or lead operator on shift will identify any DMS that are currently activated at the end of the shift so that the next shift can be advised.
- The supervisor or lead operator will identify any active floodgates at the end of the shift so the next shift can be advised.
- An example of the Shift Change Report for day is shown in **Appendix F**. Please see the Shift Change Report Spreadsheet for the Monthly Report.

## STANDARD OPERATING PROCEDURES

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### 19. Management and Inventory Management System (MIMS)

**19.1.** *As a part of the ICM Workforce Development training, specific details can be found in Module 11- MIMS Insight*

#### 19.2. Ticket Creation

- When a device fails, goes offline, or errors the supervisor or lead operator on shift 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.

#### 19.2 Network Outage (I-4 Ultimate)

- Receive 2 emails with the following messages, “**Alert: 10GigabitEthernet2/3 at 4E-72.1-MH2 is Down**” & “**Alert: 10GigabitEthernet2/3 at 4E-96.3-MH5 is Down.**” Subject lines will read, “Alert: **10GigabitEthernet2/3 at 4E-72.1-MH2 is Down**” & “Alert: **10GigabitEthernet2/3 at 4E-96.3-MH5 is Down.**”
- Once this message is received, wait 10 minutes. Sometimes the network will come back up and no action needs to be taken.
- After 10 minutes passes and no update occur saying the network is back up, you will contact John Whitman at (865) 437-6691.
- Upon his approval, create a MIMS ticket using the network outage method.
  - Network Admin will inform you what verbiage to use in the MIMS ticket.
- Send a page to “D5-RTMC I-4 Ultimate SYS” and make the subject line “SYS”
  - Network Admin will inform you what verbiage to use in the email notification.
- Once the network has been restored, you will:

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- Receive 2 emails with the following messages, “**Alert: 10GigabitEthernet2/3 at 4E-72.1-MH2 is Up**” & “**Alert: 10GigabitEthernet2/3 at 4E-96.3-MH5 is Up.**”
- Subject lines will read, “**Alert: 10GigabitEthernet2/3 at 4E-72.1-MH2 is Up**” & “**Alert: 10GigabitEthernet2/3 at 4E-96.3-MH5 is Up.**”
- After you receive this email, you’ll contact the Network Admin to officially verify the system is up.
- Upon confirmation from the Network Admin, update comment in the MIMS ticket and close the ticket and comment that the network has been restored.
- Send a page to “D5-RTMC I-4 Ultimate SYS” saying the network outage has been restored.

### **19.3 Closing out MIMS tickets for I-4 Ultimate**

- RTMC Supervisor/Lead Operator/RTMC Manager creates a MIMS ticket.
- TCD takes ownership of the ticket.
- After TCD fixes the issue, TCD resolves the ticket.
- TCD or RTMC need to click on the check box stating the asset is operational before the ticket can be closed.
- At that time, TCD contacts the RTMC to verify it is back up at the RTMC.
- RTMC Supervisor/Lead Operator/RTMC Manager confirms the device is operational and sets the ticket to closed.

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### 20. Wrong Way Driver System

**20.1.** *As a part of the ICM Workforce Development training, specific details can be found in Module 7- Wrong Way Driver Essentials*

#### 20.2. Notification

- Notify FHP as to what ramp the wrong way driver entered from and in what direction they're traveling.
- Attempt to describe the vehicle based off of the camera images
- Attempt to locate the wrong way driver on camera.
- Notify any Road Ranger that may be in the area.
- Notify Turnpike TMC if the location is near their coverage area.
- Create a SunGuide® event.
- Within the SunGuide® event be sure to save the details related to your response.
  - Was FHP notified?
  - Did they ask for assistance from the Sheriff's office or another law enforcement agency?
  - Was a Road Ranger notified?
  - Include BlinkLink ID number.
  - Details as to resolution of event.
  - Close the SunGuide® event.

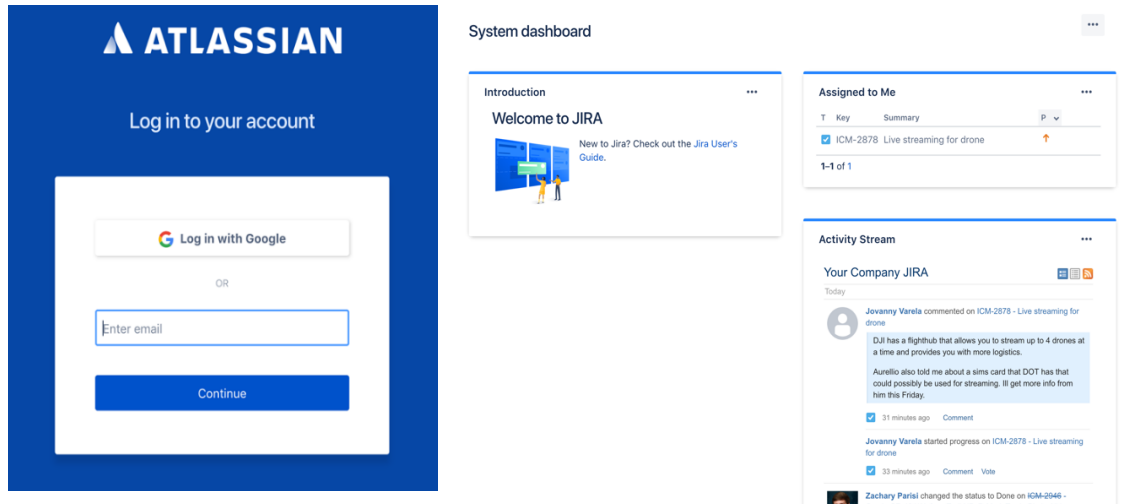
#### 20.3. Blinklink Software

- Resolve the alarm according to the appropriate reason.
  - Unresolved – An ongoing event remains present and the appropriate resolution cannot be determined at this time.
  - Wrong Way Driver- A true WWD is present.
  - Test Event- a test of the WWD equipment.
  - Emergency Response Vehicle- A FD, LEO or emergency responder vehicle is accessing the ramp in the wrong direction.
  - Maintenance Vehicle- A maintenance worker of some sort is triggering the alarm.
  - False Positive- There is a vehicle on the ramp, but it is not traveling in the wrong direction.
- Within the notes section include the SunGuide® Event ID.
- Reference Module 7- Wrong Way Driver Essentials

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### 21. Drone Operation

- Login with your Atlassian account using you DOT email and the password you created. <https://id.atlassian.com/login>



- On the JIRA dashboard, under “Assigned to Me” you’ll find drone tasks that are assigned to you and must be accomplished. It will include the type of due date, type of shot needed, how long the clips must be and the hours of the day that they must be shot. It will also include a reference photo of the intersection that is being inquired on.
- After reviewing the JIRA ticket, change the ticket statuses from “Start Progress” to “In Progress” by clicking on Start progress.



- Contact Local Air Traffic Control Tower (ATCT)
- Notifying local ATCT before flight
  - After changing the JIRA ticket statuses to “In Progress”, check to see if you will need to notify any local ATCT by referencing either the sectional chart or by visiting the link below.
  - <https://faa.maps.arcgis.com/apps/webappviewer/index.html?id=9c2e4406710048e19806ebf6a06754ad>
  - The local ATCT phone number are available in the UAS folder.
- Pre/Post Flight Checks
- Review Flight Check List
  - Before and after each flight, go over the Flight Check List to ensure safe airspace operations. The Flight Check List will be located in the UAS Folder.
  - **This file will be available in the UAS folder**
- Flight Log

## STANDARD OPERATING PROCEDURES

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- Fill out Flight Log

### Flight Inspection List

#### Pre-Flight

- Propellers in Good condition
- Drone body clean, secure and no loose parts
- Camera secured, providing live view and clean lens
- Drone batteries fully charged
- RC battery fully charged
- SD card properly inserted and has enough memory to film
- GPS Home Point working

#### Flight

- Maintain Visual Line of Sight
- Drone responsive to inputs
- Monitor battery levels and altitude

#### Post-Flight

- Inspect Propellers to insure good condition
- Inspect drone body for damages
- Inspect camera for damages
- Inspect batteries for malfunctions

- **Date** - Fill out the date of flight
- **Event** - This will be the JIRA ticket number (i.e. ICM - 1234)
- **Drone** - This will be the drone model you are flying
- **Time Out/In** - If you were requested to complete an assignment during your regularly scheduled shift, Time out would be the time you leave the RMTC, Time In would be the time you return
- **Pre/Post Flight Inspection** - Initial to confirm that you have inspected the drone preflight and post flight
- **Location** - This is the location that you park once arrive at desired location
- **Arrive Time** - This is the Time you arrive at the location
- **Take Off Time** - This is the time that you launch the aircraft for the first time after arriving at the location
- **Landing Time** - This is the last time you land after capturing requested footage. The times that you land to change batteries are not needed.
- **Depart Time** - This is the time you leave the filming location
- **Pilot** - Fill in with your initials
- **Beginning Mileage** - Fill in with the mileage posted on the odometer when you left the RMTC
- **Ending Mileage** - Fill in with the mileage posted on the odometer when you arrive back at the RMTC
- **Total Mileage** - This is the total mileage roundtrip driven
- **This file will be available in the UAS folder**





## STANDARD OPERATING PROCEDURES

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### 22. FMS Report

- *As a part of the ICM Workforce Development training, specific details can be found in Module 12-SunGuide Reporting.*
- Report 1: Event Summary Report
  - I-4 from MM 114 to beginning of Volusia
  - Every hour of every day. Sunday to Saturday (168 reports)
  - These can be generated as PDFS
  - *Do this one like you'd do the others. This was the only area we didn't add to the Scheduling. Also, make sure you check the box for per day basis. Remember that's key to running these correctly.*
- Report 2: Event Chronology Report
  - Fill in the date and Time: 10/01/2018 12:00AM to 10/31/2018 11:59PM (first day of the month to last day)
  - Event Type Wrong Way Driver
  - County = Orange
  - This will generate all WWD events.
- Report 3: Traffic Detection - Detector Volume Tabular (Run Reports as an EXCEL)
  - Fill in the date and Time: 10/01/2018 12:00AM to 10/31/2018 11:59PM (first day of the month to last day)
  - Detector Station: listed below.
  - Save as by Mile Marker.
  - 58.5 (I-4)
  - 64.1 (I-4)
  - 65.2 (I-4)
  - 67.9 (I-4)
  - 71.9 (I-4)
  - 73.8 (I-4)
  - 75.9 (I-4)
  - 76.4 (I-4)
  - 79.0 E (I-4)
  - 79.0 W (I-4)
  - 79.8 E (I-4)
  - 79.8 W (I-4)
  - 82.3 (I-4)
  - 84.0 (I-4)
  - 87.0 (I-4)
  - 88.1 (I-4)
  - 89.7 (I-4)
  - 92.4 (I-4)
  - 94.6 (I-4)



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- 98.3 (I-4)
- 101.0 (I-4)
- 101.5 (I-4)
- 104.0 E (I-4)
- 104.0 W (I-4)
- 107.4 (I-4)
- 110.7 (I-4)
- 113.9 (I-4)
- CFX-1.4 EB
- CFX-1.4 WB
- CFX-2.2 EB
- CFX-2.0 WB
- CFX-4.9 EB
- CFX-4.9 WB
- CFX-6.8 EB
- CFX-6.8 WB
- CFX-7.0 EB
- CFX-7.3 WB
- CFX-7.6 EB
- CFX-7.6 WB
- CFX-8.9 EB
- CFX-8.9 WB
- CFX-9.2 EB
- CFX-9.2 WB
- CFX-10.6 EB
- CFX-10.6 WB
- CFX-10.9 WB
- CFX-10.8 EB
- CFX-12.1 EB
- CFX-12.1 EB
- CFX-14.2 EB
- CFX-15.7 EB
- CFX-15.7 WB
- CFX-16.5 EB
- CFX-16.5 WB
- CFX-19.0 EB
- CFX-19.0 WB
- CFX-20.1 EB
- CFX-19.9 WB
- CFX-21.8 EB
- CFX-21.8 WB
- CFX- 33.6 EB
- CFX- 33.6 WB



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- CFX- 35.2 EB
- CFX- 35.2 WB
- CFX- 36.7 EB
- CFX- 36.7 WB
- CFX- 37.7 EB
- CFX- 37.7 WB
- CFX- 31.2 EB
- CFX- 31.2 WB
- CFX- 29.5 EB
- CFX- 29.5 WB
- CFX- 27.3 EB
- CFX- 27.63 WB
- CFX- 8.6 EB
- CFX- 8.6 WB
- CFX- 10.3 EB
- CFX- 10.3 WB
- CFX- 10.7 EB
- CFX- 10.7 WB
- CFX- 13.8 EB
- CFX- 13.8 WB
- CFX- 14.5 EB
- CFX- 14.5 WB
- Report 4: Travel Times- Segment Average Time Time and Speed Tabular (Run Reports as an Excel file)
  - Fill in the date and Time: 10/01/2018 12:00AM to 10/31/2018 11:59PM (first day of the month to last day)
  - TVT Segment: listed below
    - FMS-ChampionsGate to SR 528 EB (*Save as S1EB*)
    - FMS-ChampionsGate to SR 528 WB (*Save as S1WB*)
    - FMS-SR 528 to JYP EB (*Save as S2EB*)
    - FMS-SR 528 to JYP WB (*Save as S2WB*)
    - FMS-JYP to Maitland EB (*Save as S3EB*)
    - FMS-JYP to Maitland WB (*Save as S3WB*)
    - FMS- Maitland Blvd to 17/92 EB (*Save as S4EB*)
    - FMS- Maitland Blvd to 17/92 WB (*Save as S4WB*)
    - FMS-17/92 to SR 472 EB (*Save as S5EB*)
    - FMS-17/92 to SR 472 WB (*Save as S5 WB*)
    - FMS-408-I-4 to SR 50 (EB/WB)
    - FMS408- I-4 to Turnpike (EB/WB)
    - FMS417- Aloma to SR 408 (NB/SB)
    - FMS417- SR 408 to SR 528 (NB/SB)
    - FMS528- McCoy to SR 417 (EB/SB)
  - Summary: 15 Minutes

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- Report 5: Road Ranger Assists
  - Fill in the date and Time: 10/01/2018 12:00AM to 10/31/2018 11:59PM (first day of the month to last day)
  - Set County to (Osceola, then *Orange*, then *Seminole*, then *Volusia EB 106 to 114*, and finally *Volusia WB 114 to 106*) **\*\*Note, we are only collecting data within our limits hence why we only do Volusia from MM 106 to MM 114**
  - Save files in Folder as Road Ranger Assists and file by name of county; Volusia will have two folders)
  - These can be ran as pdf
- Report 6: Crash Report
  - For each segment run an Event Summary Report per month for current year
  - For each segment run an Event Summary Report per month for previous year for comparison data.
  - Reports shall be generated for I-4, SR 408, SR 417 and SR 528
  - Enter the data into ICM Spreadsheet for monthly report.
- Report 7: Performance Measure Report
  - Each month generated the Performance Measure Report for Osceola, Orange, Seminole, and Volusia.
  - Enter this data into the ICM Spreadsheet for the monthly report.
- Report 8: COIN Events
  - Review the log book for the COIN events and enter the associated number of COIN events within the ICM Spreadsheet for the monthly report.
  - Generate the Event Chronology Report for each event for review.
- Report 10: RISC
  - Review the log book for the RISC events and enter the associated number of RISC events within the ICM Spreadsheet for the monthly report.
  - Generate the Event Chronology Report for each event for review.
- Report 11: Narrative Report
  - As a part of the monthly report the ICM Communication Specialist shall provide narratives of ICM in Action.
  - These reports are a part of the monthly report.
- Report 12: Takeaway Stories
  - The RTMC Manager shall create a 1-page document to be placed in the front of the monthly report to provide an overview analysis of the report.
- Report 13: Event Management – Secondary Crash Report (The report can be ran as a PDF)
  - Fill in the date and Time: 10/01/2018 12:00AM to 10/31/2018 11:59PM (first day of the month to last day)



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- Set County to (*Osceola, then Orange, then Seminole, then Volusia EB 106 to 114, and finally Volusia WB 114 to 106*) *\*\*Note, we are only collecting data within our limits hence why we only do Volusia from MM 106 to MM 114*)
- Set the Event Type to *Any*
- Save files by county in a Secondary Crash for October folder.

## STANDARD OPERATING PROCEDURES

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### **23. 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.

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### 24. Maintaining Agencies

There are multiple maintaining agencies involved within the ICM-AAM corridors; operational issues can arise in Seminole County, Orange County, Volusia County, City of Orlando, City of Winter Park, and/or the City of Orlando. Currently there are ten corridors that fall within ICM-AAM:

- US 17/92 (Mills Avenue/Orlando Avenue), from SR 50 (Colonial Drive) to Airport Boulevard and from Firehouse Road to Beresford Avenue, 47 signalized intersections, 16.4 miles. US 17/92 in Volusia County, from Firehouse Road to Beresford Avenue, 5 signalized intersections, 2.1 miles.
- SR 46, from International Parkway to Airport Boulevard, 10 signalized intersections, 3.0 miles.
- SR 50 (Colonial Drive), from SR 435 (Kirkman Road) to SR 436 (Semoran Boulevard), 35 signalized intersections, 9.0 miles.
- SR 414 (Maitland Boulevard), from Bear Lake Road/Rose Avenue to CR 427 (Maitland Avenue), 10 signalized intersections, 5.8 miles.
- SR 423/CR 423 (John Young Parkway), from US 17/92 (Orlando Avenue) to SR 482 (Sand Lake Road), 36 signalized intersections, 14.1 miles.
- SR 434 (Forest City Road), from US 17/92 to SR 424 (Edgewater Drive), 31 signalized intersections, 11.0 miles.
- SR 435 (Kirkman Road), from SR 50 (Colonial Drive) to Carrier Drive, 17 signalized intersections, 6.6 miles.
- SR 436 (Semoran Boulevard), from SR 434 to US 17/92, 24 signalized intersections, 4.8 miles.
- US 441 (Orange Blossom Trail), from Country Club Drive to Taft Vineland Road, 32 signalized intersections, 9.6 miles.
- SR 482 (Sand Lake Road/McCoy Road), from Turkey Lake Road to Jetport Drive, 22 signalized intersections, 7.9 miles.
- In the future, additional corridors may be added, and/or the current corridor limits could be expanded.

#### 24.1 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



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- The majority 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:

### **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.

### **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 3: 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 4: Assigning observation review and follow up

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- Once the corridor manager has determined that further investigation is required, an ICAT ticket with an Opportunities Issue Type should be created.
  
- Step 5: 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 6: 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.

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### **24.2 Additional Scenarios**

The preferred method to contact citizens is via telephone. However, if a telephone number is unavailable, the citizen will initially be contacted via email. This email response shall request that the citizen directly call the corridor manager to further discuss the issue. Because of the slow process, continual communication by email is not preferred.

Should the corridor manager make the initial contact and the citizen is unreachable, the manager will make a second attempt of communication after seven days. If at that time the citizen is still unreachable, the manager will close the task.

If the original contact information received from the District is determined to be faulty (i.e. non-working telephone number or email address), the corridor manager will close the complaint and note the task as "incorrect contact information".

## STANDARD OPERATING PROCEDURES

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### 25. Operational Scenarios

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.

The following scenarios describe how the operations would occur with the staffing levels defined in the first stage of this program implementation:

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### 25.1 Scenario 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.

### 25.2 Scenario 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.

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- 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.

### **25.3 Scenario 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 Manager 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 manager 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.

### **25.4 Scenario 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.

### **25.5 Scenario 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.

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- 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.

### 25.6 Scenario 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.