



54th Edition

Polk County Traffic Incident Management Team

January 2014



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Upcoming Events:

TIM Team Meeting:
Thursday, April 10th, 2014
10:00 AM

Polk County Sheriff's Office Complex
1891 Jim Keene Boulevard
Winter Haven, FL 33830



Be a Part of an AWARD-WINNING Transportation Incident Management (TIM) Team:

Florida Department of Transportation District One, along with partners Metric Engineering and Delcan invite you to join this award winning team. The intelligent Transportation Systems (ITS) Society of Florida recently awarded your team for recognition in contribution to ITS and the SHRP2 training - vital elements to the TIM Program!

What is a TIM Team?

A **Traffic Incident Management (TIM) Team** is a group of organizations meeting regularly to identify issues and develop and improve incident management operations through Coordination, Communication, and Cooperation.

What is Traffic Incident Management?

Traffic Incident Management includes all the activities involved in detecting, verifying, responding to and clearing roadway incidents. It is the coordinated, pre-planned use of personnel and technologies to restore the full operational capacity of a roadway after an incident occurs, and provide motorists with up-to-date information. Effective incident management saves time, reduces economic impact and most importantly, improves safety for motorists and responders. Traffic Incident Management is action taken when a traffic incident occurs. The goal is to manage traffic in a safe and timely manner through training, planning and full cooperation of all the responding agencies. 20% of crashes are secondary incidents. Nearly 13% of police officers and firefighter line-of-duty deaths result from vehicle-related incidents. For every additional minute taken to clear a traffic incident, it will extend the duration an additional 4 to 7 minutes. Together we must combat traffic congestion while improving responder and motorist safety at the same time. To do this, a plan or guidelines establishing a logical and systematic approach must be recognized.

You Are Very Important to Traffic Incident Management!

Each agency involved in Traffic Incident Management plays a vital role in assisting to keep the roadways safe for the motoring public.. You can help us make our TIM program one of the best in the nation! Meeting on a routine basis, in a controlled environment, provides the opportunity to establish relationships and understanding of each agencies roles and responsibilities. Building those relationships helps provide a proper understanding of the different roles. Florida Department of Transportation District-One's Traffic Incident Management (TIM) teams work hard to fight the rising cost of traffic incidents by helping clear roadways faster and protect responders and drivers.

Program Strengths:

- Promotes more effective multi-agency, coordinated, and planned incident response.
- Improves travel-time reliability for person and freight trips on Nation's highways by improving incident clearance times.
- Reduces congestion, collisions, and delays caused by secondary crashes.
- Improves responder and motorist safety.

TIM Team Activities:

- Long Range Work Plans
- Table Top Exercises
- Share problems, issues, resources
- Develop Response Plans and Procedures
- Develop Response criteria
- Define roles & Responsibilities
- Agency Facility Tours

TIM Schedule and Locations for 2014:

Polk County Sheriff's Office Complex

1891 Jim Keene Boulevard
Winter Haven, FL 33830

- Thursday, January 9, 2014 @ 10:00 AM
- Thursday, April 10, 2014 @ 10:00 AM
- Thursday, July 10, 2014 @ 10:00 AM
- Thursday, October 9, 2014 @ 10:00 AM

New SWIFT SunGuide Center TMC Manager



Traffic Operations is pleased to announce the appointment of Robert (Robbie) Brown as ITS Operations Manager, effective Friday, January 3, 2014. Robbie began his career in transportation at Lee County DOT where he

worked for 24 years mostly in the Traffic Operations Section managing their signal systems. Prior to coming to Fort Myers Operations in September 2013 as a Contracts Support Specialist, Robbie worked at the SWIFT SunGuide Center Traffic Management Center (TMC) as a Shift Supervisor. This experience will prove to be extremely valuable in Robbie's new position.

On a personal note, Robbie has lived in Lee County since 1972. He loves to spend time with his family; they enjoy camping, barbecuing and working out.

Please join us in welcoming Robbie to his new position in Traffic Operations at the SWIFT SunGuide Center TMC in Fort Myers.

Active Arterial Management Series - Part 2



AAM Series Part 1 Summary

The November 2013 issue of TIM Team Times introduced Active Arterial Management (AAM) in Part 1 of a 2 part series. The AAM Series Part 1 article briefly summarized the issue of growing arterial congestion in Florida and throughout the Country, highlighting its impact to arterial travel times and reliability for the traveling public on a daily basis. The AAM Series Part 1 article also discussed the potential to maximize existing investments in the arterial roadways by introducing an Active Arterial Management strategy that merges successful Freeway Management System (FMS) Intelligent Transportation System (ITS) operations and maintenance (O&M) strategies with Advanced Traffic Management Systems (ATMS) on arterial roadways.

AAM, as defined by the U.S. DOT Federal Highway Administration (FHWA), is "the active prioritization of objectives and collection of information to efficiently manage traffic signal infrastructure and control devices to maximize safety and throughput while minimizing delays."¹ AAM maximizes safety, vehicular throughput, and transportation efficiency while providing cost savings to the traveling public. The objective of this TIM Team Times AAM Article is to summarize the potential cost benefits of Enhanced Maintenance AAM and Full AAM implementation, the two basic levels of proposed AAM implementation and investment.

AAM Series Part 2

Traffic congestion and traffic incidents result in traffic delays. Traffic delays in turn cause additional congestion and potentially secondary incidents resulting in additional traffic delays, which have severe financial impacts to the economy and to American families by way of increased fuel expenditures. In addition to unnecessary fuel cost, traffic delays cause increased fuel emissions impacting the environment and increased commuter times which impacts the quality of life of drivers. The U.S. DOT National Strategy to Reduce Congestion on America's Transportation Network report states that traffic delays account for 3.7 billion hours and 2.3 billion gallons of wasted fuel annually.² AAM can provide more reliable and efficient travel times which would reduce air pollution and decrease commuter delays.

Enhanced Maintenance AAM vs. Full AAM

Within the AAM program, designated "priority" corridors and their associated traffic signals can be categorized in one of two levels: Enhanced Maintenance AAM or Full AAM. Enhanced Maintenance AAM includes basic maintenance and operation, such as routine signal maintenance and occasional retiming, which can prevent the malfunction of equipment (i.e. detectors) while still having a sizeable impact on the efficiency of the traffic signals. Full AAM, on the other hand, is recommended for implementation on major arterial roadways since it includes the deployment of ITS devices, upgraded traffic controller equipment, and the installation of a fiber network that will allow maintaining agencies to remotely monitor and modify traffic signal timing in "real time" as needed for daily events such as traffic incidents, weather, and work zones.

Cost of the Problem (Opportunity Cost)

The financial cost of arterial congestion can be estimated by using key factors, such as average travel delays (Hours), vehicle volume (AADT), and the resulting wasted fuel consumption (\$/Gallon). Opportunity cost,

which is the projected amount of money that the travelling public is expected to pay should AAM not be implemented, can be quantified. With the use of simple equations and research data, opportunity costs can be calculated for the following common arterial problems:

- Congestion Opportunity Cost
- Signalized Intersection Detector Failure Opportunity Cost
- Signal Retiming Opportunity Cost
- Arterial Management Opportunity Cost
- Adaptive Technology Opportunity Cost
- Crash Reduction Opportunity Cost

Cost of the Solution

In order to determine the AAM cost for an arterial roadway corridor, region, City, County, or FDOT District, an extensive review of the priority roadways must be performed. The review includes data collection such as Level of Service (LOS), Annual Average Daily Traffic (AADT), crash history, transit use, and more. After each area is categorized as requiring Enhanced Maintenance AAM or Full AAM, a cost estimate can be developed for all identified corridors and traffic signals.

Benefit/Cost (B/C) Ratio

Upon determination of the total Opportunity Costs and the total AAM costs, a Benefit/Cost Ratio can be established for a proposed AAM implementation. The B/C Ratio confirms how much benefit, in dollars, the public receives for every public dollar spent. A typical B/C for Florida could be expected to be over 16:1 providing an average annual savings to the travelling public of over \$1.5 billion.³



The concept of Active Arterial Management and its potential cost savings is quickly gaining traction throughout America's transportation industry. AAM implementations in California, Texas, and Georgia are already underway. Florida is aggressively researching the benefits of Enhanced Maintenance AAM and Full AAM investments while numerous Florida agencies are already deploying ATMS with advanced ITS along key arterial roadway corridors utilizing the principles of AAM.

Article Submitted by Metric Engineering, Inc.—Robert Mastascusa, P.E.

¹ USDOT FHA Traffic Signal Operations and Maintenance Staffing Guidelines.

² http://ops.fhwa.dot.gov/publications/fhwahop09006/exec_sum.htm http://ops.fhwa.dot.gov/publications/fhwahop09006/exec_sum.htm

³ USDOT National Strategy To Reduce Congestion On America's Transportation Network. <http://isddc.dot.gov/OLPFiles/OST/012988.pdf>

³ Cody, Dale. *Statewide Active Arterial Management Needs Plan* (July 2013) P.99.

T I M TEAM WEBSITE!

www.swftim.org

The Polk County TIM Team is committed to implementing the Quick Clearance principles of Florida's Open Roads Policy through the "3 Cs" of TIM: Communication, Cooperation and Coordination, and providing the public with the best real-time Motorist Information available. Team membership draws from state, regional, and local transportation agencies, public safety providers, and other organizations and companies that service the traveling public. The Teams, sponsored by the FDOT, meet bi-monthly.



Mission

The TIM Team Program brings together all agencies involved in clearing the roadway crashes with the objective of improving detection, verification, response, and clearance times to expeditiously remove a motor vehicle crash or incident from the roadway while providing the best real-time information to motorists, resulting in a safer highway environment for both incident responders and motorists.