



**Mission:** Provide efficient, coordinated, and consistent traffic incident management across the state that will improve the safety and reliability of the transportation network.

**Vision:** Develop an institutionally integrated, fully cooperative association of all public agency and private industry traffic incident management stakeholders to improve the safety and reliability of the Florida Transportation system and maintain Florida's status as a national leader in TIM programs.





# Florida Traffic Incident Management Program Strategic Plan

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## 1. Challenge and Purpose Statement

Traffic incidents are responsible for approximately 50-60 percent of the congestion delays that motorists encounter on the nation’s roadways every day. Responders to these incidents routinely face dangers from other traffic and sometimes are victims of secondary crashes, as are other travelers. The economic, increased air pollution, motorist frustration, and general quality of life impacts of traffic incidents are substantial and must be addressed with a strategic approach.

Working with other transportation, public safety and a variety of public and private-sector organizations, the Florida Department of Transportation (FDOT) has made excellent progress toward better management of traffic incidents. The first organizational meeting was held in Orlando, Florida, at the Regional Traffic Management Center in January, 2001. In just five short years Traffic Incident Management (TIM) efforts have risen from a decentralized, uncoordinated effort to an organized, statewide program that has become a model for many other states.

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**VISION:** Develop an institutionally integrated, fully cooperative association of all public agency and private industry traffic incident management stakeholders to improve the safety and reliability of the Florida Transportation system and maintain Florida’s status as a national leader in TIM programs.

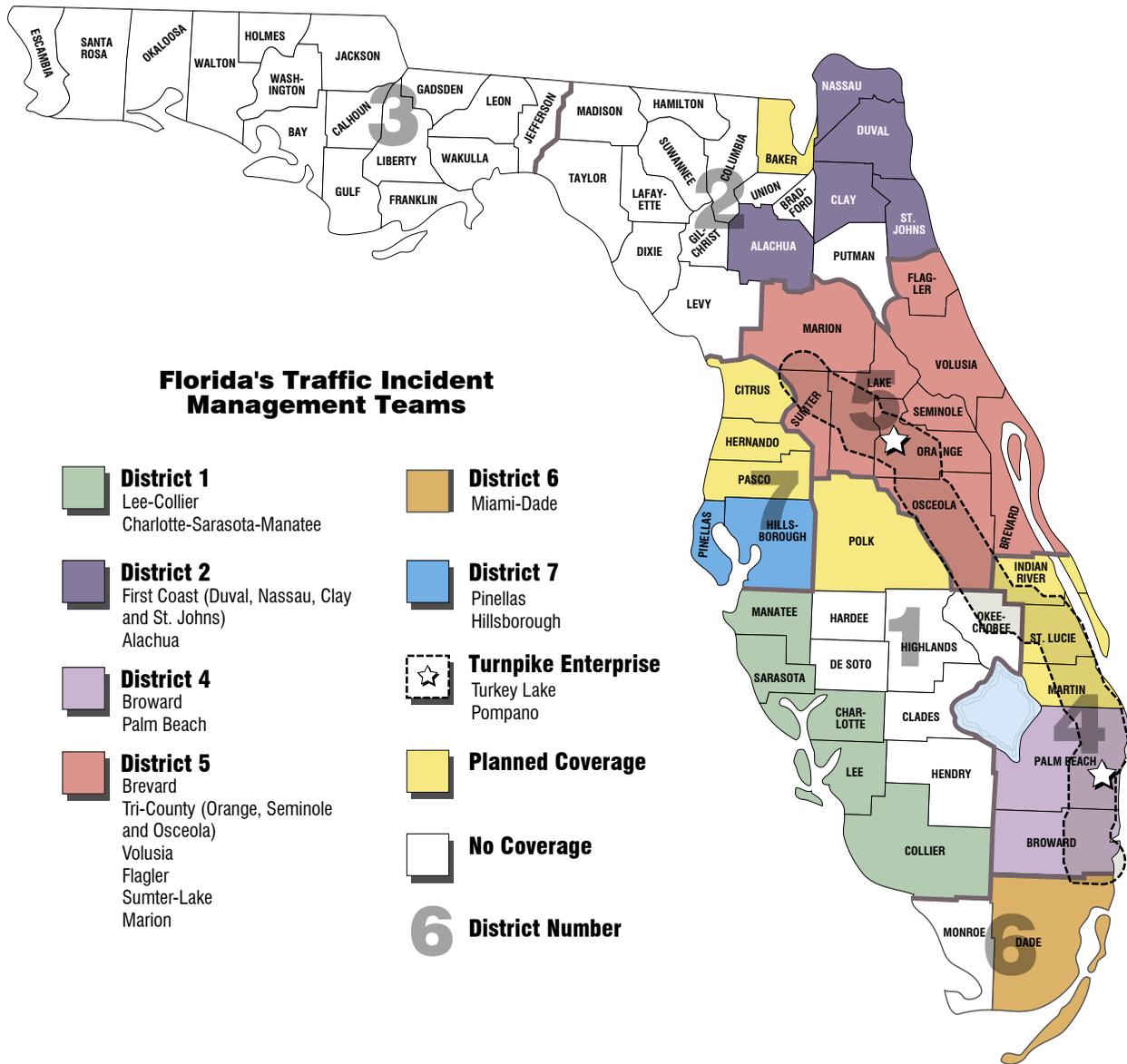
This document identifies recommended actions to sustain the commitment and expand the TIM Program in Florida to better meet the needs of travelers statewide.

## 2. Current Status of TIM Program

In recent years, Florida has become a leader in promulgating multi-agency agreements and pilot studies concerning traffic incident management. Just a sampling of the achievements include: the Districts’ operation of a the Road Ranger Program, the Open Roads Policy, I-95 Corridor Coalition membership, Guidelines for Mitigation of Motor Vehicle Fluids, the Turnpike Enterprise’s Rapid Incident Scene Clearance (RISC) program, achieving authorization to use

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Geographic Coverage of Regional TIM Teams

create the vast majority of the inefficiencies in the transportation system, not capacity constraints, except in a few obvious locations. Reduced incident rates, severity, and accompanying delay; reduced secondary incidents; and overall improved quality of travel should be primary metrics of performance of the Department, not just miles of asphalt laid or resurfaced. Thus traffic incident management should be a primary focus of the Department. Five basic areas where executive-level support is crucial are to develop a formal program including:

- Develop Florida DOT policy through a mission, vision, goals, objectives, and strategic actions that appropriately positions TIM as an agency priority eligible for support and management.
- Develop a program with the appropriate structure, organization, and plan to fulfill the identified objectives. This and the next three bullets constitute the main purpose of this section.
- Establish performance reporting and accountability through continuous performance improvement support.
- Ensure adequate and sustainable resource support for the program.
- Charge lead agency liaison to develop appropriate policy and working relationships with TIM partners and other key players.

Traffic Incident Management has not been well funded within FDOT and that accounts for the sporadic success rate of initiatives. In conclusion, it is recommend that traffic operations, and particularly Traffic Incident Management, be recognized as a priority function of FDOT and have a permanent line item in the FDOT

Work Program. The collective actions recommended in this Strategic Plan will demand additional resources. It is strongly recommended that FDOT commit an initial sum of \$16,815,000 to bring the TIM Program up to its full potential over a two-three year period, and further commit up to (initially) \$12,299,500 per year for its continuing improvement, expansion, and sustenance over the next years.

These funds are staged as follows:

- Short-term actions: \$2,282,500 direct cost, with estimated annual costs of \$550,500,
- Medium-term actions: \$3,007,500 and \$1,154,000, and
- Long-term actions: \$11,525,000 and \$10,595,000.

Such bold actions by the Department of Transportation and its partners will ensure the safest possible travel environment for Florida's citizens, our visitors, and our commercial carriers, enhancing the economic welfare of our state.

## WHERE TO FIND MORE

For more information on the TIM Program in Florida, you can review copies of the *TIM Strategic Plan*, a *TIM Strategic Plan Executive Summary*, and the *TIM Reference Document*, which provides a much more detailed background on the program. These are available on the FDOT's TIM Web site shown below.

***Think Safe—Be Safe!***

For more information: [http://www.dot.state.fl.us/trafficoperations/incidentmanagement/incident\\_main.htm](http://www.dot.state.fl.us/trafficoperations/incidentmanagement/incident_main.htm)

800 MHz radios on a statewide basis, deployment of photogrammetry investigation techniques, deployment of the Statewide Traffic Management Center Software Library System (SunGuide<sup>SM</sup> Software), Severe Incident Response Vehicle, Eye in the Sky for Traffic Management Vehicle Pilot Program, and a District 5 initiative allowing responders to remove deceased victims from roadways under certain conditions.

### 3. Traffic Incident Management Strategic Principles

Looking to the future, the ultimate vision to “develop an institutionally integrated and fully cooperative association of all public agency and private industry traffic incident management stakeholders” requires a concerted application of the “4-Cs” (communication, cooperation, coordination, and commitment) for all phases of traffic incident management in the state, and with our neighbors. Some of the essential strategic principles to ensure success of this plan are summarized as follows:

- Ensure that the TIM community, including the Road Rangers, is organized in a manner that can both provide effective traffic incident management and satisfy the statutory requirement making the



Florida DOT the responsible agency for highway operations—including incident clearance.

- Comply with relevant portions of the National Incident Management System (NIMS).
- Focus traffic incident management in transportation management centers (TMCs), which should be the centroid of TIM activities.
- Transform the Road Ranger Program’s primary mission from motorist assist to traffic incident management.
- Apply the all-events approach combining the best practices from traffic incident management and the range of emergency transportation operations into a single comprehensive framework.
- Recognize the need for multiple objectives in traffic incident management and emergency transportation operations.

- Base all TIM on performance-driven objectives to achieve continuous improvement towards policy objectives of efficiency and effectiveness.
- Adopt a formal program approach to joint procedures and protocols as well as policies, interagency agreements, innovative contracting, and other institutional measures.
- Finally, recall that the primary focus of the TIM Program for the next few years will be focused on maximizing mobility and minimizing secondary crashes.

#### 4. Programmatic Improvements

The detailed strategic and tactical actions recommended in the Strategic Plan that will propel the Florida TIM Program to the next level are covered in nine programmatic areas.

##### 4.1. Traffic Incident Management Operations

This section deals with actions in the areas of responder and motorist safety, response and clearance policies, and handling of major incidents.

##### Responder and Motorist Safety

###### Recommendations include:

- Expand the Road Ranger Program to full statewide freeway coverage, with emphasis on major corridors where it is currently lacking, mainly I-10 in the Panhandle.
- Engage Road Rangers more actively with TIM .
- Reduce unnecessary equipment at incidents scenes and improve the controlled use of emergency vehicle lighting.

##### Response and Clearance Policies and

###### Procedures-Recommendations include:

- Develop standardized guidelines for TIM Team and Road Ranger operations throughout the state, to the extent practical.
- Provide incentives to Road Rangers, Asset Managers, and towing and recovery companies for quick clearance (e.g., expand the RISC program to all freeways), and update towing regulations to improve the equipment requirements.
- Districts should determine the appropriate role of Asset Managers in TIM.



- Change the FHP authorized wrecker program to create a RISC class of wrecker for responses on Interstate corridors and Expressways.
- Participate in a common interagency communications system for all TIM personnel, with the potential need for legislative action to overcome security barriers of shared telecommunications resources, and financial assistance for some agencies.
- A law limiting liability to all responders in quick clearance should be pursued.

**Potential FDOT Policy Changes** – These are policy changes FDOT could make unilaterally:

- Initiate a focus on highway and traffic operations as a primary mission of the Florida DOT.
- Include TIM explicitly in highway designs and have TIM sign-off on plans and specifications and ensure that MOT plans include TIM.
- Establish TIM—including Road Ranger operations—as a priority in the FDOT Work Program.

**Potential FDOT Procedural Changes** – Following are suggested procedural changes the FDOT could make unilaterally and/or champion among stakeholders.

- Develop a new TIM Program Standard Operating Procedure (SOP) to define the roles and responsibilities of FDOT Traffic Engineering and Operations (including ITS), TMCs, TIM Teams, Road Rangers, and other FDOT assets.
- Champion a new Joint Operations Agreement (JOA) that would be jointly signed by FDOT,

FHP, local law enforcement, fire rescue, EMS, Medical Examiners, and other TIM stakeholders

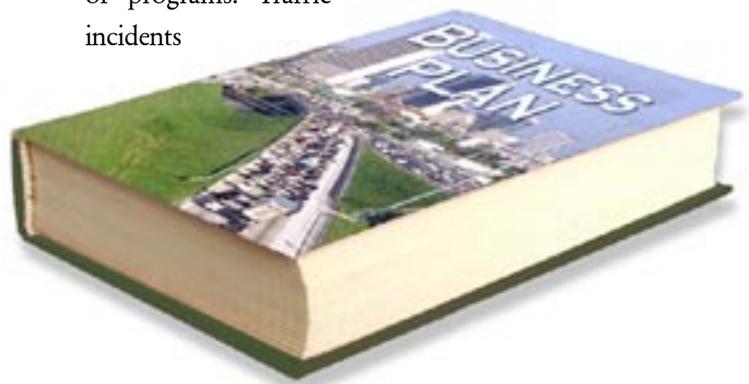
**Potential FDOT Guideline Changes** – Recommended changes to FDOT guidelines, either changed unilaterally and/or championed among stakeholders include:

- Strengthen the support for reducing minor spill cleanup by applying the guidelines approved by FDOT in June 2004.
- Support evacuation guidelines, including contraflow, and develop with FDOT partners more comprehensive guidelines for emergency evacuation.
- Provide guidelines for more positive access by responder vehicles, including helicopters.

## 5. FDOT's TIM Business Plan

The Florida DOT, like most State DOTs, is primarily oriented toward highway construction and maintenance. Traffic operations, per se, have not traditionally been a primary mission focus. To truly operate a transportation system, FDOT needs to measure traffic operations in real time, establish performance goals for operations, and hold staff accountable for achieving these goals.

The net result of this paradigm change would be to consider outcomes of the Department's efforts, as opposed to the outputs of programs. Traffic incidents



- In the next few years, expert consultant support can be useful with actions such as: assisting in the transformation of its TIM program to one of operations and management, transforming TIM regionally to a fully integrated, multi-agency orientation, and transforming the Road Ranger Program's emphasis to traffic incident management.

**Performance Measures** – As Florida's TIM Program moves to the next level, it will be imperative to measure its progress. Statewide TIM performance measures should be adopted.

**Quality Assurance Program** – The TIM Program should consider developing a Statewide Traffic Incident Management Training and Qualification Program (TIMTQP).

**Traffic Incident Management Resources** – Several major decisions need to be made before the equipment and other TIM resource needs are known. Some of the possibilities are as follows:

- If interagency telecommunications becomes a reality, there will obviously need to be a large-scale acquisition of radio equipment.
- Upgraded communications for Road Ranger vehicles as well as the standard on-board gear and appurtenances necessary with a changing role for Road Rangers.
- New temporary signage barricades, cones and flares to meet the requirements of the revised Manual on Uniform Traffic Control Devices.
- Incidental equipment and materials as other quick clearance practices become widespread, including more minor spillage clean-up materials and better crash debris removal equipment.

**TIM Program Strategic Future** – Despite many successes, the Traffic Incident Management Program

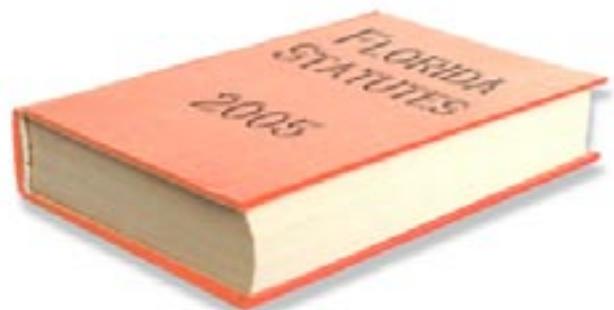
must be further improved and must be part of a FDOT's formal operations program to ensure the ultimate long-term success of the agencies. Florida has one of the highest fatality rates in the nation at 1.76 per million miles driven; nearly twice as high as the best states that are under 1 per million miles driven. When secondary crashes occur, FDOT and its partners may have been able to prevent fatalities through better response and management of the previous incidents.

The recommendations in this plan are consistent with, and based on, the best practices found in Florida and other leading states. Florida has already achieved significant success in TIM initiatives and a consistent program will put FDOT in the enviable position of being one of the top programs in the nation. The combined strategic and tactical recommendations that collectively comprise Florida's Traffic Incident Strategic Plan are summarized in the TIM Strategic Plan and more detailed TIM Reference Document.

#### 4.4. Recommended Changes in Laws, Policies and Procedures

In order to accomplish many of the forgoing changes in the TIM Program, there should be some changes in the governance of the program. Recommendations are included for potential legislative initiatives, and FDOT policy, procedural, and guideline changes.

**Potential Legislative Changes** – These are legislative changes the FDOT could support in the Florida Legislature:



- Improve public and responder awareness of the Move-It Law.
- Improve minor spill cleanup by applying approved guidelines and vigorously pursuing quick clean-up of minor vehicle spills.
- Develop guidelines to provide emergency access via median crossovers.
- Provide timely notification of responsible agencies. Initiate multi-agency post-incident debriefs for major incidents and evacuations.
- Construction and maintenance MOT plans include TIM.

**Major Incidents** – Recommendations include:

- Responders proactively remove deceased victims, which requires an agreement with regional medical examiners.
- Support command and control efforts for evacuation as required by NIMS and the State Comprehensive Emergency Management Plan.
- Support evacuation guidelines and support evacuation routing, including contraflow.

**4.2. Communications Technologies**

These recommendations deal with integrated inter-agency communications, transportation management systems, and traveler information.

**Integrated Interagency Communications – Recommendations include:**

- Provide common interagency communications system for all TIM personnel (authorized but currently not implemented) and for all emergency management personnel.

**Transportation Management Systems** – With ITS and TMCs coming extensively on line around

the state, it is critical that TMCs become more involved in TIM, operating under a common Statewide Concept of Operations that encourages co-location of FDOT TMCs and Law Enforcement Dispatch Centers, mainly with the Florida Highway Patrol (FHP). To do this effectively will require considerable outreach to work closer with FHP, the 9-1-1 Centers, and other emergency agencies that respond to incidents on Florida highways.

Recommendations include:

- Use ITS—particularly data and video sharing—to detect and verify incidents, improve first and secondary responses to incidents, and improve incident clearance times.
- With TMCs as the centroid of TIM, provide Road Ranger Dispatchers in the TMCs, or alternatively in separate Law Enforcement Dispatch Centers.
- Integrate TMC and law enforcement CAD systems.

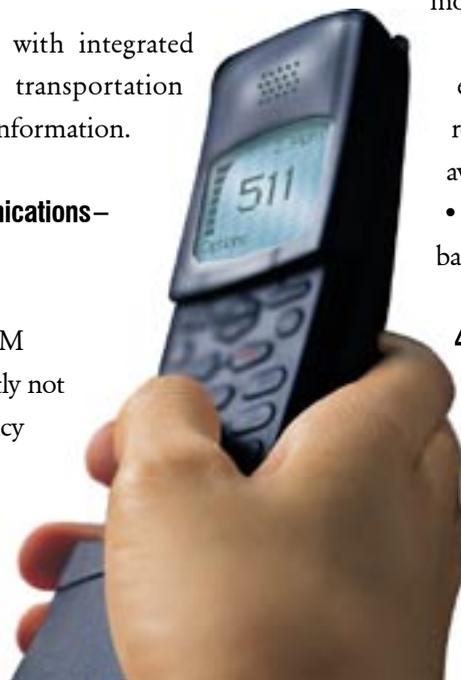
**Traveler Information** – Travelers need timely and accurate information so that they may make more informed decisions in response to incidents.

Recommendations include:

- Provide timely incident information to motorists to avoid additional incidents.
  - Conduct awareness campaign to encourage good individual incident response by motorists, to include avoiding rubbernecking.
  - Particularly provide warnings to back of queue.

**4.3. Programs and Institutions**

Important recommendations for TIM administrative teams, performance measures, and institutionalized elements of the TIM Program Strategic Plan are included below.



**TIM Administrative Teams** – Many stakeholders are currently active in the state’s TIM Program—including transportation, public safety, and other public-and private-sector organizations. A restructuring of the TIM program is recommended, including:

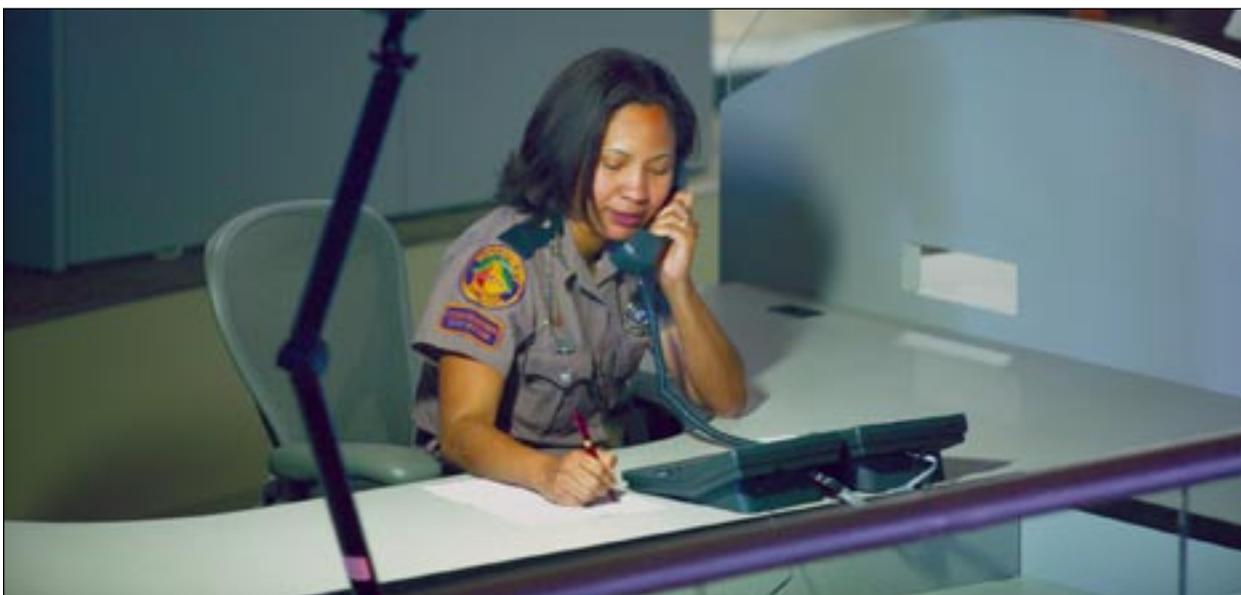
- Expand the TIM Steering Committee to include more stakeholders, such as AAA, Fire and Police Chiefs’ Associations, etc. Develop operations agreements with agencies, such as Medical Examiners, hospitals, hazardous materials handlers, and interagency agreements for TIM mutual support.
- Provide inter-agency training. Foster a two-way expert outreach for the exchange of best practices with others in Florida and nationally.
- Develop guidelines to standardize the Road Ranger Program, and initiate a formal qualification program and expanded training in TIM for Road Ranger operators.
- Present Executive Forums and TIM Workshops in areas not covered by TIM Teams and strengthen the bonds between statewide and regional TIM Teams.

- Require qualification/certification of at least heavy recovery services.
- Develop a concerted TIM awareness program to educate the public about good TIM practices (in addition to the explicit ones recommended elsewhere) and the TIM Program in general.

**FDOT Staffing Recommendations**

A substantially expanded TIM Program suggests staffing levels in the FDOT Central Office and Districts as follows:

- In the Central Office another position is needed for training, management and operations, quality assurance reviews, etc.
- For Districts having one or two TIM Teams and Road Rangers, consider a fulltime TIM Manager to handle the administration of TIM Teams and Road Ranger contracts. For Districts with three or more TIM Teams and two or more Road Ranger contracts, consider a fulltime TIM Manager to manage the TIM Program and a separate Road Ranger Manager. For extremely active regions, consider an assistant TIM Manager in addition to a separate Road Ranger Manager.



### **Florida Highway Patrol Liaison to Florida Department of Transportation**

With the proliferation of TMCs statewide, several of which have co-location of FDOT and Regional Law Enforcement Dispatch Centers operated by FHP, it becomes more imperative to improve the 4-Cs between these state agencies. Recommendations include:

- Create a FDOT-FHP liaison position to reside in the FDOT Office of Traffic Engineering and Operations Office in the Central Office in Tallahassee—funded by FDOT.
- The FHP officer would act as “TIM Program Co-manager” and would assist, or assume a number of the responsibilities currently attributed to the TIM Program Manager.

### **Reorganization of the Statewide TIM Teams**

The Statewide TIM Teams are the primary forums for innovation, debate, and development of the TIM tools. Recommendations include:

- There should be a new structure as part of the TIM Strategic Plan that would be organizationally based, with agency-appointed representatives from each of the stakeholder organizations.
- The statewide chair and key committee chairs must be able to energize the overall activities of the Team and encourage attendance and follow-up between meetings. Key chairs should be FDOT TIM staff or champions from partner agencies who are dedicated to the success of the TIM Program.

### **Other TIM-Related Organizations and Consultant Support for TIM TEAMS**

Recommendations include:

- TIM should be interactive with and keep up communications with other organizations that provide support services to the TIM Program and are influenced by FDOT, such as Community Traffic Safety Teams, professional associations, auto clubs, and insurance companies.

