A Strategic Plan for Developing and Implementing a TIM Program within the Ozarks Transportation Organization Region

November 2016
Acknowledgements

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- Mr. Brian Doubrava, City of Springfield
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- Mr. Bob Patterson, Mercy
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- Mr. Matt Henry, Henry’s Towing
- Mr. Mike Dawson, Cox Healthcare
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- Mr. Tom Dancey, City of Springfield
- Mr. Tom Vanderburg, Greene County
- Cpl. Truman Isbell, Ozark Police Department
- Mr. David Oheim, Prime, Inc.

**OTO Staff:**
- Andy Thomason, TIM Planner
- Sara Fields, Executive Director
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Traffic incidents, including crashes, disabled vehicles, and debris on the road, create unsafe driving conditions; put motorists and responder lives at risk; and account for approximately 25 percent of all traffic delays.

For each minute that a freeway travel lane is blocked during peak use, an estimated 4 minutes of delay result after the incident is cleared. This estimate accounts for 4.2 billion hours per year in delays nationally. Additionally, the U.S. Department of Transportation Strategic Plan Fiscal Year (FY) 2010 – FY2015 reports that Americans burn more than 2.8 billion gallons of gasoline every year while stuck in incident-related traffic.

Traffic Incident Management consists of a planned and coordinated multi-disciplinary process to detect, respond to, and clear traffic incidents so that traffic flow may be restored as safely and quickly as possible. In order to be effective, TIM teams must have involvement from a wide range of stakeholders, as shown in the table below.

Meaningful TIM reduces the duration and impacts of traffic incidents and improves the safety of motorists, crash victims and emergency responders. A “good” TIM program is one in which responders go home every time, roadways are blocked for the minimum amount of time, and secondary crashes are reduced or eliminated.

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| Transportation Agencies | |
|-------------------------| |

Table 1: Traffic Incident Management Stakeholders

Source: 2010 Traffic Incident Management Handbook Update

Why this is important...

Responders are being struck and killed at traffic incidents in the U.S. on average:

- 5 Firefighters each year
- 1 Law Enforcement Officer each Month
- 1 Tow Truck Operator each week
Introduction

Within the greater Springfield Missouri area, the Traffic Incident Management group has developed within the Ozarks Transportation Organization (OTO), the MPO for Springfield. The mission of the OTO is to provide a forum for cooperative decision making in support of an excellent regional transportation system. The regional focus held by OTO provides an excellent platform on which to build a multi-disciplinary TIM team. The team functions as a subcommittee of the OTO Technical Planning Committee.

This TIM Strategic Plan represents Phase I of the development and implementation of the OTO TIM Subcommittee. Actions included will establish organizational structure, basic operating procedures, a regional needs list, and assemble data on ongoing TIM activities within the region. Future phases of this strategic plan will further develop training opportunities, build interoperable communication capabilities, integration of technology, and advanced early warning.

The OTO TIM Traffic Incident Management Strategic Plan, Phase I, is divided into the following sections:

- Goals
- Action Plan

The introduction describes TIM and the OTO Subcommittee. The regional performance section includes a brief description of ongoing TIM activities. Goals for the nation and for the region will be discussed in the goals section. Finally, implementation actions for the next 12-24 months will be outlined in the Action Plan. This plan will updated in 24 months.
According to the July 2016 *Missouri Department of Transportation Tracker*, there were four traffic impacting incidents along I-44 in the second quarter of 2016. These incidents cost drivers time and delays freight flows. As regional leaders implement effective traffic incident management procedures, delay costs borne by regional residents and business are being reduced. MoDOT, the Ozark Police Department, and the Highway Patrol and Springfield Police Academies are all working to implement TIM actions.

The Missouri Department of Transportation has deployed two traveler assist vehicles to patrol major roads in southwest Missouri, including I-44, James River Freeway, and US-65. These vehicles assist stranded motorists, manage traffic at major incidents, and can assist in moving inoperable vehicles off the road. The vehicles carry chains, brooms, cones, road signs, gas cans, and have large traffic alert flashers. This MoDOT public service is a vital component of TIM in the Ozarks.

The Missouri Highway Patrol Academy has fully integrated traffic incident management curriculum. Cadets receive a full four hours of SHRP2 TIM Responder training. The Springfield Police Academy has worked to incorporate elements of TIM curriculum into every new officer’s training. This training helps ensure that today’s patrol officers and tomorrow’s leadership are aware of the regional importance of TIM.

**What is SHRP2 TIM Responder Training?**

A training program developed by the second Strategic Highway Research Program (SHRP2) that offers a set of practices and standards to enable safer and faster clearance times. The training includes all aspects of incident response, including correct positioning of response vehicles, creating a safe work area using traffic control devices, and final scene clearance.
Regional Performance

The Ozark Police Department has committed to the principles of TIM. As a result of the change in operating procedures, the department’s road clearance times have fallen by 50%. This decrease allows traffic to return to normal flows quicker and reduce costly delay. The success experienced by Ozark is not indicative of every community’s potential success, but does highlight the gains that can be made.

The Missouri Department of Transportation Southwest District has also pursued grant funding to purchase additional cones, and incident warning signs. The commitment to TIM demonstrated by the successful grant application is significant. District leaders recognizes a unmet need existed and sought a way to meet that need.

 Agencies operating within the OTO boundaries have a strong history with TIM practices. The purpose of this plan is to build regional connections that will allow TIM to be fully integrated throughout the OTO area.

PURPOSE

Build regional relationships in an effort to fully integrate TIM throughout the OTO area for the benefit of travelers and incident responders.
The OTO TIM Subcommittee will work to further the *National Unified Goal (NUG)* of:
- Responder Safety;
- Safe, quick clearance; and
- Prompt, reliable interoperable communications.

The three-objective goal guides national policy, training, and promotion related to Traffic Incident Management. The *National Traffic Incident Management Coalition* has identified 18 strategies to achieve the NUG. The subcommittee has committed to drawing from these 18 strategies as it identifies an action plan for the next 12-24 months.

The NUG serves as an important guide to the OTO TIM subcommittee. This Phase 1 Strategic Plan serves as an organizing effort for the Subcommittee. The group does not yet have the structure to fully consider and adopt its own goals. The NUG serves a great stand-in for local goals until the committee is completely established.

The NUG strategies are divided into cross-cutting strategies and 3 objectives. The three objectives correspond to the 3 parts of the NUG. The TIM Subcommittee has drawn from the cross-cutting strategies and from two of the three strategies. No Responder Safety strategies were directly implementable by the subcommittee. The OTO TIM Action Plan contains actions from nine of the 18 strategies, as shown in bold in the graphic to the right. Including half of the NUG strategies is a good start for the subcommittee.

### National Strategies

1. **TIM Partnerships**
2. **Multidisciplinary NIMS and TIM Training**
3. **Goals for Performance and Progress**
4. **TIM Technology**
5. **Effective TIM Policies**
6. **Awareness and Education Partnerships**
7. **Recommended Practices for Responder Safety**
8. **Move Over/Slow Down Laws**
9. **Driver Training and Awareness**
10. **Multidisciplinary TIM Procedures**
11. **Response and Clearance Time Goals**
12. **24/7 Availability**
13. **Multidisciplinary Communications Practices and Procedures**
14. **Prompt, Reliable Responder Notification**
15. **Interoperable Voice and Data Networks**
16. **Broadband Emergency Communication Systems**
17. **Prompt Reliable Traveler Information Systems**
18. **Partnerships with News Media and Information Providers**

*Bold: Implemented in this Plan*
The TIM Action Plan, which contains 12 actions, is organized into three priority groups, A, B, and C. The priority groups represent common themes and do loosely correspond with implementation importance. Priority A actions help establish the subcommittee and create operational procedures over the next 12 months. Priority B actions create processes to evaluate TIM activities, both regional-wide and incident-specific. Actions included in Priority C advance the state of TIM practice in the OTO area. Priority B and C actions will be implemented of the next 12-24 months.

The Action Plan will result in eight deliverables. They include:
- Response Procedures
- Performance Targets
- By-Laws
- AAR Survey
- Workzone Checklist
- Training Census
- Medical Examiner MOU
- Towing Inventory Framework

These deliverables represent important steps towards a unified TIM program.

### Draft By-Laws

The By-Laws should establish the following:
- Representation
- Committee Size
- Meeting Schedule
- Purpose

By-Laws Working Group, OTO

### TIM Response Procedures

Collaboratively draft and adopt by MOU a manual/standard procedures for TIM Activities.

Entire Subcommittee, OTO

### Prioritized Needs List

An annually updated list of equipment, technology, and training will be created.

Priorities Working Group, OTO

### Promote TIM

OTO, and all other participating organizations, regularly discuss TIM and its benefits with relevant boards, councils, and general public.

Entire Subcommittee, OTO

### Standardize Secondary Crash Reporting

Development uniform method for categorizing and reporting secondary crashes.

Law Enforcement, OTO

### Standardize Secondary Crash Reporting

Development uniform method for categorizing and reporting secondary crashes.

Law Enforcement, OTO
# TIM Strategic Plan, Phase 1

## Action Plan

### Priority ‘B’ Actions

**Evaluational**

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<th>Online After Action Report</th>
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<tr>
<td>TIM Subcommittee, OTO</td>
<td>A few broad performance targets should be established to measure TIM implementation, including targets for which data does not yet exist.</td>
<td>NUG Strategy 3 &amp; 11</td>
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<tr>
<td>TIM Subcommittee, OTO</td>
<td>NUG Strategy 3 &amp; 11</td>
<td>Create an opportunity to share feedback and lessons learned on intermediate and major incidents</td>
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<td>AAR Working Group, OTO</td>
<td>NUG Strategy 10</td>
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<th>Priority ‘B’ Actions</th>
<th>Inventory Training Venues</th>
<th>Training Census</th>
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<tr>
<td>TIM Subcommittee, OTO</td>
<td>Identify and contact venues that offer EMS, fire fighter, or police training to offer TIM training</td>
<td>NUG Strategy 2</td>
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<td>OTO,</td>
<td>Create and implement a procedure to track and monitor completed training for all responders within the OTO region</td>
<td>NUG Strategy 2</td>
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<td>Organized Funding List</td>
<td>Identify and organize a list of potential funding sources, containing important, basic information on each opportunity</td>
<td>NUG Strategy 14</td>
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<td>Medical Examiner MOU</td>
<td>Establish operating and communication procedure with medical examiners with the OTO area.</td>
<td>NUG Strategy 4</td>
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<td>OTO, ME Working Group, MEs, OTO</td>
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<td>Regional Towing Inventory</td>
<td>Conduct annual inventory of Towing Industry assets in the OTO area.</td>
<td>NUG Strategy 10</td>
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<td>Checklist for Work Zones</td>
<td>A standard policy should be adopted by key agencies to govern the consideration and accommodation of TIM in planned road work and work zones</td>
<td>NUG Strategy 10</td>
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<td>TIM Subcommittee, MoDOT, OTO</td>
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**Priority ‘C’ Actions**

*Advancing the State of Practice*
References


The Traffic Incident Management Strategic Plan, Phase 1 contains an action plan with actions divided into three priority levels. Priority A actions were intended to be completed in the first 12 months of plan implementation. Priority B and Priority C actions were intended to be completed during the second year of plan implementation, months 12 to 24. Below is a summary of overall progress towards implementation and a summary of implementation for all actions contained in the TIM Strategic Plan.

Overall Summary

Meaningful progress has been made during the first 12 months of Phase 1 of the Traffic Incident Management Strategic Plan. Steps have been taken toward Priority A and Priority B actions. All Priority A actions have not been completed, but the TIM Subcommittee is not concerned. In addition to actions outlined in the Strategic Plan, the TIM Subcommittee has been used to discuss impacts of regional road construction projects, such as the rebuilding of US 65.

Slower than expected progress has been, in part, due to issues related to the meeting schedule. Floods in May 2017 resulted in meeting being rescheduled during Mr. Thomason’s paternity leave. The August meeting was devoted to the completion of the Annual TIM Self-Assessment, an important annual activity Mr. Thomason had overlooked. The inability of the committee to complete strategic plan related activities during these meetings slowed progress toward plan implementation. During the November 2017 meeting, the committee resumed activities first introduced in February 2017.

The committee has had good participation during the first year of strategic plan implementation. Members of most disciplines have been present at each meeting. Fire, EMS, Law Enforcement, Towing, and Media have been regularly represented. Members have also been willing to give their time and effort to the Annual TIM exercise. Casual conversations before and after meetings show a real
commitment to cooperation and collaboration.

**Action Specific Summary**

Below is a summary of action taken on each action item included in the TIM Strategic Plan. Some action has been taken on Priority A and Priority B action items during Year 1 of the Strategic Plan. No action has been taken on any Priority C actions.

**Priority A Actions**

Priority A Actions were targeted at establishing and improving the organizational and operational structure of the TIM Subcommittee and the TIM Program in the field. The goal was to address these in Year 1 of the strategic plan.

**Draft Bylaws**

The Committee reviewed a first draft of Bylaws during the February 2017 meeting. The committee generally approved of the draft. Comments were offered on committee membership. Due to events described in the Overall Summary and a full agenda in November 2017, the Bylaws were not taken up again during Year 1 of the Strategic Plan.

**TIM Response Procedures**

The Committee has discussed draft response procedures at 2 meetings during Year 1 of the strategic plan. In February 2017, the committee was presented with individual chapters of the response procedures. The conversation did not go as Mr. Thomason had expected, so a more complete draft was presented at the November 2017 meeting. Better conversation occurred during this meeting. The decision was made to reference TIM activities on city streets, not just freeways. Members also felt it was important to keep the procedures broad so not to interfere with departmental policies and to include an emphasis on communication.

**Prioritized Needs List**

The issue of a prioritized needs list was introduced at the May 2017 meeting. A few needs were offered during the meeting. One Committee member shared the request for

“Members also felt it was important to keep the procedures broad so not to interfere with departmental policies and to include an emphasis on communication.”
needs to area fire chiefs. Based on his email, we received equipment requests from Springfield Fire, Battlefield/Seymour Fire, and Willard Fire. Ms. Fields, OTO Executive Director, knew that the Southwest Missouri Coalition for Roadway Safety had some funds to spend before fiscal year-end, so the equipment request was shared with the coalition. The Coalition was able to purchase 152 vests and 30 cones for these jurisdictions. The needs list was reintroduced at the November 2017, with the intention of prioritizing a Coalition application in February.

**Promote TIM**

Several efforts were made to promote TIM in the region. The OTO participated in the 2016 TIM Awareness Week Press Conference hosted by MoDOT. The Strategic Plan was also presented to the Technical Planning Committee and the Board of Directors as educational agenda items. Mr. Thomason shared information about the TIM program to the SMCOG Transportation Advisory Committee and Springfield’s Traffic Advisory Board. KOLR 10 News ran a story on the 2017 Annual TIM Exercise and KTTS ran a piece about the 2016 exercise in early 2017. TIM related posts were also shared on OTO’s social media accounts.

**Standardize Secondary Crash Reporting**

This action was included as a Priority A Action with some hesitation. It is an issue that must be addressed not only at a basic training level, but it also has to overcome institutionalized practices and norms. Given the number of actions targeted at Year 1, Mr. Thomason chose to focus on other actions

**Priority B Actions**

Priority B Actions were targeted at establishing a framework for evaluating the region’s TIM Program. The goal was to address these in Year 2 of the strategic plan.

**Establish Performance Targets**

It is standard practice to include some reference to performance targets in response procedures. Efforts were made to identify possible performance measures.
Annual Report: Year 1

during the drafting the region’s procedures. Specific targets were not set, as data is not currently available.

**Online After-Action Report**
An online after-action survey was created and approved by the committee during the November 2017 meeting. This action was relatively simple and was important to several committee members. The goal will be to send out the survey to all organizations that respond to incidents lasting over one hour starting December 1, 2017.

**Inventory Training Venues**
Limited work has been complete toward achieving this action item. Only large training institutions have been identified and no contact has been made with any institution.

**Training Census**
A list has been created that contain organizations that might employ individuals needing TIM training. Contact information has been gathered for Towing and Recovery businesses.

**Priority C Actions**
Priority C Actions were targeted at advancing the state of practice in the region. The goal was to address these actions in Year 2 of the strategic plan. No actions were taken during Year 1 on Priority C actions.
This report was prepared in cooperation with the USDOT, including FHWA and FTA, as well as the Missouri Department of Transportation. The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the Missouri Highways and Transportation Commission, the Federal Highway Administration or the Federal Transit Administration.