



South Dakota
Department of Transportation
Office of Research



U.S. Department
of Transportation
Federal Highway
Administration

SD2008-02-F

Development of a Baseline Statewide Traffic Incident Management Plan

Study SD2008-02
FINAL REPORT

Prepared by
Manifest, Inc.
1095 Larkspur Terrace
Rockville, MD 20850

Aug. 4, 2009

DISCLAIMER

The contents of this report, funded in part through grant(s) from the Federal Highway Administration, reflect the views of the authors who are responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the South Dakota Department of Transportation, the State Transportation Commission, or the Federal Highway Administration. This report does not constitute a standard, specification, or regulation.

ACKNOWLEDGEMENTS

This work was performed under the supervision of the SD2008-02 Technical Panel:

John Adler.....	Operations Support	Bruce Hunt.....	Federal Highway Administration
Jon Becker	Local Transportation Programs	Col. DanMosteller	SD Highway Patrol
Greg Fuller.....	Division of Operations	Scott Rabern	Operations Support
Maj. Randy Hartley	SD Highway Patrol	Lynne Rath	SD Emergency Management
David Huft	Research	Kristi Turman	SD Emergency Management
Jason Humphrey	Operations Support		

The work was performed in cooperation with the United States Department of Transportation Federal Highway Administration.

TECHNICAL REPORT STANDARD TITLE PAGE

1. Report No. SD2008-02-F	2. Government Accession No.	3. Recipient's Catalog No.	
4. Title and Subtitle Development of a Baseline Statewide Traffic Incident Management Plan: Draft Final Report		5. Report Date	
		6. Performing Organization Code	
7. Author(s) Karen Haas		8. Performing Organization Report No.	
9. Performing Organization Name and Address Manifest, Inc. 1095 Larkspur Terrace Rockville, MD 20850		10. Work Unit No.	
		11. Contract or Grant No. 311042	
12. Sponsoring Agency Name and Address South Dakota Department of Transportation Office of Research 700 East Broadway Avenue Pierre, SD 57501-2586		13. Type of Report and Period Covered	
		14. Sponsoring Agency Code HRZ802(10)-(11)	
15. Supplementary Notes			
16. Abstract <p>This <i>Final Report</i> documents the methodology used by the South Dakota Department of Transportation (SDDOT) to develop a Baseline Statewide Traffic Incident Management Plan (Statewide TIM Plan) through a stakeholder involvement process.</p> <p>Use of a consensus development process to develop the Statewide TIM Plan was seen as an important opportunity to build a lasting foundation for stronger multi-disciplinary, multi-agency, multi-jurisdictional operational partnerships, which are the key to improved coordination of traffic incident response.</p> <p>The methodology included outreach to the key stakeholder groups that need to be included in TIM partnerships: emergency communications (9-1-1 dispatch); emergency medical services (EMS); fire and rescue; law enforcement; transportation agencies; and towing and recovery services.</p> <p>The Final Report includes a Problem Description; Objectives; Task Description; Findings and Conclusions; and Implementation Recommendations.</p>			
17. Keywords traffic incident management		18. Distribution Statement No restrictions. This document is available to the public from the sponsoring agency.	
19. Security Classification (of this report) Unclassified	20. Security Classification (of this page) Unclassified	21. No. of Pages	22. Price

TABLE OF CONTENTS

DISCLAIMER	i
ACKNOWLEDGEMENTS	i
Technical Report Standard Title Page.....	ii
TABLE OF CONTENTS	iv
Problem description	1
objectives.....	1
task description.....	1
Task 1. Kick-off Meeting.....	1
Task 2. Preliminary Assessment	2
Interview Questions	2
Preliminary Assessment Findings:.....	4
Task 3. Plan Initial Stakeholder Meetings	4
Task 4. Conduct Initial Stakeholder Meetings.....	5
Task 5: Summarize and Analyze Stakeholder Input	5
Task 6. Develop Draft Statewide Baseline Traffic Incident Management Plan	5
Task 7: Revise Draft Plan	5
Task 8: Solicit Stakeholder Input to Draft Plan Through Final Stakeholder Meeting and Invited Comments	6
Task 9: Meet with Technical Panel.....	6
findings and conclusions.....	6
Findings from the Preliminary Assessment:	6
Findings from the Initial Stakeholder Meetings	9
Findings from the Key Stakeholder Video Conference and the Final Stakeholder Meeting:	10
Summary Findings:	10
implementation recommendations	11
Recommendation 1. Make TIM a Departmental priority.	11
Recommendation 2. Provide adequate resources.	11
Recommendation 3. Develop and implement a TIM Training Plan.	12
Recommendation 4. Follow guidelines for TIM policies and procedures development.	13

Recommendation 5. Develop a Statewide Policy on Traffic Control for Delayed Removal
Tows..... 13

Recommendation 6. Foster development of TIM champions..... 14

Recommendation 7. Engage underrepresented stakeholder groups..... 14

PROBLEM DESCRIPTION

Based on self-assessment, as well as input received through stakeholder workshops, the South Dakota Department of Transportation (SDDOT) identified the need to develop a more comprehensive and coordinated approach to traffic incident management in order to reduce the travel, traffic, and safety impacts of emergency incidents, severe weather events, disasters, and special events.

SDDOT required contractor support for development of a Statewide Traffic Incident Management Plan (Statewide TIM Plan) through a stakeholder involvement process. Use of a consensus development process for plan development was seen as an important opportunity to build a lasting foundation for stronger multi-disciplinary, multi-agency, multi-jurisdictional operational partnerships, which are the key to improved coordination of traffic incident response. Traffic incident response disciplines that need to be included in TIM partnerships include, at a minimum, emergency communications (9-1-1 dispatch); emergency medical services (EMS); fire and rescue; law enforcement; transportation; and towing and recovery services.

OBJECTIVES

These objectives were defined by SDDOT in the Request for Proposal:

1. Develop a baseline Statewide TIM Plan that identifies organizational roles and responsibilities, and defines incidents and response strategies.
2. Describe and quantify the resources necessary to execute and sustain the baseline Statewide TIM Plan.

TASK DESCRIPTION

Development of the Statewide TIM Plan involved the following Tasks:

- Task 1. Kick-off Meeting
- Task 2. Preliminary Assessment
- Task 3. Plan Initial Stakeholder Meetings
- Task 4. Conduct Initial Stakeholder Meetings (2)
- Task 5. Summarize and Analyze Stakeholder Input
- Task 6. Develop Draft Statewide Baseline Traffic Incident Management Plan
- Task 7. Revise Draft Plan
- Task 8. Solicit Stakeholder Input to Draft Plan Through Final Stakeholder Meeting and Invited Comments
- Task 9. Meet with Technical Panel
- Task 10. Finalize Statewide TIM Plan
- Task 11. Prepare Final Report

TASK 1. KICK-OFF MEETING

The project kick-off meeting was held June 3, 2008 at SDDOT headquarters in Pierre, SD. The consultant presented a draft work plan to the Technical Panel. The Panel provided work plan input, including: stakeholders to be interviewed for the Preliminary Assessment; interview questions; and the

overall scope, content, and format of the Statewide TIM Plan. The Panel also provided input regarding the time frame and location for the Initial Stakeholder Meetings; the meeting agenda; invitees; and potential speakers.

Deliverables: Kick-Off Meeting Notes; Final Work Plan

TASK 2. PRELIMINARY ASSESSMENT

In order to determine the baseline status of Traffic Incident Management (TIM) in South Dakota, the consultant reviewed existing documentation and interviewed representatives of major stakeholder groups, including:

- Environmental Officials
- Emergency Management Officials
- Emergency Medical Services
- Fire Officials
- Insurance Industry Officials
- Incident Communications Officials
- Law Enforcement Officials
- Local Elected Officials
- Transportation Officials
- Towing Industry Representatives
- Tribal Officials; and
- Trucking Industry Representatives.

A total of 39 stakeholders were invited to participate in the interview process. Thirty of the stakeholders responded, and 28 interviews were completed. (Scheduling difficulties prevented interviews with the other 2 respondents.)

INTERVIEW QUESTIONS

Interview questions were developed by the consultant and approved by SDDOT. Interview subjects from external stakeholder organizations were asked the following questions:

1. What, if any, history does your organization have in working with transportation incident management partners? With the South Dakota Department of Transportation in particular?
2. The plan we are developing is intended to improve response to all types of incident types. [Interviewer will quickly read list.] Which types of incidents are of greatest concern to your organization? Why is that?
3. From the point of view of the people you represent, what needs to be improved about the way that these incidents are handled? [For example: (1) Incident Notification and Status Information; (2) Speed of Incident Response; (3) Availability of Response Resources; (4) Communications Among Responders; (4) Cooperation Among Responders; (5) Speed of Incident Clearance; (6) Crash Investigation Procedures; (7) Debris Clearance Procedures.]

4. Question for Representatives of TIM Responder Organizations: If you could wave a magic wand and have your fellow responders do three things differently, what would they be? [For example, get the fire service to stop blocking all lanes of traffic unnecessarily; or have law enforcement complete paperwork off the highway.]
5. What do you think is working well in the approach to incident management in South Dakota?
6. Our goal is not just to produce a paper plan, but to use the process of developing the Statewide TIM Plan to lay the foundation for building ongoing partnerships that will improve the way emergency incidents on the highway are managed in South Dakota. In order to do that, we are going to need for your organization to feel “ownership” of the plan and to be committed to its cooperative implementation.
7. What needs to be in the plan in order for it to appeal to the people you represent?
8. Who in your organization will need to be involved and convinced in order for your organization to commit to things such as multidisciplinary responder training, or MOUs outlining multidisciplinary TIM response procedures?
9. Once your leadership is committed to improving traffic incident response in South Dakota, what will it take to reach the grassroots?

Interview subjects from SDDOT were asked the following questions:

1. What is your Office or Division’s role in Traffic Incident Management?
2. From the point of view of your Office or Division, what are your key concerns or priorities related to the statewide TIM plan? In other words, what must be included in the plan in order for it to achieve your objectives?
3. Have you previously been involved in TIM planning or programs?
4. What do you think is working well in the approach to TIM in South Dakota?
5. From your point of view, what needs to be improved about the way that emergency incidents on South Dakota roadways are handled? [For example: (1) Incident Notification and Status Information; (2) Speed of Incident Response; (3) Availability of Response Resources; (4) Communication Among Responders; (4) Cooperation Among Responders; (5) Speed of Incident Clearance; (6) Crash Investigation Procedures; (7) Debris Clearance Procedures.]
6. If you could wave a magic wand and have the non-transportation TIM responders do three things differently, what would they be? [For example, get the fire service to stop blocking all lanes of traffic unnecessarily; or have law enforcement complete paperwork off the highway.]
7. What do you think will be the key challenges in developing and implementing a plan to improve TIM in South Dakota?
8. Can you think of other stakeholders that should be involved?
9. Please tell me about any other concerns or issues that you may have.

The consultant documented the results of each interview in interview notes.

PRELIMINARY ASSESSMENT FINDINGS:

The consultant analyzed the interview results and presented the findings in a Preliminary Assessment document.

Deliverables: Interview Questions; Interview Notes; *Preliminary Assessment* (June 16, 2008)

TASK 3. PLAN INITIAL STAKEHOLDER MEETINGS

The consultant worked with SDDOT and the Technical Panel to plan the Initial Stakeholder Meetings, which were held in Rapid City, SD on June 23, 2008, and Mitchell, SD on June 24, 2009.

The first step was to develop the invitation list. The invitation list from the 2005 ITS Stakeholder Workshops was used as a starting point. The consultant assisted in identifying additional TIM stakeholder groups (with which SDDOT had not previously worked on TIM issues) to be added to the list, and helped to identify and contact the associations that represent them. Among the new stakeholder associations invited to participate were the South Dakota Emergency Medical Technicians Association; the Dakota Chapter of the Association of Public-Safety Communications Officials, International; the Dakota Chapter, National Emergency Number Association; the South Dakota Fire Chiefs Association; and the South Dakota Firefighters Association. Other associations invited to participate included the South Dakota Police Chiefs Association, the South Dakota Sheriffs Association, the South Dakota Professional Towing Association, the South Dakota County Highway Superintendents Association, and the South Dakota Trucking Association.

SDDOT handled the facilities arrangements. The consultant developed invitation letters. SDDOT sent out the invitation lists and tracked RSVP responses. SDDOT and the consultant followed up as needed with invitees who did not respond, in order to ensure adequate representation from all stakeholder groups.

The consultant worked with SDDOT to develop the workshop agendas, which included an opportunity during the opening session for the leaders of the major stakeholder associations to briefly describe their organizations' key interests related to improved traffic incident management.

TIM education and awareness DVDs were also included in the opening session of the Initial Stakeholder Meetings, including:

- The International Association of Chiefs of Police DVD entitled *Your Vest Won't Stop This Bullet*
- *The Hats of Highway Safety*, and
- *Hampton Roads, Virginia TIM Plan*

The consultant worked with SDDOT to plan the facilitated break-out sessions and to train facilitators and note takers to lead four breakout sessions to discuss the issues that had been identified in the Preliminary Assessment (Task 2). SDDOT provided digital tape recording equipment so that all of the break-out session discussions would be recorded. Facilitators were instructed to ask participants to identify themselves before speaking so that the recordings could be transcribed into an accurate record of the stakeholder input received. Note takers were instructed to record the discussion results on flip charts, as a backup in case of technical difficulties with the digital tape recording.

Deliverables: Invitation List; Invitation Letter; Meeting Agendas; and Meeting Handouts.

TASK 4. CONDUCT INITIAL STAKEHOLDER MEETINGS

The consultant assisted SDDOT in managing the Initial Stakeholder meetings, and served as one of the discussion facilitators.

TASK 5: SUMMARIZE AND ANALYZE STAKEHOLDER INPUT

The consultant transcribed the recordings of the breakout session discussions. Twenty-two of the 32 MP3 files proved audible. Based on the transcriptions, and the flipchart notes for the sessions that did not have audible recordings, the consultant developed tables documenting (verbatim) the input received on each issue discussed, including the source of the input. This painstaking documentation clearly identifies areas of consensus and dissent for each breakout group topic. The consultant provided the tables, an analysis, and an executive summary that groups the breakout results into actionable categories, in the *Report on Results of Initial Stakeholder Workshops*. The consultant delivered this report on July 21, 2008, and presented the findings to the Technical Panel in an Aug. 1, 2008 teleconference.

Deliverables: Report on Results of Initial Stakeholder Workshops (July 21, 2008)

TASK 6. DEVELOP DRAFT STATEWIDE BASELINE TRAFFIC INCIDENT MANAGEMENT PLAN

In August 2008 several teleconferences were held with the Technical Panel to obtain input regarding the Plan contents. The consultant provided the Panel with read-ahead material that documented approaches that other States and local corridor regions had taken to dealing with various topics in their TIM Plans and Policies. Using these models, the Panel provided direction regarding the general format of the policy guidance to be included in the Plan. By the third week in August, a first cut at the Preliminary Draft Statewide TIM Plan had been developed for the Technical Panel's review.

Deliverable: Preliminary Draft Baseline Statewide Traffic Incident Management Plan (Aug. 21, 2008)

TASK 7: REVISE DRAFT PLAN

The Technical Panel provided written review comments to the consultant. The consultant revised the Plan based on the Panel's input, and provided a table that tracked the Panel comments and their disposition in the new draft. Areas of concern were worked out during several teleconferences. By October, the Preliminary Draft Statewide TIM Plan was ready to be released to the leaders of key stakeholder groups.

On November 19, 2008, a Video Conference was held with the leaders of the key associations that represent TIM stakeholders in South Dakota to obtain their input on the Preliminary Draft Statewide TIM Plan. Participants were asked to provide the consultant and Panel members with input regarding any major deficiencies in the Plan, so they could be corrected prior to release of the Draft Statewide TIM Plan for public comment. Participants were asked to review the Preliminary Draft Statewide TIM Plan in advance of the teleconference.

Video Conference participants suggested a few minor edits to the Plan, but no major issues were identified as a result of the Video Conference. The participants' input was incorporated into the Draft Statewide TIM Plan that was posted on the SDDOT website for stakeholder comment.

Deliverable: Draft Statewide Baseline Traffic Incident Management Plan (Oct. 2008)

TASK 8: SOLICIT STAKEHOLDER INPUT TO DRAFT PLAN THROUGH FINAL STAKEHOLDER MEETING AND INVITED COMMENTS

SDDOT posted the Draft Statewide TIM Plan on the SDDOT web site and contacted stakeholders (using the invitation list developed for the Initial Stakeholder Meetings) to request their participation in the Final Stakeholder Meeting, which was held in Pierre, SD on June 18, 2009. SDDOT also encouraged stakeholders to file written comments on the Draft Statewide TIM Plan. The consultant worked with SDDOT to develop the meeting agenda, and attended the meeting to take notes, and to make an introductory presentation entitled “What’s in the Plan? Why is it Useful?” Stakeholders’ comments were generally positive. A few minor editorial changes were requested, but no major issues were discussed. Written comments were received from the South Dakota Professional Towing Association and from the South Dakota Sheriffs Association.

Deliverables: Draft Meeting Agenda, PowerPoint Presentation; Meeting Documentation

TASK 9: MEET WITH TECHNICAL PANEL

Following the Final Stakeholder Meeting, during the afternoon of June 18, 2009, the consultant met with the Technical Panel to discuss stakeholder input, and implementation strategies.

Deliverables: PowerPoint Presentation; Meeting Documentation

TASK 10: FINALIZE STATEWIDE TIM PLAN

Based on the input received through written comments, at the Final Stakeholder Meeting, and at the Technical Panel Meeting, the consultant made final revisions to the Statewide TIM Plan. All stakeholder comments were addressed in the Final Statewide TIM Plan.

Deliverable: Final Baseline Statewide Traffic Incident Management Plan

TASK 11: PREPARE FINAL REPORT

The consultant prepared this Final Report to document project methodology and deliverables, and to provide recommendations for finalizing and implementing the Statewide TIM Plan.

FINDINGS AND CONCLUSIONS

FINDINGS FROM THE PRELIMINARY ASSESSMENT:

The initial stakeholder interviews revealed that stakeholders had a strong desire to move forward with developing TIM) partnerships in South Dakota. Awareness of TIM concepts and interest in developing TIM partnerships was strong among most State Highway Patrol officers who were interviewed, and some of the DOT operations office personnel also were engaged, due to participation in National Highway Institute (NHI) TIM Training Courses that had been conducted in the state a few years before. The leaders of the state towing association also were very familiar with TIM concepts and eager to make progress, due to their exposure to national TIM issues through their national association. However, awareness and knowledge of TIM concepts among SDDOT maintenance and operations personnel varied greatly across various field offices, reflecting the general variation in the nature of responder relationships across the state.

Stakeholder meetings had been conducted a few years prior, in conjunction with ITS systems planning, and these meetings had provided a forum for SDDOT to interact with a broader group of incident

management stakeholders. However, SDDOT had not previously worked closely with fire, emergency medical services (EMS), law enforcement, or emergency communicators on TIM issues.

Relationships between SDDOT and the Native American Tribal Nations in South Dakota traditionally had related principally to planning issues, rather than TIM. More recently there had been an effort to work with the Tribal Nations to increase the accuracy of data reported on crashes that occur on Tribal lands. Tribal officials from the nine Tribal Nations within South Dakota were invited to participate, but only two Nations responded to the invitation and participated in the initial stakeholder interviews and the Initial Stakeholder Meetings. Finding ways to engage the Tribal Nations in the Statewide TIM Plan development process remained a challenge throughout the project, and will need to be addressed in the Plan Implementation Process.

The initial stakeholder interviews revealed an apparent strength □ the prevailing cooperative spirit among South Dakota responding agencies. When asked, “What do you think is working well in the approach to incident management in South Dakota?” almost all of the interview respondents replied that response agencies and neighboring communities willingly provide mutual aid and generally work together well.

Yet the shadow of scarce resources cannot be dodged. There were widespread comments that State Patrol services were being spread thinner and thinner, even as crime was increasing, and an additional \$2 million State Patrol budget cut in January 2008 had only increased concerns. Concern about the lack of State Patrol resources was especially strong among the Sheriffs and Fire Chiefs in the more remote rural areas, where fire and EMS services are staffed solely by volunteers, and vary widely in their levels of training and preparedness. Single fire/EMS units sometimes serve vast geographic areas. One- or two-person Sheriff’s departments sometimes provide the only readily available law enforcement capability for large regions. Volunteer fire departments in rural areas often provide traffic control at incident scenes, and they are sometimes not well trained in traffic control procedures. The Bureau of Indian Affairs (BIA) has its own resource problems, and struggles to retain, house and train officers to respond to crashes on tribal lands.

In the cities, the State Patrol reported that it was struggling to provide adequate traffic control at incident scenes, especially on the Interstate, and called on SDDOT to provide traffic control in order to free their officers for investigation and scene control. SDDOT was generally willing to assume the role of traffic control, but recognized that it did not have the resources to provide such services 24 x 7 for all incidents, and thus needed to define levels of service by incident type and location.

All response agencies shared concern about the safety of their personnel at incident scenes.

There was nearly universal concern about improving the level of cooperation and communication among responders. While some who had been in public service for many years commented that acceptance of the Incident Command System and Unified Command concepts had increased dramatically, most voiced concern that there were still instances of confusion at incident scenes regarding who was in charge of what. Stakeholders generally seemed to agree that it would be a major step forward to develop clearer understanding regarding Incident Command System procedures, and the authorities and responsibilities of each responding agency.

Finally, there was general agreement that TIM partners should get together at the regional level on a regular basis.

Based on an analysis of the stakeholder input obtained in the interviews, the following key issues were identified for discussion during the breakout sessions at the Initial Stakeholder Meetings, and potential inclusion in the State TIM Plan:

TIM Responder Roles and Procedures

- Who is in charge of what, under what conditions?
- When involved in an incident, who should you report to?
- How do we make sure that everyone is trained to understand the above, and that it is implemented?
 - Different disciplines may learn different things in their incident command system training.
 - Some responders are not trained in the Incident Command System.
 - Some responders don't understand that they need to be trained in the Incident Command System so they can function within the command system appropriately.
- If DOT is generally in charge of traffic control, what happens when DOT can't be there?
 - Who provides traffic control training to various responders who do traffic control?
 - What equipment should other responders carry routinely? For example, collapsible cones are available that will easily fit in any emergency vehicle. Shouldn't we encourage all responders to carry them, so that they can make the scene safer for themselves if no other traffic control forces are available?
- What about the new MUTCD requirement for various levels of traffic control on incidents on highways that are (at least partially) federally funded? For vests? Who is educating responders for that?

Responder Safety Procedures

- What safety procedures should all TIM responders learn?
 - Proper safety apparel
 - Safe vehicle exiting procedures
 - Safe vehicle positioning procedures
 - Safe scene lighting
 - Appropriate use of sirens and lighting en route
 - Safe traffic control procedures
 - Move Over law
- How will Responder Safety training be delivered across disciplines, across the state?

Incident Communications—Procedures, and Technology

- How can we ensure that everyone who needs to be notified about an incident is notified?
- How can we improve the quality of information about the incident that responders receive, so that they don't waste time either bringing resources that aren't needed, or showing up with the wrong equipment?
- Do we want at least one channel on the statewide radio system devoted to interdisciplinary responder communication, so everyone gets the same information at the same time?
- Do we want to plan, in the future, for increased data networking capability—wireless, interagency, real-time, mobile?
- What about ITS technology—what do we want to be able to do in the future with cameras, sensors, traffic control centers, automatic vehicle location technology, telematics? How will we link real-time travel and weather information into our incident communications system?

Training

- What types of training is not presently provided to responders that they need?

- Responder safety training
- Information about the roles and responsibilities of other responders
- Incident Command System training
- Training in proper use of incident communications systems
- Traffic control training
- What would be the most economical and efficient way to deliver such training?

FINDINGS FROM THE INITIAL STAKEHOLDER MEETINGS

The consultant’s analysis of the results of the Initial Stakeholder Meetings identified the following “Actionable Categories” related to the input received from the stakeholders:

- Clarifying Roles and Responsibilities
- Statewide TIM Plan
- TIM Partnerships
- Training
- Procedures
- Technology Development; and
- Public Education

Clarifying Roles and Responsibilities: Stakeholders reported that roles and responsibilities needed to be clarified regarding:

- Weather-related closures;
- Road blockage for traffic incidents;
- Traffic control at incident scenes; and
- Liability concerns regarding non-consent removal of vehicles and/or cargo.

Statewide TIM Plan: Stakeholders said they wanted the State TIM Plan to provide flexible guidance without overly detailed or rigid policies. Local stakeholders voiced concern that requirements would be imposed on them by the state without resources for implementing the requirements. Stakeholders reported “post 9-1-1 fatigue” in the responder community regarding response training and planning requirements.

TIM Partnerships: Stakeholders generally saw a benefit in both state and local partnership meetings. Most felt that local/corridor/regional partnership meetings are very important, because TIM response always occurs at the local level. Proponents of state-level meetings see opportunities for developing a State TIM framework, for learning from other regions, and for discussing legislation, funding, and technology development.

Training: Stakeholders said they wanted training, or learning opportunities, on these topics:

- Understanding each others’ roles;
- Proper TIM procedures, including communications training (State Radio, 9-1-1); NIMS; Unified Command; and
- Responder Safety.

Stakeholders emphasized that the format for the training needs to be tailored for the audience:

- Keep it concise for first responders, especially volunteers.
- Consider more informal learning opportunities, such as invited speakers at regular volunteer fire department meetings.
- Consider distance learning formats, especially for volunteers.
- Work through associations.

Procedures: Stakeholders called for clarification for procedures for towing, and for State Radio. Confusion regarding policies governing traffic control for non-emergency towing was a major concern. Stakeholders also voiced concerns regarding qualifications and training for towing rotation lists, and liability for non-consent tows. Stakeholders requested SOPs for switching to the designated interoperable channel for major incidents, and responder training in proper use of the State Radio.

Technology Development: Stakeholders called for:

- Additional channels and added capacity in the State Radio system;
- Equipment (camera-equipped cell phones) to enable responders to send digital photographs of the incident scene to towers prior to their dispatch;
- GPS for fleet monitoring (in-vehicle and at the control center);
- Video monitoring of major incidents; and
- Computer-assisted traffic management software.

Public Education: Stakeholders called for cooperative efforts among TIM responders to educate the public about the Move Over law, and on “How to Call 9-1-1.”

FINDINGS FROM THE KEY STAKEHOLDER VIDEO CONFERENCE AND THE FINAL STAKEHOLDER MEETING:

Comments on the Draft Statewide TIM Plan, both during the Video Conference and at the Final Stakeholder Meeting, tended to be relatively minor. All comments were addressed through minor deletions or additions in the text.

SUMMARY FINDINGS:

The extensive “up front” work — interviewing stakeholders to learn their concerns, then holding facilitated stakeholder meetings to discuss these concerns and issues in detail — paid off later in the project, when the draft Plan met with universal acceptance from the external stakeholders, because it responded well to the external stakeholder needs and concerns.

IMPLEMENTATION RECOMMENDATIONS

Based on the project Findings and Conclusions, the following implementation steps are recommended:

1. Make TIM a Departmental priority.
2. Provide adequate resources.
3. Develop and implement a TIM Training Plan.
4. Follow guidelines for TIM policies and procedures development.
5. Develop a Statewide Policy on Traffic Control for Delayed Removal Tows.
6. Foster development of TIM champions.
7. Engage underrepresented stakeholder groups.

RECOMMENDATION 1. MAKE TIM A DEPARTMENTAL PRIORITY.

Explanation: Implementation of the Statewide TIM Plan requires dedicated personnel and capital resources. At present, TIM is not a departmental priority for the South Dakota Department of Transportation (SDDOT), or for the South Dakota Department of Public Safety (SDDPS), and consequently the topic does not receive the level of resources and attention that is needed in order to make progress toward the objectives identified in the Statewide TIM Plan.

Recommended Process: (1) The Governor should direct the Secretary of Transportation and the Secretary of Public Safety to make improved Traffic Incident Management a Departmental priority. The Secretaries, in turn, should instruct staff to make implementation of the Statewide TIM Plan a part of their work programs. The Governor should request that the annual update of the Statewide TIM Plan include:

- A performance report that tracks progress in achieving TIM goals, based on performance metrics such as:
 - Number of TIM responder injuries or deaths at traffic incident scenes;
 - Number of secondary incidents;
 - Number of State personnel trained in TIM procedures;
 - Average traffic incident response time;
 - Average traffic incident clearance time.

(2) Traffic Incident Management tasks should be included in the job descriptions for all personnel who are involved in traffic incident response, and their job performance evaluation criteria should include TIM performance metrics.

RECOMMENDATION 2. PROVIDE ADEQUATE RESOURCES.

Explanation: The State needs to provide adequate resources for implementation and maintenance of the Statewide TIM Plan, including:

- administrative support for the State TIM Advisory Group and its subcommittees;
- administrative support for local/regional TIM teams;
- conference planning and facilities support for Annual statewide TIM Conference;
- trainers and curriculum for annual joint multidisciplinary TIM training for State Responders;

- SDDOT staff resources for 24/7 TIM response; and
- traffic control equipment for State DOT response trailers.

Recommended Process: (1) SDDOT needs to create a one-half-time position to provide administrative support, conference planning, and training support for Statewide TIM Plan implementation (1,000 person-hours a year). (2) SDDOT and the SDDPS, together, need to provide resources for annual joint multidisciplinary TIM training for State responders, which is called for in Section 4.5.2 of the Statewide TIM Plan. (3) In addition, SDDOT needs to provide the personnel, equipment, and training resources necessary to provide 24/7 TIM response, as described in Tables 2-6 of the Statewide TIM Plan.

RECOMMENDATION 3. DEVELOP AND IMPLEMENT A TIM TRAINING PLAN.

Explanation: For the Statewide Plan to be successful, all TIM responders need training that covers:

- Missions and roles of other TIM disciplines (these are briefly defined in Section 2 of the Statewide TIM Plan);
- The Incident Command System (ICS), including Unified Command (UC) and the National Incident Management System (NIMS); and
- Procedural Guidelines for Multidisciplinary Traffic Incident Response (these are described in Section 3 of the Statewide TIM Plan).

Recommended Process: The State TIM Advisory Group should develop and implement a TIM Training Plan for initial, and ongoing, training of all TIM responders. The Plan should include the training courses, formats, delivery mechanisms, and training schedule.

In the Plan, it is recommended that the State agencies bear primary responsibility for training of State personnel.

Stakeholder groups need to cooperate, working through the State TIM Advisory Group (perhaps through a Training Subcommittee), in developing a wide range of training and outreach methods for training local responders (especially volunteers) in the multidisciplinary TIM procedures that are defined in the Statewide TIM Plan. The local TIM responder community is diverse, and varied both in their training needs, and their training opportunities. Consequently, TIM training for local responders needs to be provided in many formats and offered through many channels.

Local career responders include city police and emergency communicators, county sheriffs, and some career firefighters and EMS personnel. In most cases, even in the larger localities, fire departments are a mixture of professional and volunteers. For career responders, training options might include:

- formal TIM training courses
 - integrating TIM content into regular basic and /or continuing education professional courses;
 - or
 - stand-alone courses, workshops, or exercises.
- training workshops and outreach sessions at State meetings / conferences of state associations for responders.

In rural South Dakota, volunteer firefighters and EMS carry a primary responsibility for traffic incident response. County Sheriff’s Departments frequently are one- or two-person operations. Because volunteers have other, full-time jobs, opportunities for formal training may be limited, and thus it is realistic to think

in terms of ways to provide opportunities for them to learn more about the basic principles of traffic incident response, and responder safety, through the communications channels they normally use.

Over and over, stakeholders have advised that training and information for local volunteer responders needs to be very concise—at a level that tells them exactly how the information relates to their job, and clearly states what they are expected to do as a result.

Some suggestions include:

- online training;
- training through the County Emergency Manager;
- learning opportunities through regular debriefings at incident scenes;
- short (less than 60 minutes) courses that have been endorsed by state associations (sheriffs, fire, EMS, NENA, APCO);
- TIM training courses at the state conventions of the major associations;
- information about TIM in the publications of the state associations representing responders; and
- presentations from representatives of other response agencies incorporated into regular responder training and safety training sessions, or regular volunteer unit meetings.

A Tribal Technical Assistance Program (TTAP) representative suggested a train-the-trainer program where the head of dispatch at the Tribal Law Enforcement Agency; the Safety Officer, and the EMT each are trained, and then train their employees.

RECOMMENDATION 4. FOLLOW GUIDELINES FOR TIM POLICIES AND PROCEDURES DEVELOPMENT.

Explanation: The stakeholder involvement process that was used to develop the Statewide TIM Plan produced positive results. Stakeholders feel some ownership of the Statewide TIM Plan because they were involved in its development and the concerns that they expressed were addressed in the Plan. These positive results could easily be erased if the State agencies were to develop future TIM-related policies and procedures without involving stakeholders.

Recommended Process: Adhere to the General Guidelines for the Development of TIM Policies and Procedures presented in Section 4.4.1 of the Statewide TIM Plan.

RECOMMENDATION 5. DEVELOP A STATEWIDE POLICY ON TRAFFIC CONTROL FOR DELAYED REMOVAL TOWS

Explanation: At times, due to traffic, weather, manpower, visibility, or other conditions at an incident scene, the Incident Commander may direct the tower to remove a crashed or otherwise disabled vehicle from the highway to the shoulder or median, for later retrieval. The tower can then make arrangements to remove the vehicle to a tow yard or other off-road location, at a time when conditions will improve. “Delayed Removal Tows” is the term used for the tow that takes place after the conclusion of the traffic incident. This Statewide TIM Plan does not presently address provision of traffic control for Delayed Removal Tows. It is desirable to develop a uniform, statewide policy regarding this issue. Note that the site of the Delayed Removal Tow is considered a temporary work zone, and temporary traffic control should be provided during the Delayed Removal Tow operation in accordance with *MUTCD Part 6, A-H (Temporary Traffic Control)*.

Responsible Agencies: South Dakota DOT and South Dakota Highway Patrol

Recommended Stakeholder Advisory Process: A Towing Subcommittee of the State TIM Advisory Group to be tasked with developing consensus on a draft policy. Subcommittee should include representatives of towing industry, private sector traffic control industry, insurance industry, DOT, and Highway Patrol.

RECOMMENDATION 6. FOSTER DEVELOPMENT OF TIM CHAMPIONS.

Explanation: At present there is a lack of state-level leadership for TIM development in South Dakota.

Recommended Processes: (1) The State TIM Advisory Group will provide an excellent forum for development of TIM champions. SDDOT and SDDPS need to identify an initial Statewide TIM Advisory Group Chair and Vice Chair who are familiar with TIM issues and willing to commit the time and energy necessary to make the TIM Advisory Group, and the Annual Statewide TIM Conference, successful. During the Stakeholder Meetings, a few potential champions from the Law Enforcement and Fire communities emerged. These people need to be cultivated. (2) Creating dedicated staff, and making TIM a Departmental Priority will help develop internal champions.

RECOMMENDATION 7. ENGAGE UNDERREPRESENTED STAKEHOLDER GROUPS.

Explanation: During the process of developing the Statewide TIM Plan, certain stakeholder groups, including Tribal Nations and the insurance industry, were difficult to engage. Continuing effort is needed to engage these stakeholders.

Recommended Process: Continue to brainstorm ways to engage underrepresented stakeholders. Request advice and assistance from people who are more familiar with the targeted groups. Some ideas to consider: (1) Develop simple outreach materials (a one-page handout) to explain to these stakeholders why they might want to participate in Statewide TIM Partnerships. (2) Request time at a meeting attended by these stakeholders to discuss the Statewide TIM Plan, and TIM training opportunities. Assign specific action items to designated personnel to pursue the participation of underrepresented stakeholder groups.