Federal Highway Administration

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Safety

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Roadway Safety Professional Capacity Building

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Strategic Highway Safety Plan (SHSP) Database Search

Search RSPCB website

The Strategic Highway Safety Plan (SHSP) Database contains key data from 52 SHSPs about the datadriven approaches states are using to reduce roadway fatalities and serious injuries. The database includes information about emphasis area strategies and action plans; 4E safety partners; approaches states are using to update, implement, and evaluate plans; and much more. Contact Danielle Betkey in the FHWA Office of Safety with your questions or comments.

Things to keep in mind when using the database.



SHSP Key Components	SHSP Special Topics	Emphasis Area Categories	Keyword Search	
Show me SHSPs with emph that fall into these c		dropdown: ress < Ctrl>. Alabama	□ Vulnerable Users (All) □ Motorcycles □ Older Drivers □ Younger Drivers □ Other	☐ Pedestrians and Bicyclists ☐ Legislative/Policy ☐ Data ☐ Incident Management/EMS ☐ CMV/Heavy Vehicles ☐ Other

View emphasis area categories for all states

SEARCH

RESET

Results: I	ncident Management/EMS
24 State(s),	30 Emphasis Area(s). Secondary emphasis areas (if any) shaded.
Arizona	Traffic Incident Management Strategies:
	Education TIM/Secondary Crashes – Develop and implement practices, policies and public education efforts to increase TIM responder safety. TIM/Secondary Crashes – Develop cross-cutting TIM programs that include training, public education, research, evaluation and application of technology. Work Zones – Increase knowledge and awareness of work zones and work-zone safety.
	Enforcement/Adjudication Work Zones – Improve driver compliance with work-zone traffic controls.
	Engineering Work Zones – Develop and improve work-zone design and management practices.
	Incident Management/EMS TIM/Secondary Crashes – Develop and implement procedures that achieve safe and quick incident clearance. TIM/Secondary Crashes – Develop and implement prompt and reliable communications systems that support TIM.
Arkansas	Operational Improvements – Emergency Services Capabilities Strategies:
	 Education Educate the public to promote EMS safety and quicker response times. Promote trauma education on a statewide basis.
	Enforcement/Adjudication Enforce state laws that enhance EMS safety and response.
	Engineering Coordinate with EMS regarding median crossover gaps on divided highways.
	Incident Management/EMS Improve the Arkansas Trauma System.

Arkansas Operational Improvements - Incident Management

Strategies:

- Education
 - Continue to implement TIM training statewide throughout various responder disciplines.
 - Educate the public on Arkansas "Move Over" and "Move It" laws

- Enforcement/Adjudication
 Improve visibility of stopped traffic queues due to incidents with law enforcement.
- · Engineering
 - Improve intelligent infrastructure capabilities to better inform drivers of roadway incidents

 - Improve the incident management data system and statewide TIM program.
 Improve traffic incident management (TIM) techniques to reduce roadway clearance times and reduce secondary crashes
- · Legislative/Policy/Programmatic
 - Continue coordination with the Arkansas Traffic Incident Management (TIM) Committee, a multidisciplinary group made up of TIM stakeholders in Arkansas.

California

Emergency Medical Services

Strategies:

- Data
 - Improve data from the time of the crash
- Education
- Develop guidance documents to share with EMS responders to increase crash scene safety.
- · Incident Management/EMS

 - Develop strategies to improve the time to definitive care.
 Increase involvement by EMS leaders in the California SHSP.
- · Legislative/Policy/Programmatic
 - Improve access to information to enable interoperability of communications systems between all responders to crash sites

Connecticut

Traffic Incident Management

Strategies:

- - Support the development and tracking of TIM performance metrics following national standards and definitions.
- Education
 - Continue to conduct public awareness programs to support effective on-scene traffic incident management by road users
 - Promote best practices for traffic incident management and provide accessibility to intelligent transportation systems (ITS) tools.
 - Support regular multi-disciplinary TIM training and exercises
- · Incident Management/EMS

 - Conduct After-Action Reviews to improve response and scene management.
 Establish a statewide TIM program with a lead agency to administer clearly defined responsibilities that meet the requirements of the National Incident Management System (NIMS).
 - Implement a statewide NIMS-based Unified Response Manual (URM) Improve Traveler Information to the media and public.

 - Reduce incident duration, which is achieved through (a) reducing the time to detect incidents, (b) initiating an expedient and appropriate response, and (c) clearing the incident as quickly as possible.
- · Legislative/Policy/Programmatic

 - Sealurate expansion of ITS infrastructure to additional regional corridors based on prioritized need.
 Identify staffing needs and training resources for CTDOT staff and emergency responders.
 Include Weather Responsive Traffic Management (WRTM) strategies, such as Road Weather Information Systems (RWIS).

District of Columbia

Special Target Area - Emergency Management Services (EMS)

Strategies

- Data
 - Review/upgrade electronic EMS run database.
- Education
 - Continue and update as necessary the recertification process to increase education and involvement of EMS personnel in the principles of traffic safety, DDOT's Traffic Responders course, and other federally available training.
 Develop partnership—DCPS lead with FEMS, MPD, DOH, and Hospitals (trauma units) to provide safety education/awareness to middle and high school

 - Explore feasibility of online training and expanding to all enforcement agencies and other institutions.
- Maintain a culture of health promotion and safety.
 Review/expand the operations of ROP and ensure that all personnel have appropriate protection devices and training.
- · Incident Management/EMS

 - tent Managementerno Develop appropriate performance measures. Develop/Implement: ER Registry, Hospital Discharge Registry, Trauma Registry.

 - Explore and incorporate best practices in crash scene care.

 Explore integrating motorcyclist treatment module into DC-approved trauma hospitals.
 - Improve EMS operations.
 - Improve response time to crash scene
 - Integrate a motorcyclist treatment module in EMS personnel training and other first-responder training.

 - Investigate need for and implement accordingly new trauma locations within the District.
 Review FEMS Pre-Hospital Protocols in relation to the safety goals (50 percent reduction in traffic -related fatalities and serious injuries by 2025).

District of Columbia

Special Target Area - Traffic Incident Management

Strategies:

- - Modify the crash reporting application to include data on secondary crashes.
 - Refine the architecture for sharing incident information among responding agencies and with agencies along detour routes that may be affected.
- - Identify and address the issues by providing timely incident information to the public.
 Incorporate interagency incident management training and emergency traffic control training into ongoing (all) responder training.
 - Initiate a public information campaign for motorists on the proper response to an incident. Provide training to responders on the quick clearance law

· Engineering

- Accelerate Implementation of Operations and ITS Technologies & Strategies.

 Get into full compliance with the Temporary Traffic Control Devices Rule and use the work zone self-assessment to identify actions and priority areas for
- improvement, as appropriate
- Indications, a appropriate in the TMC system and implement strategies for improvement, including using all DMS system to inform the public of incidents. Implement reference and ramp markers on critical routes, District-wide.
- Improve reliability through efficient movement of freight.
- Manage congestion by improving reliability and operating the system at peak performance: Active Transportation and Demand Management (ATDM), Arterial Management/Traffic Signal Operations, Congestion Pricing, Real-Time Transportation Information Program, Road Weather Management, and Work Zone

- · Incident Management/EMS
 - Encourage expanded use of interoperable communication capabilities.

 - Encourage installation of push bumpers on responder vehicles.

 Enhance the capability of current traffic management centers and implement other centers, as needed.
 - Establish or enhance local incident management teams and cultivate their development.

 - Establish or ennance local incident management learns and cultivate their development.

 Expand the roadway service patrols to augment longoing incident management activities.

 Identify and address the delays and safety problems associated with work zones and maintenance activities.

 Identify critical or Decision Point locations where ITS technology should be located to disseminate incident information.

 Improve planning and preparation for response to hazardous materials incidents on the roadways.

 Improve the warning system for the end of the traffic queue at major incidents to reduce secondary crashes.

 - Promote the use of the national incident management system.

 Refine and initiate approval process for quick clearance, move-it, and other related laws.
 - Share DDOT's traffic incident management strategic plan with responders and update the plan regularly. Sponsor post-incident debriefings for all major incidents.
- · Legislative/Policy/Programmatic
 - Expand the number of DDOT's Traffic Incident Management staff; reduce the geographic area and roles they are responsible for. Organizing and Planning for Operations.

Hawaii **Enhancing First Responder Capabilities**

Strategies:

- - Continue community-level traffic safety programs (i.e., child safety seat inspection stations). Continue promotion of the "Move Over" law.

 Expand Voluntary Bystander Care Training Program to targeted communities and drivers.

 - Promote first responder-type careers in high schools and colleges.
- - Develop Emergency Preparedness model for identified high crash areas and potential high risk scenarios.
 Educate all levels and branches of government on both the scope of work and the ways to support first responders.
 Evaluate the use of lights and sirens in different environments (i.e., rural, urban, peak traffic time), and provide findings and recommendations to affected
 - agencies and communities.
 Expand Computer Aided Dispatch (CAD) technologies to neighbor islands.
 - Expain Configuration Ander Dispatch (CAD) terminogues to integribute institute. Provide policy training for first responders to encourage engagement in legislative matters that address agency staffing issues and safety measures. Provide training, education, equipment and technologies to improve first responder capabilities for traffic-related crashes.
- · Legislative/Policy/Programmatic
 - Fund injury prevention positions at the county level.

Traffic Incident Management

Strategies:

Illinois

- Data

 - Consider update to the crash report form to improve secondary crash information.
 Develop and implement procedures to collect and record incident management and improve data sharing.
- - Continue required training for towing companies; workers within IDOT and ISP.
 - Continue to provide emergency response training to a variety of emergency responders such as towing companies, local agencies, and law enforcement. Educate emergency responders on the importance of incident management and quick clearance practices. Educate the public about the dangers of exiting a disabled or crashed vehicle.

 - Increase public awareness of the importance of moving disabled vehicles involved in non-injury crashes from the roadway as soon as practical.

 Increase public awareness of the importance of moving disabled vehicles involved in non-injury crashes from the roadway as soon as practical.

 Increase public awareness of the importance of yielding the right-of-way to emergency vehicles and personnel and on the "Move Over" law.

 Require IS-100 and IS-700 NIMS training courses for all emergency responders.
- - Enforce the use of required personal safety vest and enforce the use of required high-visibility apparel for first responders.
 - Establish an "Open Roads" policy to promote quick clearance for safety and mobility

Kentucky Incident Management

Strategies:

- Improve accuracy of data recorded as "secondary crashes" by investigating officers.
- Education
 - Incorporate interagency incident management training and emergency traffic control training into ongoing training for all responders. Initiate a public information campaign for motorists on the proper response to an incident.

 - Provide timely incident management information to the public.

 Provide training on Kentucky's "open roads" policy for interstates and parkways.
 - Provide training to responders on the quick clearance law. Sponsor post-incident debriefings for all major incidents.

• Engineering

- Encourage the expanded use of interoperable communication capabilities.

 Identify and address the delays and safety problems associated with work zones and maintenance activities.
- Install push bumpers on responder vehicles.
- Install reference and ramp markers in high incident areas or on critical routes

· Incident Management/EMS

- Decrease response times for Safety Patrol on assistance calls.

 Enhance the capability of current traffic management centers and implement other centers as needed.

 Establish or enhance local incident management teams and nurture their development.
- Identify and direct traffic to alternative routes.

 Improve the warning system for the end-of-traffic queue at major incidents to reduce secondary crashes.
- Increase Safety Patrol capacity to respond to all requests for assistance.
 Increase Traffic Incident Management (TIMS) certification for emergency responders.
- · Legislative/Policy/Programmatic

 - gislative/Policy/Programmatic

 Evaluate and implement a policy for the 511 system to identify problems and strategies for improvement.

 Evaluate and implement a policy regarding critical or "Decision Point" locations where ITS technology should be located to disseminate incident information.

 Promote the use of the national incident management system.

 Refine the quick clearance law to include clauses that limit liability of responders.

 Share Kentucky's Highway Incident Management Strategic Plan with responders, and update the plan regularly.

Maine **Emergency Services/Incident Management**

Strategies:

- Data
 - Data: Maine EMS drafted legislation that was passed in 2011 that will allow MEMS to provide confidential data to agencies (such as the Maine Center for Disease Control and Prevention and the Office of the Chief Medical Examiner) and for research projects. 1) EMS is continuing to work with the Maine CODES project for opportunities to provide data. 2) EMS will be working with Maine Bureau of Highway Safety (MeBHS) to identify resources for assessing both EMS and BHS data as recommended in a recent traffic records assessment. 3) EMS is also desping standardized report cards that will be sent to each provider summarizing their performance in key areas and comparing their results with other providers within the EMS region and in the state.
 - Emergency Medical Dispatch Determinant Codes: Maine EMS made regulatory changes that allow EMS services to modify their response based upon dispatch determinant codes.

 EMS data collection: Maine EMS requires all EMS services to submit an electronic patient care report (ePCR) within one business day of a call. The Maine ePCR system utilizes the National EMS Information System data definitions and will transition to NEMSIS 3.0 during 2017. NEMSIS 3.0 will also contribute significantly to the goal of integrating Maine EMS data with the Maine Health Information Network (InfoNet).

- Education: Maine EMS has adopted the national education standards for all license levels and has made rule changes to transition other license levels to the appropriate national standard. Current educational activities include updating continuing education requirements to reflect concurrent skills/ knowledge
- expectations. Education, and Relations (PIER) has been an area of limited involvement with EMS services. While some have done impressive outreach programs for cardiac care, playground safety, etc., the majority of services are unsure about how to implement such a program. In response, the contract that MEMS has with the regional EMS offices includes improving PIER during the coming fiscal year. Promote a culture of safety. The problems of EMS safety are well-documented and have been discussed nationally for many years. In spite of these discussions, the rate of job-related injuries and crashes remains high. Maine has required basic ambulance vehicle operator training for several years and
- discussions, the rate of job-related injuries and crashes remains night, Maine has required distinct ambulance venicle operator training for several years and continues efforts to educate providers about the importance of safe operations. Some services have installed vehicle telematics that provide data on vehicle location and some vehicle operation data such as speed, braking, sudden turns, etc.

 Transporting Children Safely in Ambulances: With funding assistance from MeBHS, Maine EMS has conducted several train-the-trainer sessions to teach EMS providers about the proper way to secure children in an ambulance. This program is now part of many initial training programs. A goal is to have it become part of all initial training programs.

 Incident Management/EMS
 Quality Improvement: 1) In 2015, Maine EMS conducted a quality improvement study of situations where patients either refused transport and/or did not warrant transport. The No Transport study identified that EMS providers do not always comply with established Maine EMS protocols. The results of this study led to Maine EMS crudinal fields in the forthcoming MEFIRS system. 2) In 2016, Maine EMS studied statewide cardiac arrest survival rates. Data suggests that a patient found in a ventricular rhythm upon arrival of EMS had a 21% survival rate. About 10% of all cardiac arrests survived to hospital discharge. This survival rate is consistent with national studies. In 2017, Maine EMS expects to continue to study the effectiveness of the cervical spine immobilization protocol.

- Legislative/Policy/Programmatic
 Emergency Medical Dispatch (EMD): Maine has a statewide EMD requirement and one of the goals of EMD is to decrease the frequency of lights and sirens ("code 3") responses. An essential step in implementing response codes is quality assurance within the dispatch centers. In June, the Board of EMS adopted mandatory QA reporting requirements and the EMS office is working with services who are interested in developing response codes. Efforts to expand the use
 - of response codes will be discussed and developed based upon lessons learned from these initial pilot services.

 Incident Management Task Force activities will continue bringing together many at-the-scene stakeholders to plan for emergency events and for emergency site coordination. Activities being reviewed include: 1) Screening of the crash scene to minimize traffic rubber-necking; 2) Improving traffic notification changeable message signs and other means; and 3) Improving signage for key detours when traffic needs to be diverted.

Michigan

Traffic Incident Management

Strategies:

- Education
 - Promote and educate the use of high-visibility apparel for first responders.
 - Provide public education on safe, quick clearance, and vehicle removal laws.

- Conduct training in traffic incident management for all stakeholder groups.
- Coordinate traffic incident response between all responders.

Minnesota

Emergency Medical Services (EMS) and Trauma Systems

Strategies: The SHSP does not list Other Areas of Focus strategies.

Missouri

Special Roadway Environments - Traffic Incident Management Area

Strategies:

- - Integrate CADD/911 feeds into TMCs and ATMS software for quicker incident notification.
 - Link EMS data with crash data.

Education

- Develop app, flyers, social media, video and PSAs to educate public on In Case of Emergency (ICE).
 Educate responders on the importance of incident management and quick clearance practices; on how to maneuver incident scene to keep traffic lanes open at crash location; and motorists on importance of entering and accessing emergency contact information in cell phones.
- Educate the public about the dangers of exiting a disabled or crashed vehicle; about the availability and use of real time traffic information tools (e.g., MoDOT mobile app, traveler information map, etc.); on Missouri's Move Over Law and Move It Law.
- Encourage scheduling of clean up during off-peak, planned times.
 Enhance training for all responders on skills to deal with CMV, new technologies, alternative fuels, extraction and safe vehicle operation.
 Increase public awareness of the importance of yielding the right of way to emergency vehicles and raise public and law enforcement awareness of Move Over
- and Move It laws; moving disabled vehicles involved in non-injury crashes from the roadway as soon as practical to keep these vehicles from potentially obstructing emergency vehicle access to the crash scene.
- Move It Law TIM training.
- Move Over Law educate enforcement on grants available.

 Promote other successful state programs such as Yellow Dot program (on windshield) which indicates emergency information in glove compartment.
- Promote Strategic Highway Research Program (SHRP2) TIM Responder Safety Training (e.g., multidisciplinary, towing, EMS, DOT, fire, media, law enforcement, hazmat, etc.); educate on the importance of utilizing high-visibility apparel for emergency responders in all lighting conditions.
- Provide training on emergency traffic control to all responders.
- Require IS-100 and IS-700 National Incident Management Structure (NIMS) training courses for all responders.

 Support training for law enforcement on the 2012 Missouri Uniform Traffic Crash Report to enable development of a baseline for crashes involving emergency
- response vehicles and secondary crashes.

 Work with all responders and agencies to promote and endorse a statewide "Open Roads Philosophy" with TIM training.

· Enforcement/Adjudication

Increase the enforcement of Missouri's Move Over Law and utilization of Move It Law.

Engineering

- Add crash pull off sites.
- Continue to expand access to systems such as Dynamic Message Signs (DMS) and other systems that can display incident information.
- Create barrier openings or emergency crossovers where needed/appropriate.

 Deploy technology to allow for quick crash scene assessment and investigations for quicker clearance.

 Design/modify identified incident bypass routes to accommodate interstate traffic (e.g., increase turning radii, improve pavement condition, add shoulders,
- replace bridges, etc.).

 Encourage use of interoperable emergency communication equipment (e.g., compatible radio systems to enhance TIM operations, etc.).

 Use technology/innovation to support TIM (e.g., mobile apps, etc.).

 Work with response partners to expand the use of mile markers on priority incident corridors.

· Incident Management/EMS

- Coordinate, develop, and implement incident management plans for interstate and high-priority corridors with enforcement.
- · Legislative/Policy/Programmatic
 - Enact legislation to restrict all cell phone use while driving.
 - Expand current legislation to restrict texting for all drivers.
 Inform local agencies of availability of local MSHP troop training.

New Mexico

Emergency Medical Services

Strategies:

- - Improve data collection and analysis capabilities related to NMEMSTARS.

Educate EMS personnel on contacting NMDOT Districts to initiate traffic control activities to assist in the prevention of secondary crashes.

- · Increase EMS training for rural/EMS fire personnel to include courses on leadership/management, as well as incident/scene management, by developing inperson and online regional training curriculum.
- - Pre-designate landing areas for helicopters at crash sites.

 - Provide funding for installation of global positioning system units in EMS vehicles in rural areas to improve response time.

 Reduce time from crash to appropriate definitive care by equipping EMS vehicles with multi-service, satellite-capable telephones, particularly in rural areas.

New York

Emergency Response (Cross-Cutting Area) - New York State Emergency Medical Services

Strategies:

- Data
 - Continue the conversion from a paper based pre-hospital medical record to the National EMS Information System.
 - Continue the conversion from a paper based pro-frequent from the conversion from
- - Develop groups in each of the 18 New York State EMS system geographic regions that can provide education to EMS agencies and providers.
- · Incident Management/EMS
 - Complete the American College of Surgeons trauma center verification process at all NYS trauma centers.
 - Maintain electronic mail distribution lists to enable direct communication with the NYS EMS system at the region, county and local levels in order to share
 - Transition the NYS Trauma system to a nationally recognized verification process.

New York

Emergency Response (Cross-Cutting Area) - Traffic Incident Management

Strategies:

- - Improve the accuracy and use of TIM data.
- - Educate emergency responders and the public on existing laws and best practices: Promote the use of high-visibility apparel by emergency responders. highway workers, tow operators, etc.; Increase the number of and identify the target audiences for TIM training classes. Include additional TIM training at the local level; Establish statewide protocols for the end-of-queue notification to the traveling public and coordinate with ITS/TSMO operations strategies; Promote awareness of the "Move Over" law; improve the public's knowledge of "steer it/clear it" best practices; Continue to investigate and implement best practices for communication to the traveling public leading up to and through temporary traffic control zones.
- · Incident Management/EMS
 - Establish regional TIM committees in regions where they don't already exist.
 - Reduce the clearance times of incidents through improved coordination between responders and motorist assistance programs: Improve the coordination between responders through training and communication enhancement; Support the Highway Emergency Local Patrol (HELP) program by expanding its implementation and establishing a HELP truck operator academy and curriculum.

Oregon

Improved Systems - Emergency Medical Services

Strategies:

- - Conduct annual trauma symposium for EMS providers.
 - Promote Traffic Incident Management (TIM) Responder Training for EMS officials in rural and sparsely populated areas
 Recruit, train, and retain EMS responders in urban, rural, and sparsely populated areas.
- Engineering

 Address EMS equipment shortfalls through increased funding.

Pennsylvania

Improving Emergency/Incident Influence Time - Emergency Medical Services

Strategies:

- - Increase the integration of PennDOT crash data with EMS Records Utilize the National EMS Information System (NEMSIS) Version 3 dataset.
 - · Utilize technologies to improve response times Implement a rural coordinate addressing system for rural locations
- - Expand the promotion of the Yellow Dot Program Increase social media coverage and the exposure to mature drivers

 - Expand the promotion of the Yellow Dot Program Partner with stakeholder organizations to distribute materials.

 Implement the Highway Incident & Transportation System Collaborate with safety stakeholders to promote understanding of EMS and identify opportunities for cooperative efforts
 - Implement the Highway Incident & Transportation System Engage National Association of State EMS Officials (NASEMSO) on highway safety issues relevant to emergency services
 - Include EMS personnel when planning or implementing response plans Increase the participation of communities.
 Include EMS personnel when planning or implementing response plans Increase the participation of EMS personnel within communities.
- Engineering
 Utilize technologies to improve response times Increase the number of traffic signals equipped with emergency vehicle preemption detection.
- · Incident Management/EMS
 - Expand the promotion of the Yellow Dot Program Utilize communication technology to enhance emergency care by providing medical information of drivers/passengers to first responders following a crash.

 - Optimize EMS staffing patterns with recruitment and retention strategies Increase the number of certifications of new EMS personnel.

 Optimize EMS staffing patterns with recruitment and retention strategies Increase the percentage of calls that meet national response time standards.

 Optimize EMS staffing patterns with recruitment and retention strategies Maintain the number of certifications among existing EMS personnel.

 Utilize technologies to improve response times Increase number of EMS vehicles equipped with GPS.
- · Legislative/Policy/Programmatic
 - Utilize technologies to improve response times Increase 911 center compliance with Federal Communications Commission (FCC) Wireless Phase 2.

Pennsylvania

Improving Emergency/Incident Influence Time - Traffic Operations

Strategies:

Improve data and performance metrics capabilities - Develop better ways to identify and capture information for secondary crashes.

Education

- Enhance traffic management center operations Continue to expand the functions and knowledge of the Statewide Traffic Management Center (STMC).
 Improve traffic incident management in Pennsylvania Improve driver education, outreach and awareness of Pennsylvania TIM laws.
- Improve traffic incident management in Pennsylvania Improve training for first responders.

- Implement tools for effective traffic operations Full implementation of PennDOT's ITS command and control software (ATMS).
- Implement tools for effective traffic operations Improve the communications with motorists stuck in a trapped queue

· Incident Management/EMS

- Improve traffic incident management in Pennsylvania Expand TIM taskforces across the state, as appropriate
- · Legislative/Policy/Programmatic
- - Enhance traffic management center operations Continue to build a regional mindset throughout the four RTMC areas.

 Enhance traffic management center operations Establish Traffic Operations Plans (TOPs) in each Regional TMC (RTMC).

 Implement tools for effective traffic operations Establish update strategy for antiquated ITS device.

- Improve data and performance metrics capabilities Develop a robust performance metrics program for incident management with a focus on secondary crashes, roadway clearance, and incident clearance.
 Improve data and performance metrics capabilities Pursue legislation in Quick Clearance programs.
 Improve traffic incident management in Pennsylvania Support the development of a Statewide Traffic Incident Management (TIM) Program.

Puerto Rico

Rhode Island

Emergency Medical Response

Strategies:

- - . Enhance EMS response capabilities through interagency training and public education on safety equipment and traffic laws.
 - Promote activities to reduce time for EMS personnel to arrive on scene and transport victims to the most appropriate medical facility. Promote ITS technologies for crash identification and facilitate emergency response.

 - Promote legislative and regulatory changes to support Trauma system integration and licensing, training requirements, and equipment for EMS staff.
 - Promote registance and regularizes to support internal system integration and incensing, antiming requirements, and equips
 Promote medical rapid response units to optimize EMS resources, based on crash incident conditions.
 Promote the establishment of an EMS station grid, which will result in a cost-effective operation and a reduction in response time.
 Provide Incident Management Training to all EMS and law enforcement personnel.

Traffic Incident Management

Strategies

- Data
 - Improve data analysis of work zones and traffic incident design and implementation.
- Education
 - Conduct training on present policies, procedures and laws.
 - Promote and maintain work zone and incident management safety and accountability.
- · Engineering
 - Implement State-of-the-art technologies that improve the design and management of work zones and traffic incidents
- · Legislative/Policy/Programmatic
 - Build or expand performance metrics to measure the effectiveness of work zone and traffic incident management initiatives. Establish or enhance local incident management teams.

 - Implement a Traffic Incident Management Plan.

Tennessee

Operational Improvements - Incident Management, Work Zone Safety

- Education
 - Develop inter-agency memorandums of understanding (2.2) Develop inter-disciplinary training and joint exercises through participation in the FHWA SHRP2 training curriculum.
 - Improve incident response and reduce the clearance time for crashes (3.3) Develop plans for, construct, and maintain an incident management test track for the training of first responders to handle a variety of crash scenarios.

 Reduce the number and severity of secondary roadway crashes by effective emergency response (1.1) – TIM Responder Training Program – Equip incident
 - responder such as TDOT's HELP operators and supervisors with a common set of core competencies as part of the FHWA SHRP2 program. Assist them in the areas of responder safety; safe, quick clearances; and prompt, reliable, and interoperable communications.

 Reduce the severity and number of crashes occurring in work zones (4.4) Develop in-house training program for TDOT staff and related partners with focus
 - on Tennessee procedures.

 - Reduce the severity of crashes involving senior drivers (6.1) Train first responders and law enforcement on implementation of the Yellow DOT Program.
 Reduce the severity of crashes involving senior drivers (6.2) Educate Senior Drivers on the benefits and use of the Yellow DOT Program.
- - Reduce the severity and number of crashes occurring in work zones (4.3) Refine standardized procedures for the use of law enforcement in work zones.
- - Manage congestion (5.2) Continue improvement of communication of important work zone information and current/upcoming construction work to the public through the use of the 511 system, TDOT web site, and other public information strategies.

 Reduce the severity and number of crashes occurring in work zones (4.1) – Refine procedures to comply with the Final Rule on Work Zones (23 CFR 630

 - Subpart J) and the Final Rule on Temporary Traffic Control (23 CFR 630 Subpart K).

 Reduce the severity and number of crashes occurring in work zones (4.2) Install truck and trailer mounted attenuators within work zones to increase work zone safety.
 - Reduce the severity and number of crashes occurring in work zones (4.5) Continue and refine standardized inspections for work zones.

 Reduce the severity and number of crashes occurring in work zones (4.6) Refine speed limit policies for work zones and improve standard procedures for
 - reducing speed in work zones.
 - Reduce the severity and number of crashes occurring in work zones (4.7) Enhance visual measures for assisting senior drivers through work zones as recommended in the Highway Design Handbook for Older Drivers and Pedestrians.
- Incident Management/EMS
 Develop inter-agency memorandums of understanding (2.1) Partner with all state and local jurisdictions to improve emergency response, to provide quick

 - Develop inter-agency memorandums of understanding (2.1) Pariner with all state and local jurisdictions to improve emergency response, to provide quick clearance of incidents, and to enhance inter-agency communication.

 Improve incident response and reduce the clearance time for crashes (3.1) Improve communications between 911 centers and first responders.

 Improve incident response and reduce the clearance time for crashes (3.2) Establish TIM Committees in each county or region of the state.

 Improve incident response and reduce the clearance time for crashes (3.4) Expand installation of Enhanced Reference Markers (ERM) and expand coverage of TDOT's HELP program on controlled access highways.

 - Manage congestion (5.1) Continue to identify and refine procedures, like night-work, to help reduce congestion.
 Manage congestion (5.3) Explore various ITS strategies under the TDOT SmartWay Program to make travel through and around work zones safer and more
 - · Manage congestion (5.4) Continue efforts such as expanded coverage of TDOT's HELP program to reduce the amount and time duration of lane closures
 - Reduce the number and severity of secondary roadway crashes by effective emergency response (1.2) TIM Action Plan Develop an incident response plan as part of the Transportation Systems Management and Operations (TSM&O) strategic plan to promote safe and efficient management and operation on highways to serve the mobility needs of people and freight.
 - Reduce the number and severity of secondary roadway crashes by effective emergency response (1.3) TDOT Protect the Queue Program Place emphasis on this program to provide advance motorist information when traffic is slowed or stopped upstream from a highway incident or work zone.

Utah

Emergency Services

Strategies:

- - Utilize patient care data to make improvements in patient care.
- - Continue to provide pediatric trauma education.
 - Develop and support integrated EMS and transportation safety programs. Increase education and involvement of EMS in transportation safety.

· Engineering

- Enhance communication interoperability in an effort to decrease incident response time. Improve communication infrastructure for emergency response and dispatch.

- Incident Management/EMS

 Maintain efforts to ensure ambulances are appropriately staffed and equipped.
 - Maintain efforts to facilitate rapid response, treatment and transport of vehicular crash victims
- - Continue efforts to implement a statewide trauma system.

Traffic Incident Management Utah Strategies: Education Train responders in Traffic Incident Management using the FHWA or similar training materials. · Legislative/Policy/Programmatic Create a Traffic Incident Management plan for Utah. Other Build and maintain performance measures for Incident Management and Secondary Crashes. Identify strategies for clearing highway incidents Management Coalitions within major geographic areas of Utah that include all responders, such as: Law Enforcement, Fire, Emergency Medical, Towing, Public Works, and UDOT. Vermont **Enhance Vermont's Emergency Medical Services Capabilities** Strategies: Conduct Traffic Incident Management Training for first responders to ensure that incident scenes are set up in the safest and most efficient manner possible. · Create a culture of safety associated with emergency vehicle operation and emergency scene response Assess and improve the quality of clinical care provided to those injured Assess and improve the Vermont trauma system. Improve intra-agency coordination during emergency response Improve the availability and distribution of emergency medical responders. Improve the timeliness of EMS response and transport. Virginia Incident Response and Emergency Medical Services Strategies: Data 1.5 Investigate the opportunity to and integrate where cost-effective local law enforcement computer aided dispatch (CAD) information into VDOT Traffic Operation Centers (TOC) to provide enhanced response times, situational awareness, and provide timely motorist information to reduce the potential for secondary crasnes. 2.4 Ensure 100 percent compliance of EMS agencies submit NEMSIS version 3 reporting data to the Virginia Patient Care Information System. 2.5 Ensure that Virginia EMS and Trauma Care System collects, integrates, links, and analyzes data from all system components. 1.6 Improve incident information provided to TOCs and other responders including tow operators. Develop, disperse, and train responders on appropriate information to provide adequate descriptions so that proper equipment is dispatched. Investigate technologies, legal issues, and funding opportunities to provide early information for quick clearance and removals. 1.0 Develop an effective, consistent, and coordinated incident response program in accordance with the National Incident Management System (NIMS) and Virginia's Traffic Incident Management (TIM) program at the State and local level to ensure timely response and incident clearance to reduce time to access emergency services and reduce secondary crashes. 1.10 Pilot rural VDOT Incident Response Teams (IRT) and report on feasibility and resources to expand statewide. 1.11 Investigate best practices and equipment and identify resources to provide mobile crash investigation teams with necessary equipment to efficiently and effectively collect information resulting from severe crash investigation (e.g., Total Station equipment). 1.2 Work with state and local fire, EMS, law enforcement, and incident response personnel to track and monitor the rate of secondary incidents through improved crash reporting and investigate opportunities to reduce secondary incidents. 1.3 Work with state and local fire, EMS, law enforcement, and incident response personnel to promote and emphasize the benefits of internal and multiagency. after action reviews and reports for crashes using best practices and sharing any lessons learned. 1.4 Continue to support work with state and local fire, EMS, law enforcement, and incident response personnel to promulgate the Statewide TIM (STIM) committee initiatives by sharing information and garnering input through maintaining the STIM web site, to propose quick clearance policy for consideration and implementation and implement associated training (e.g., SHRP 2 training). 1.7 Expand the use of VDOT's pilot program of quick notification of towing operators to incidents. Investigate zoned-based towing contracts best practices and consider a pilot implementation. 1.8 Pilot rural VDOT Incident Response Teams (IRT) and report on feasibility and resources to expand statewide. 1.9 Investigate the legal, policy, procedural and financial considerations to pilot expedited VDOT emergency relocation of disabled vehicles. 2.0 Reduce crash injury severity outcomes through timely EMS response and appropriate data to improve medical care. 2.1 Continue to fund Virginia State Police Med-Flight operations. 2.2 Monitor the local approved EMS response plans as they relate to incident responses. 2.3 Ensure that the Virginia EMS and Trauma Care System continue to utilize statewide comprehensive, robust prehospital data system with standard definitions. 1.1 Work with state and local fire, EMS, law enforcement, and incident response personnel to develop localized incident management plans consistent with the Code of Virginia. Within the next 5 years, develop, implement, and refine statewide incident management detour plans. Washington **Emergency Medical Services (EMS) and Trauma Response** Strategies: Data Ensure that the Washington State EMS and Trauma Care System (WEMSIS) has a statewide comprehensive, robust pre-hospital data system utilizing a data set with standard definitions. Ensure that the Washington State EMS and Trauma Care System collects, integrates, links, and analyzes data from all system components Increase the number of EMS agencies reporting to WEMSIS. Provide WEMSIS data for linking to collision records. Improve enforcement and public understanding of "move-over" law. Engineering Consider EMS access in engineering development plans. Incident Management/EMS Ensure adequate and efficient distribution of pre-hospital EMS resources at all levels (aid and ambulance) according to the EMS and Trauma State and Regional Plans. Ensure efficient and adequate distribution of Level 1 and Level 2 Designated Trauma Centers. Increase the number of Level 2 Trauma Centers in the state. Ensure that all major trauma patients are transported to the highest appropriate level of designated trauma center within a 30-minute transport. Increase the percentage of EMS on-scene arrival responses that are within state requirements. · Legislative/Policy/Programmatic Identify funding strategies that assist air medical services in filling gaps in coverage for emergency air medical response as identified in the state EMS and Trauma System Plan. Increase injury prevention programs that reduce traffic related injuries and death. Enable seamless communications capabilities among EMS, law enforcement, and fire services agencies through interoperability. Enhance EMS to Increase Survivability Wisconsin Strategies: The SHSP does not list Continuing Highway Safety Issue Areas strategies

Wisconsin

Improve Incident Management

Strategies: The SHSP does not list Continuing Highway Safety Issue Areas strategies.