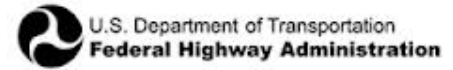


Roadway Safety Professional Capacity Building Program

Through engaging peer workshops, the RSPCB Program matches agencies seeking solutions to roadway safety issues with trailblazers who have addressed similar challenges and emerged with a roadmap and noteworthy practices for approaching the issue.



MINNESOTA PEER EXCHANGE:

STRATEGIC HIGHWAY SAFETY PLAN (SHSP) IMPLEMENTATION

An RSPCB Peer Exchange

The Minnesota Department of Transportation (MN DOT) hosted a peer exchange February 3-4, 2015, in St. Paul, Minnesota. The event included peer representatives from the Nevada Department of Transportation (NV DOT), the Ohio Department of Transportation (Ohio DOT), and the Vermont Agency of Transportation (VTrans) and was supported by the Federal Highway Administration (FHWA) Office of Safety's [Roadway Safety Professional Capacity Building Program](#) and the FHWA Minnesota Division Office.

Minnesota completed its SHSP update in summer 2014; understanding how to effectively take the SHSP from plan to implementation is now of primary importance. The focus of the event was to gather states that have done a particularly good job on implementation and gain input on how to apply those methods in Minnesota. Minnesota's goal is to create a living SHSP that results in concrete actions that sustain the energy and momentum created during the SHSP update.

This peer exchange consisted of peer presentations followed by facilitated discussions. Several themes emerged from the peer presentations as strengths in the SHSP implementation process. These included:

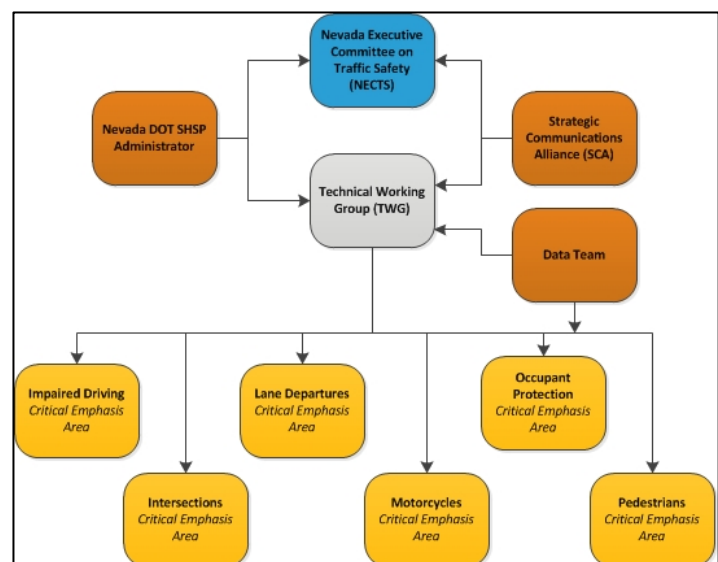
- Supportive organizational structure for SHSP management.
- Critical emphasis area (CEA) teams and action plans.
- Process for ongoing stakeholder engagement.
- Coordinated SHSP marketing approach.
- Tracking and monitoring process in place.
- "Living" element of the plan.

This report presents key takeaways in the above areas. The full agenda is available in [Appendix A](#) and the list of participants is available in [Appendix B](#). Peer presentations are available upon request.

SHSP ORGANIZATIONAL STRUCTURE

The SHSP serves as a statewide plan to coordinate all roadway safety programs, providing a framework for reducing fatalities and injuries on all public roads. SHSP organizational structures vary State to State. Some peer States use a top-down structure with a leadership or executive committee at the top comprised of

Nevada's SHSP Organizational Structure



appointed or elected officials, and possibly executive leadership of stakeholder organizations responsible for directing the program. Nevada for example, has an Executive Committee on Traffic Safety (NECTS) providing executive leadership and a technical working group to coordinate its six CEA teams. Other States use a bottom-up approach with steering committees or working groups comprised of stakeholder agency managers in charge of making recommendations to a leadership committee.

In a similar manner, Ohio's Executive Committee empowers its steering committee to make day-to-day decisions about the SHSP. Ohio DOT leads the committee with assistance from the Department of Public Safety. The Steering Committee has been meeting quarterly for about 15 years, and is made up of key local, State and Federal safety agencies. The quarterly meetings cover the following topics:

- Review of quarterly crash trends across emphasis areas.
- Review of action plans and tracking implementation.
- Coordinating the network of emphasis area teams and stakeholders to make sure they are all focused on common goals.

Steering committee agencies share information with hundreds of other safety organizations throughout Ohio. The SHSP, the statewide committee, and regional safety partnerships create a network of thousands of people focused on common safety goals. These agencies share resources and data that make Ohio's transportation system safer while maximizing limited funds. Ohio holds a biannual summit to seed these committees with new ideas and to make sure they have ample multi-disciplinary input.

In 2012, Vermont's highway safety stakeholders resolved to take their campaign for safer roads to a new level by establishing the Vermont Highway Safety Alliance (VHSA). The model for the VHSA is based on the Maine Transportation Safety Coalition. The VHSA aims to expand on SHSP accomplishments, provide a clearinghouse of crash data, information, initiatives, and resources available to partners, further engage private sector partners, expand collaboration, improve efficient use of resources, and strengthen and unify the safety message. The VHSA is a non-profit organization that brings together public and private partnerships. It is made up of a board of directors, focus groups, and task teams. The core agencies on the board are VTrans, the Department of Motor Vehicles, the Governor's Highway Safety Office, the Department of Education, Vermont State Police, and the Department of Public Health. Private members include American Automobile Association (AAA), American Association of Retired Persons, the Truck and Bus Association, University of Vermont Medical Center, Vermont Youth Safety Council, Vermont Auto Dealers, and the Vermont League of Cities and Towns.

Also in 2012, Vermont created a safety coordinator position to assist with overall coordination between focus groups. VTrans wanted to avoid "safety hobby syndrome" where safety was only a secondary or periphery activity. The position serves as a central point of contact for all VHSA members, a dedicated person to set up VHSA and SHSP activities. The coordinator is responsible for following up on the commitments and responsibilities of members.

***Minimize redundancy
& leverage existing
safety organizational
structures.***

Peers identified an opportunity to utilize existing safety-related organizational structures, such as Minnesota DOT's regional Towards Zero Death (TZD) committees as a foundation for the SHSP management structure. Minnesota DOT has a regional TZD leadership team comprised of a district engineer and a district police captain, and regional TZD steering committees made up of representatives from the counties across

engineering, law enforcement, education, and emergency medical and trauma services. Minnesota DOT is also

reviewing other State organizations' safety plans to identify potential partnerships and potential collaboration opportunities. Example existing safety programs in Minnesota that can be leveraged include TZD Safety Roads Coalitions, the TZD Enforcement Program, regional trauma efforts, county safety initiatives, child passenger safety, and motorcycle safety initiatives. Similarly, Ohio DOT reviewed existing statewide committees, task forces, and transportation safety related groups prior to creating new ones for the SHSP. Peers highlighted that the SHSP should help guide existing safety efforts and not be viewed as an entirely new effort; redundancy can hinder participation and it is important to ensure that CEA action teams have a unique and beneficial contribution.

CRITICAL EMPHASIS AREA TEAMS AND ACTION PLANS

CEAs are primarily chosen based on analysis of safety data and stakeholder input. Some states use task forces, action teams, and working groups (referred to in this report as CEA teams) to achieve goals outlined in the SHSP. Peers spoke on their experiences with creating CEA teams and highlighted that the groups help build relationships between organizations doing similar types of work, and prompt members to look at safety from the perspective of multiple disciplines. CEA action teams also help facilitate follow-through by assigning responsibility for actions to achieve broader SHSP goals. Peers spoke on the importance of creating balanced representation from disciplines and stakeholder organizations, and cautioned not to allow any one particular interest or stakeholder group overwhelm the CEA team. Peers agreed that a strong chairperson is key to keeping the team focused and energized.

Multidisciplinary CEA action teams led by a strong chairperson help move the SHSP mission forward.

In Ohio, CEA committees meet quarterly and report out to an SHSP executive committee annually on ongoing efforts, progress on performance measures, and potential obstacles they might be facing. Ohio's SHSP leverages existing agency plans and committee structures to ensure that participation in the SHSP process is relevant and easy. For example, Ohio already had an extensive network of local coalitions involving the 4Es (Education, Enforcement, Engineering, and Emergency Services), which meet quarterly to review data, develop strategies and track implementation. Ohio is using these networks as emphasis area teams for issues related to alcohol, speed, seat belts, and young drivers. When existing committees are not in place, Ohio DOT uses a similar agency-driven process for identifying CEA teams, such as for roadway departure, intersection, commercial vehicles, and other issues. When existing teams lack multi-disciplinary input the agency adds appropriate committee members.

Action plans provide buy-in & encourage progress monitoring.

Ohio's Action Plans

OHIO STRATEGIC HIGHWAY SAFETY PLAN

ROADWAY DEPARTURE ACTION PLAN

Fatality Goal: Reduce the number of roadway departure fatalities from 552 in 2013 to 509 in 2017.

Serious Injury Goal: Reduce the number of serious injuries related to roadway departures from 3,510 in 2013 to 3,238 in 2017.

EMPHASIS AREA TEAM LEADER: Michelle May, ODOT

Strategy 1: Advance the use of new technology and roadway designs to address roadway departure crashes.

Step #	Action Step Leader	Description	Output Measure	Timeline
1	ODOT - Michelle May/Michael McNeill	Provide the funding and technical assistance to pilot new equipment or roadway designs to reduce roadway departure crashes.	# of miles or locations installed % crash reductions	Annually
2	ODOT - Mike McNeill	Provide startup funding to create a national clearinghouse for roadway departure safety information which will identify best practices, safety countermeasures, new roadside technologies and the latest research and training. The clearinghouse is being funded through the national Transportation Pooled Fund Program.	Funding committed	Annually

Action plans create concrete, actionable items to help focus and prioritize SHSP tasks and aid in implementation. Ohio DOT creates action plans for each emphasis area that includes serious injury and fatalities reduction goals, and strategies and

action steps are matched with output measures and timelines. Action plans create transparency of actions and Ohio DOT uses the plans to measure implementation progress. Action plans also help identify partners needed to streamline implementation and encourage a feeling of ownership for CEA team members. Peers suggested that the action items should be specific enough so that they can accomplish goals, but cautioned against assigning too many tasks to individuals to avoid having them feel overwhelmed or overburdened.

NECTS in Nevada is comprised of directors of the agencies that represent focus areas, and also receives reports from its CEA task forces. Nevada gives team members actionable items—actions they can specifically take to help implement the SHSP. To keep CEA teams engaged and motivated, NV DOT actively seeks members for the teams from outside of the DOT and also rotates team chairpersons.

Focus groups and task teams in Vermont develop and carry out the strategies in the SHSP. Each focus group has defined action plans and performance measures in the SHSP. A spreadsheet is used for tracking status. VTrans has experienced issues with getting timely information on all of the performance measures, but the agency is working with their information technology section on a better tool for updating and reporting performance measures.

STAKEHOLDER ENGAGEMENT

Peers spoke about stakeholder engagement from several perspectives. An overarching theme was that it is important to ensure stakeholders have something to gain in exchange for their participation and dedication. Nevada DOT shared that they host recognition ceremonies and annual awards for participants, including “best communicator” and “most proactive” member on the CEA teams. Ohio DOT noted that stakeholder communication should be simple and direct, with clear information about the value they have added and how their future contributions will make a difference. To gain and maintain stakeholder engagement, Ohio DOT also actively shares data with stakeholders. They have created a GIS-based mapping tool, which lets users draw a shape on a map, select from a series of attributes, and retrieve crash data. They also created Microsoft Excel-based spreadsheets for standard safety analyses and can generate charts on the downloaded data. In addition, Ohio creates and distributes crash heat maps, fact sheets, and priority maps to map crash data by county and township, so local partners can prioritize safety reviews and investments.

Give everyone something they need.

Make stakeholder involvement rewarding and easy.

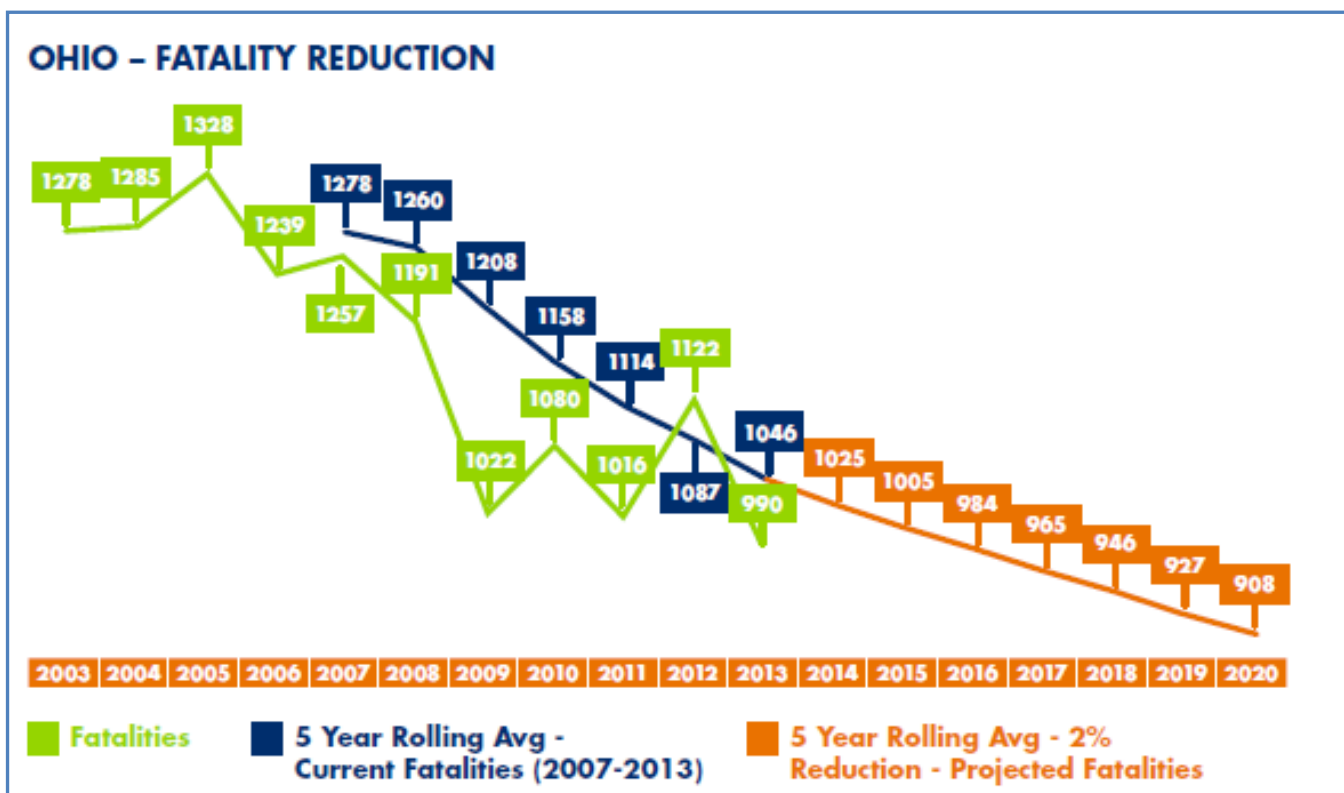
To get the most out of CEA action teams and to ease the burden on stakeholders, peers suggested arranging for support on meeting logistics, planning, and administration. Nevada DOT uses consultants for this work. As mentioned earlier, VTrans hired a safety coordinator whose primary duties are to act as a clearinghouse for information sharing, provide a hub for the safety program, and ensure follow-up on commitments and actions.

TRACKING AND MONITORING

Tracking and monitoring are part of peer states' CEA plans and teams. Plans outline measures and goals, teams track the status of SHSP strategies and related actions and also monitor progress towards SHSP goals.

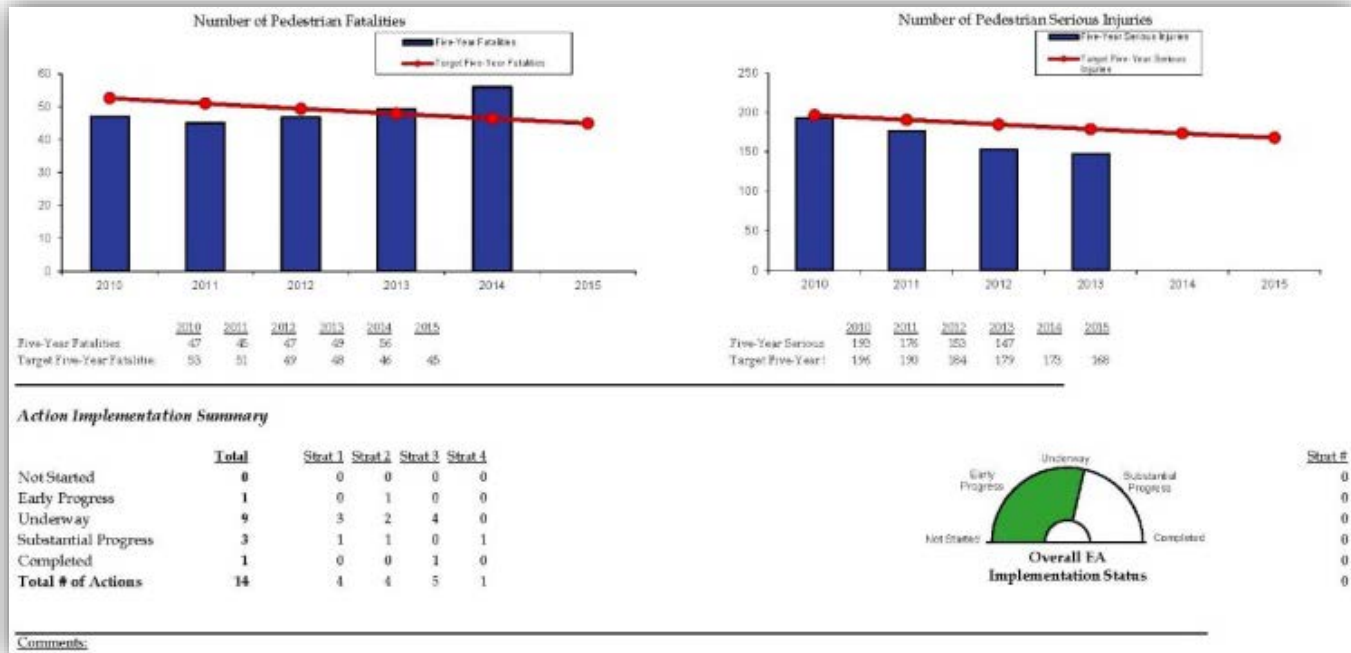
For example, Ohio DOTs SHSP goals are to: 1) reduce the number of fatalities from 1,046 to 965 between 2013 and 2017; 2) reduce the fatality rate by 2 percent annually; 3) reduce the number of serious injuries from 9,725 to 8,970 between 2012 and 2017; and 4) reduce the serious injury rate by 2 percent annually. They review their progress in meeting those goals to see if their investments are working. The graph below shows Ohio's progress in reducing their fatality rate by 2 percent annually.

Ohio's Fatality Reduction Goals



Nevada DOT monitors progress in meeting their CEA goals and objectives as well the implementation status of their strategies. Tracking strategy implementation can be especially helpful if States are not meeting their goals. The problem may not be the program of strategies, but the level of implementation. An example of Nevada DOT Pedestrian CEA progress is shown below.

Nevada's Pedestrian CEA Progress



In 2012, the CEA teams adopted a series of performance measures to track the impact of strategies adopted by each CEA, all of which tie to the number of fatalities and serious injuries. The Nevada SHSP objectives were set as five-year average number of fatalities and serious injuries with 2008 (average of 2004 to 2008) as the baseline year. Nevada produces an SHSP Annual Report that showcases this tracking and monitoring information.

MARKETING AND SAFETY CULTURE

Peer states emphasized the importance of a strong, coordinated marketing effort. Nevada DOT reported on their Strategic Communications Alliance (SCA), which works with both the NETCS and the Technical Working Group responsible for managing the CEA teams to ensure that a consistent safety message is delivered to the public.

Create a unified message.

Minnesota leverages the TZD brand for communication. Vermont's Highway Safety Alliance (VHSA) engages partners across agencies and the private sector on safety campaigns such as their "Phones down, heads up" hands-free cell phone campaign. The VHSA was created to promote prior SHSP accomplishments with the goal of improving the efficient use of resources and also to encourage collaboration opportunities. The VHSA

Board of Directors includes core agencies such as the Vermont Department of Transportation, the Governor's Highway Safety Program, the Department of Education, State Police, the Department of Health, and private members such as AAA, the Truck and Bus Association, the University of Vermont Medical Center, the Vermont Youth Safety Council, Vermont Auto Dealers, and the Vermont League of Cities & Towns.

Ohio DOT spoke on looking for buy-in from groups that aren't necessarily paying attention to the SHSP as a normal course of business. Private stakeholders such as local businesses can get involved by implementing employer safety policies such as

Look for unique partners and messaging channels.

banning the use of hand held electronic devices while driving company vehicles. Nevada DOT collaborates with the Department of Motor Vehicles (DMV) to broadcast safety campaign videos in DMV waiting areas.

Assess outreach impacts and safety culture in addition to traditional performance measures.

In addition to monitoring progress of critical emphasis areas during periodic check-ins with the executive committees, states reported on tracking outreach activities. Nevada DOT reported on using surveys to measure public perceptions of safety, and hopes to use this information to measure change in safety culture over time. These survey calls include questions about the TZD brand, what the caller remembers about the brand, what kind of key words the caller remembers, and also how it has influenced their behavior.

A “LIVING” SHSP

SHSPs are high-level strategic plans but they are also meant to be “living” documents, meaning they should be put into action. While the high-level document typically remains unchanged over the life of the SHSP, there is a need and benefit to provide more detail on how the strategies in the SHSP will be implemented. States achieve this in different ways. VTrans approaches this with a two-part SHSP: a core plan and a supplement.

In April 2013, the VHSA adopted the 2012-2016 Vermont SHSP. The SHSP summarizes historical crash trends on Vermont’s roadways, identifies and prioritizes critical, significant, and special emphasis areas, and outlines strategies to further the current trend of reducing fatal, major and other crashes statewide.

Consider a two-part SHSP with a high-level core document with a more comprehensive & actionable supplement.

The supplement is intended to act as the work plan for the SHSP and outlines the framework that the VHSA and its safety partners will use to facilitate the advancement of Vermont’s safety initiatives. The supplement provides a separate chapter for each critical, significant, and special emphasis area. The following components are provided in each chapter for the critical, significant, and special emphasis areas:

- **Overview:** A summary of the information provided in the SHSP for the emphasis area including a problem statement (the reason the emphasis area was selected), the targeted goal to be accomplished by the end of 2016, and the strategies that will be used.
- **Data:** Overall historical trends from 2004 to 2011 with a more detailed evaluation of the most recent 5-year analysis period from 2007 to 2011.
- **Action Plans:** A description of the action plans for each individual strategy, along with the action plan champion, potential partners to assist in the implementation of the plan, and the targeted goal.
- **Performance Measures and Status Report:** The measure that will be used to document performance (progress toward a goal), the projected outcome, and a status report as to whether or not the particular action item is currently active.
- **Potential Funding Sources:** Potential funding sources that could be targeted to help support activity under the action plan.

It was important for Vermont to acknowledge that a successful work plan must be practical and implementable in order to achieve its targeted goals. The VHSA, its focus groups, and other safety partners have worked diligently to create aggressive but achievable action plans to forward Vermont's agenda on road safety and reduce major crashes. The action plans presented in the SHSP supplement reach across the 4E disciplines of roadway safety and call for collaboration from five focus groups: enforcement, data, education, infrastructure, and outreach and marketing.

The core plan provides an overview of all safety initiatives in the State, outlines emphasis areas, and includes high level goals; it is aimed at high-level leadership and external audiences. The supplement is used to provide additional data, CEA strategies, and actions for those working more closely with the SHSP. The supplement is a living document that can be modified or amended as CEAs progress and evolve.

LESSONS LEARNED FROM THE MN PEER EXCHANGE

At the conclusion of this two-day peer exchange, Minnesota DOT and peers identified elements they felt may have potential to pursue in Minnesota. These items included CEA action teams, CEA action plans, a two-part SHSP, progress monitoring, and consultant support.

The takeaways and key points discussed above are summarized below:

- Develop an SHSP organizational structure that will engage leaders and stakeholders and institutionalize the 4E approach.
- Minimize redundancy and leverage existing safety-related organizational structures.
- Create multidisciplinary CEA action teams led by a strong chairperson to help move the SHSP mission forward.
- Consider a two-part SHSP with a high-level core document and a more comprehensive and actionable supplement. Action plans provide buy-in and encourage progress monitoring.
- Give members something for their efforts—data, for example—to make stakeholder involvement rewarding.
- Make stakeholder participation easy by providing assistance with coordination and meeting logistics.
- Create a unified safety message across agencies.
- Look for unique safety partners and messaging channels.
- Assess outreach impacts and safety culture to confirm that efforts are effective.

APPENDIX A

MN SHSP Implementation Peer Exchange

St. Paul, Minnesota

February 3-4, 2015

February 3, 2015

9:00 a.m.	Registration
9:30 a.m.	Welcome and Introductions. (Mike Barnes, Minnesota DOT Operations Division Director)
9:45 a.m.	Workshop Overview (Jennifer Warren, FHWA Office of Safety; Sue Groth, MN DOT)
10:00 a.m.	Highlights of Minnesota's SHSP (MN DOT)
10:30 a.m.	BREAK
10:45 a.m.	Peer Presentation: Nevada (Ken Mammen, NV DOT)
11:15 a.m.	Peer Presentation: Ohio (Michelle May, OH DOT)
12:00 p.m.	LUNCH
1:00 p.m.	Peer Panel Q&A
1:30 p.m.	Small Groups Session 1
2:15 p.m.	Small Groups Session 2
3:00 p.m.	BREAK
3:15 p.m.	Key Takeaways from Small Groups / Let's Discuss! <ul style="list-style-type: none">• What did we hear that we liked?• What would it help us address/how would it help enhance what we are doing in our State?• Can/should we try it in Minnesota? What have we confirmed about our process?
4:15 p.m.	Wrap-up (MN DOT, FHWA)
4:30 p.m.	ADJOURN

February 4, 2015

8:30 a.m.	Welcome (Sue Mulvihill, Deputy Commissioner, Minnesota DOT; Jennifer Warren, FHWA Office of Safety)
9:00 a.m.	Peer Presentation: Vermont (Bruce Nyquist, VTrans Traffic and Safety Engineer)
9:30 a.m.	Q&A
10:15 a.m.	BREAK
10:30 a.m.	Key Takeaways / Let's Discuss! <ul style="list-style-type: none">• What did we hear that we liked?• What would it help us address/how would it help enhance what we are doing in our State?• Can/should we try it in Minnesota? What have we confirmed about our process?
11:30 a.m.	Next Steps: What actions will we take to integrate new or enhanced implementation activities?
12:15 p.m.	Wrap-up and Closing Remarks (Jennifer Warren, FHWA Office of Safety; Sue Groth, Minnesota DOT)
12:30 p.m.	ADJOURN

APPENDIX B: PARTICIPANTS

FHWA/Volpe	
<p>Andrew Berthaume US DOT/Volpe Cambridge, Massachusetts Phone Number: 617-494-3159 Email: andrew.berthaume@dot.gov</p>	<p>Jennifer Warren Transportation Specialist FHWA Office of Safety Washington, D.C. Phone Number: 202-366-2157 Email: jennifer.warren@dot.gov</p>
<p>Laura Black US DOT/Volpe Cambridge, Massachusetts Phone Number: 617-494-2274 Email: laura.black@dot.gov</p>	
MINNESOTA	
<p>Donna Berger Director Minnesota Department of Public Safety Office of Traffic Safety St. Paul, Minnesota Phone Number: 651-201-7061 Email: donna.berger@state.mn.us</p>	<p>Mark Kinde Minnesota Department of Health Injury & Violence Prevention Unit Leader St. Paul, Minnesota Phone Number: 651-201-5447 Email: mark.kinde@state.mn.us</p>
<p>Peter Buchen Assistant State Traffic Engineer Minnesota Department of Transportation Roseville, Minnesota Phone Number: 651-234-7010 Email: peter.buchen@state.mn.us</p>	<p>Holly Kostrzewski Minnesota Department of Transportation NE/NW Minnesota Toward Zero Deaths Regional Coordinator Duluth, Minnesota Phone Number: 218-725-2828 Email: holly.kostrzewski@state.mn.us</p>
<p>Eric DeVoe Research Analyst Minnesota Department of Transportation Roseville, Minnesota Phone Number: 651-234-7016 Email: eric.devoe@state.mn.us</p>	<p>Susie Palmer Traffic Safety Programs Manager Minnesota Department of Public Safety Office of Traffic Safety St. Paul, Minnesota Phone Number: 651-201-7071 Email: susie.palmer@state.mn.us</p>
<p>Bradley Estochen State Safety Engineer Minnesota Department of Transportation Roseville, Minnesota Phone Number: 651-234-7011 Email: Bradley.estochen@state.mn.us</p>	<p>Kris Riesenber Technical Services Team Leader FHWA Minnesota Division Office St. Paul, Minnesota Phone Number: 651-291-6114 Email: kris.riesenberg@dot.gov</p>
<p>Katie Fleming Research Analyst Minnesota Department of Transportation Roseville, Minnesota Phone Number: 651-234-7013 Email: katie.fleming@state.mn.us</p>	<p>Will Stein Safety Engineer FHWA Minnesota Division St. Paul, Minnesota Phone Number: 651-291-6122 Email: william.stein@dot.gov</p>
<p>Sue Groth State Traffic Engineer Minnesota Department of Transportation Roseville, Minnesota Phone Number: 651-234-7004 Email: sue.groth@state.mn.us</p>	<p>Susan Youngs TZD Regional Coordinator-Metro Region Minnesota Department of Transportation Roseville, Minnesota Phone Number: 651-234-7706 Email: susan.youngs@state.mn.us</p>

Kristine Hernandez Minnesota Department of Transportation Minnesota Toward Zero Deaths Program Coordinator Rochester, Minnesota Phone Number: 507-286-7601 Email: kristine.hernandez@state.mn.us	
PEER STATES	
NEVADA	
Juan Balbuena-Merle Safety and Local Public Agencies Engineer FHWA Nevada Division Office Carson City, Nevada Phone Number: 775-687-8582 Email: juan.balbuena@dot.gov	Kenneth Mammen Chief Traffic Safety Engineer Nevada Department of Transportation Carson City, Nevada Phone Number: 775-888-7335 Email: kmammen@dot.state.nv.us
OHIO	
Michelle May Highway Safety Program Manager Ohio Department of Transportation Columbus, Ohio Phone Number: 614-644-8309 Email: michelle.may@dot.state.oh.us	
VERMONT	
Bruce Nyquist Office of Highway Safety Director Vermont Agency of Transportation Montpelier, Vermont Phone Number: 802-828-2696 Email: bruce.nyquist@state.vt.us	