Strategic Highway Safety Plan SHSP Quick Reference Guide





U.S.Department of Transportation

Federal Highway Administration

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16. Abstract

The purpose of the quick reference guide is to provide individuals who are managing Strategic Highway Safety Plans (SHSPs) or those who are interested in SHSPs with the basic information needed to get started with the plan and successfully manage the process. It provides an overview of the basic elements and requirements of an SHSP, as well as provides helpful resources with links to learn more. It also provides an easy reference to the essential things an SHSP program manager should know. The guide includes comments from individuals who are managing their State's SHSP, tips for the basic steps in the plan process, and information on noteworthy practices. An online version and PDF version are available.

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Introduction

You are the new program manager for the Strategic Highway Safety Plan (SHSP)—now what? You've probably already discovered that the SHSP is no small task. The SHSP involves a variety of stakeholders from different agencies and disciplines all of whom have their own set of expectations and concerns; there are a number of tasks to complete; and there are connections that need to be made so the process can be successful. This is why an SHSP program manager is vital to the success of the SHSP. This guide, however, is a useful reference for anyone who is new to the SHSP process and can be used for stakeholders, leaders, or anyone interested in getting involved.

This guide is designed to provide you with a quick reference to the basic information you need to get started with the SHSP and successfully manage the process. It will provide you with an overview of the basic elements and requirements of an SHSP, as well as provide you with helpful resources and links to learn more. We recommend reviewing the document in order, but if you are pressed for time, making sure you understand the requirements is crucial.

This on-line guide is designed to be both interactive and intuitive. Please use the "control" bar along the left side of the viewing screen to either:

1) go to the various sections of the guide, or 2) download a PDF version.

To go to any section within the guide, simply move the cursor over the SHSP Quick Reference Guide text under the "Go To" section of the control bar. A small window will open allowing the user to select the section desired. Simply click to open the Section. Within the guide there are links to various Web sites and reports where users can go for more information. These are opened in a separate window.

To download the PDF version simply click on the document under the "Download" section of the control bar. This will open the PDF version of the selected document in a new window. The control bar along the right side of the window is available from any page allowing users to easily get back to where they started from anywhere.



"When Congress required States to develop an SHSP, they did so because the process works. Bringing the various safety disciplines together to work jointly on the most serious traffic safety problems is making a difference."

Elizabeth Alicandri Associate Administrator FHWA Office of Safety

Purpose

The role of the SHSP Program Manager is paramount in creating a process that functions effectively and efficiently, and it's worth it. Over the past 10 years, there has been a reduction of nearly 25 percent in the number of fatalities on the Nation's roadways. Still, much needs to be done to move our Nation towards zero deaths and State SHSPs are charting the course.

The SHSP process is multifaceted, and so are the skills of an SHSP Program Manager. You'll find some days you are a meeting planner and facilitator, and other days you are a diplomat and Champion for the SHSP. Some of the specific roles and responsibilities for an SHSP Program Manager include the following:

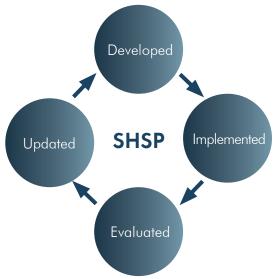
- Serve as the point person for all SHSP-related activities, programs, and projects;
- Manage meetings for the SHSP, including those involving the Executive and Steering Committees;
- Ensure the emphasis area teams are meeting and functioning well;
- Assist SHSP key players (Executive and Steering Committees, emphasis area teams) in finding solutions to problems, and help overcome barriers;
- Work to obtain data for the SHSP's data-driven process;
- Organize special meetings and events as needed such as Summits and Workshops;
- Spearhead and track implementation efforts; and
- Ensure the SHSP is evaluated and reviewed on a regular basis to ensure it is moving in the right direction.



What is the SHSP?

The SHSP is a critical part of the Highway Safety Improvement Program (HSIP), which is a core Federal-aid program designed to achieve significant reductions in traffic fatalities and serious injuries. It requires a data-driven strategic approach to improving traffic safety. For more information on the HSIP, click here. The SHSP has been included in three of the most recent transportation bills which provide funding for transportation across the U.S., including the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU); the Moving Ahead for Progress in the 21st Century (MAP-21), and the Fixing America's Surface Transportation (FAST) Act, which continues the requirement for States to develop, implement, evaluate, and update an SHSP "that identifies and analyzes highway safety problems and opportunities on all public roads."

The SHSP is developed by the State transportation department. It is a data-driven, statewide coordinated plan that provides a comprehensive framework for reducing trafficrelated fatalities and serious injuries across all modes, and on all public roadways. It is designed to drive safety investment decisions and be coordinated with other safety plans, including the Highway Safety Improvement Program (HSIP), the Highway Safety Plan (HSP), and the Commercial Vehicle Safety Plan (CVSP).



Source: Cambridge Systematics, Inc.

States were required to develop SHSPs in 2005. By October 1, 2007 all States complied. This means if you currently are involved in your SHSP, it will be either during the implementation, update, or evaluation stage, which are described in this guide.

The SHSP process is continuous with one element always building on the other as the effort moves forward. As States implement their plans, they are gathering information for the evaluation of the plan, and the results from the evaluation will guide the update process showing where changes are needed in the future.



"The true benefit of the plan is getting lots of organizations collaborating on safety goals and investments. This has been invaluable. It strengthens the individual organizations, reduces duplication and stretches human and financial resources farther."

W. Scott Jones, Utah Department of Transportation

Benefits of SHSPs

The primary goal of an SHSP is to reduce fatalities and serious injuries on all public roads. It offers the following benefits:

- Establishes common statewide goals and priorities;
- Strengthens existing partnerships;
- Builds new safety coalitions;
- Promotes data, knowledge, and resource sharing;
- Focus on the State's most serious traffic safety problems;
- Avoids redundant activities and leverages existing resources, such as funding, personnel, and leadership;
- Provides a multidisciplinary approach to solving problems;
- Incorporates both behavioral and infrastructure strategies and countermeasures to more effectively reduce highway fatalities and serious injuries on all public roads.

Involvement in the SHSP means one organization does not carry all of the financial or technical burdens alone. It fosters camaraderie and trust, so individuals know where to turn with questions, problems, shared strategies, and new ideas. The possibilities for sharing resources through SHSP collaborations are endless. For example, high-visibility enforcement combined with low-cost safety improvements where appropriate may improve safety more than either strategy alone. The collaborative approach brings about combinations of countermeasures that more effectively improve safety than any single countermeasure.

You can learn more about the "basics" of SHSPs in the **Strategic Highway Safety Plan Champion's Guidebook**. This document reviews the basic principles and important considerations concerning the development, implementation, and evaluation of an SHSP. It's a helpful resource for States that are updating their SHSP, assessing their SHSP development process, as well as providing a reference for professionals new to the SHSP, safety or planning.



SHSP Requirements

The law requiring State SHSPs describes the various elements that must be considered. Following is a breakdown of the requirements of the SHSP. These are fully described in the **SHSP Guidance**.

A Consultative Approach

The Federal Highway Administration (FHWA), which is the Federal agency charged to overseeing the SHSP process, recommends key stakeholders be consulted early in the process, their input considered prior to any final decisions on the plan, and that they be routinely informed on the progress of the SHSP. States agree that improved coordination among diverse safety stakeholders is one of the greatest benefits of the SHSP.

A list of the required multidisciplinary stakeholders includes:

- Governor's Highway Safety Representative;
- Regional transportation planning organization and metropolitan planning organizations;
- Representatives of major modes of transportation;
- State and local law enforcement;
- Persons responsible for administering Railway Highway Crossings Program;
- Operation Lifesaver;
- Representatives conducting motor carrier safety program;
- Motor Vehicle Administration representatives;
- Local and Tribal involvement; and
- Other major State and local stakeholders.

SHSP TIP— STAKEHOLDERS

If there is no existing list of stakeholders for your SHSP, start with the DOT State Safety Engineer's Office and the State Highway Safety Office. They will have contacts for your stakeholders list.



Coordination with Other Transportation Plans

The SHSP provides strategic direction for State plans, such as the HSIP, the HSP, and the CVSP. It also provides direction for local and Tribal safety plans. This means, for instance, that State, local and Tribal entities should coordinate their safety planning efforts with the SHSP and incorporate the goals, emphasis areas, and strategies of the SHSP into their plans, as appropriate.

The law also requires other agencies to coordinate their State safety plans with the SHSP. Specifically, the State must coordinate its HSP, data collection, and information systems with the SHSP. The lead State commercial motor vehicle safety agency also must coordinate the plan, data collection, and information systems with the State highway safety improvement program. Plans such as the Long-Range Statewide Transportation Plan and Metropolitan Transportation Plan also should be developed in coordination with the SHSP. Where relevant, this coordination should include, at a minimum, high-level goals, objectives, and strategies that are consistent with those in the SHSP.

In turn, the SHSP must consider the results of other State, regional, or local transportation and highway safety planning processes and Tribal planning processes and outcomes. These processes can inform the SHSP, particularly in terms of the roadway safety issues faced in local, regional, and Tribal areas.

In summary, the SHSP and the relevant transportation plans within a State should be developed in a cooperative process and have consistent safety goals and objectives that support a performance-based highway safety program.

Data-Driven Problem Identification

SHSPs must analyze and make effective use of State, regional, local, or Tribal safety data. States should use the best available safety data to identify critical highway safety problems and safety improvement opportunities on all public roads, including non-Stateowned public roads and roads on Tribal land.

NOTEWORTHY PRACTICE— OTHER SAFETY FACTORS

Several Maryland SHSP emphasis area teams identified road safety audits as a way to improve safety, which prevented duplication and linked the SHSP with the State's RSA program. Click here for more information.

Consideration of Additional Safety Factors

States also must consider additional safety factors when establishing their emphasis areas and strategies, such as the findings of Road Safety Audits (RSA), locations of fatalities and serious injuries, etc.



A Performance-Based Approach

SHSPs have been at the forefront of a performance-based approach since they were first required in 2005. SHSPs continue to support this approach by adopting performance-based goals, which are now required to be consistent with the safety performance measures established by FHWA in accordance with 23 U.S.C. 150 (these measures include five-year rolling averages for: number and rate of fatalities per million VMT; number and rate of serious injuries per million VMT; and number of nonmotorized fatalities and serious injuries) and are be coordinated with other State highway safety plans. SHSPs also should include multiyear objectives, which encourage monitoring of the status and progress of SHSP implementation efforts.

As part of the performance-based program, States also are required to set annual targets for safety performance measures to carry out the HSIP. The SHSP goals are not the same as the HSIP targets. However, the SHSP process provides an opportunity to establish longer-term goals and objectives, to which the annual targets can align. This provides consistency and direction across all safety plans and programs.

Use of Effective Strategies and Countermeasures

The SHSP describes a program of strategies to reduce or eliminate safety hazards, and high priority should be given to those strategies that can significantly reduce roadway fatalities and serious injuries in the SHSP emphasis areas.

Multidisciplinary—Addresses the 4 Es

The SHSP must address a variety of factors, including the highway safety elements of engineering, education, enforcement, and emergency services (the 4 Es). This can apply to both infrastructure and noninfrastructure emphasis areas.

Special Requirements

Legislation requires States to address two special rules in their SHSP updates. SHSP updates must now:

- Include the definition of "High-Risk Rural Roads."
- Include strategies to address older driver and pedestrian safety, if there has been an increase in fatalities and serious injuries to older drivers and pedestrians.

"One of the best things about getting involved with the SHSP is how much I have learned about other disciplines. When you work in one agency, it is not always possible to learn about what others in safety are doing. The multidisciplinary approach has given me insight into what law enforcement does and the many activities and programs on the behavioral side of safety. The SHSP broadens everyone's knowledge and understanding of the safety issue which leads to better decision-making overall."

Gretchen Chavez
California Department
of Transportation



"I was involved in my State's SHSP update process from the very beginning. This helped me to become familiar with their process and provide feedback along the way. It also helped me to use the SHSP process approval checklist to determine whether my State's SHSP process was consistent with HSIP legislation and regulations. Our State's **SHSP Program Manager** also referenced the checklist and found it very helpful during the SHSP's development. By the time the SHSP update was drafted we were both confident the SHSP had wide spread and multidisciplinary support and the process met all of the applicable requirements."

> Lance Johnson Safety Engineer Idaho FHWA Division

SHSP Update

States must update their SHSPs on a regular basis and no later than five years from the date of the previous approved version. As part of the SHSP update process, States must establish an update and evaluation cycle (or schedule).

SHSP Evaluation

At a minimum, States must evaluate their SHSPs as part of the States' regularly recurring SHSP update process. Regular evaluation, based on current safety data, confirms the validity of the emphasis areas and strategies. During SHSP development, States should pay particular attention to what will be measured (i.e., performance measures) and how progress will be determined. States should have in place mechanisms for regularly tracking SHSP implementation and monitoring progress.

Approval of SHSP Update

The FHWA Division Offices must approve the process States use to update their SHSP. They do not approve specific content. States must

submit to their State FHWA Division Administrator its updated SHSP, along with a detailed description of the process it used to update the plan. This information should be included as a section or chapter in the SHSP. In reviewing a State's SHSP update process, FHWA Division Offices use an SHSP Process Approval Checklist, which also can be found in the list of links below.

RESOURCES AND LINKS FOR SHSP PROGRAM REQUIREMENTS

Click here for guidance on the SHSP provisions.

Click here for SHSP Q&As.

For information on the HSIP and Safety Performance Measures ruling, click here.

For a copy of the FHWA SHSP Process Approval Checklist, click here.

SHSP TIP— UPDATE PROCESS

Depending on the complexity of the task, it can take between six months to a year to complete an SHSP update.

NoteworthyPractice— Tracking Tools

States are using a variety of methods to track progress on implementing the strategies and actions in the SHSP. Idaho has developed a tracking tool that includes a summary sheet on the objectives, strategies and actions.

Click here to read more about this practice.



Following is a list of useful resources that provide additional information on SHSPs:

- Champion's Guide to Saving Lives (Second Edition)—This
 document reviews the basic principles and important considerations
 concerning the development, implementation, and evaluation of a
 Strategic Highway Safety Plan (SHSP). It is intended as a resource for
 States to consult during examination of their SHSP process, as well
 during SHSP updates. Click here to view the report.
- Trainings—The FHWA Office of Safety's Roadway Safety Professional Capacity Building Web page includes courses, seminars, and workshops offered by the FHWA Resource Center and the National Highway Institute (NHI). There are two NHI courses targeted at the SHSP—SHSP Development and SHSP implementation. Click here to access this information.
- Noteworthy Practices—The FHWA Office of Safety has a Web page devoted to noteworthy practices, including those that affect SHSPs. Just visit the site, type in strategic highway safety plans in the search box and information on a variety of noteworthy practices is available. Click here to visit the site.
- **HSIP/SHSP Peer Exchanges and Reports**—The Office of Safety conducts peer exchanges around the country as a way to help States talk with other States facing similar issues. These peer exchanges often result in an event report that details the safety challenges encountered by many of their fellow agencies. Click **here** to view these reports.
- **Federal contacts**—The three main Federal agencies who are involved in the SHSP have a Division or Regional office that is available to offer assistance. Following are the links to the FHWA Division Offices which are located in every State, the 10 National Highway Traffic Safety Administration (NHTSA) Regional Offices, and the Federal Motor Carrier Safety Administration (FMCSA) Division Offices, which also are located in every State:
 - FHWA Division Offices.
 - NHTSA Regional Offices.
 - FMCSA Field Offices.
- State contacts—Click here for a list of all State departments of transportation. For a list of the State highway safety offices, visit the Governors Highway Association.

"One of the most effective tools to help us improve our SHSP process was a peer exchange. It was a one-on-one exchange where I could ask questions of my peers in real time and get answers. Another idea would be to invite another State that has gone through the process to be a job coach or mentor. Once you have built that relationship, it is rewarding and gives you the knowledge you need."

> Michael Schwendau Kentucky Office of Highway Safety



"The information that was most critical was being familiar with the previous plan. A lot of effort went into it with a large number of stakeholders who were already involved. It was important to get to know those partners and understand it was a statewide, collective effort, and not just PennDOT. It also was important to know the history behind the SHSP, the original legislative requirement, and the requirements from the most recent transportation bills."

Jeffrey Roecker Pennsylvania Department of Transportation

The SHSP Process

Start with the SHSP Fundamentals

Like any good process, the SHSP starts with **several fundamentals**, such as good leadership, collaboration, and effective communication. These fundamentals provide the foundation for the update process, but also ensure that you create a plan that can be successfully implemented and evaluated. These fundamentals are highlighted in the **SHSP**Implementation Process Model (IPM) and are summarized in the steps below. Many of these elements already may be in place for your SHSP and functioning well. In other cases you may have to make changes if the process is not as effective as it could be. The bottom line is an SHSP can only work if it has the proper support and is brought to life through action. The steps below will help to get you there.

Step 1—Ensure Adequate Leadership, Collaboration, and Communication

Successful SHSP development and implementation requires leadership, collaboration, and communication. In the complex, multidisciplinary world of the SHSP, leaders bring together the diverse interests and concerns of engineers, planners, law enforcement officers, education officials, emergency medical services personnel, and others. The following are elements that contribute to SHSP success:

- Champions—Champions provide enthusiasm and support for the SHSP and must be credible and accountable, have excellent interpersonal and organizational skills, and be a skilled expediter. Safety champions help secure the necessary leadership, resources, visibility, support, and commitment of all partners. Some examples include the Secretary or Director of the DOT, the head of the State Highway Safety Office, a legislator, or the Superintendent of the State Police or Highway Patrol.
- Leadership Committee(s)—Some States have both an Executive Committee and a Steering Committee that lead the SHSP. An Executive committee provides leadership for SHSP development, implementation, and evaluation. Steering Committees guides the SHSP process, and regularly reviews progress and receives updates on SHSP-related programs and projects. The Appendix includes a list of suggested members for both committees along with suggested roles and responsibilities. To encourage



leaders to participate in the SHSP, FHWA has developed an **SHSP Leadership Flyer** which details reasons why these officials should get involved.



Source: Cambridge Systematics, Inc.

• **Effective Organizational Structures**—The organization of the SHSP follows a fairly simple approach with the Executive Committee leading the effort, followed by the Steering Committee, and Emphasis Area teams. Some States also have a Data Team or Working Group that functions as a support for the overall plan.

PENNSYLVANIA'S EXECUTIVE LEADERSHIP

The Pennsylvania SHSP is developed under the guidance and direction of a Multi-Agency Safety Team (MAST), which includes leadership from various State agencies. These agencies signed a memorandum of understanding agreeing to support Pennsylvania's vision, mission and goal and implement the highway safety strategies for which they are responsible. In addition, the MAST supports the SHSP in a numerous ways, including: approving the SHSP prior to submission to FHWA; oversight of task action teams; preparing summary of achievements and successes for the Governor's Office; and evaluating the plan, initiating redirection of priorities, and requesting revisions to the plan.

• **Safety Partners**—Legislation provides a list of required stakeholders. This is just the minimum who should be involved. States have added other public- and private-sector agencies and organizations that meet their needs. Following is the required list:

"Most of the people who are participating are doing it on a volunteer basis so it is vital to communicate with them. It is important they know their time and expertise is valuable. Keep the participants in the loop or they drop off. Once a year we do a statewide summit. and include all of the partners, not just the decision-makers. It helps people realize they are gathering for a purpose to drive down deaths."

Lisa Losness Idaho Traffic Division/ Office of Highway Safety



- The Governor's highway safety representative;
- Regional and metropolitan transportation planning organizations;
- Representatives from the major transportation modes;
- State and local traffic enforcement officials;
- The Governor's highway-rail-grade crossing representative;
- Representatives conducting a motor carrier safety program;
- County transportation officials;
- State representatives of nonmotorized users;
- Motor vehicle administration agencies; and
- Other major Federal, State, Tribal, and local safety stakeholders.
- Collaboration and Communication with Your Stakeholders—
 Collaboration and communication is essential to getting and keeping a
 diverse group of stakeholders active and involved in the SHSP process.
 Collaborative problem solving means bringing people together to jointly
 develop solutions to difficult problems such as reducing traffic-related
 deaths and serious injuries. The FHWA SHSP Stakeholder Involvement
 Flyer provides information on the benefits of collaboration.

The SHSP document itself should clearly and concisely describe the State's safety problem and describe a program of priorities and strategies to reduce fatalities and serious injuries on all roadways in the State. Format also is important and should be discussed among the safety partners and the final format should be broadly supported among them. **The SHSP Preparation section** of the Champion's Guide to Saving Lives provides some useful recommendations.

ARIZONA'S STAKEHOLDER OUTREACH

In Arizona, the SHSP update process included an extensive statewide safety stakeholder outreach effort. Two major safety events and task force work sessions were conducted. The first major event was the Safety Launch, designed to bring together Federal, State, regional, local and Tribal transportation safety stakeholders from across Arizona. This was followed by a Safety Summit, in which stakeholders participated in three rounds of individual task force work sessions between and after the two major safety events. Each task force included industry and subject-matter experts and other transportation-safety advocates. These task forces worked to establish the SHSP Emphasis Areas and develop proposed strategies and action steps to improve safety. The **Arizona SHSP** has more information on the effort.



RESOURCES AND LINKS ON SHSP LEADERSHIP, COLLABORATION, AND COMMUNICATION

- Champion's Guide to Saving Lives (Second Edition)—This document reviews the basic principles and important considerations concerning the development, implementation, and evaluation of a Strategic Highway Safety Plan (SHSP). It is intended as a resource for States to consult during examination of their SHSP process, as well during SHSP updates.
- SHSP Implementation Process Model (IPM)—The IPM provides the
 essential eight elements and steps that will help States successfully implement their plan.
- SHSP Technical Assistance
 - FHWA Roadway Safety Peer-to-Peer Program—The Office of Safety offers free technical assistance on policy, program, and technical issues to State and local roadway agencies.
 - **FHWA Office of Safety**—The Office of Safety works to reduce the number of crashes on U.S. roadways and the severity of crash impacts.
 - FHWA Division Offices.
 - Strategic Highway Safety Plan (SHSP) Development Course—
 This course provides details on the steps States should take to develop their SHSPs.
 - Highway Safety Improvement Program (HSIP) Overview Course— This course is intended to provide a basic understanding of the purpose of the (HSIP) and relationship of HSIP programs, background on data collection and quality measures, and an overview of the HSIP processes for planning, implementation, and evaluation.
 - Strategic Highway Safety Plan Implementation Course—The Strategic Highway Safety Plan (SHSP) Implementation Course provides strategies and examples of SHSP implementation processes. It draws from the SHSP Implementation Process Model (IPM) and other sources to assist safety practitioners in managing SHSP implementation.

Step 2—Collect and Analyze Data

Using data to identify safety problems is fundamental to a successful SHSP. Just as development of the SHSP is a data-driven process, an effective implementation process also depends on appropriate use of data. The type of data for your SHSP includes:



"We know we have a really great document because it is 100 percent data driven which is something we can fall back on every time. The data showed us what to do. The SHSP is a great planning document that points to where we are going and why we are going there. It provides justification for the projects we are doing."

Emily G. Thomas South Carolina Department of Public Safety

- Crash data;
- Roadway data;
- Traffic data;
- Driver records;
- Vehicle registration;
- Injury surveillance;
- Citation, prosecution, and adjudication; and
- Other data such as demographics from the Census Bureau, data from insurance companies, etc.

Crash data is generated from reports from law enforcement officers and may be managed by the State law enforcement agency, State Highway Safety Office, or the Department of Transportation. Roadway data is maintained by the DOT; driver and vehicle records by Department of Motor Vehicles; injury surveillance by the Department of Health; and citation, prosecution, and adjudication data by the courts.

There are many uses for the data, such as:

- Description of the safety problem in the State;
- Selection of emphasis areas;
- Identification of strategies and action steps;
- Development of performance measures and measurable objectives for the plan;
- Identification of needed improvements; and
- Directing limited resources to the highest potential for reducing fatalities and serious injuries.

OHIO'S DATA FACT SHEETS

Ohio uses data to inform their SHSP emphasis areas and to educate SHSP stakeholders, public officials, and others about the SHSP. Emphasis Area Fact Sheets provide some general background information along with specific information on who is involved in the crashes, where and when the crashes occurred, and any contributing factors such as speeding, vehicle and crash type, etc. To view copies of these safety fact sheets, visit the **Ohio SHSP Web page** (go to Emphasis Area Pages, and click on the Safety Fact Sheet you want to view).



RESOURCES AND LINKS FOR DATA

- Fatality Analysis Reporting System (FARS)—FARS is a Nationwide census which provides data on fatal injuries suffered in motor vehicle traffic crashes.
- Traffic Records Coordinating Committee—The DOT Traffic Records
 Coordinating Committee (DOT | TRCC) is a multimodal group with members
 from FHWA, FMCSA, NHTSA, and RITA that works to improve the collection,
 management, and analysis of traffic safety data at the State and Federal level.
 Similar committees exist in each State and are usually managed by the
 Highway Safety Office.
- Applying Safety Data and Analysis to Performance-Based
 Transportation Planning—This guidebook provides State and regional
 planners with information on how to effectively use safety data and analy sis tools in performance-based transportation planning and
 programming processes.
- Data Technical Assistance
 - Crash Data Improvement Program (CDIP)—The CDIP is intended to provide States with a means to measure the quality of the information within their crash database. It is can provide States with metrics to measure where their crash data stands in terms of its timeliness, the accuracy and completeness of the data, the consistency of all reporting agencies reporting the information in the same way, the ability to integrate crash data with other safety databases and how the State makes the crash data accessible to users.
 - Roadway Data Improvement Program (RDIP)—The Roadway Safety Data Program works to improve safety data and expand capabilities for analysis and evaluation by providing tools and resources. A toolbox is available to help agencies find the appropriate tool based on their specific needs and capabilities.
 - NHTSA Traffic Records Assessment—NHTSA's assessments are peer evaluations of State traffic records system capabilities. Using the online State Traffic Records Assessment Program (STRAP), independent subject matter experts from State, local, and other areas examine State responses to a uniform set of questions and rate the responses against the ideal set out in the Traffic Records Program Assessment Advisory.
- FMCSA Analysis and Information Online (A&I)—A&I is FMCSA's online resource center for analytical data, statistics, recent studies, and reports on truck and bus safety.
- National EMS Information (NEMSIS) Web Site—NEMSIS is the national EMS database that includes data and information collected throughout the EMS system. Information is available on tools that are used, reports, etc.

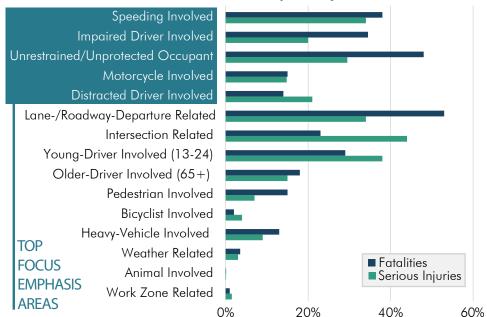


Step 3—Put Your Plan into Action

SELECT EMPHASIS AREAS

Each SHSP identifies the areas where they want to focus. These emphasis areas should be selected based on an analysis of available data and input from safety stakeholders representing the 4 Es of safety. Emphasis areas may change during SHSP updates based on the results of ongoing safety data analysis. Many States have found a fewer number of emphasis areas (usually between four and eight) helps direct efforts and makes the SHSP a more "strategic" and effective plan.

Percent of Total Fatalities and Serious Injuries By Crash Characteristic



Source: Arizona 2014 Strategic Highway Safety Plan.

To select emphasis areas, some States start with a list of emphasis areas identified in the Towards Zero Deaths: A National Strategy for Highway Safety or the American Association of State Transportation Officials Strategic Highway Safety Plan and then look at the number of traffic-related fatalities and serious injuries and select those areas with the greatest number as shown in the figure.

Other factors also can be used to select emphasis areas such as:

- Policy considerations such as a focus on nonmotorized transportation; and
- Areas that are showing increases above and beyond any increases in overall fatalities and serious injuries.



DETERMINE FATALITY AND SERIOUS INJURY MEASURABLE OBJECTIVES

Most States include in their SHSP measurable objectives for the statewide fatalities and serious injuries. We use the term objectives because that indicates the specific, measurable progress the State wants to achieve. Goals are broad, general statements that relate to the overall mission.

SHSP measurable objectives are not the same thing as the annual safety targets required for the HSIP and the HSP since the SHSP is a five-year plan. States, however, can use the SHSP process as a starting point for aligning the method used for establishing all objectives and targets. Since annual targets are updated more frequently than the multi-year SHSP objectives—and should take into account the impact of planned programs and projects—annual HSP and HSIP targets may deviate from the multiyear SHSP objectives.

Once the method is agreed upon (by the State Department of Transportation, State Highway Safety Office, and other SHSP stakeholders involved in developing annual targets, e.g., Metropolitan Planning Organizations), States can develop the fatality and serious injury objectives for the multiyear period of the SHSP.

Learn more in the **SHSP Guidance** in the section "A Performance-Based Approach."

States also may choose to set measurable objectives for each emphasis area. Setting these objectives can:

- Follow the same process that was used to set the overall fatality and serious injury objectives; or
- States can calculate what percentage of the overall fatality and serious injury each emphasis area represents and calculate the reductions accordingly.

SHSP TIP— SETTING OBJECTIVES

Here are some suggestions for setting achievable and measurable fatality and serious injury objectives:

- Use five-year rolling averages to even out the ups and downs in the numbers.
- Show stakeholders several options for the amount of reduction, for instance the percentage reduction if the goal is the AASHTO goal to halve fatalities by half by 2030, or the percentage reduction being used by the Highway Safety Office in their HSP. What works best for your SHSP?
- Make sure the objectives are SMART:
 - S Specific;
 - M Measurable;
 - A Achievable;
 - R Realistic; and
 - T Time Bound.



RESOURCES AND LINKS FOR IDENTIFYING MEASURABLE OBJECTIVES

- Safety Target Setting Final Report—This document reviews the role of transportation safety target setting in a performance management framework, summarizes the state of the practice in safety target setting, and presents a framework for developing or updating transportation safety targets.
- A Compendium of State and Regional Safety Target Setting Practices— This report documents State and regional safety targets, methods, data used, and target consistency. It contains a fact sheet on each State's and region's target setting practices.
- Safety Target Setting Peer Exchange—This report documents a peer exchange held in February 2013 with 10 transportation agencies to discuss safety target setting methods.
- Target Setting Literature Review—This document is a literature review of the
 role of target setting in a performance management framework and provides
 examples of national safety target setting.
- Urbanized and Nonurbanized Safety Target Setting: Final Report—This
 report reviews the role of transportation safety target setting in a performance management framework, summarizing the state of the practice in
 safety target setting and presents a framework for developing urbanized
 and nonurbanized safety targets.
- A Primer on Safety Performance Measures for the Transportation
 Planning Process—This Primer is a tool to help State and local practitioners,
 transportation planners, and decision makers identify, select, and use
 safety performance measures as a part of the transportation planning process.

SELECT THE STRATEGIES AND ACTIONS THAT WILL HELP YOU MEET YOUR SHSP GOALS AND OBJECTIVES

Strategies detail how the State will achieve each objective. If the objective is to reduce lane departures by 10 percent over the next five years, then what will the State need to do to achieve that reduction? One strategy could be to identify the most hazardous lane-departure locations in the State and reduce lane-departure crashes at those locations while another strategy could be to install rumble strips on principal arterials.

 The actions then detail what steps need to be taken to implement that strategy, i.e., obtain base line data, conduct road safety audits, conduct high-visibility enforcement campaigns, etc. Each action should include an action plan that provides more detail such as what agency or organization will take the lead on ensuring the action is implemented, what resources



are needed (staff, equipment), what is the timeline and budget, and what is the scope (statewide or a local/regional pilot). Action plans turn SHSP concepts and ideas into a reality that saves lives and prevents injuries.

VERMONT'S SHSP SUPPLEMENT DETAILS SHSP ACTIONS

Vermont has developed an SHSP Supplement, which acts as the work plan for the SHSP and outlines the framework that the Vermont Highway Safety Alliance (VHSA) and its safety partners will utilize to advance Vermont's safety initiatives. The Supplement includes action plans with a description of the actions for each individual strategy, along with the action plan champion, potential partners to assist in the implementation of the plan, and the targeted goal. 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 are developed in a collaborative process and reach across all disciplines of roadway safety (Education, Enforcement, Engineering, and Emergency Services).

For more information, go to the **Develop Emphasis Area Action Plans** section of the SHSP Implementation Process Model.

RESOURCES AND LINKS FOR STRATEGY SELECTION

- FHWA Office of Safety Proven Safety Countermeasures—The FHWA
 Office of Safety compiled this list of nine proven countermeasures to
 address crashes that occur in the focus areas of intersections, pedestrians,
 and roadway departure.
- NHTSA Countermeasures That Work—This publication is a basic reference to assist State Highway Safety Offices (SHSO) in selecting effective, evidence-based countermeasures for nine traffic safety problem areas:
 Alcohol- and Drug-Impaired Driving; Seat Belts and Child Restraints;
 Speeding and Speed Management; Distracted and Drowsy Driving;
 Motorcycle Safety; Young Drivers; Older Drivers; Pedestrians; and Bicycles.
- Motor Vehicle Prioritizing Interventions and Cost Calculator for States (MV PICCS)—CDC offers a new interactive calculator, called the Motor Vehicle PICCS (Prioritizing Interventions and Cost Calculator for States), pronounced "picks." This tool will help State decision makers prioritize and select from a suite of 12 effective motor vehicle injury prevention interventions. MV PICCS is designed to calculate the expected number of injuries prevented and lives saved at the State level and the costs of implementation, while taking into account available resources.



- NCHRP 500 Series: Guidance for Implementation of the AASHTO
 Strategic Highway Safety Plan Transportation Research—The National
 Cooperative Highway Research Program (NCHRP) has developed a series
 of guides to assist State and local agencies in reducing injuries and
 fatalities in targeted areas. The guides correspond to the emphasis areas
 outlined in the AASHTO Strategic Highway Safety Plan. Each guide
 includes a brief introduction, a general description of the problem, the
 strategies/countermeasures to address the problem, and a model implementation process.
- NCHRP 622: Effectiveness of Behavioral Highway Safety
 Countermeasures—The purpose of this report is to develop a roadmap for
 States, and a best practices guide for the use and assessment of behavioral
 countermeasures. All countermeasures that are used or could be used are
 considered and the cost and/or effectiveness is indicated when available.
- Toward Zero Deaths (TZD): A National Strategy on Highway Safety— Toward Zero Deaths is the United States' highway safety vision and is presented as the only acceptable target for the Nation, families, and individuals. The Web site includes information on the TZD Communication Plan, how to become a participant, and a video on how everyone's efforts are helping.
- FHWA Crash Modification Factors Clearinghouse—The Crash
 Modification Factor (CMF) Clearinghouse offers transportation professionals
 a central, Web-based repository of CMFs, as well as additional information
 and resources related to CMFs.

Step 4—Integrate the SHSP into Other Transportation and Safety Plans

Effective SHSP implementation leverages the resources of other transportation planning and programming activities. The SHSP can be integrated into existing transportation and safety planning processes, such as HSIP, HSP, Long-Range Transportation Plans (LRTP), Commercial Vehicle Safety Plans (CVSP), and Statewide Transportation Improvement Programs (S/TIP). This integration is important for improving overall safety coordination and linkages among the State, regional, local, and Tribal agencies and lead to a more comprehensive approach to transportation safety planning. It also ensures all agencies understand the key safety priorities.

NOTEWORTHY PRACTICE— PLAN INTEGRATION

Delaware integrates its SHSP with other State plans and programs by forming a committee of coordinating agencies; aligning goals and strategies; identification of roles and responsibilities for leading 4 Es strategies; and strengthened partnerships. Click here for more information on Delaware's process.



- Find your State's Highway Safety Plan (HSP)—The HSP is the document that is developed annually by the State Highway Safety Office and details what programs and activities the State will be conducting in the coming fiscal year. A companion Year End Report provides information on how well the State met the goals and objectives in the HSP.
- Access your State's HSIP Annual Report, which describes the progress being made to implement highway safety improvement projects; assesses the effectiveness of those improvements; and describes the extent to which the improvements have contributed to reducing fatalities and serious injuries on all public roads.
- Learn more about the Motor Carrier Safety Assistance Program (MCSAP)
 and State Commercial Vehicle Plans (CVSP). MCSAP is designed to help
 commercial vehicle carriers and drivers improve their safety performance, and
 CVSPs outline what strategies and actions will be taken to reach that goal.

Step 5—Market Your Plan

Marketing is the process for creating, communicating, delivering, and exchanging information about your SHSP to the public, to safety stakeholders, and to elected officials. Marketing benefits SHSP implementation efforts in several ways: it increases awareness of the SHSP goal to reduce traffic-related fatalities and serious injuries; educates key political leaders on their role in saving lives; and helps address those SHSP elements that require behavior change. Marketing the SHSP can involve the creation of a separate SHSP Web site, an SHSP Web page on the State's DOT Web site, a link to a TZD type of Web site, a Facebook page, newsletters, electronic bulletins, tweets, etc. Learn more about marketing your SHSP.

LOUISIANA MARKETING AND COMMUNICATION

Louisiana uses a variety of methods to market their SHSP. The have a Destination Zero Deaths (DZD) Web site which features the SHSP and all plan related activities, a Destination Zero Deaths Facebook page, a Twitter account, and they publish a quarterly newsletter that is delivered to all SHSP stakeholders. The State also has formed a Communications Coordinating Council that involves representatives from the SHSP Steering Committee, the nine regional safety coalitions, and experts at marketing and public relations from various State and local agencies. The group meets quarterly and has developed a Communications Plan to help market the SHSP and assist in implementing SHSP strategies and actions that focus on marketing. For more information, visit the **DZD Web site.**

Step 6—Evaluate Your Plan

Today all States are implementing SHSPs, and some are asking questions about SHSP effectiveness, e.g., which elements work well and which do not meet expectations. An organized approach to evaluation helps answer some basic questions such as:

- Are we doing things right, i.e., did we do what we said we were going to do?
- Are we doing the right things, i.e., are we making a difference?
- How can we improve?

SHSP TIP—TYPICAL EVALUATION MEASURES

- Fatalities;
- · Serious injuries;
- Behavior changes; and
- Knowledge gains.

In addition, regularly recurring evaluation is a requirement of the HSIP to ensure the accuracy of data and proposed strategies. This is because safety improvements depend on a program of data-driven priorities and proven effective strategies. Evaluation helps States achieve such a program by analyzing SHSP process and performance and determining whether current activities deserve enhancement, revision, or replacement.

Evaluation is intended to take the place of trial and error, guesswork based on anecdotal evidence, and intuition. Evaluation helps States assess the progress of their SHSP and identify opportunities for improvement. The results can help strengthen the SHSP process and performance and in so doing improve the State's transportation safety.

Elements of SHSP evaluation already are in place in many States; however, additional benefits can be realized by organizing and institutionalizing these elements into a comprehensive program evaluation, as outlined

NOTEWORTHY PRACTICE — EVALUATION RESULTS

The Nevada SHSP compiles their SHSP evaluation results into an Annual Report, which shows progress for their performance measures and supporting data. Click **here** for more information.

in the SHSP Evaluation Process Model (EPM). Program evaluation looks at the overall SHSP. It can identify where SHSP and emphasis area goals are met or unmet and point toward likely strengths or shortcomings, i.e., the failure to implement certain strategies or the identification of strategies not having the expected effect. The EPM can help States address the evaluation requirement as well. Learn more about conducting an SHSP evaluation in the **SHSP EPM**.



RESOURCES AND LINKS FOR SHSP EVALUATION

SHSP Evaluation Process Model (EPM)—The EPM assists States with conducting a program evaluation of their SHSP. Program evaluation looks at the overall SHSP process, helping States assess how they develop, manage, and implement their SHSP. It also examines the SHSP's performance and identifies if goals and objectives are being met. The EPM will help States answer basic questions of program evaluation, such as: What are we trying to do? How well are we doing it? How can we improve?

Traffic Safety Performance Measures for States and Federal Agencies—This publication contains a minimum set of performance measures to be used by State and Federal agencies in the development and implementation of behavioral highway safety plans and programs.

The Art of Appropriate Evaluation—This guide describes the benefits of evaluation of provides an overview of the steps involved.

Connect With Your SHSP Community

You have been given a lot of information, resources, and links to more information. If you visit the **SHSP Community of Practice**, you will find it all there too! You also can visit **FHWA's SHSP Web page**. Make sure to bookmark these sites.



Source: U.S. Department of Transportation Federal Highway Administration.

The SHSP Community of Practice (COP) is an online community for SHSP practitioners and stakeholders who represent the 4 Es of safety (engineering, enforcement, education, and emergency services/response). Here you will have the opportunity to learn about the latest SHSP resources, noteworthy practices, and events as well as interact with peers on SHSP-related issues through the Safety Talk discussion Forum.

SHSP TIP— JOIN SAFETY TALK

Safety Talk is an online SHSP discussion forum dedicated to sharing strategies and approaches for updating, implementing, and evaluating SHSPs. Safety Talk membership is by invitation. If you're not already registered, contact Jennifer Warren and ask to be a member!

Jennifer.Warren@dot.gov (202) 366-2157



Appendix

- A. Suggested Membership for Executive Committees and Example Roles and Responsibilities
- B. Suggested Membership for Steering Committee and Example Roles and Responsibilities



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A. Suggested Membership for Executive Committees and Example Roles and Responsibilities

Members

- Secretary/Director
 - Department of Transportation
 - Department of Public Safety
 - Department of Health
 - Department of Motor Vehicles
 - Emergency Medical Services Authority
- Commissioner/Superintendent State Police
- Chair, State Police Chiefs Association
- Federal Agency Representatives (FHWA, NHTSA, FMCSA)

Roles and Responsibilities

- Establish SHSP policies and procedures, review progress, provide advice and guidance, address challenges, and remove barriers;
- Provide support and assistance to specific SHSP strategies;
- Encourage collaboration among the agencies and stakeholders;
- Align agency with the SHSP's goals and objectives;
- Recommend and designate safety professionals for the Steering Committee and Emphasis Area Teams;
- Communicate information about the SHSP within agencies and in public forums; and
- Share progress on safety initiatives.



B. Suggested Membership for Steering Committee and Example Roles and Responsibilities

Members

- Department of Transportation
- Department of Public Safety
- Department of Health
- Department of Education
- Department of the Judiciary
- Department of Motor Vehicles
- Highway Safety Office
- State Police
- State Police Chiefs Association
- Alcoholic Beverage Control
- Emergency Medical Services
- Municipal League
- County Engineers Association
- State Trucking Association
- Metropolitan and Regional Planning Organizations
- Pedestrian/Bicycle Coordinator
- Railway Highway Crossing Representative
- Tribal Representatives
- Federal Agencies (FHWA, NHTSA, FMCSA)



Roles and Responsibilities

- Provide assistance, when appropriate to overcome barriers or solve problems;
- Identify problems or barriers and report to the Executive Committee;
- Make recommendations for decisions needed by the Executive Committee;
- Discuss action step implementation progress and coordinate next steps;
- Suggest new actions or modify existing actions as needed;
- Continually track and report progress;
- Evaluate the effectiveness of strategies and actions to ensure they are contributing to decreases in fatalities and serious injuries;
- Receive updates on SHSP-related campaigns, trainings, or other programs; and
- Provide guidance on future programs, activities, etc.



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