The Essential Eight

**Fundamental Elements and Effective Steps
for SHSP Implementation**

The draft Strategic Highway Safety Plan (SHSP) implementation process model (IPM) is now available. The IPM is a collaborative effort among several states, the Federal Highway Administration (FHWA) Office of Safety, the FHWA Office of Planning, the National Highway Traffic Safety Administration (NHTSA), and the Federal Motor Carrier Administration (FMCSA), and other national safety stakeholders. The model describes the following fundamental elements and steps for SHSP implementation:

This IPM was developed based on reviews of related plans and practices; extensive interviews with a range of SHSP stakeholders from six model states, including representatives from departments of transportation, highway safety offices, motor carrier staff, metropolitan planning organizations, local stakeholders, and others; and the combined knowledge and expertise of the project team.

The second phase of the project began on April 14-15, 2009, with the kickoff of a six-month pilot of the IPM by ten states to test its feasibility and obtain feedback. Additional input has been gathered from a review panel representing other states and national organizations. The IPM will be updated based on results of the pilot and input from the review panel, with final publication expected by late spring of 2010. We are making this draft version available and encouraging all states to use the information, ideas, and suggestions in it and to share lessons learned with us.

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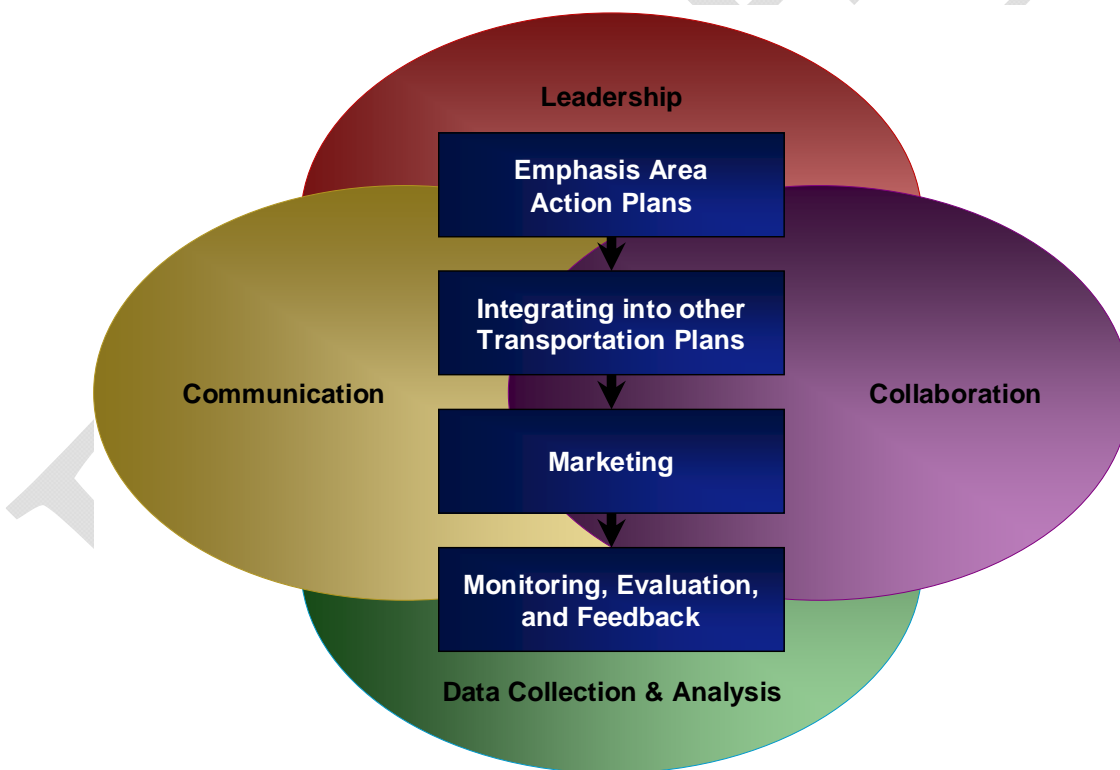
A Strategic Highway Safety Plan Implementation Process Model

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The Strategic Highway Safety Plan
Implementation Process Model

■ Introduction

The Federal Highway Administration (FHWA) in collaboration with partners at the Federal (e.g., the National Highway Traffic Safety Administration (NHTSA), and the Federal Motor Carrier Safety Administration (FMCSA)) state, and local levels is leading the effort to implement Strategic Highway Safety Plans (SHSPs) across the nation. To assist states with this task the partners researched noteworthy practices and incorporated them into an SHSP Implementation Process Model (IPM). The IPM is an implementation guide primarily based on research and the experiences of several "model" states as well as the knowledge and experiences of subject experts.

> SHSP implementation must be a consideration from the very start of the planning process. Data analysis, emphasis areas, action planning, and other activities should all be based on a solid understanding of implementation potential and requirements.

■ Background

FHWA together with other safety partners provided SHSP development guidance in **A Champion's Guide to Saving Lives.** Most states followed some or all of the following steps:

- Gain Leadership Support and Initiative
- Identify a Champion
- Initiate the Development Process
- Gather Data
- Analyze Data
- Establish a Working Group
- Bring Safety Partners Together
- Adopt a Strategic Goal
- Identify Key Emphasis Areas
- Form Task Groups
- Identify Key Emphasis Area Performance Based Goals
- Identify Strategies and Countermeasures
- Determine Priorities for Implementation

To prevent the devastating human and economic consequences of traffic crashes, the American Association of State Highway and Transportation Officials (AASHTO) published an SHSP in 1998 and encouraged the states to develop evidence-based SHSPs addressing the appropriate emphasis areas in the AASHTO plan. Some of the states had already produced an SHSP and others began work after the AASHTO plan was published. With passage of the Safe, Accountant, Flexible, Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) in 2005 state SHSPs became a requirement, and today all States have an SHSP.

The SHSP is a data-driven, comprehensive, multidisciplinary plan integrating the 4 E's of safety – engineering, education, enforcement, and emergency medical services. It establishes statewide goals, objectives, performance measures, and emphasis areas and is developed in consultation with Federal, state, local, and private sector safety stakeholders. All states are implementing SHSPs, and many are experiencing remarkable results.

■ Implementation Process Model Methodology

The IPM identifies model practices and processes that support SHSP implementation. This is not to suggest that one size fits all; each state should review the model elements and determine which are useful for overcoming barriers and implementing its SHSP more effectively. Successful SHSP implementation will result in transportation safety improvements that save lives and reduce injuries.

The IPM is based on wisdom gained through developing and implementing *The Champion's Guide for Developing Strategic Highway Safety Plans* and reviewing practices of "model" states selected because of their success in implementing one or more elements of the SHSP as well as their range in geography, demographics, funding/spending levels, etc. Extensive interviews with leaders and champions from "model" states, and in-depth examination of statewide and metropolitan transportation plan and program documents, highlighted examples of the exemplary approaches and noteworthy practices these states are using to implement their SHSPs.

■ IPM Elements

Chapter 1 presents an overview of the essential eight elements of the IPM – the four fundamental requirements and the four steps for successful SHSP implementation. Chapters 2 through 7 provide in-depth discussions of each element including a description or definition, the rationale supporting its inclusion in the model, and a range of implementation strategies, actions, and process techniques. Specific roles and responsibilities of the various safety stakeholders, i.e., planners, engineers, law enforcement personnel, educators, and emergency medical services personnel are described where appropriate.

> ### The Essential Eight
>
> The "Essential Eight" refer to the four fundamental elements and the four steps for successful SHSP implementation.
>
> *Fundamental Elements*
> - Leadership
> - Collaboration
> - Communication
> - Data Collection and Analysis
>
> *Steps for Implementation*
> - Emphasis Area Action Plans
> - Linkage to Other Plans
> - Marketing
> - Monitoring, Evaluation, and Feedback

The IPM suggests successful implementation requires collaboration, communication, and leadership (Chapter 2); data collection and analysis (Chapter 3); emphasis area action plans (Chapter 4); SHSP integration into other transportation plans and programs including the statewide and metropolitan Long-Range Transportation Plans (LRTP) and Transportation Improvement Programs (S/TIP), Highway Safety Improvement Program (HSIP), Highway Safety Plans (HSP), and Commercial Vehicle Safety Plans (CVSP) (Chapter 5); a marketing plan (Chapter 6); and monitoring, evaluation, and feedback to the planning and implementation process (Chapter 7). The chapters provide an overall framework along with specific examples states may utilize to support and enhance implementation efforts.

■ Using the IPM

#

Case Study Title

Readers should review the first chapter to identify strengths and weaknesses in their own implementation activities. Subsequent chapters describe the elements and discuss how to implement them. Traffic symbols in the left hand margin (see example here) refer to case studies relevant to the IPM discussion. The case studies are documented in Appendix A.

Each chapter also includes a summary list of key strategies and a series of questions for users to assess their implementation efforts. Helpful recommendations and procedures are identified throughout the guide; however, users can also turn immediately to chapters related to specific areas where their implementation efforts are stalled or not yet started.

For example, if users identify "disconnects" between the SHSP and the HSIP, they can refer directly to Chapter 5 to see where the most beneficial integration can occur. Becoming familiar with how the SHSP is integrated into the HSIP process is the first step to establishing collaboration among people working within both processes.

To effectively manage transportation safety improvement efforts and to attract safety funding and other resources, progress must be measured and tracked over time. Chapter 7 of the IPM can help develop methods to assess ongoing progress at the state and metropolitan planning organization (MPO) levels. Demonstrated progress based on crash and other safety data will help make the case for continuing and increasing financial and institutional support for programs devoted to saving lives and reducing injuries.

Chapter 1 – The SHSP IPM

The development and implementation of the SHSP breaks new ground in the safety arena because multidisciplinary, multimodal, and collaborative relationships have not been standard practice in the past. The pioneering efforts of states over the past few years have brought to light elements that consistently appear in effective implementation practices. At least four fundamental elements support all SHSP implementation practices: leadership, collaboration, communication, and data collection and analysis. Effective use of these elements is essential for moving forward on the following steps:

1. Developing emphasis area action plans;

2. Integrating the SHSP into other transportation and safety plans;

3. Developing a marketing strategy; and

4. Monitoring progress, evaluating results, and establishing a feedback loop to ensure SHSP adjustments and updates are continually incorporating experiences and lessons learned.

Figure 1.1   Elements of the SHSP IPM
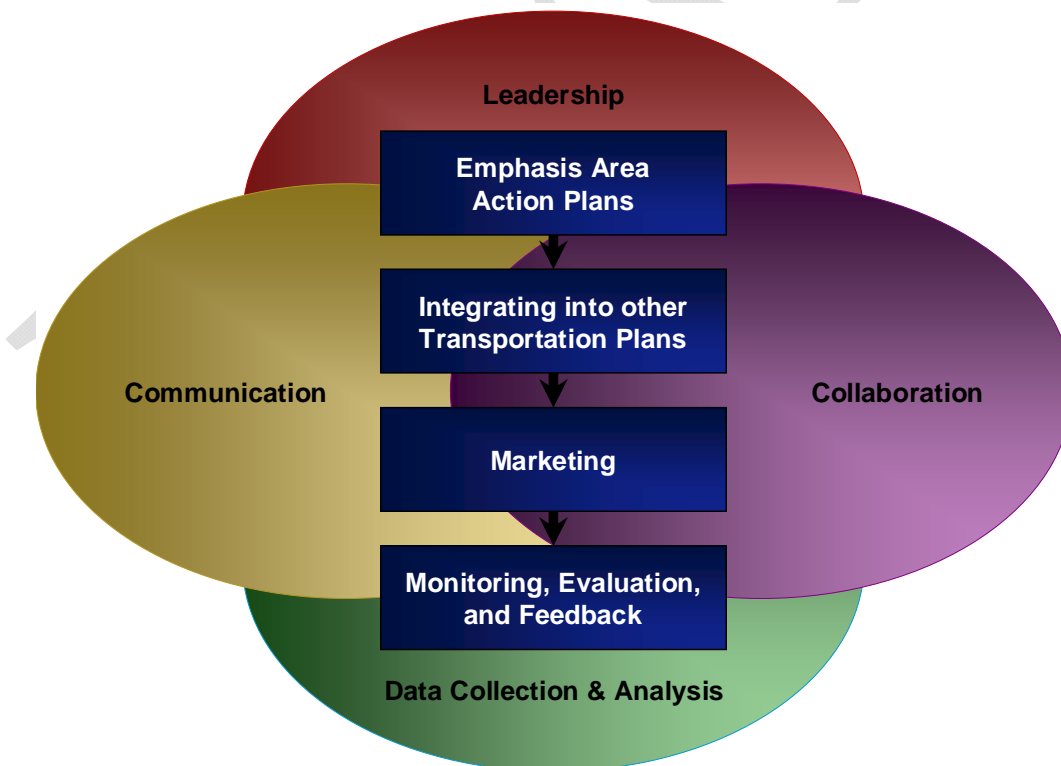
■ Fundamental Elements

Identify Effective, Inspired Leadership

Sustained, visible, and committed leadership is fundamental to a successful SHSP implementation process. Leaders recognize the SHSP as a long-term, ongoing process that changes how safety partners interact and collaborate to create and manage effective safety programs.

Leaders are responsible for influencing policy direction, setting priorities, and defining performance expectations for agency staff; influencing the way partner agencies respond to SHSP requirements; affecting time and resource allocation; managing interagency relationships; and establishing accountability for actions and outcomes.

Leadership Roles

SHSP development revealed three fundamental leadership roles important for SHSP implementation. As SHSP implementation becomes more far reaching and complex, the roles may be assumed by different people with varying levels of authority and even different agencies.

- **Role 1 –** These leaders have access to resources and "position power"; in other words, they may not be involved in the day-to-day management responsibility for program development and implementation but they are able to "move mountains" in terms of resource allocation and policy support.

- **Role 2 –** These leaders inspire others to follow their direction. They are often referred to as "Champions" in the overall SHSP course of action. Champions are people who provide enthusiasm and support to SHSP implementation; have excellent interpersonal skills; are expediters; are credible and accountable; tend to be subject matter experts; and are highly respected within their own agencies and in the safety community.

- **Role 3 –** These leaders are often known as program managers, and their activities keep the implementation process on track. They manage the process and attend to the day-to-day tasks of arranging, facilitating, and documenting meetings, tracking progress, and pushing discrete activities through to completion.

In some cases, a single person may fulfill all these roles, but it is more often the case that multiple people assume these responsibilities.

Where possible, states should establish SHSP leadership through the Governor, the state's highest executive office. This sends a clear message to all agencies regarding the importance of highway safety and the need to address it in state programs and policies. It also establishes a basis for prioritizing available funding to support transportation safety among all partner agencies. Leadership can also be established through institutionalized partnerships between the Department of Transportation (DOT), the State Highway Safety

Office (SHSO), and other partner agencies, as appropriate. As the lead agencies responsible for SHSP implementation, the partnership provides leadership and ensures the traditional safety-funded programs are driven by the SHSP. The partnership also institutionalizes the continuity necessary to sustain safety efforts through changes of administration and personnel.

Establish a Collaborative Process

The SHSP development process established a broad-based collaborative process among many agencies and organizations. This internal and external collaboration remains necessary for effective SHSP implementation. Collaborative relationships among safety partners are fundamental to the implementation process because the responsibility for addressing the wide range of programs and disciplines that can improve transportation safety falls upon many participants. States can facilitate internal collaboration through agency policies and procedures and support external collaboration through inter/intra-agency communication with safety partners. Establishing collaborative arrangements where partners regularly work together builds trust and understanding. These collaborations help expand the initiative to the broader safety community and foster widespread understanding and supports for safety priorities.

Collaboration results in a wiser use of limited resources and may facilitate leveraging additional resources to achieve a broader range of program objectives. For example, multiple agencies may have responsibilities that involve the use of crash data. Collaboration among these agencies and individuals is imperative to effectively support crash data collection and analysis and minimize duplication of effort. Solutions arrived at collaboratively among several agencies and data users result in improved processes, opportunities to apply innovative approaches, and cost-sharing among the agencies. Collaboration on SHSP projects also brings new partners and further expands resources to assist with SHSP implementation.

Create Effective Communications Mechanisms

One of the challenges facing states as they move forward is the majority of stakeholders have existing full-time jobs requiring their time and attention. These stakeholders need to know "what's in it for them" to sustain their interest and involvement and to enable effective ongoing communication. Describing the vital role each safety stakeholder plays in the SHSP implementation process, as well as the benefits they will receive by participating, builds buy-in and ownership. Conducting regular meetings where stakeholders report on progress, offer opinions on SHSP programs and activities, identify opportunities, solve problems, and celebrate successes builds transparency into the process and establishes and maintains effective communication.

Internal communication also is essential within organizations and agencies responsible for SHSP implementation. The existence of institutionalized communication mechanisms to support information sharing among technical and senior staff facilitates decision-making and enables agencies to be more effective.

Collect and Analyze Data

The purpose of a data-driven process is to direct resources to projects and programs with the greatest potential impact. The strength of the SHSP lies in a state's ability to identify and analyze safety data. Just as data were analyzed to identify problem locations and behaviors during the SHSP development phase, data analysis is critical for prioritizing countermeasures, evaluating results, and updating the plan. Data analysis reveals reductions in fatalities and serious injuries that may result from safety programs and countermeasures. By combining these benefits with other considerations such as cost and resource availability, a more effective prioritization of projects, programs, and resources can be achieved.

■ Steps for Implementation

Develop Emphasis Area Action Plans

SHSPs are implemented through the objectives, strategies, and action plans developed for each emphasis area. Multidisciplinary emphasis area action planning teams, representing various agencies and differing perspectives, result in a stronger more robust safety program, and also keep the stakeholders involved and interested. The needs and priorities of various agencies should be taken into account to ensure they have a stake in the SHSP and a commitment to its implementation.

A good action plan describes in detail how each of the strategies will be accomplished through a series of action steps. It identifies the responsible persons and agencies and includes performance measures, deadlines, evaluation criteria, and resources, including, where appropriate, funding sources.

Integrate the SHSP Into Other Transportation Plans and Programs

Statewide and metropolitan LRTPs and TIPs, HSIPs, CVSPs, HSPs, and other plans contribute to the success of the SHSP. Establishing SHSP integration into these plans and programs advances the safety agenda because the plans reflect statewide priorities (e.g., they support the SHSP which is the primary expression of statewide safety priorities), provide a blueprint for action for key agencies, and influence resource distribution. A brief description of SHSP integration with each plan or program is provided below.

Long-Range Transportation Plan (LRTP) – LRTPs identify transportation goals, objectives, needs, and performance measures over a 20- to 30-year horizon and provide policy and strategy recommendations for accommodating those needs. Integrate the SHSP into the LRTP by ensuring transportation safety is *explicitly* addressed within the scope of the statewide and MPO long-range transportation planning processes.

Statewide and Metropolitan Transportation Improvement Program (S/TIP) – S/TIPs, developed by the states and MPOs, are capital programming documents. These programs

are resource constrained and identify projects and funding that reflect society's mobility, operational, and safety needs. Therefore, they should support the emphasis areas and strategies in the SHSP.

Highway Safety Improvement Programs (HSIP) – The purpose of the HSIP is to achieve a significant reduction in the occurrence of and the potential for fatalities and serious injuries resulting from crashes on all public roads through the implementation of infrastructure-related highway safety improvements. This is accomplished through a data-driven program consisting of planning, implementation, and evaluation components. The HSIP also includes the Rail Highway Grade Crossing and High-Risk Rural Roads set-aside programs. SHSPs can be used as decision-making tools to select and prioritize HSIP investment decisions.

Highway Safety Plan (HSP) – HSPs address behavioral safety areas (e.g., occupant protection, impaired driving), police traffic services, emergency medical services, motorcycle safety, as well as traffic records and other program areas. The HSP is an annual plan identifying program activities supported by Federal funds targeting identified highway safety problems, including traffic safety law enforcement, media and public education, prosecution and adjudication, training and many other activities designed to reduce motor vehicle crash-related injuries and fatalities. The emphasis areas of the SHSP should be in sync with those of the HSP.

Commercial Vehicle Safety Plan (CVSP) – CVSPs are designed to reduce the number and severity of crashes and hazardous materials incidents involving commercial motor vehicles (CMV), and may include many of the behavior safety elements in the SHSP.

Develop a Marketing Strategy

Marketing the SHSP to individuals inside and outside the transportation community builds support for what the SHSP is trying to achieve and sustains momentum. Marketing is also a way to broaden the reach of the SHSP to individuals, such as public information officers, who may not participate in implementation activities on a regular basis. Since improving transportation safety is not based solely on modifications to the roadway, but also involves changing the behavior and attitude of individuals, marketing outreach is essential.

Developing and implementing the SHSP is a ground-breaking effort, and as such, should be recognized for its impact on reducing traffic-related fatalities and injuries. Good SHSP marketing strategies include, among other things, news events, web sites, newsletters, and a branding theme or unique identity to make the SHSP easily recognized and remembered.

Monitor, Evaluate, and Provide Feedback

Monitoring, evaluation, and feedback are essential steps for any strategic planning process. They are especially important because most SHSPs have only been developed in the past few years and states are now gaining initial experience in their implementation. Institutionalizing lessons learned in these early implementation efforts improves the efficiency of future efforts.

Comprehensive action plans identify the parties responsible for implementing action steps and include performance measures and deadlines. Knowing these elements supports tracking progress. SHSP implementers should establish a monitoring process and assign responsibilities for updating the information frequently. An evaluation process should be developed early to ensure appropriate data are collected for evaluating both the overall program and individual projects. Finally, a feedback loop should be incorporated into the plan to ensure 1) leadership and stakeholders are informed; 2) information is regularly used to make course corrections as implementation takes place; and 3) SHSP updates are based on solid evaluation results.

The following chapters provide details and noteworthy practices on the Essential Eight elements of the SHSP IPM. States began addressing the fundamentals (e.g., leadership, collaboration, communication, and data collection and analysis) and directing efforts towards the steps for implementation (e.g., developing emphasis area action plans; integrating the SHSP into other transportation plans; marketing the SHSP and related safety efforts; and monitoring, evaluation, and feedback) during the SHSP development process. Continuing those practices will lead to sustainable, results-driven safety programs that work.

Each state will implement the SHSP according to the available opportunities and resources. Models are representations or ideal states; hence, all parts of the model may not work or be necessary for all states. However, the IPM includes "take-aways" for everyone; hence, states should use the pieces that work best for them.

Chapter 2 – Leadership, Collaboration, and Communication

Successful SHSP development and implementation requires the fundamental elements of leadership, collaboration, and communication. The interaction or synergy of these elements results in an outcome far greater than would be accomplished by focusing efforts on just one aspect. 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. How these groups work together defines collaboration and the way collaborative relationships are established and maintained.

Inherent in the word "leader" is the idea of followers – a leader is someone capable of motivating others to follow. The word leader also implies direction – leaders inspire others to action or to do things differently. Some leaders hold formal positions of authority and some do not. All leaders have the ability to set direction and inspire others to follow them. Leaders are risk takers, problems solvers, and creative thinkers, committed to doing what is necessary to advance the cause, which sometimes means breaking traditional institutional barriers. These attributes are essential for SHSP implementation.

2-1

SHSP Operations Manager

Leaders are needed not just at the top, but also throughout the SHSP implementation effort. As noted in Chapter 1, at least three leadership roles are involved in SHSP implementation – leaders who have access to resources and "position power"; champions or individuals who inspire others to take action; and managers who focus on the nuts and bolts of day-to-day SHSP implementation

Leaders communicate the vision, goals, and objectives and support a collaborative framework that enables safety stakeholders to actively participate in SHSP programs and activities.

The beauty of the SHSP is in its multidisciplinary character. In their book, *Quality or Else; The Revolution in the Business World*, Lloyd Dobyns and Clare Crawford-Mason say, "It is not a question of how well each process works, the question is how well they all work together." SHSP implementation is not about how well planners conceptualize the transportation system, engineers design the roadway, police officers enforce the law, drivers are educated about proper driving behavior, or emergency medical services personnel respond to crashes. It is about how well these groups work together to improve safety.

The diversity of the safety field, the importance of coordination among disciplines, and the need to advance safety among a host of competing public sector priorities all contribute to the need for strong SHSP leadership. Leaders are important in every phase of the SHSP, but especially during implementation when maintaining momentum and interest is more difficult.

SHSP implementation is a long-term, ongoing process designed to change how safety partners conduct business, interact with each other, and manage safety programs – a tall order for any plan, but particularly in the safety arena where groups have traditionally

worked together only in certain limited instances. These challenges can be met through effective leadership, a collaborative framework, and clear communication about expectations.

Effective SHSP implementation involves the fundamental elements of leadership, collaboration, and communication. These elements, incorporated to some degree during the SHSP development process, should continue and be strengthened during the implementation process.

Ensuring Strong Leadership

Strong leadership can be exerted through a high-level executive committee with state and local participants that meet periodically to solve problems, remove barriers, track progress, and recommend further action. Many states established this type of committee during the SHSP development process and continue its function during implementation. Incorporating safety collaboration performance objectives into the position descriptions for individuals involved in the SHSP, e.g., champions, engineers, planners, etc., is one way to support this function. Another method involves leaders providing funding support for SHSP projects. The SHSP Leadership Team decides which projects are funded based on input from the emphasis area task teams, and prioritizes them based on benefit/cost, expected fatality reductions, and the extent to which projects address SHSP emphasis areas.

2-2

SHSP Project Seed Money

As with any committee or group, maintaining interest and activity is a challenge. Leaders want to feel their input is valued and more importantly needed. They are decision-makers so meetings should focus on problem solving and seeking advice and guidance.

A working group or steering committee comprised of technical staff performs many of the implementation tasks. In some cases, the working group members may be the leaders of the various SHSP emphasis area teams discussed in Chapter 4. These people provide leadership by overseeing the implementation of SHSP strategies and action steps. Team leaders mirror the multidisciplinary nature of the SHSP and represent the various disciplines.

SHSP champions provide leadership because they are enthusiastic supporters of SHSP implementation. These individuals are credible, accountable, and have excellent interpersonal and organizational skills. Champions ensure commitment and participation from a full range of safety partners and may be appointed either by the DOT leadership or by the primary sponsoring agency.

All agencies and organizations undergo staff changes, and it is essential to train the leaders of tomorrow to ensure the focus on safety continues into the future. Assign leadership responsibilities for program implementation and ensure all staff has opportunities to engage and lead during meetings and other initiatives.

Establishing a Collaborative Process

2-3

Collaborative Problem Solving

Dramatic improvements in roadway safety are more likely to result from a collaborative effort among the 4 E's of safety (engineering, enforcement, education, and emergency

medical services) than from efforts within a single discipline. The need for multidisciplinary solutions necessitates collaboration. Research suggests the results of interdisciplinary team efforts are greater in scope and value than results from individual professionals working in isolation.

SHSP partners typically include the DOT; the SHSO; departments of public safety (state police or patrol), emergency medical services, heath, and education; the Motor Carrier Safety Assistance Program (MCSAP) managers; Federal partners (FHWA, FMCSA, and the NHTSA); local agencies; Tribal governments; special interest groups; and many other organizations.

2-4

Motor Vehicle Administration Partner

Since the SHSP covers all public roads, some states involve leadership from MPOs and associations that represent county/city governments. Local Technical Assistance Programs (LTAP) support local highway agencies by transferring highway technology from FHWA, the state DOT, and universities to local transportation agencies through workshops and other training mechanisms. Some states have actively involved the LTAP on their working/ steering committees. University Transportation Centers can serve as a resource in transferring technology and information on the SHSP to local agencies and partners.

2-5

Emergency Medical Services Partner

2-6

LTAP Support to Local Agencies

The various agencies and organizations involved in the SHSP bring unique and valuable perspectives to bear on the roadway safety problem. Their competing philosophies, worldviews, and problem solving approaches, however, can make collaboration difficult. Creating a basic foundation for effective collaboration and establishing a process to support collaborative efforts are techniques that help overcome these barriers.

2-7

Technical Support to Local Agencies

A basic foundation for collaboration includes incorporation of SHSP goals, mission statements, and safety targets into the priorities of each stakeholder agency. It can be further supported by defining the agencies or organizations responsible for implementing specific strategies and action steps in the plan. A memorandum of understanding (MOU) is a useful tool for institutionalizing the process. States with existing MOUs can review them to determine if any updates or changes should be made. MOUs also help build sustainability. As stakeholders change and new partners come on board, commitment on the part of all agencies can be reaffirmed by updating the MOU.

2-8

State Safety Charter

Creating Communications Mechanisms

Collaboration occurs when the vision, mission, and goals of the SHSP are clearly and continually communicated to all involved partners and stakeholders. Formal communication methods include meeting reports, media events, newsletters, presentations at safety conferences, etc.

2-9

Electronic Communication System

Communication can also be informal and involve blogs, list serves, chat rooms, web sites, and periodic e-mail blasts that encourage greater interaction, and provide progress updates, information on recent research, or ask for assistance from fellow partners and stakeholders. The information need not be lengthy or complicated, but regular updates remind all stakeholders of the SHSP effort and their role in ensuring success.

> ### *Key Leadership, Collaboration, and Communication Strategies:*
>
> - Assign leaders who are credible, accountable, and have excellent interpersonal and organizational skills.
> - Establish multidisciplinary collaborative efforts involving the 4Es of safety.
> - Clearly and broadly communicate the SHSP vision, mission, and goals to all partners and stakeholders.

■ Checklist

Answering these questions will help stakeholders assess their SHSP leadership, collaboration, and communication processes and identify opportunities for improvement.

- Is your SHSP "sitting on the shelf"? What can you do to build and sustain momentum among your partners?

- Does your implementation process have a clearly defined leader with the commitment, ability, and institutional authority to move forward?

- Does your implementation process have an organizational structure to oversee the process and measure performance?

- Do the Governor and DOT Director/Secretary/Commissioner support or facilitate SHSP implementation?

- Have any formal agreements (e.g., MOU) been established among agencies with respect to SHSP implementation? Are they effective?

- Do senior management and technical staff communicate and coordinate on SHSP implementation?

- How has senior management involvement in safety changed as a result of the SHSP?

- Does your state hold regularly scheduled meetings on SHSP implementation and related safety programs?

- Are the DOT and the Highway Safety Office (HSO) collaborating and sharing resources to implement the SHSP?

- Do all parts of the DOT support SHSP implementation, e.g., administration, design, traffic, maintenance, and the safety engineer?

- Are MPOs and other regional and local agencies involved?

- Are outreach programs conducted with agencies and stakeholders outside of the DOT to support SHSP implementation?

- What communications mechanisms are you using to keep all the partners informed and engaged?

- Is SHSP implementation coordinated with other nontransportation agencies?

Chapter 3 – Collecting, Analyzing, and Sharing Data

Using data to identify safety problems is fundamental to successful SHSP implementation. Just as development of the SHSP was a data-driven process, an effective implementation process also depends on appropriate use of data. These data enable managers to identify safety problems, select proper strategies and countermeasures, monitor progress toward achievement of SHSP goals and objectives, measure the effectiveness of SHSP strategies, identify needed improvements, and direct limited resources where they are most needed.

3-1

MOU Among Data Generators

3-2

Centralized Data Source

A variety of strategies can be employed to collect quality data, perform appropriate analysis, and ensure SHSP stakeholders can access the data and the analysis. NHTSA section 408 grants, established in Title 23, United States Code, through SAFETEA-LU, provide funding for states to improve the timeliness, accuracy, completeness, uniformity, integration, and accessibility of safety data. In some states, multiple agencies provide funding for data collection and management through interagency agreements. Educating state legislatures on the benefits of data-driven decision-making has helped some states successfully make the case for additional safety funding.

Collect Relevant Data

Given the multidisciplinary nature of SHSP efforts, types of data relevant to implementation include the following:

- **Crash Data –** Weather conditions, time of day, day of week, person type (driver, occupant, pedestrian, etc.), number and severity of injuries, violation of traffic laws, crash location, manner of collision, number of vehicles involved, alcohol or drug impairment, direction of travel, crash diagram, narrative description of crash;

- **Injury Surveillance –** EMS response time, hospital assessment of injury severity, hospital length of stay and cost, rehabilitation time and cost;

- **Roadway –** Roadway classification, roadway inventory data, traffic control devices, location referencing system, rail grade crossings, structures (bridges, tunnels), traffic volume, vehicle types on the roadway;

- **Vehicle –** Vehicle Identification Number (VIN), registration information and plate, age/ model/year, weight of vehicle, owner information, U.S. DOT number (commercial), carrier information (commercial), inspection/out-of-service records (commercial);

- **Driver –** Age and date of birth, driver history (previous convictions), license status, gender and ethnicity, education/training;

- **Law Enforcement –** Citation tracking, prosecution, conviction, sentencing, case tracking; and

- **Other –** Statewide occupant protection use survey, insurance data (carrier, policy number, claims cost), demographic data.

The data may be collected from a variety of sources including state and local crash data systems and roadway inventory files, the national Fatality Analysis Reporting System (FARS), the Motor Carrier Management Information System (MCMIS), the National Emergency Medical Services Information System (NEMSIS), the Crash Outcome Data Evaluation System (**CODES**), and others.

In many cases, highly beneficial safety data are unavailable or unknown. Information within police crash records may vary from location to location; medical records, insurance records, and licensing information may not be available or linked to the crash data; and roadway inventory information may be limited and difficult to link to the crash data system. These and other data quality problems inhibit the effectiveness of efforts to improve transportation safety. However, access to timely and accurate safety data is critical for successful SHSP implementation. The following strategies have proven successful for improving data collection, management, and analysis:

- Prepare a traffic records improvement strategic plan.

- Integrate the Traffic Records Coordinating Committee (TRCC) into the SHSP implementation team. The TRCC is responsible for identifying traffic records data system enhancement strategies to improve data access, accuracy, and timeliness.

- Provide input to the TRCC on needed changes in crash report fields or data collection and processing problems.

- Establish data collection task forces or committees to promote collaboration among safety stakeholders.

- Implement data collection technologies to reduce the number of errors and processing time for data. "NCHRP Synthesis 367: Technologies for Improving Safety Data" provides a comprehensive summary of crash data collection innovations.

- Provide continuous training for state and local police officers on the importance of crash data and collection techniques.

- Provide continuous training for state and local crash report system administrators to properly handle reports with inaccurate or missing information.

- Develop proper protocols to address crash reports that need additional investigation.

- Develop a data standards manual that identifies available data streams and the agencies responsible for collecting and maintaining the data. The manual can also provide definitions of variables.

- Develop data submission protocols for other agencies that provide data to the management system.

- Provide training for data input personnel and analysts to understand how their efforts contribute and are utilized by technical staff in the support of safety programs.

Analyzing Data

Just as data were analyzed to identify emphasis areas and develop emphasis area goals and their associated objectives and strategies, they are analyzed to develop action plans, monitor, and evaluate results, and provide feedback to update the SHSP. Analysis can involve simple statistical investigations of crash trends and types as well as contributing crash factors. Analysis may also utilize sophisticated tools such as FHWA's SafetyAnalyst and the soon-to-be-released Highway Safety Manual. As a foundation for SHSP implementation, data are the basis for the following:

- Identification of system-wide safety issues as well as specific high-crash corridors, road segments, and intersections – By describing safety problems quantitatively, an agency knows the size of the problem and is able to focus its efforts on areas of greatest need. Data can be used to discern trends such as increases or decreases in certain types of crashes (e.g., rear-end collisions, lane departures).

- Performance-based program management – Analysis of safety data allows managers to determine the extent to which the SHSP is achieving its stated goals and objectives.

- Project selection and prioritization – Analysis of safety data helps managers pinpoint high-crash locations and identify high-risk groups such as younger drivers, older drivers, impaired drivers, and motorcyclists. These statistics, together with further analysis, allow managers to select and prioritize countermeasures with the greatest potential for reducing death and injury.

- Monitoring and evaluation – Data monitoring and evaluation helps managers make course corrections as the plan moves forward; develop new programs using more effective countermeasures and strategies; improve existing programs; and direct resources toward implementation of the most effective programs, policies, and projects.

- Resource justification – Data-driven prioritized road safety projects provide transportation planners, engineers, law enforcement officers, and others justification for additional resources.

Sharing Data

Various programs and departments receive safety data from the agency or department maintaining the data. Local governments, MPOs, advocacy groups, and private consultants request crash data to conduct various planning activities and projects. The agency maintaining the data may provide raw datasets or filtered datasets that can be readily used by local agencies.

Access to reliable data for all stakeholders enables them to more fully realize the benefits of integrating the SHSP with other transportation and safety plans (as discussed in Chapter 5). Adopting the following strategies will allow more effective and efficient data sharing practices.

- Maintain a centralized data source accessible to all state and local agency partners ensuring everyone is using consistent information.

- Develop policies to establish data dissemination schedules.

3-3

Data Decision Support Tool

- Develop a standard procedure for handling data requests that clearly identifies who will handle requests and how the request will be addressed.

- Host MPOs forums to discuss data issues and enhancement strategies.

3-4

Local Safety Planning Improved Through MPO Outreach

- Employ university research centers to provide safety data analysis support to MPOs.

- Encourage MPOs to conduct safety analysis for member jurisdictions, including crash location mapping.

- Work with LTAPs to support safety planning efforts at the local level by providing data for nonstate highways and developing a GIS-based integrated roadway management system.

Key Data Collection, Analysis, and Sharing Strategies:

- Conduct initial research into a range of available data sources.

- Collect all relevant data necessary to define safety needs and support decision-making processes.

- Prepare a traffic records improvement strategic plan and data collection task forces or committees.

- Provide training in the collection, analysis, and use of safety data.

- Analyze data using statistical methods.

- Use data to identify problem locations and prioritize projects.

- Use data to monitor and evaluate the outcomes and results of safety projects and programs.

- Use data to justify the need for resources to support implementation of safety projects and programs.

- Establish data sharing protocols to ensure all stakeholders are working from the same data sets and have access to the data they need.

■ Checklist

Answering these questions will help stakeholders review their SHSP data collection and analysis process and identify opportunities for improvement.

- Does your state have a traffic records improvement strategic plan?

- Is the TRCC strategic plan integrated and/or coordinated with the SHSP?

- Is the TRCC integrated with SHSP implementation efforts?

- How is data collection funded? Do the agencies and organizations using the data provide funding support? Does your state make full use of section 408 funding for data collection?

- How is data collection coordinated at the regional/local level?

- Who provides/processes/analyzes data?

- How are data shared at the statewide level and with whom?

- How are data disseminated to and utilized by regional and local agencies?

- Are data uniform and coordinated among entities?

- Are transportation planning data utilized in SHSP implementation (i.e., travel demand models, HPMS, etc.)?

- Are GIS-based tools being utilized for analysis and visualization of crash data?

Chapter 4 – Emphasis Area Action Plans

SHSP emphasis area action plans provide a road map that gives stakeholders and partners direction. While emphasis areas may be defined differently, all can be supported by action plans that provide specifics such as performance measures, funding sources, project-level detail, and evaluation criteria for assessing outcomes. Action plans turn SHSP concepts and ideas into a reality that saves lives and prevents injuries.

During SHSP development, states identified emphasis areas and developed strategies to improve safety using data to focus on the most serious transportation safety problems. These elements form the organizational structure of the SHSP. Action plans describe how the strategies will be implemented. For instance, if the objective is to reduce lane departure crashes by 10 percent by the end of fiscal year 2012, the strategies would detail how the state intends to meet the objective. One strategy could be to identify the top 10 hazardous lane departure locations in the state and reduce lane departure crashes at those locations. The action plan details how the strategy will be achieved, i.e., obtain base line data; conduct road safety audits; etc.

4-1

Road Safety Audits

Action plans include data needs, resources (staff, equipment, materials, and training), a timeline, whether legislative action is required, what agency or organization is responsible, a budget, performance and process measures, and an evaluation plan. Decision-makers can use the information in the action plans to commit the resources and people needed for implementation. The level of detail required depends on the strategy's complexity, size, scope, and the number of participating agencies. The process and performance measures form the basis for monitoring and evaluation. To promote accountability throughout the action process, some states assign agency/organization responsibilities for each emphasis area, objective, strategy, and action step. Some states define their action plans in terms of work tasks, inputs/outputs, and agency roles, using project management techniques, including Gantt charts, to manage the implementation process.

After enduring the frequently difficult and challenging SHSP development process, some stakeholders experience fatigue. Developing action plans may seem detailed and tedious, but the step cannot be ignored. An SHSP without an action plan is little more than words on paper with no grounding in the day-to-day realities of implementation. The hard work and effort put forth during development becomes meaningless without the organizational and institutional framework of the action plan that cultivates and enhances the collaboration and cooperation essential to SHSP success.

Action plans eliminate guesswork; prevent "shot gun" approaches; focus resources where they are needed; and help identify transportation projects that can be incorporated into the SHSP creating a stronger link between the SHSP and existing transportation plans and programs. Once action plans are completed, they can be posted on the Internet to promote transparency and offer opportunities for additional stakeholders to come forward and participate in or support SHSP implementation.

The action planning process emphasizes collaboration, communication, cooperation, and agency coordination. Successful approaches to action planning vary with some states developing uniform processes across emphasis areas, and others allowing more flexibility in how individual emphasis areas teams are managed. Regardless of approach, all have involved active participation from emphasis area team members and often a facilitator to assist the team in reaching consensus on the action plan elements. Facilitators may also serve as emphasis area team leaders, but if not, leaders should work closely with them to ensure the process is completed as quickly as possible and does not get bogged down. In addition to enlisting the help of a facilitator, states should consider developing a matrix or tool to focus the discussion and ensure the necessary information is collected.

Figure 4.1 illustrates an example action planning tool.

Figure 4.1 Action Planning Matrix Steps

Emphasis Area		*Updated* _____		Reporting Period: _____			
Lead Agency							
OBJECTIVE #1							
OBJECTIVE #2							
Strategy #1							
Strategy Agency							
Action Steps	**Action Step Measure**	**Action Step Agency**	**Resources**	**Partners**	**Budget**	**Timeline**	

Some states coordinate SHSP action plans with existing agency safety plans and programs (i.e., HSP, CVSP, and HSIP) within the state. Emphasis area action plans can and should be incorporated into the work plans of existing task forces or committees. This approach avoids duplication, promotes buy-in from the implementing agencies, and provides an opportunity to leverage existing programs and resources.

Action plans are living documents that should be revisited and amended as necessary. Teams can add, remove, or revise strategies and actions steps over time to ensure the plan remains relevant. For instance, dramatic changes in data may warrant a fresh look at all SHSP elements including action plans. Waiting for next update cycle of the entire SHSP to make these changes can result in losing the momentum needed for successful implementation.

Some action plans are easier to accomplish than others. Advocating legislative strategies to advance road safety may be sensitive. Some states omit them completely, while others make attempts to address these strategies through appropriate channels. States successfully addressing legislative strategies involve key partners, such as legislative officials and private organizations in the effort. In some instances, a legislatively mandated task force is

Sidebar labels:

4-2
Emphasis Area Team Facilitators

4-3
Implementation Chart

4-4
Links to Existing Organizations

4-5
Three-Tiered Programming

4-6
Multiagency Policy Council Supporting Safety Legislation

formed to examine laws pertaining to specific emphasis areas, such as impaired driving. In this case the task force can develop the strategies and action plans for the SHSP. Involving these parties in the process ensures everyone is working from the same information and avoids conflicting programs and messages.

Action plans involving changes to policy and design standards can be complicated as well. Incorporating standards for cable median barriers, rumble strips, etc., into a state's design standards or policies, may be difficult to address in action planning. In these cases, the action plan may point to a series of steps leading to the development of new standards, without defining the specific standards or policies. Once again, involving the appropriate partners in the process provides greater opportunity for the strategies to be adopted.

The following checklist can be used to develop action plans. The list can be tailored to individual state and local needs and conditions.

Steps for Creating an Action Plan (Checklist)

Establish an action planning framework and evaluation approach
– Define the goals for the SHSP – The reasons for the plan;
– Define the measurable objectives – What the plan will accomplish;
– Determine the performance measures that will be used to evaluate the plan; and
– Determine the measurement method for each performance measure.

Develop the action plan
– Determine the strategies for achieving each of the objectives
– Determine the action steps for accomplishing each strategy; and
– Determine the process measure or performance indicator for measuring progress.

Identify resource requirements
– Agencies whose cooperation and coordination is required;
– Funding and personnel;
– Data and information;
– Equipment, materials, and training;
– Schedule; and
– Steps that require legislative approval.

Develop a detailed budget *(many states include this step as part of the specific plan/program processes described in chapter 5)*
– Provide detailed budget information by task; and
– Separate information by funding source and agency/office.

Tracking and evaluation are discussed in more detail in Chapter 7; however, evaluation design is a critical element of an action plan and should be developed before the project starts to ensure activities are directly linked to expected outcomes and appropriate baseline data are collected.

> *Key Emphasis Area Action Plan Strategies:*
>
> - Identify a facilitator to assist emphasis area teams in achieving consensus on action plan elements.
> - Develop detailed action plans for each strategy in your SHSP.
> - Identify performance measures as a basis for monitoring and evaluation.
> - Assign responsibilities to support accountability.
> - Review and amend action plans as you proceed with implementation.

■ Checklist

Answering these questions will help stakeholders review their SHSP action planning process and identify opportunities for improvement.

- Does your state have action plans for all SHSP emphasis areas and strategies?

- Are the action planning teams multidisciplinary?

- Is someone assigned to coordinate and document all the actions plans and track progress?

- Are the action plans available to all the stakeholders?

- Are projects and activities identified in the action plans?

- Does your SHSP include strategies that require changes in legislation, policy, or design standards? If so, are the key people required to move this forward involved?

- Does your state have the specific policies and procedures in place to support and implement changes in legislation, policy, or design standards?

Chapter 5 –
Integration into Other Transportation Plans and Programs

The most effective SHSP implementation mechanism may be to leverage activity and resources through other transportation plans and programs. This chapter explains how the SHSP can be integrated into traditional transportation and safety planning processes. Many plans and programs exist, but this chapter focuses on five of the most important either because of their impact on transportation systems planning and the large resources programmed through them, such as LRTPs and S/TIPs, or because they focus exclusively on safety improvements, such as HSIPs, HSPs, and CVSPs. Figure 5.1 illustrates the relationships among these various plans and programs.

Figure 5.1   Coordinated Transportation Safety Planning
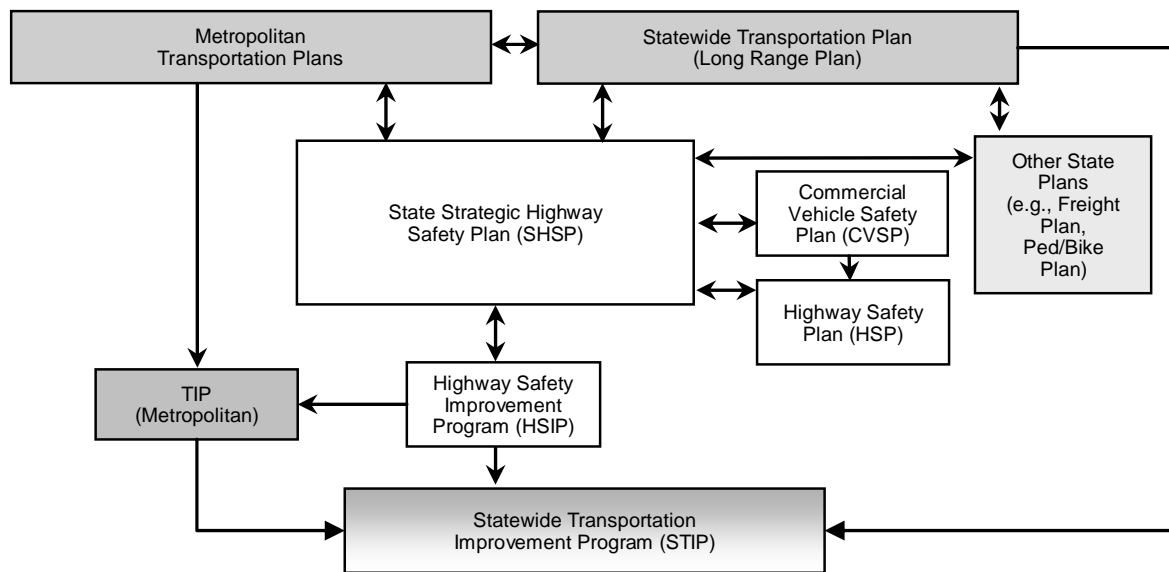
Source: FHWA, revised by Cambridge Systematics.

Each of the five planning processes is examined from the SHSP integration perspective. Each section provides a brief description of the plan or program, identifies overall opportunities for integration, and lists specific integration opportunities.   These opportunities are gleaned from existing practices from the model states (described in the introduction methodology section) and from the experiences of the project development team. Many planning and programming processes have a long history, and are managed by different agencies such as Departments of Transportation, State Police, SHSOs, MPOs, etc. and changing the institutional structures associated with them may be the most difficult aspect of SHSP integration.   Transportation and safety planners are encouraged to

experiment with and adopt the strategies where they make sense to further SHSP implementation.

Strategic planning, whether long-range, short-term, safety, or transportation focused, follows a relatively similar process. The generalized steps include: collect and analyze data; identify problems or issues; select relevant and appropriate projects, programs, policies, and countermeasures; prioritize the elements; implement the plans; monitor implementation progress, evaluate outcomes, and use the monitoring and evaluation results to influence process and program improvements. Aligning the various plans and programs to support the SHSP reduces administrative burden, ensures consistent data and analysis methods, and allocates resources to more effectively produce safety improvements.

5.1 Long-Range Transportation Plans and State/Transportation Improvement Programs

LRTPs and S/TIPs prepared at both the state and MPO levels provide guidance for improvements to transportation facilities and systems. They typically present a multimodal set of capital, operations, and systems management strategies for transportation facilities within their geographic areas. LRTPs may include policies, strategies, and future projects; projected demand for transportation services over 20 or more years; a systems-level approach that considers roadways, transit, nonmotorized transportation, and intermodal connectors; statewide and regional land use, development, housing, environmental and employment goals and plans; cost estimates and reasonably available financial sources for operation, maintenance, and capital investments; and strategies to preserve existing facilities and make efficient use of the current transportation system.

TIPs and STIPs are short-range (covering a period no less than four years and updated every four years), fiscally constrained programs of transportation improvements. Programs and projects included in S/TIPs must have identified funding sources. TIPs are incorporated directly, without change, into the state STIP. Through an established process, the state DOT identifies projects from rural areas, smaller urban jurisdictions, and areas of the state outside of its MPOs for inclusion in the STIP. Development of a transportation plan sensitive to safety issues creates opportunities to improve the way agencies design and operate the transportation system. For example, incorporating the SHSP into the S/TIP development process can lead to implementing additional strategies that positively affect crash rates and increase focus on safety by incorporating safety evaluations of project alternatives prior to final design selection.

Figure 5.2 illustrates the relationship between the SHSP and the transportation planning process. The SHSP should influence the transportation plan's visions and goals, alternative improvement strategies, and evaluation and prioritization of strategies. Systems operations and project implementation activities should provide feedback to the SHSP. This feedback enables SHSP managers to improve future transportation planning efforts.

Figure 5.2   Relationship Between SHSP and Transportation Planning
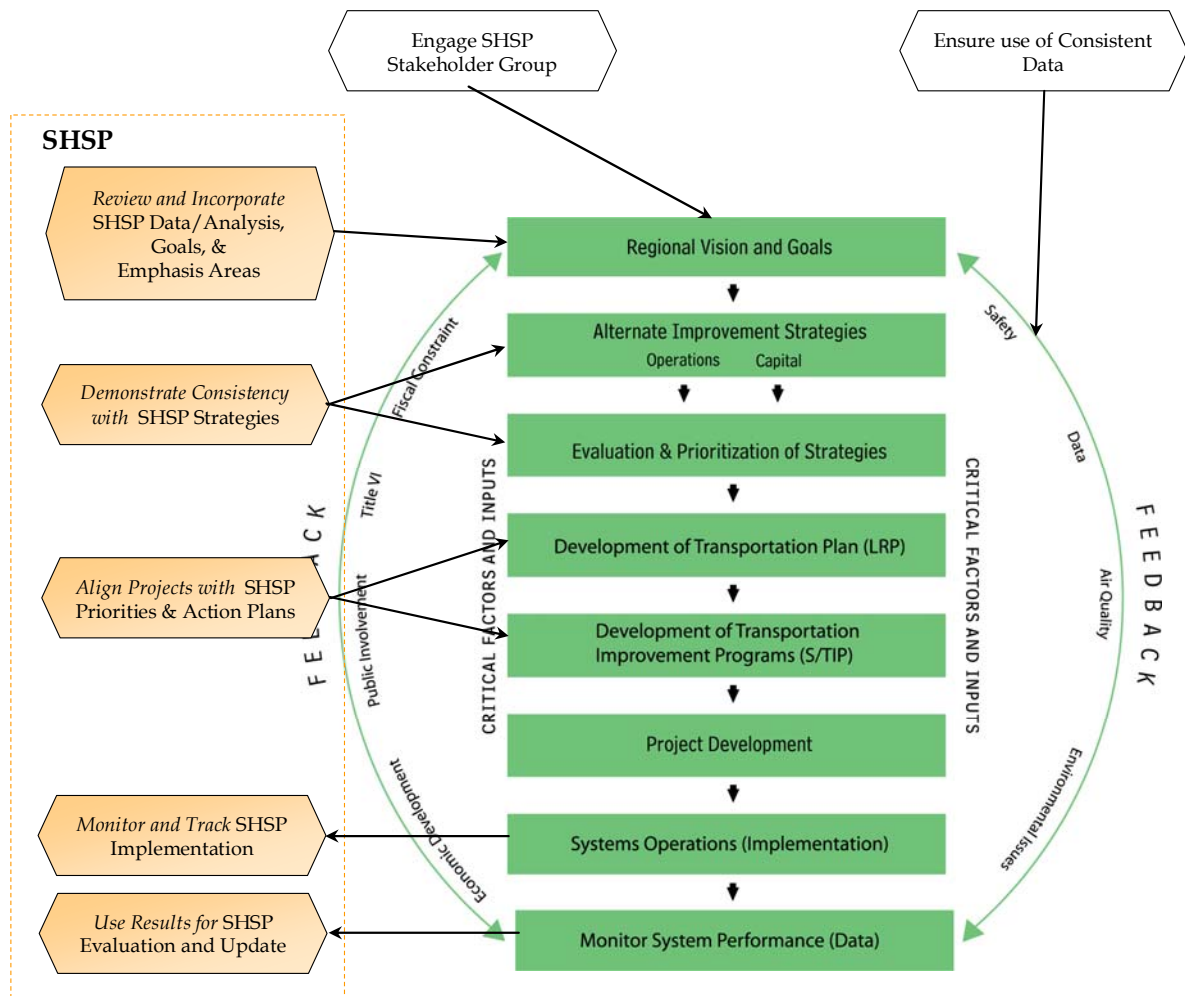
Establishing Vision Statements and Goals

Transportation planning begins with a vision, which typically consists of general statements describing desired end-states. For example, most planning visions highlight the need for a safe and secure transportation system that provides mobility and accessibility.

The vision of an LRTP or a S/TIP is important to SHSP implementation efforts because it sets the tone for the overall planning process and outlines the needs to be considered when evaluating different transportation options. Visions for LRTPs and S/TIPs should include statements about the importance of safety. To help make this happen, the SHSP stakeholder group should be engaged in these planning processes early on to promote consideration of safety during the visioning process.   Prototype vision statements that include safety language should be presented to raise awareness at public meetings, board meetings, or in other forums where the visioning process is taking place.

SHSP stakeholders can attend monthly meetings of the state MPO association and encourage them to include safety on the agenda at every meeting. Some MPOs involve the DOT traffic safety division during development of the LRTP to coordinate safety planning. MPO personnel serve as regional safety ambassadors to local governments and increase awareness by incorporating safety pages on their web sites. Safety conscious planning (SCP) workshops at the state and regional level will improve the safety component in MPO transportation planning efforts.

Goals and objectives provide guidance to subsequent planning efforts and help assess the relative contribution of alternatives toward achieving desired safety improvements. Properly developed goals and objectives also lead to the identification of criteria for evaluating options and alternatives. SHSP goals and emphasis area objectives set quantifiable targets for statewide priorities and should be adopted into the LRTP verbatim or, at a minimum, should be clearly reflected in the transportation planning process based on safety data and analysis.

5-1

MPO Participation in SHSP

Involving MPOs in SHSP implementation efforts provides critical local and regional input. In turn, some MPOs are beginning to institutionalize safety by establishing Safety Committees and adopting safety resolutions that support the SHSP. Some MPOs are developing Regional Safety Action Plans in conjunction with the SHSP.

Identifying Alternate Improvement Strategies

The next step in the transportation planning process is to identify the strategies needed to achieve the desired safety improvements. Safety strategies and projects within both the LRTP and the S/TIP should be consistent with SHSP countermeasures. The adoption of these strategies and projects improves the effectiveness of the LRTP and S/TIP development processes and ensures consistency among them with respect to safety.

Evaluating Alternative Strategies

Evaluation is the process of synthesizing information on the benefits, costs, and impacts so judgments can be made concerning the relative merits of alternative actions. In the same way that including safety in the vision statement is important for setting planning priorities, including safety in evaluation criteria is essential for ensuring real action is taken to address safety problems. Most evaluation efforts use one of three methods:

1. List the evaluation criteria and show how the alternatives compare;
2. Assign weights or scores to the evaluation factors; or
3. Conduct benefit/cost analyses.

5-2

Prioritizing Safety in the TIP

One way to correlate the S/TIP with the SHSP is to establish a project prioritization scheme that takes the safety benefits of a project into account and assigns weighting or scoring in the selection of projects. Weighting can account for the value of lives saved and/or crashes reduced in the context of other prioritization factors, such as congestion relief and air

quality improvement. Ranking can be based on comparison of actual crash rates or crash severity at proposed project locations.

Developing Plans and Programs

The statewide LRTP can range from a relatively simple statement of investment policies and strategies to a detailed master plan outlining specific investments to be made over the plan's life (usually 20 years). The metropolitan LRTP typically identifies specific projects or transportation corridors where improvements are necessary.

The STIP and TIP are connected to the LRTPs through a process called programming. Programming matches desired actions with available funding through a priority-setting process. This S/TIP priority-setting process is undertaken with contributions from a multitude of stakeholders interested in a wide variety of issues. To ensure safety is part of the prioritization effort, SHSP stakeholders need to be part of the priority setting process.

Incorporating the SHSP into the LRTP and S/TIP impacts the degree to which SHSP goals, objectives, and strategies are implemented. LRTP and S/TIP projects should be aligned with SHSP strategies and action plans. LRTPs and S/TIPS may significantly impact transportation safety by targeting appropriate groups for education efforts, enhancing traffic enforcement activities, providing improved data collection and management efforts, conducting studies on corridors or areas where safety is of particular concern, and considering additional regulations to promote transportation safety.

Some MPOs use SHSP emphasis areas as a source for programs in their annual Unified Planning Work Program (UPWP), and some are developing safety work plans. These work plans identify specific programs to encourage local involvement in safety planning.

Some states require explicit documentation showing that STIP projects utilizing HSIP funds are directly linked to the SHSP, either as a specific project or countermeasure. Some states fund safety projects through the use of funds not typically used for safety projects, such as the Congestion Mitigation and Air Quality Program (CMAQ).

Key Integration Strategies – LRTP and S/TIP

- Meet with the DOT Planning Director and MPO planners to learn how safety is considered during project selection and prioritization.

- Participate in DOT and MPO visioning exercises to ensure safety is explicitly addressed.

- Present the SHSP vision statement for consideration during visioning exercises.

- Develop prototype vision statements that include safety language for presentation at public involvement meetings, MPO board meetings, and other forums to raise awareness.

- Encourage the adoption of SHSP goals, objectives, and performance measures.

- Provide the results of research and analysis conducted during the SHSP development process to identify strategies and projects for inclusion in LRTPs and S/TIPs.

- Offer to serve on committees and teams that prepare and influence transportation plans.

- Support MPO transportation safety planning forums to review crash data, introduce the SHSP, and discuss how safety can be integrated into their planning documents.

- Attend statewide and local MPO board meetings to encourage a focus on safety.

- Provide crash data to identify safety problems and link the data to SHSP strategies and action plans.

- Encourage MPOs to establish safety committees, adopt safety resolutions in support of the SHSP, and develop regional safety action plans reflecting appropriate elements from the SHSP.

- Provide software and training on data analysis and safety planning tools.

- Encourage and participate in the establishment of project prioritization weighting or ranking schemes that explicitly address safety considerations.

- Encourage MPOs to use the SHSP emphasis areas as a source for programs in their annual Unified Planning Work Programs.

- Ask the DOT and MPOs to require explicit documentation showing how STIP projects utilizing HSIP funds are directly linked to the SHSP.

- Work with the DOT and MPOs to identify and leverage funding support through alternative funding sources, such as the CMAQ.

5.2 Highway Safety Improvement Programs

HSIP is a "core" Federal funding program with the objective of achieving a significant reduction in traffic fatalities and serious injuries on all public roads. It includes the State HSIP, the High Risk Rural Roads (HRRR) Program, and the Highway-Rail Grade Crossing (HRGX) Program.

HSIPs emphasize data-driven approaches to improving highway safety. States focus attention on relevant emphasis areas and implement a range of SHSP strategies and countermeasures including:

- Intersection safety improvements;

- Pavement and shoulder widening;

- Installation of rumble strips or another warning device;

- Installation of a skid-resistant surface;

- Improvements for pedestrian or bicyclist safety or safety of the disabled;

- Construction of any project for the elimination of hazards at a railway highway crossing;

- Construction of railway-highway crossing safety features, including installation of protective devices;

- The conduct of model traffic enforcement activities at a railway-highway crossing;

- Construction of traffic calming features;

- Elimination of roadside obstacles;

- Improvements to highway signage and pavement markings;

- Installation of priority control systems for emergency vehicles at signalized intersections;

- Installation of traffic controls or other warning devices at locations with high-accident potential;

- Safety conscious planning;

- Improvements in the collection and analysis of crash data;

- Planning, integrated interoperable emergency communications equipment, operational activities, or traffic enforcement activities (including police assistance) relating to work zone safety;

- Installation of guardrails, barriers (including barriers between construction work zones and traffic lanes for the safety of motorists and workers), and crash attenuators;

- The addition or retrofitting of structures or other measures to eliminate or reduce accidents involving vehicles and wildlife;

- Installation and maintenance of signs (including fluorescent, yellow-green signs) at pedestrian-bicycle crossings and in school zones; and

- Construction and operational improvements on high-risk rural roads.

Figure 5.3 illustrates the relationship between the SHSP and the HSIP. The SHSP should be used to influence decisions made during the *planning* phase of the HSIP process. *Implementation* of highway safety improvement projects informs tracking and updating of the SHSP, and *evaluation* of the effects of the highway safety improvements provides data to feedback into both the SHSP and the HSIP planning processes.

Figure 5.3 Relationship Between SHSP and HSIP
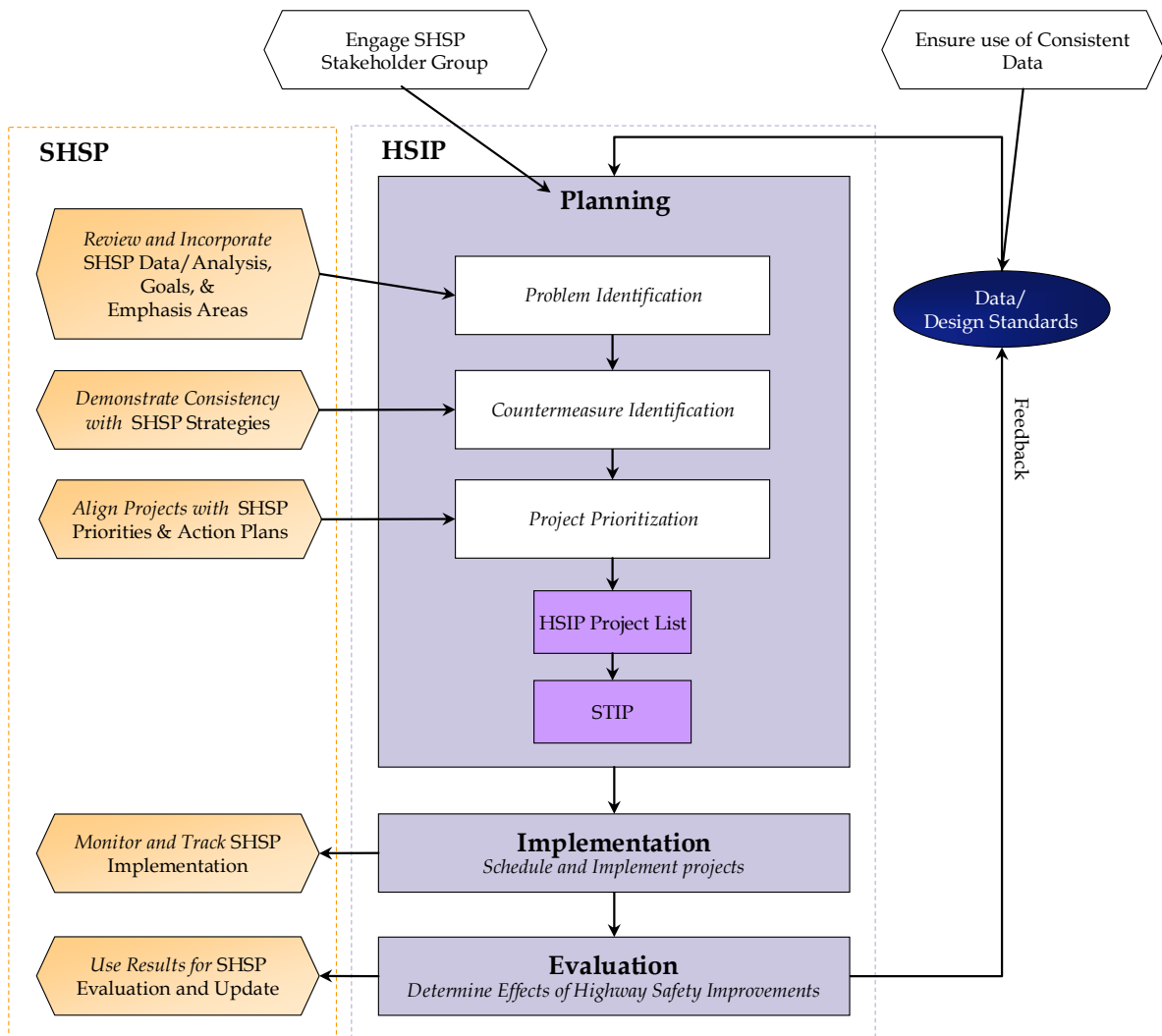
Engaging the SHSP stakeholder group in HSIP planning will result in greater integration of the two processes through ongoing collaboration and communication. Some state DOTs require a safety element in personnel performance reviews to ensure key staff at all levels view their support of the SHSP process as a high priority.

Identifying Problems

The first step in the HSIP process is problem identification. Network screening identifies key crash types to address with systematic improvements and specific sites with potential for safety improvement.

The process for identifying systematic improvements should be based on the same data and analysis used to develop the emphasis areas in the state SHSP. The identification process may vary among states but typically involves the following steps:

1. Identify the crash types to address (e.g., run-off the road, median crossover). This process is similar to that used to select emphasis areas in the SHSP. Typically the key crash types are selected based on frequency of occurrence.

2. Identify the characteristics of the crash types (e.g., rural versus urban, two-lane versus four-lane, divided versus undivided, on curve versus on tangent, type of intersection control, etc.). Some SHSPs identify characteristics such as rural crashes as emphasis areas. Others address them as strategies within SHSP emphasis areas.

The network screening process identifies sites with potential to benefit from a safety improvement and involves a comprehensive review of the roadway network to identify locations with safety problems. Several problem identification methodologies, based on factors such as crash frequency, crash rate, severity index, etc., can be used in this process. The SHSP should influence the methodology. For example, if states identify unsignalized intersections as an SHSP emphasis area, they may focus on just those types of intersections when applying a problem identification method. Also, some SHSPs recommend problem identification methodologies and criteria (i.e., fatality frequency, injury severity, etc.). The HSIP process should consider adopting SHSP methodologies for consistency.

Identifying Countermeasures

The next step in the HSIP process is to identify contributing crash factors and effective countermeasures. This involves developing a "problem diagnosis" or a comprehensive description of the crash site or road segment; identifying several alternate countermeasures to address the crash factors; and assessing the countermeasures' practical limitations and constraints.

Countermeasures can be identified during a field study, a road safety audit (RSA), a literature search, by agency policy, etc., and should be consistent with corresponding SHSP countermeasures. For example, a state that has identified run-off-the-road crashes as an emphasis area in their SHSP, may have identified median cable barriers as the preferred

systematic improvement to address this crash type. This decision should be reflected in the HSIP.

Furthermore, the SHSP process engages safety stakeholders and other partners to provide a wide range of perspectives when selecting potential solutions. Involving safety partners results in more comprehensive and effective multidisciplinary solutions. To ensure local stakeholders are well-equipped to conduct safety studies, one state developed a Safety Study Guidelines course to train local governments, MPOs, and consultants to systematically determine crash contributing factors and identify strategies for improving high-crash frequency locations.

5-5

Training Improves Local Safety Planning Capacity

Prioritizing Projects

The next step is to prioritize the projects. This is typically accomplished using ranking, incremental benefit/cost analysis, or optimization methods. The SHSP should guide prioritization decisions so the selection of projects reflects the strategies and action plans identified in the SHSP. This can be done by developing policies and procedures to ensure consideration of the SHSP during project prioritization.

5-6

Centralized HSIP Funding and Evaluation

One state requires district safety review teams to bring projects to the SHSP process for evaluation. Another state, recognizing the importance of working with local stakeholders, dedicates resources to off-system safety projects and provides technical assistance for local efforts.

5-7

Local Government Assistance

Prioritization is required because resources are limited and not all beneficial projects can be funded. However, funding can be increased for HSIP efforts to implement SHSP strategies. One state provides more funding for safety and reserves funds specifically for projects that align with the SHSP. Some states leverage funds beyond §148 to implement HSIP projects. Freeing up HSIP resources for dedicated safety work, several states have mainstreamed safety features (i.e., rumble strips, etc.) into general construction projects. Project sharing and the use of cooperative agreements to fund projects also can be used.

Key Integration Strategies – HSIP

- Identify the infrastructure-related emphasis areas in the SHSP.

- Develop policies and procedures to ensure the SHSP is considered during project prioritization.

- Encourage a systems approach for implementing proven effective countermeasures.

- Program HSIP funding to implement strategies associated with the SHSP emphasis areas.

- Structure annual performance reviews to ensure DOT personnel are integrating the SHSP into their work and to provide opportunities for rewarding exemplary work to improve safety.

- Engage safety stakeholders and other partners to ensure more comprehensive and effective multidisciplinary solutions.

- Train local governments, MPOs, and consultants to systematically determine crash contributing factors and identify strategies for improving locations with high crash rates.

- Use the SHSP process to review and evaluate the safety impacts of projects proposed by DOT Districts.

- Reserve funds specifically for projects that align with the SHSP.

- Mainstream safety features (i.e., rumble strips, etc.) into the scope of general construction projects to conserve scarce safety funds.

- Dedicate resources to off-system safety projects.

- Provide technical assistance and traffic engineering expertise to locals.

5.3 Highway Safety Plans

HSPs are designed to reduce crashes, fatalities, injuries, and property damage by addressing road user target groups (e.g., young and elderly drivers), behavioral issues (e.g., impaired driving, speeding and aggressive driving), police traffic services, emergency medical services, motorcycle safety, as well as traffic records improvements.

SHSOs engage a wide range of state, local, nonprofit, and private sector partners. Through the HSP, states can focus attention on relevant SHSP emphasis areas to implement the corresponding range of SHSP strategies and countermeasures. Common grant programs focus on law enforcement, community traffic safety programs (CTSP), occupant protection programs, etc. HSPs also implement statewide campaigns and initiatives to increase public recognition of safety issues.

Figure 5.4 illustrates the relationship between the SHSP and the HSP. The SHSP influences problem identification, goals and objectives, countermeasure identification, and project development within the HSP process. After the development and approval of the HSP, project implementation and evaluation activities provide feedback to both the SHSP and the HSP planning processes.

Figure 5.4 Relationship Between SHSP and the HSP
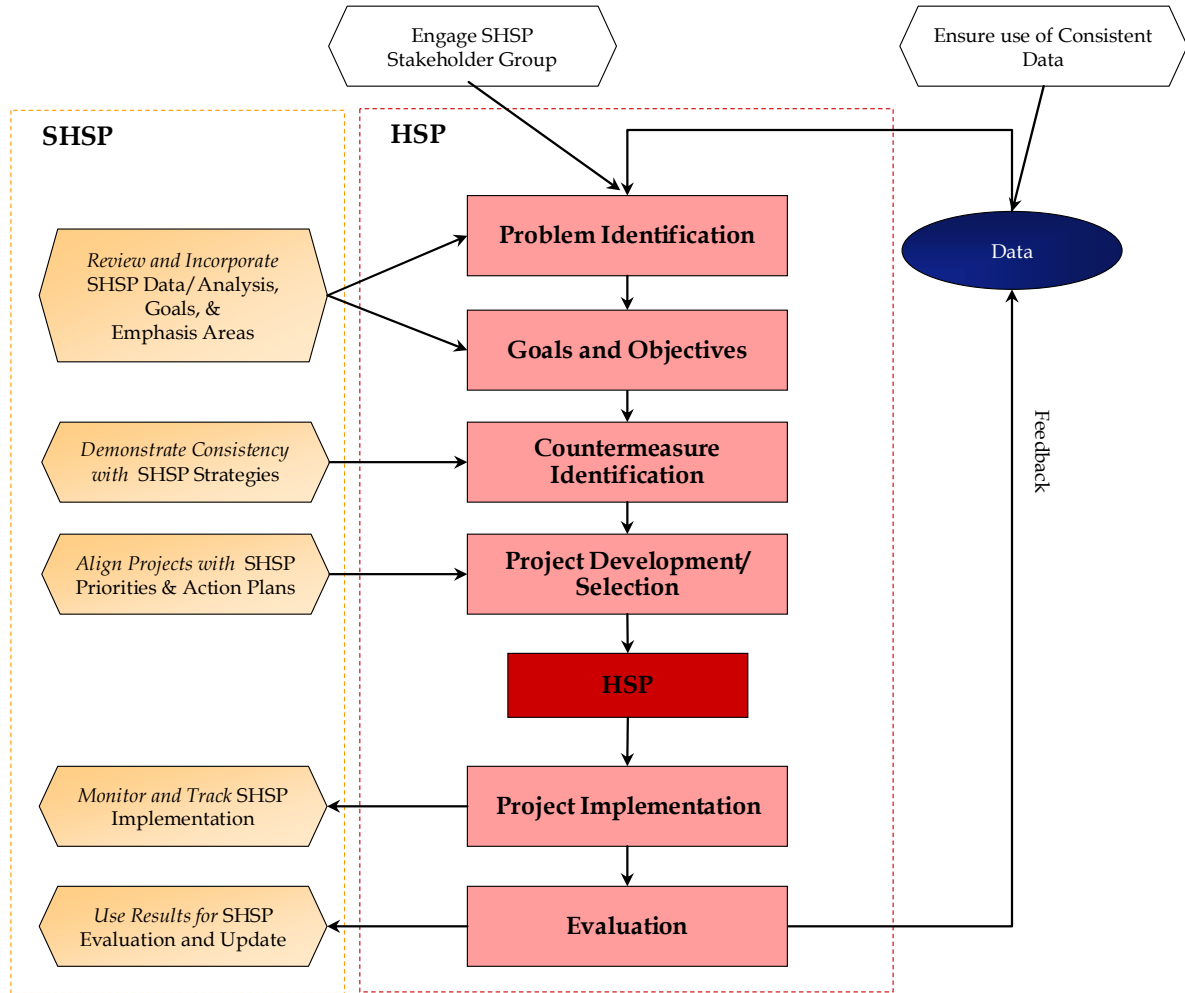
Problem Identification

The first step in developing the HSP is problem identification. States are required to produce a data-driven document that identifies highway safety problems using crash data. Other information, such as demographic, roadway, travel, and medical data are also included in the analysis. SHSP emphasis areas should be included in the HSP since the same data are used in both analyses. States can align HSP focus areas with SHSP emphasis areas by including the same team members during the development of both.

Goals and Objectives

After determining the nature, extent, and location of the state's traffic safety problems, goals and measurable objectives for each program area are established by SHSO staff. While the goals and objectives of the SHSP and HSP may not be identical, they are based on consistent data and should complement each other and jointly support the state's safety priorities.

Performance measures are required in the HSP. The purpose of measuring performance is to determine effectiveness. Selecting performance measures need not be arduous. It is important, however, to ensure that data are available and that the performance measure will actually demonstrate the effects of the goal, objective, or project being measured. Reliable resources for performance measures, including guidance on the development and implementation of behavioral plans and programs by NHTSA and the Governors Highway Safety Association (GHSA) are available. States should consider adopting the objectives and performance measures identified in the SHSP within the HSP.

Countermeasure Identification

The next step is to identify countermeasures. Certain programs and initiatives are predefined by NHTSA in the Certification Statement, such as participation in national "Click It or Ticket" campaigns. Countermeasures are selected from the National Priority Program Areas and other program areas based on data analysis. The countermeasures selected by SHSOs should be consistent with SHSP countermeasures identified through analysis of the same data and review of the wide range of noteworthy practices available.

Project Development and Selection

5-8

Focusing HSP Grants Applications

The process for selecting grant projects varies among states based on their data and identified problems. Bringing together multiple agencies during the programming process improves project selection and is consistent with the SHSP. Some SHSOs release a grant solicitation announcement detailing the state's traffic safety problems, the countermeasures selected, and information for submitting a grant proposal. After proposals are received a selection process determines who will be awarded grants. Other SHSOs identify entities they feel can impact their selected countermeasures and work with them to develop their grants. SHSOs should emphasize SHSP emphasis areas, strategies and action plans in their grant development and application processes.

5-9

Local Safety Coordinators Adopt SHSP Strategies

Many SHSOs provide grants to local coalitions, nonprofits, and advocacy organizations to address issues specific to their areas of expertise or jurisdictions. CTSPs can be managed by the SHSO with set aside funds for SHSP implementation. Grant applications for these programs should be aligned with the SHSP goals, objectives, performance measures, emphasis area strategies, and action plans.

5-10

Grant Writing Assistance Focuses on SHSP

SHSOs may provide assistance to law enforcement partners to facilitate the grant application process and ensure consistency with the SHSP. Other effective strategies include: establishing safety outreach programs throughout the state through a partnership with the health department; conducting data analysis for grant applications to ensure

proposed projects are aligned with the safety problem; educating HSP grant recipients on the SHSP to improve alignment of grant applications with the emphasis areas; and developing a template for grant applications to improve efficiency for both grant recipients and the SHSO.

Key Integration Strategies – HSP

- Conduct data analysis to focus on the greatest problem areas consistent with the SHSP emphasis area identification process.

- Focus the grant development and selection process on priority problem areas consistent with SHSP emphasis areas and strategies, e.g., revise grant solicitation announcements to include SHSP priorities.

- Bring multiple agencies together during the programming process to improve project selection and ensure consistency with SHSP priorities and strategies.

- Provide grant funds to local coalitions, nonprofits, and advocacy organizations to address issues specific to their jurisdictions and areas of expertise.

5.4 Commercial Vehicle Safety Plans

The performance-based CVSP is designed to reduce the number and severity of crashes and hazardous materials incidents involving CMVs. FMCSA directs MCSAP lead agencies to coordinate with the SHSO and other safety partners on data collection and information systems, participate in the TRCC, and align their safety activities with the SHSP.

Figure 5.5 illustrates the relationship between the SHSP and the CVSP. The SHSP should influence the development of the CVSP mission and goal statements, the identification of CMV safety problems, the development of state-specific objectives, and the development of strategies and activities. After the approval of the CVSP, implementation, monitoring, and evaluation activities provide feedback to the SHSP.

Collaboration and communication should be encouraged by engaging the SHSP stakeholder group throughout the CVSP development process to facilitate the integration of the two processes and programs.

Figure 5.5 Relationship Between SHSP and the CVSP
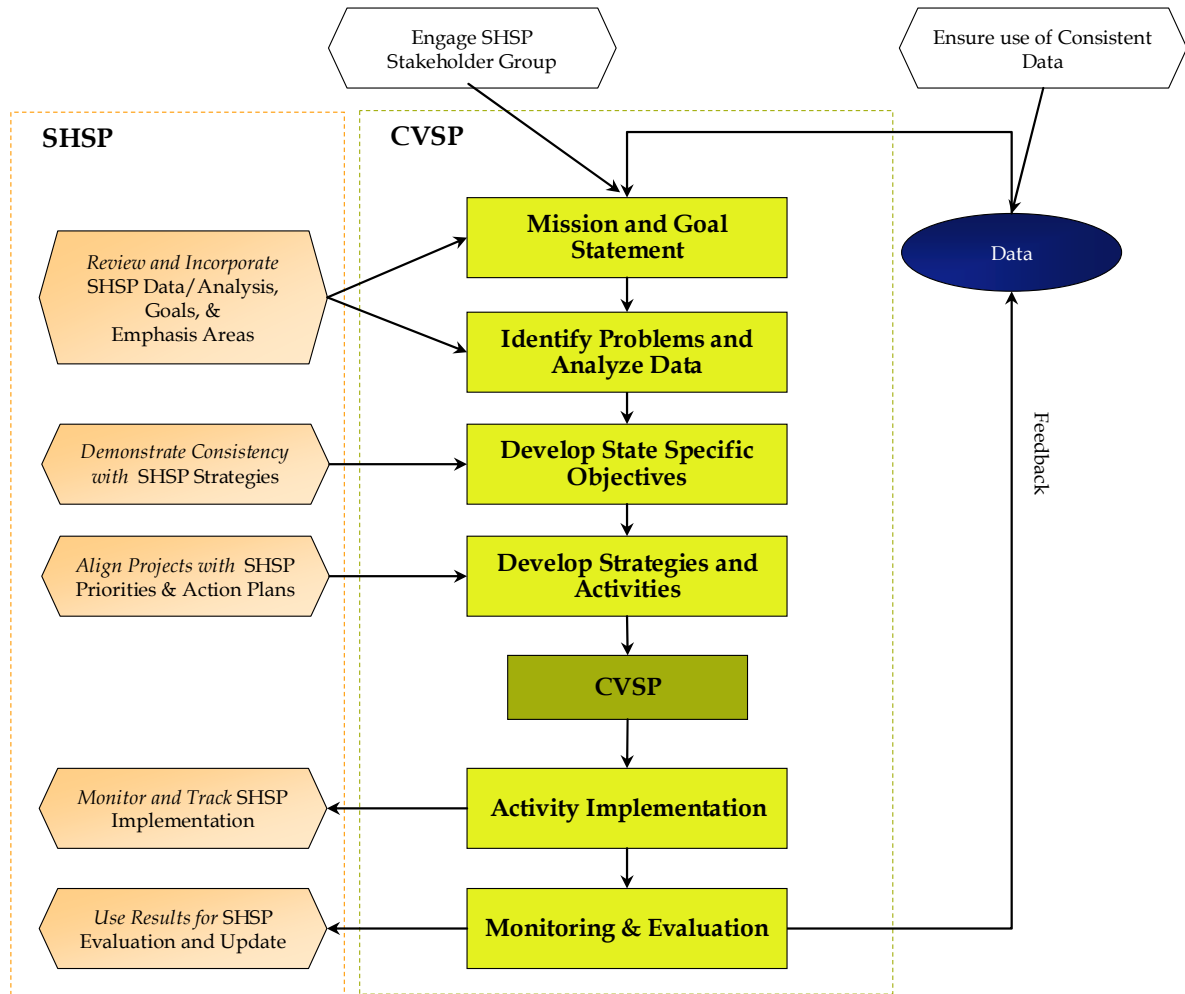
Mission and Goal Statement

The first step in developing the CVSP is to prepare a mission and goal statement. The inclusion of a CMV fatality reduction goal, including annual performance targets, is required. The goal must be compatible with the National CMV fatality reduction goal (currently, "reducing the rate of truck-related fatalities to no more than 0.16 per 100 million vehicle miles traveled (VMT) by 2011 from a baseline rate of 0.184 per 100 million VMT in 2005"). While having a state goal consistent with the national goal does not mean they must be identical, they must both aim to reduce CMV crashes and fatalities in a measurable and repeatable manner. States that have identified CMV crashes as a separate SHSP emphasis area should consider using that emphasis area objective within the CVSP mission and goal statement.

Identifying Problems and Analyzing Data

As part of their CVSPs, states are required to address the five MCSAP National Program Elements: driver/vehicle inspections, traffic enforcement, compliance reviews, public education and awareness, and data collection. States are also strongly encouraged to define one or more state-specific CMV safety problems where they intend to focus both their attention and MCSAP resources during the next year, such as CMV crash reduction, passenger carrier safety, or CMV safety data quality. The state should look to the SHSP for emphasis areas and/or strategies that relate to CMVs and include them within the CVSP. At a minimum, CVSP planning should use the same data to identify problems as was used to identify SHSP emphasis areas.

Develop State Specific Objectives

Each state-specific problem in a CVSP must describe the expected outcome or result (i.e., reduction in the number/percentage of crashes, hazardous materials incidents, fatalities, injuries) anticipated as a result of the strategies and activities to be undertaken. These objectives must be quantifiable and must also include an explicit timeframe (number of months/years) within which the outcome or result is expected. States should look to SHSP emphasis area action plans to identify relevant objectives with this level of detail.

Develop Strategies and Activities

States must next describe the program strategies it intends to employ to achieve the objectives and the program activities it will deploy to support the strategies. Some states include CMVs in SHSPs as emphasis areas and draw heavily from existing truck safety plans to identify SHSP strategies and actions. Other states incorporate SHSP engineering, education, and enforcement strategies into their CVSPs (i.e., safety belts, impaired driving, work zones, etc.). These strategies and activities must be accompanied in the CVSP by specific, quantitative performance measures, whereby the MCSAP agency can periodically monitor and evaluate its progress toward its CMV safety objective. State MCSAP agencies must also specify how often they will monitor and evaluate their progress toward goals and are encouraged to shift its mix of strategies when monitoring and evaluation indicates revisions are warranted.

States successfully integrating CVSP and SHSP strategies and action plans have included CMV stakeholders at the table and built upon existing CMV safety efforts. MCSAP personnel and representatives from state trucking associations bring a valuable perspective to the SHSP process and contribute ideas on how CMV safety efforts can support the statewide goals. This process encourages collaboration between CMV and other safety stakeholders, and provides new partnership opportunities.

MCSAP's partners include among others, motor vehicle administrations and law enforcement agencies. In one state, MCSAP, in partnership with the Association of Chiefs of Police, developed an Award for Excellence in Commercial Vehicle Safety to acknowledge local law enforcement agencies. In another state, MCSAP personnel are involved in freight planning processes thereby providing greater opportunities to incorporate SHSP elements

into broader CMV efforts. CMV safety efforts also have brought together engineering staff with MCSAP and law enforcement personnel.

5-15

Engaging Local Agencies in Commercial Vehicle Inspections

As with all other safety efforts, reaching out to local stakeholders provides greater opportunities to improve safety. Some state police agencies have engaged local law enforcement in CMV inspections, and in at least one state, they have trained and certified local agency personnel to conduct truck inspections.

Preparing the CVSP

Priority activities are selected based on available funding and state spending authority. Emphasis should be placed on activities contributing to SHSP implementation, not just as they relate to CMV safety specifically, but as to their support of the broader safety goals and objectives established as part of the SHSP.

> ### Key Integration Strategies – CVSP
>
> - Identify SHSP emphasis areas and/or strategies related to CMVs and include them as state specific objectives within the CVSP.
>
> - Use data for problem identification consistent with the SHSP.
>
> - Participate in FMCSA's data driven, high visibility enforcement campaign and link the activity to SHSP strategic campaigns.
>
> - Incorporate SHSP engineering, education, and enforcement strategies into the CVSP (i.e., safety belts, aggressive driving, work zones, etc.).
>
> - Encourage state trucking associations and commissions to collaborate with a broad range of safety stakeholders.
>
> - Collaborate with law enforcement, motor vehicle administrators, and engineers to develop joint training and campaign programs.
>
> - Develop an Award for Excellence in Commercial Vehicle Safety, in collaboration with the state Association of Chiefs of Police to acknowledge local law enforcement agencies.
>
> - Integrate safety and SHSP elements into the state and local freight planning processes.
>
> - Reach out to local stakeholders by training, certifying, and collaborating with them on CMV inspection programs.

5.5 Plan and Program Integration Checklist and Timeline

■ Checklist

The following series of questions will help stakeholders review opportunities for integrating the SHSP into the other transportation plans and programs and help identify areas for improvement.
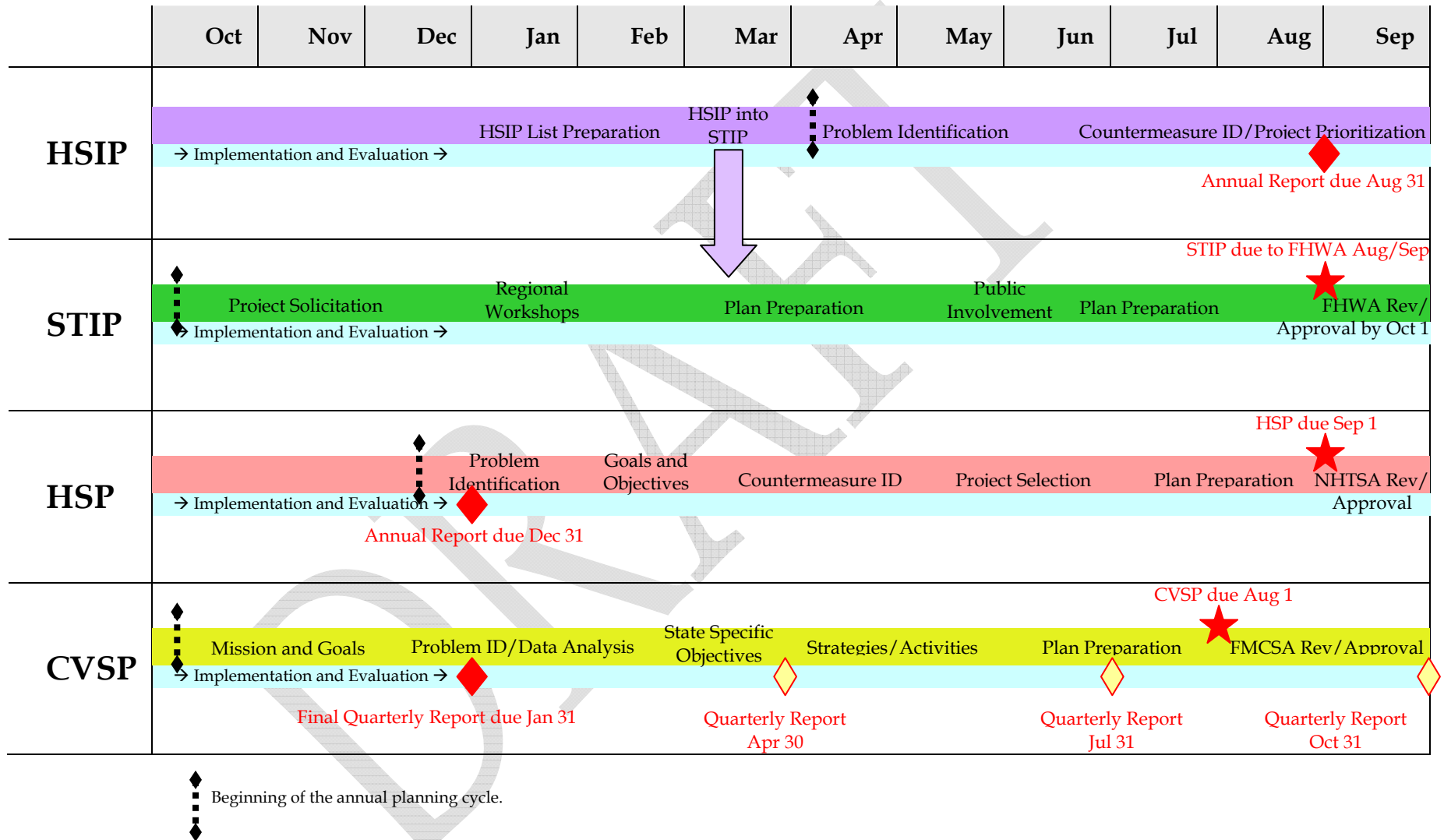
- Do SHSP stakeholders participate in the plan/program development process?

- Do all safety agencies use the same database and analysis strategies to identify problems and program funding?

- Do the plan/program visions, goals, and objectives reflect SHSP goals?

- Are plan/program strategies and countermeasures consistent with SHSP strategies?

- Do plan/programs target funding to implement strategies associated with SHSP emphasis areas?

- Do SHSP stakeholders participate in the establishment of project prioritization weighting or ranking schemes?

- Do plan/program managers engage SHSP stakeholders in project selection?

- Is safety a criterion in agency performance reviews?

- Have SHSP stakeholders met with DOT and MPO planners to learn how safety data, analysis, and strategies are incorporated into their planning process?

- Do DOT and MPO planners have access to SHSP safety data and analysis?

- Do SHSP stakeholders participate in MPO board meetings?

- Do the MPOs have safety committees and regional safety action plans?

- Is safety mainstreamed into the scope of general construction projects?

- Is safety integrated into the state and local freight planning processes?

- Are HSIP and STIP projects nominated by DOT Districts reviewed by safety engineers?

- Do HSP grant solicitation documents contain SHSP criteria?

- Do MCSAP officers and managers collaborate with law enforcement, motor vehicle administrators, and engineers?

- Does local law enforcement participate in CMV inspections and enforcement?

■ Timeline

Figure 5.6 provides an annual schedule for the different transportation plans and programs discussed. Federally required plan submission and reporting dates are noted; however, the timelines are presented only as a general guide because states follow different schedules. States are encouraged to develop similar timelines consistent with their specific planning schedules. Understanding when phases of the different planning processes occur is helpful to collaborative integration efforts.

Figure 5.6 Safety and Transportation Planning Timeline

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep

HSIP
- HSIP List Preparation
- HSIP into STIP
- Problem Identification
- Countermeasure ID/Project Prioritization
- → Implementation and Evaluation →
- Annual Report due Aug 31

STIP
- Project Solicitation
- Regional Workshops
- Plan Preparation
- Public Involvement
- Plan Preparation
- STIP due to FHWA Aug/Sep
- FHWA Rev/ Approval by Oct 1
- → Implementation and Evaluation →

HSP
- Problem Identification
- Goals and Objectives
- Countermeasure ID
- Project Selection
- Plan Preparation
- HSP due Sep 1
- NHTSA Rev/ Approval
- → Implementation and Evaluation →
- Annual Report due Dec 31

CVSP
- Mission and Goals
- Problem ID/Data Analysis
- State Specific Objectives
- Strategies/Activities
- Plan Preparation
- CVSP due Aug 1
- FMCSA Rev/Approval
- → Implementation and Evaluation →
- Final Quarterly Report due Jan 31
- Quarterly Report Apr 30
- Quarterly Report Jul 31
- Quarterly Report Oct 31

Beginning of the annual planning cycle.

43

Chapter 6 – Marketing

"Marketing is the activity, set of institutions, and processes for creating, communicating, delivering, and exchanging offerings that have a value for customers, clients, partners, and society at large" (American Marketing Association). In the SHSP context, marketing is the process for creating, communicating, delivering, and exchanging information about the SHSP to the public in general and to safety stakeholders and elected officials in particular.

Marketing benefits SHSP implementation in several ways: it increases awareness of the SHSP goal to reduce traffic-related fatalities and serious injuries; moves safety stakeholders out of their individual silos (engineering, enforcement, education, and emergency medical services) and into multidisciplinary teams; and addresses those elements in the plan that require behavior change.

Marketing has always been a component of transportation safety because improvements are not based solely on modifications to the roadway and surrounding environment, but also on behavior and attitude changes within the individuals who use the transportation system. SHSPs include both infrastructure and behavioral emphasis areas, and the techniques and approaches used to improve road user behavior can be applied to marketing the SHSP including branding, information dissemination, awareness, and behavior change. Marketing answers the age old question, "If a tree falls in the woods and no one is there to hear it, does it make a sound?" The answer is yes, but the action has more impact if someone does hear it. The same is true for the SHSP.

The SHSP is a product that states spent a great deal of time and effort developing in hopes of improving the safety bottom line – reducing traffic-related fatalities and injuries. Marketing is how states will get stakeholders, officials, and the public to "buy" the product by keeping them active, involved, and supporting the plan's implementation. Obtaining support and involvement is important because without active and committed supporters, implementation does not happen. It is akin to a team planning for a major football game, and then not having any players to go on the field when the whistle blows.

Keeping the plan the purview of a small group of stakeholders also defeats another goal of the SHSP which is to change the way engineers, planners, law enforcement personnel, educators, and emergency medical services personnel do business, and persuade them to work collaboratively. Marketing helps stakeholders understand it is no longer possible to do "business as usual."

Marketing helps safety stakeholders understand the vital role they play in the SHSP and why their continued involvement is important. Previous chapters noted the difficulty in maintaining interest in the SHSP once the plan is developed. Marketing is one way to keep interest and activity levels high. People want to be a part of something bigger than themselves, and educating stakeholders about life saving programs and activities generates ongoing commitment. Other benefits of marketing include the following:

- Establishes the SHSP as an important and worthwhile endeavor among safety stakeholders, elected officials, and the public at large;

- Highlights, promotes, and celebrates effective approaches to improving transportation safety;

- Raises awareness about the importance of transportation safety and about the goals and objectives of the SHSP;

- Educates the public, safety stakeholders, and public officials about safety problems, such as aggressive driving; and

- Garners the support required to make the tough choices necessary to reduce the number of traffic deaths and injuries.

Developing and Implementing a Marketing Strategy

Once states determine a marketing plan, several tasks are needed to accomplish it and ensure the approach is effective. Marketing, like any other aspect of SHSP implementation, requires a plan, and just like the SHSP, the most important decision is what the marketing plan is designed to accomplish. The following list of strategies will help states define marketing plans. In addition to the strategies, a list of delivery mechanisms is also provided to help refine the approach and ensure marketing dollars are spent wisely.

Marketing Strategies

- Gain support and involvement from new safety stakeholders;

- Keep current safety stakeholders interested and active in implementation;

- Educate the public about the SHSP and the state's most serious transportation safety problems;

- Raise awareness of the SHSP goals and objectives among elected officials;

- Coordinate media and communications messaging among all the partners involved in the SHSP; and

- Provide opportunities to highlight different aspects of transportation safety.

Marketing Dissemination Techniques

- A unique branding that includes a logo and slogan;

- A web site;

- Newsletters;

- Brochures;

- Safety Summits;

- Presentations at safety and community meetings;

- News media events (earned media);

- Public service announcements;

- Paid radio and television advertising; and

- Blogs, podcasts, a Facebook page, etc..

Marketing Plan Elements

Gain support from new safety stakeholders and keep current stakeholders active and involved.

6-1

SHSP Newsletters

Newsletters One way to gain support and keep current stakeholders interested and involved is to let them know how different groups and individuals are implementing the plan. Quarterly newsletters could be sent to stakeholders throughout the state. The newsletter features quick updates on each of the emphasis areas team activities. In addition to the update information, a feature recognizing a stakeholder who stands out as a safety champion could be included.

6-2

SHSP Leadership Summit

Summits Safety Summits generate enthusiasm. They are used to educate stakeholders on implementation progress, stimulate networking, suggest ideas for best practices, etc. To obtain buy-in and support, however, the best approach is to give participants something to do. This can involve a review of the SHSP to determine what is working and where additional help is needed or organizing participants into regional teams that select the emphasis areas they feel are most pressing and determine what they will do to address them.

Web Sites Web sites generate interest in the SHSP particularly if an interactive function allows people to sign up, ask a question, and obtain additional information. Some states post the SHSP on the DOT web site, while others create a unique site to support the SHSP. Web sites also serve a practical function allowing emphasis area team members and other stakeholders to obtain information on the latest research, review meeting reports, obtain updated data, etc.

Presentations States interested in gaining support for the SHSP from new stakeholders can conduct outreach activities. For example, presentations by SHSP champions can be made to the state association of counties or to the state police chiefs association to spread the word about the SHSP. Many states also have state or local engineering chapters that may welcome SHSP presentations at their meetings. The key to effective presentations in these cases is to leave the participants with strategies for getting involved and specific activities to implement.

Other marketing tools for stimulating stakeholder interest and support include the following:

- Brochures that highlight the goals, objectives, and accomplishments of the SHSP; and

- The use of new media such as blogs or podcasts of SHSP presentations or speeches, and a Facebook page where individuals can sign up as "friends" of the SHSP.

Educate the public about the SHSP and the state's most serious transportation safety problems.

Figure 6.1   SHSP Logos and Slogans

6-3

Branding and Marketing the SHSP

Branding   Almost anyone in America knows the golden arches represent McDonalds. Large corporations spend millions of dollars branding their products and their companies so people will recognize and remember them. The same can be true for the SHSP. When members of the public see the SHSP branding, they know the product, activity, or information they see is related to improving transportation safety. For instance, if the state is conducting a traffic safety campaign on impaired driving, such as "Over the Limit under Arrest," the SHSP logo can be included on all print and broadcast materials. Branding usually includes a logo, and a slogan. The following graphic includes examples of branding for several state SHSPs.

State SHSP Branding & Logos

Maryland

New Mexico

Rhode Island

Florida

News Events News media events educate the public and involve safety stakeholders in a stimulating and fun activity. These events are usually centered on a specific issue coordinated with the SHSP emphasis areas. Invite the SHSP champion to attend and participate in the event and distribute brochures and other materials to the news media representatives. Changes in the number of fatalities and serious injuries are a good topic for a news media event centered on the SHSP.

Raise awareness about the SHSP goals and objectives among elected officials.

Brochures Brochures that outline the purpose of the SHSP and its importance to the state's residents can educate elected officials. Whenever possible, include information that shows how the SHSP not only save lives and prevents injury, but also improves the state's financial bottom line. Providing this information to state legislators helps pave the way for legislative changes identified in the SHSP implementation plan.

Presentations Presentations about the SHSP to educate legislators may be effective, but providing elected officials with a presentation they can use to talk about safety is better. Elected officials often are called upon to address community and business groups. A tailored presentation on transportation safety demonstrates to constituents that officials are well informed and concerned. States may want to conduct symposiums to educate legislators about the state's safety needs and the SHSP.

6-4

Legislative Symposium

Provide opportunities to highlight different aspects of the SHSP.

In many states marketing traffic safety focuses on behavior such as impaired driving (the "Over the Limit, Under Arrest" campaign), safety belt use ("the Click It or Ticket" campaign), etc.; however, marketing campaigns can effectively address infrastructure issues as well. For instance, a number of infrastructure improvements could be of interest to the news media, which is one of the marketing dissemination tools. In one state installing rumble strips on 1,400 miles of roadway resulted in a 42 percent reduction in the number of vehicles driving off the road. That caught the attention of the news media which traveled to one of the rumble strip sites to interview the DOT program coordinator. During the interview, the coordinator highlighted the benefits of the rumble strip program and tied the strategy back to the SHSP.

Coordinate media and communication messaging among all the partners involved in the SHSP.

A review of the number of agencies and organizations that promote transportation safety messages in any state may reveal a surprising level of activity and interest, e.g., community groups promoting pedestrian safety for children walking to and from school, the annual "Click It or Ticket" campaign sponsored by the SHSO, etc. While this level of activity is appreciated, it can create problems particularly when messages compete for the same audience. Rules of marketing include consistency and repetition – tell people what you are going to tell them, tell them, and tell them what you told them.

To address the issue of message consistency and repetition, one state formed a Strategic Communications Alliance made up of public information officers and media professionals from government agencies, MPOs, private sector organizations, public relations firms, and community groups. The purpose of the Alliance is to bring together traffic safety communications experts; coordinate messaging; develop a communications calendar that includes the major high-visibility enforcement initiatives; and support implementation of the SHSP. The state believes the group is needed to prevent competing messages from different agencies and coordinate efforts.

The Alliance meets quarterly and approves all marketing materials for the SHSP including the branding and logo, newsletter design and contents, and information for the SHSP web site. Recently the group developed a traffic safety survey to determine how each agency or organization currently provides or could provide support to existing safety campaigns.

Key Marketing Strategies

- Develop a statewide strategic marketing plan.
- Brand the SHSP with a unique identify.
- Gain support from new safety stakeholders.
- Use newsletters and safety summits to keep stakeholders interested and active.
- Educate the public and elected officials about the SHSP and safety issues.
- Provide opportunities to highlight different aspects of the SHSP through news media.
- Coordinate media and communications messaging among all SHSP partners.
- Prepare materials to distribute through public relations channels and earned media.

■ Checklist

Answering these questions will help stakeholders assess their SHSP marketing processes and identify opportunities for improvement.

- Has your state developed a marketing plan?
- What agencies are involved?
- What groups are targeted in the marketing plan?
- Has your state developed a specific branding for the SHSP?
- What marketing and communications materials have been developed?
- Does your state have an SHSP web site; is the number of hits tracked?
- What outreach activities have been conducted to gain more interest and support for the SHSP?
- Has the state held any news media events related to the SHSP?
- Does your state conduct safety summits?

Chapter 7 – Monitoring, Evaluation, and Feedback

Monitoring, evaluation, and feedback provide a method for measuring SHSP progress, understanding its impact on safety, identifying and institutionalizing lessons learned, improving decision-making, and providing the information necessary to make course corrections and update the SHSP. States are gaining experience along with an understanding of the importance of monitoring and evaluating the SHSP. Some states have already updated or begun the process of updating their SHSP based on the experience they have acquired to date. Effective monitoring and evaluation requires an engaged SHSP management team, action plan implementers who provide regular status updates, and a procedure or system to collect, organize, and display progress.

Monitoring SHSP Implementation

7-1

Tracking Local Project Implementation

SHSP monitoring is based on periodic progress reports on each of the emphasis areas. Establishing a formalized reporting system with standard elements provides timely and consistent information to SHSP managers and stakeholders. In some states, emphasis area teams provide quarterly, annual, or semiannual reports to a statewide highway safety commission or coalition.

7-2

SHSP Steering Committee Manages Implementation with Tracking Tools

Several states have developed tools to formalize and streamline the monitoring process. Tracking tools range from relatively simple spreadsheets showing fatalities by emphasis area to customized web-based tools and programs identifying location-specific crashes by emphasis area. One state is developing a formalized process to update action plans: who is responsible for emphasis area updates; when are updates required; what information is provided; and how will the updates drive the SHSP decision-making process?

Evaluating SHSP Implementation Efforts

Evaluation depends on collecting baseline data reflecting the situation prior to implementation, as well as continued data collection during the implementation period, and after project completion. Waiting until after the project has started to develop an evaluation plan can result in missed opportunities to collect critical data. To avoid this, establish an evaluation plan to track progress and evaluate effectiveness as an integral part of the process. Define what constitutes "success" prior to implementation to ensure appropriate data are collected for the evaluation.

SHSP evaluations determine project effectiveness in terms of fatality and serious injury reductions. The data to collect include:

- The costs of safety countermeasures;
- The benefits of safety countermeasures;

- The crash experience before and after strategy implementation; and

- A comparison of post implementation crash frequency, rate, and severity with the expected metrics without implementation.

While it may take several years to develop valid conclusions about the effectiveness of a complex project, preliminary judgments can often be made more quickly. These provide an indication of success or failure and enable managers to react appropriately. Some behavioral and engineering countermeasures (e.g., enforcement, low-cost safety improvements) tend to provide early or interim results.

Many states develop action plans with measurable objectives or performance indicators that are tracked on a quarterly basis. Performance measures streamline the tracking and evaluation process by helping managers determine whether the project met its stated objectives or needs to be modified. Even "permanent" installations (e.g., rumble strips) require decisions about future maintenance investments. Evaluation results should be retained to improve future estimates of effectiveness.

Providing Feedback to the Planning and Implementation Process

The working group meets periodically to review the SHSP, examine progress toward goals, suggest changes or modifications, and brief the leadership. By regularly reexamining its data, evaluating the effectiveness of its countermeasures and strategies, and monitoring its progress in accomplishing the SHSP goals, they can better determine which elements of the plan, if any, should be updated or revised. The review process is accomplished at least annually, but in reality, it is a continuous process. Treat the SHSP as a living document that evolves and progresses as goals, strategies, and safety data change. Measuring the success of the overall SHSP effort is key to maintaining momentum and advancing implementation to deeper levels.

> ### *Key Monitoring, Evaluation, and Feedback Strategies*
>
> - Monitor the implementation effort and issue periodic progress reports for each emphasis area.
>
> - Use a tracking tool, at least a simple spreadsheet, to manage and formalize the monitoring process.
>
> - Use data-driven evaluation techniques and collect baseline data prior to implementation.
>
> - Determine what constitutes "success" prior to implementation to make sure the appropriate data are collected.
>
> - Use performance measures as the basis for the evaluation process.
>
> - Use the results of monitoring and evaluation to identify opportunities to update or revise the SHSP.

■ Checklist

Answering these questions will help stakeholders review their SHSP monitoring, evaluation, and feedback processes and identify opportunities for improvement.

- Does your state have procedures for monitoring and evaluating the SHSP? Who is responsible? What tools do you use?

- Do you utilize performance measures?

- How are performance measures tied to future program funding?

- What procedures are in place for ongoing SHSP update and maintenance? Who is responsible for leading the effort? Who participates?

- What data are used to adjust and update the SHSP?