Implementation of the SHSP

California Strategic Highway Safety Plan

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BUSINESS, TRANSPORTATION AND HOUSING AGENCY

April 4, 2008

Dear Fellow Californians:

I am pleased to present the "Implementation of the California Strategic Highway Safety Plan," which includes a list of high-priority actions for implementation to address California's most pressing safety issues.

As required by the 2005 Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), the California Department of Transportation led the effort to develop the statewide Strategic Highway Safety Plan (SHSP) to identify key safety needs of the State, and strategies that address these needs. California's SHSP was completed in September 2006. While the SHSP includes high-level safety strategies in 16 Challenge Areas, this document covers a list of specific actions in the 16 Challenge Areas for implementation.

These multidisciplinary actions were made possible through the collaborative efforts of more than 300 individuals from State and local agencies, advocacy groups, and private industry. The extent of this collaboration is unprecedented in California's history. It shows that we have reached a new era in traffic safety, one that promises innovative solutions to California's traffic safety challenges. I would like to thank all the safety stakeholders that took part in this important effort to reduce fatalities and serious injuries on California's streets and highways. I appreciate their efforts, expertise, passion and their dedication in working together to improve safety on California's roadways.

The real challenge lies ahead in focusing our resources and efforts to implement the 152 actions presented in this document. It is my hope that implementation of these actions will save hundreds of lives by creating safer roadways in California.

Sincerely,

DALE E. BONNER
Secretary

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Background

SAFETEA-LU requires states to:

- Focus resources on the areas of greatest need, and coordinate with other highway safety programs;
- Address engineering, management, operations, education, enforcement, and emergency medical services elements.
- Adopt strategic and performance-based goals that address the broad spectrum of safety improvements (including behavioral improvements).
- Consider the results of state, regional, and local transportation and highway safety planning processes.
- Establish an evaluation process to assess the results achieved by the highway safety improvement projects.
- Establish a collaborative data-driven process among multidisciplinary groups.

Every year, traffic crashes claim thousands of lives. A virtual army of professionals, including advocates, traffic officers, engineers, and other safety practitioners, devote their careers to addressing the problem. In the past, these groups have often worked in isolation, each focusing on a specific aspect of safety.

Congress recognized the need for a more collaborative approach to safety when it passed the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) in August of 2005. SAFETEA-LU requires the states to develop strategic highway safety plans (SHSP).

The plans must be developed through a collaborative process that involves a wide range of safety stakeholders and must use research and data analysis to identify the most pressing safety problems on all public roads in each state. This collaborative data-driven approach is intended to help a wide array of safety stakeholders to find new and effective methods for working together.

More than 190 participants from 80 California public and private stakeholder groups worked together and completed the State's SHSP in September 2006. Using rigorous data analysis, they identified 16 safety "challenge areas" where resources and efforts need to be focused. They developed broad goals and strategies for each of the areas and set an overall goal ***to reduce the California roadway fatality rate to less than 1.0 fatality per 100 million vehicle miles traveled (VMT) by 2010***.

Implementation of the SHSP is the next step to achieving California's roadway safety goal. This document establishes a set of detailed actions for each of the strategies laid out in the SHSP. Those actions will help the Challenge Area Teams meet their fatality and injury reduction goals and the overall SHSP goal. By achieving this reduction, California also will help reach the national fatality rate goal of 1.0 per 100 million VMT. The pyramid on the next page shows the relationship between the actions and the goals set by the Challenge Areas, California, and the nation.

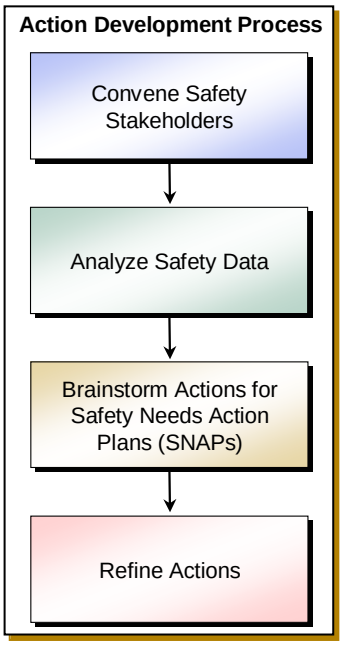
This report focuses on the SHSP actions and includes discussion of the following:

- The implementation process, including the process for monitoring and evaluating the actions over time.
- The process used to identify and select the actions, including the teams that were involved.
- The list of SHSP actions organized by Challenge Area.
- A comprehensive, current list of potential resources that can be drawn on to implement the actions.

How to Use this Document

This document is intended for use by safety stakeholders and the public. Safety stakeholders can use it as a strategic guide to help them stay focused and collaborate effectively on the most pressing safety issues. While not a funding document, it provides useful information about existing funding sources and their potential uses to support SHSP efforts. Members of the public can use this document to educate themselves about the specific actions taken to improve safety in the State of California.

Developing the Actions



Implementation of the SHSP focuses on a list of specific targeted actions designed to reduce serious injuries and fatalities in each of the 16 safety Challenge Areas designated in the SHSP. The process of selecting actions involved four major steps:

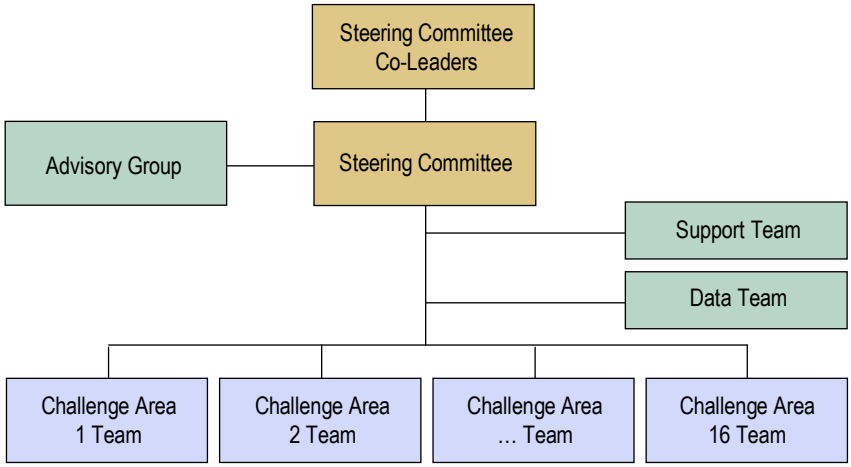
- Convening participants.
- Gathering and analyzing relevant data.
- Brainstorming of actions.
- Refinement of actions.

This section describes each of the steps in more detail.

Participants

Selection of the SHSP actions required the participation and cooperation of several teams of individuals, including the Challenge Area Teams, the Steering Committee, the Support Team, the Advisory Group, and the Data Team. The composition and purpose of each of the teams is described and diagramed below. The diagram represents the collective efforts of more than 300 individuals.

SHSP Organizational Structure



Challenge Area Teams

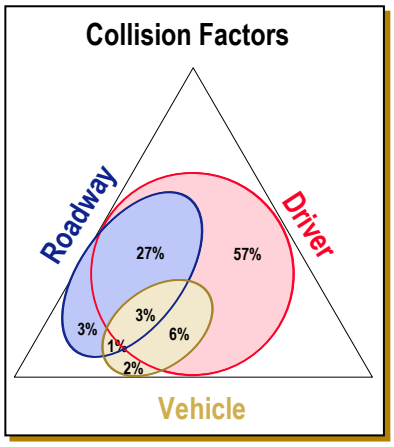
The role of the Challenge Area Teams was to work collaboratively to develop a set of actions for each SHSP strategy. The teams were made up of experts representing the four "Es" of safety (engineering, education, enforcement, and emergency medical services (EMS)). A wide variety of groups participated, including law enforcement, pedestrian and bicycle advocates, railroad representatives, engineers, traffic safety advocates, and others. Each Challenge Area Team was led by two co-leaders who provided guidance and vision throughout the planning process.

Steering Committee

A Steering Committee, comprised of individuals from representative agencies, convened to assist the efforts of the Challenge Area Teams. The Steering Committee was jointly led by representatives of the California Department of Transportation (Caltrans), the California Highway Patrol (CHP), the California Office of Traffic Safety (OTS), and the California State Association of Counties (CSAC)/County Engineers Association of California (CEAC). Additional members were drawn from the following safety stakeholder organizations:

- Department of Motor Vehicles (DMV).
- California Department of Alcoholic Beverage Control.
- California League of Cities.

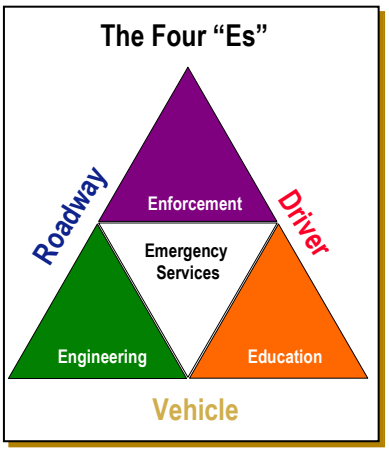
- City of Folsom Police Department.
- Metropolitan Planning Organizations (MPOs).
- Regional Transportation Planning Agencies (RTPAs).
- California Department of Public Health (CDPH).
- American Traffic Safety Services Association.
- Emergency Medical Services Authority.



The Steering Committee met monthly to provide guidance to the Challenge Area Teams as they developed the actions. The committee also helped resolve institutional issues related to funding and implementation and finalize the list of actions.

Support Team, Advisory Group, and Data Team

Development of the SHSP actions also involved the participation of three additional groups. First, the SHSP Support Team made up of Caltrans' staff, the Federal Highway Administration (FHWA), and consultants, provided ongoing logistical support to all of the other groups. Members of the Support Team also served as members of the Challenge Area Teams.



Second, the SHSP Advisory Group provided budgetary and legislative input. Lastly, the SHSP Data Team provided tailored data analysis to the Challenge Area Teams.

■ Data Compendium

To help each team understand the magnitude and characteristics of the problem of collisions in their Challenge Area, a compendium of relevant data was developed. The data was drawn from various sources, including the following:

- The CHP's Statewide Integrated Traffic Records System (SWITRS).
- The National Highway Traffic Safety Administration's (NHTSA) Fatality Analysis Reporting System.
- A variety of other State, local, and national sources.

The data compendium provided the teams with the following information:

- Fatality trends for the State of California (1995 to 2005).
- Fatality and injury trends for the Challenge Area (1995 to 2005).
- Challenge Area-specific analysis of geographic, temporal, demographic, and other characteristics of collisions and the victims of collisions (2003 to 2005).
- Additional specialized analysis (as requested by the Challenge Area).

Safety Needs Action Plans

Each Challenge Area Team developed a Safety Needs Action Plan (SNAP), consisting of a detailed list of actions to improve safety.

After analyzing the data relevant to their Challenge Area, the teams developed their Safety Needs Actions Plans (SNAPs), which are detailed plans for implementing the strategies in the SHSP. They first brainstormed a list of actions they felt would be most effective in reaching the fatality and injury reduction targets included in the SHSP, including those that address California's collisions factors (for example, roadway, driver, and vehicle-related factors and the four "Es" of safety (as shown in the diagrams on page 5)).

Then they ranked the actions by priority and listed the following information for each one:

- Location for the action (statewide, local, etc.).
- Implementation timeframe (short-, mid-, and long-term).
- Type of action (engineering, enforcement, education, and EMS).
- Action to be conducted from what level (State and/or local).
- Cost to implement (low, moderate, and high).
- Expected benefit (low, moderate, or high).
- Lead agency and contact person.
- SHSP strategies supported by the action; and
- Any known implementation risks and mitigation factors.

The Steering Committee ranked actions based on the following considerations:

- The priority order established by the Challenge Area Teams.
- The magnitude of expected benefits.
- The level of effort and resources to implement.
- Ability to measure results.
- Consolidation opportunities.

The Steering Committee reviewed each draft Challenge Area SNAP and suggested revisions if the actions lacked justification or were duplicative of other actions. The Steering Committee also requested the removal of legislative actions, since a separate legislative process already exists and will be followed to pursue legislative changes.

Finally, the Steering Committee ranked the actions within each Challenge Area based on the following considerations:

- The priority order established by the Challenge Area Teams.
- The magnitude of expected benefits.
- The level of effort and resources to implement.
- The ability to measure results.
- Consolidation opportunities.

The final revised and prioritized actions were approved by the Steering Committee and are included in the middle of this document.

SHSP Implementation

Just as the development of the SHSP and SHSP actions relied on the committed efforts of a wide range of safety stakeholders, implementation of the SHSP and progress toward the goal of improving roadway safety will require the commitment of **stakeholder resources, human, financial, and material.** This section describes how stakeholder resources will be used to implement the SHSP actions.

■ Implementation Process

While developing the high-priority actions, the Challenge Area Teams assigned responsibility for each action to an individual or agency. In the coming years, that individual or agency will work with members of the Challenge Area Team to coordinate implementation and funding of the action. Implementation will occur in one of four ways, depending on the nature of the action:

1. Some high-priority actions were already underway before development of the SHSP. The SHSP expands and enhances these actions. It raises their priority, ensuring continued agency commitment and support, and provides greater opportunities for stakeholders to collaborate on implementation.

2. Some high-priority actions were in the planning stages before development of the SHSP. The SHSP expands and enhances these actions. It raises, their priority, ensuring continued agency commitment and support, and provides greater opportunities for stakeholders to collaborate on implementation.

3. Some high-priority actions may be completed through changes to documents and manuals (for example, changes to the CHP 555 crash report form). Challenge Area Teams will work with the appropriate agencies to ensure these changes occur.

4. Some high-priority actions are new and will require either one-time or ongoing resources, whether human or financial. Challenge Area Teams can seek out additional resources for these actions by integrating them into the strategic planning and budgeting processes of the appropriate agency, or by applying to competitive annual grant programs.

Related Plans and Programs

As indicated above, one of the ways in which the SHSP actions will be implemented is through integration with existing safety-related plans and programs.

The diagram on the next page illustrates the different plans and programs that are related to the SHSP. It includes the following:

- Transportation plans on the metropolitan and State level that include projects that affect traffic safety, such as the State Transportation Improvement Program (STIP).
- Plans focused on traffic safety, such as the Highway Safety Plan and the Highway Safety Improvement Program (HSIP).
- Ongoing safety-related activities of State and local agencies and advocacy groups (for example, law enforcement, EMS).

Following careful, collaborative development of the SHSP actions, the agencies implementing these plans and programs are committed to support their implementation.

SHSP-Related Plans and Programs

Monitoring and Evaluation

The SHSP monitoring and evaluation program will:

- Measure progress towards the fatality and injury reduction goals laid out in the SHSP;
- Track implementation of the high-priority SHSP actions; and
- Provide ongoing data analysis to support the efforts of the Challenge Area Teams.

A key component of the implementation process is an ongoing program of monitoring and evaluation. The program will uphold the principle of data-driven decision-making used to select the high-priority actions. The program will measure progress towards the fatality and injury reduction goals stated in the SHSP, track implementation of the high-priority SHSP actions, and provide ongoing data analysis to support the efforts of the Challenge Area Teams.

Purpose

The monitoring and evaluation program will answer basic performance questions regarding implementation of the SHSP, such as "which of the high-priority actions are being implemented, and which are effective?" and "what overall progress is being made towards the SHSP fatality-reduction goals?" However, the most important purpose of the program is to enable the Challenge Area Teams to make informed decisions, such as:

- **Strategy decisions.** Challenge Area Teams will use the data to generate new strategies to reduce injuries and fatalities. For example, if the data reveal a strong correlation between safety belt use and age, the team may decide to focus seat belt use campaigns on the age groups with the lowest usage rates. These types of decisions have already been made for the SHSP, but will continue to be refined and changed as new information and trends emerge.

- **Resource decisions.** Challenge Area Teams will use the information to make decisions regarding where to focus limited resources. For example, if the data reveal that an educational program is having a strong effect on safety in one region but not another, they may choose to focus resources on the region where the impact is greatest.

- **Goal setting decisions.** Challenge Area Teams will use the data to set appropriate fatality and injury reduction targets. For example, they could use the data to help determine the relationship between funds spent on driving under the influence (DUI) checkpoints and reductions in alcohol-related fatalities. This information will help them plan effectively for

future checkpoint programs and help set fatality reduction targets linked to the level of resources available.

The monitoring and evaluation program will serve three additional purposes:

1. **Foster external communication.** The program will help safety stakeholders communicate with those who are not directly involved in the safety planning process, especially members of the public who are concerned about safety. It will help educate these individuals about the most pressing safety problems and the ongoing need to address them.

2. **Maintain focus on SHSP goals.** The program will keep the Challenge Area Teams focused on their strategic priorities and help continue the momentum and excitement associated with implementation of the SHSP.

3. **Inform planning processes**. The program will help integrate safety considerations into planning and decision making areas that could affect safety, such as long-range planning, operations, and maintenance. These other decision areas will be able to better support safety while meeting their objectives.

Measure Selection

Performance Measure Selection Criteria:

- Measurable
- Forecasting
- Clarity
- Usefulness
- Temporal Issues
- Geographic Scale
- Relevance

The monitoring and evaluation program will involve the tracking of a group of carefully selected *performance measures*. Applying the following selection criteria[1] ensures that the performance measures selected for the program will be meaningful and, to the extent possible, will balance the different needs and preferences of decision-makers and analysts.

- **Measurable.** Can reliable data be collected for this measure with available tools and resources?

- **Forecasting.** Is it possible to use this measure to conduct tradeoff analysis among future alternative projects or strategies?

- **Clarity.** Is this measure understandable to policy-makers, safety professionals, and the public?

[1] National Cooperative Highway Research Program Report (NCHRP) 446, *A Guidebook for Performance-Based Transportation Planning*, 2000.

- **Usefulness.** Does it directly measure the issue of concern? Will the measure prompt further analysis or action?
- **Temporal.** Can this measure be tracked over time to observe trends? Is it possible to discriminate among times of day, week, month, year, etc.?
- **Geographic Scale.** Is the measure applicable to *all public roads*? Can it discriminate between interstates, local roads, etc.? Can it be measured at the State, regional, and/or local level?
- **Relevance.** Does ongoing monitoring and reporting of this performance measure give decision-makers the information they need as often as they need it?

Measures to Track SHSP Goals

- Number of California fatalities per 100 million VMT
- Roadway user fatalities involving alcohol and drug use
- Fatalities attributed to vehicles leaving the roadway
- Fatalities involving drivers who are not properly licensed
- Percent of Californians using seat belts and child occupancy seats, percent of all vehicle occupant fatalities that are restrained
- Fatalities attributed to improper rights-of-way and turning decisions
- Fatalities involving drivers age 15 to 20
- Intersection crash fatalities
- Pedestrian fatalities attributed to vehicle collisions
- Fatalities involving drivers age 65 and older
- Fatalities attributed to speeding and other forms of aggressive driving
- Commercial vehicle crash fatalities
- Motorcycle rider fatalities
- Bicycle roadway fatalities
- Work zone fatalities
- Post crash-related fatalities

Monitoring Program Structure

Performance measures selected for the SHSP will be separated into three main groups or components:

1. A set of measures designed to **track progress** towards the goals in the SHSP.
2. A set of measures designed to assist Challenge Area Teams with **decision-making**.
3. A set of indicators designed to **track implementation** of the actions listed in this document. Each component is discussed in more detail below.

Measures to Track Progress

The monitoring program will include 16 high-level measures, listed in the box on the left, that correspond to each of the fatality reduction goals laid out in the SHSP. By tracking these measures over time, it will be possible to show whether each Challenge Area Team is on track to meet its goal. The measures also will be used to communicate with internal and external stakeholders about the ongoing need to improve roadway safety.

Measures to Assist With Decision-Making

The monitoring program also will track a small number of more sensitive measures. These will be used to support the strategic, resource, and planning decisions described previously. They will help Challenge Area Teams determine whether their efforts to

reduce fatalities among specific demographic groups, geographic areas, or roadway types are working and will help them plan for future strategies. In most cases, measures will be drawn from analysis of crash statistics, but non crash-related metrics will be used where available and appropriate. A few examples include the following:

- **Action 2.1 in Challenge Area 2: Reduce the Occurrence and Consequence of Leaving the Roadway and Head-On Collisions** involves implementing a program that would target run-off-road collisions for local roadways. To measure the effectiveness of this program, it would be appropriate to track the number of run-off-road collisions on local roadways throughout the State, especially those where the program is implemented.

- **Action 4.1 in Challenge Area 4: Increase Use of Safety Belts and Child Safety Seats** involves implementing an occupant protection program targeted at ages 15 to 24. To measure the effectiveness of the campaign, it would be appropriate to track safety belt use among ages 15 to 24 before and after the campaign and over time.

- **Action 13.2 in Challenge Area 13: Improve Bicycling Safety** involves a program to increase bicycle helmet usage through education and promotion. To measure the effectiveness of this program, it would be appropriate to track bicycle helmet usage before and after the educational campaigns and over time, especially in the areas where the campaigns were targeted.

Indicators to Track Implementation

In addition to the two types of measures described above, the monitoring and evaluation program also will include qualitative indicators to track progress. These indicators will provide information on the status of each high-priority action, such as whether it is underway, complete, or dropped. Where possible, Challenge Area Teams also may provide more detailed descriptions of activities (for example, funds spent on different programs) to provide context. Collection of these qualitative indicators is essential, since it helps establish a causal link between actions taken and their effects. The link cannot be established unless there is a record of both what was done during a specified timeframe and what the effects were on reducing injuries and fatalities.

Regular Reporting

The monitoring and evaluation program will be an ongoing effort that involves regular reporting and data analysis. This will provide Challenge Area Teams ready access to information they can use to make effective, timely decisions.

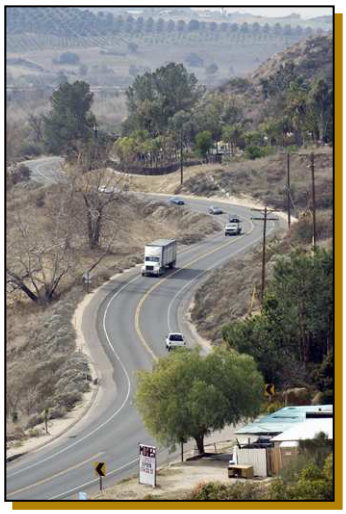
SHSP Actions

Following is the final list of high-priority SHSP actions from the individual Challenge Area SNAPs. The actions are presented in priority order under each Challenge Area.

Challenge Area 1: Reduce Impaired Driving-Related Fatalities

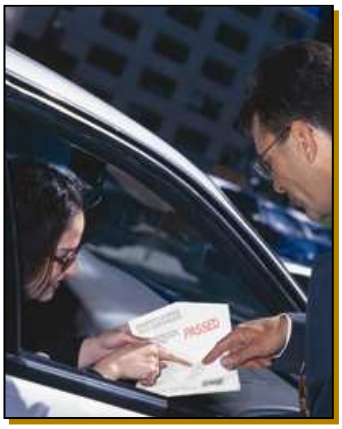
Priority	Action
1.1	Increase frequency, consistency, and publicity of sobriety checkpoint operations by law enforcement agencies in regions with the highest fatality rates.
1.2	Encourage and increase statewide crime laboratory support and distribution of portable evidential breath testing devices to allow for increased use by law enforcement personnel.
1.3	Implement and maintain the Traffic Safety Resource Prosecutor program including specialized (DUI) prosecution training statewide and DUI prosecutor mentoring.
1.4	Promote implementation of vertical prosecution of DUI offenders.
1.5	Institute programs that provide intense monitoring of "worst of the worst" repeat DUI offenders.
1.6	Develop uniform and consistent system for hospital staff to notify law enforcement upon the arrival of a person who has been involved in a traffic collision in which alcohol may have been involved.
1.7	Design and develop a study to identify discrepancies in county DUI rates and develop recommendations for system improvements.
1.8	Increase, by 15 percent, the number of law enforcement officers who are trained and certified as Drug Recognition Evaluator officers.
1.9	Develop protocol and staffing to expand use of Screening and Brief Intervention Programs in hospitals and trauma centers, and encourage courts to obtain pre-sentence alcohol and drug screening investigations as authorized in Vehicle Code Section 23249.50 and include resulting recommended treatments in sentencing of convicted DUI offenders.
1.10	Track and report in the Department of Motor Vehicles (DMV) DUI Management Information System annual report the enrollment and completion rates of DUI offenders into alcohol programs.
1.11	Increase the use of Minor Decoy and Decoy Shoulder Tap Programs to detect and deter the furnishing of alcohol to minors.
1.12	DUI countermeasure evaluations including an increase in the use of home arrest (electronic confinement) for nonviolent DUI offenders.
1.13	Develop and distribute a "tool kit" identifying programs, providers, and resources that will assist communities in implementing effective community-based, comprehensive, multijurisdictional DUI task forces.

1.14	Encourage Licensee Education on Alcohol and Drugs training to retail licensees and their employees.
1.15	Encourage full law enforcement, forensic laboratory, and DMV compliance and application of the administrative license suspension law provisions, through ongoing administrative training and outreach to law enforcement agencies, and by continuously tracking and reporting statewide and regional administrative operation trends.
1.16	Facilitate the development and distribution of reference materials for use by judicial officers in court at entry of plea and sentencing proceedings to include mandatory sentencing requirements for license suspension, treatment programs, ignition interlock requirements, enhancements for elevated Blood Alcohol Content (BAC) levels, and open container laws.
1.17	Increase publicity of the DUI Management Information System annual report to law enforcement, alcohol program providers, and the courts.



Challenge Area 2: Reduce the Occurrence and Consequence of Leaving the Roadway and Head-On Collisions

Priority	Action
2.1	Implement a program to reduce run-off-road collisions on local roadways.
2.2	Develop a collision severity reduction program for local roadways.
2.3	Enhance existing collision concentration identification programs (specifically the Tables C and C Wet in the Traffic Accident and Surveillance Analysis System (TASAS) database) on the State Highway System.
2.4	Develop a program for local roadways that monitors 2- and 3- lane roadways for cross centerline collision concentrations.
2.5	Enhance the existing 2- and 3- Lane Monitoring Program on State Highway System.
2.6	Enhance the 210.015 Collision Severity Reduction Program on the State Highway System.
2.7	Continue to implement and enhance the Run Off Road Program on the State Highway System.
2.8	Continue to implement and enhance the Median Barrier Monitoring System on the State Highway System.



Challenge Area 3: Ensure Drivers are Properly Licensed

Priority	Action
3.1	Improve driver competency assessment tools to improve the renewal driver licensing process.
3.2	Improve educational components to inform the public about the new laws as new initial licensing and renewal licensing laws are implemented and established.
3.3	Encourage and increase vehicle impoundment for drivers whose licenses are suspended or revoked, or who are unlicensed.
3.4	Create a public awareness campaign addressing the consequences of driving without a valid license.
3.5	Improve driver competency assessment tools to improve the initial driver licensing process.
3.6	Examine the reasons why some individuals choose to drive without a proper license rather than reinstate licensing privileges when eligible and based on this information propose ways to increase the reinstatement rate.
3.7	Increase the integrity of the written testing process for driver license applicants.

Challenge Area 4: Increase Use of Safety Belts and Child Safety Seats

Priority	Action
4.1	Implement occupant protection programs targeted at ages 15-24 years.
4.2	Encourage increased enforcement and education campaigns for occupant protection programs.
4.3	Implement education campaigns for child passenger safety usage.
4.4	Develop and implement a social norms (media) campaign targeted to ages 15-24 years to influence or promote seat belt usage.
4.5	Initiate a project to develop a system that links the California Emergency Medical Services Information System (CEMSIS), SWITRS, and medical data (for example, data on injuries treated in hospitals and emergency departments.
4.6	Encourage prioritization of child passenger safety enforcement statewide.
4.7	Enhance occupant protection curriculum and oversight in all traffic-related education programs.
4.8	Incorporate child passenger safety training (from certified child passenger safety trainers) into firefighter, health care, law enforcement, community-based organizations, and child care curricula/training for both initial and continuing education.
4.9	Promote the establishment of permanent child passenger safety fitting stations with paid staff, targeting counties based on need.
4.10	Develop a program that increases the accuracy of California child safety occupant protection misuse data.
4.11	Improve the child passenger safety violator process.
4.12	Implement substantially more child passenger violator educational programs statewide.

Challenge Area 5: Improve Driver Decisions about Rights-of-way and Turning

Priority	Action
5.1	Develop and encourage implementation of a systematic approach to the identification and improvement of existing and potential "high-crash concentration locations" involving improper driver decisions about rights-of-way and turning.
5.2	Develop and encourage implementation of a systematic approach for the review of traffic control devices to identify devices in need of replacement, relocation or upgrade prior to the routine maintenance cycle.
5.3	Review driver education materials and procedures to include turning rules to support proper turning decisions.
5.4	Explore and implement approved technologies being used by other states and countries to reduce severe traffic collisions associated with turning and lane changing on high-speed, multilane facilities.
5.5	Expand the use of existing technology-based tools and strategies that have been demonstrated to correct or minimize the traffic operating conditions which are a primary cause of collisions related to abrupt lane changing in the vicinity of freeway merge and diverge points.
5.6	Improve and update highway design and operational policy, standards, and practices to reflect safety-related lessons learned and research findings. Apply new policy, standards, and practices during the planning and design of improvement projects on high-speed, multilane highway facilities.
5.7	Support new and ongoing research and development projects associated with in-vehicle communication and information technologies to help detect and warn drivers of potential collision with other vehicles in the adjacent lane during lane change maneuvers.

Challenge Area 6: Reduce Young Driver Fatalities

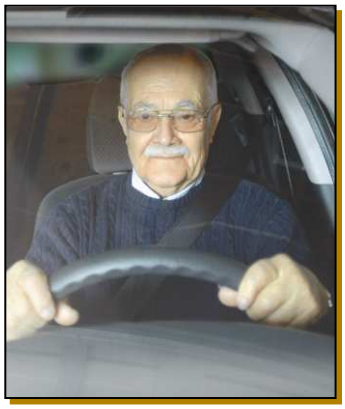
Priority	Action
6.1	Reimplement the Driver Performance Evaluation drive test, as originally developed, to include freeway driving.
6.2	Establish a task force to resolve issues and make recommendations related to improving driver education and training.
6.3	Increase the use of law enforcement for graduated driver licensing outreach programs and proactive enforcement.
6.4	Initiate a program that promotes usage of parent-teen contracts related to driving privileges.
6.5	Expand the implementation of young driver programs such as: Smart Start, Right Turn, Teen Smart, Every 15 minutes, Friday-night Live, Sober Graduation, and Target Responsibility for Alcohol Connected Emergencies (TRACE), and encourage development of new programs.
6.6	Modify completion certificates for the required driver education and training courses to allow the DMV to include information on the driver record reflecting the modality of course offered as well as the type of organization that conducted the training.
6.7	Implement program to have DMV send a congratulatory letter to every provisional licensee that goes six months without any violations or collisions, until the provisional status is terminated at age 18 years. Encourage the insurance industry to provide discounts for parents and teens who receive a letter.
6.8	Increase schools district awareness of the State-legislated Safe Routes to School Program (SR2S) and the federal Safe Routes to School (SRTS) Program and encourage implementation of elements of these programs whenever possible if funding is insufficient for a comprehensive implementation.
6.9	Establish a task force to work with existing statewide media campaigns and to develop and pursue use of public service announcements to convey traffic safety messages related to young drivers and use of alcohol and drugs.
6.10	Encourage additional local communities to implement and maintain anti-DUI programs such as, Teenage Party Prevention, Enforcement and Dispersal, Minor Decoy Program, the Shoulder Tap Program, and TRACE.

Challenge Area 7: Improve Intersection and Interchange Safety for Roadway Users

Priority	Action
7.1	Review existing or potential high-crash intersections and implement appropriate safety countermeasures, including but not limited to: visibility, advance warning, signal timing, access control, geometrics, operation and safety of all transportation modes, the use of roundabouts, intelligent transportation system tools, and targeted law enforcement.
7.2	Review existing or potential high-crash interchanges and implement appropriate safety countermeasures, including but not limited to: visibility, advance warning, access control, geometrics, operation and safety of all transportation modes, intelligent transportation system tools, and targeted law enforcement.
7.3	Establish a program, or utilize an existing program, for proactive review and safety improvements at rural high-crash concentration locations.
7.4	Review existing or potential high-crash at-grade railroad-highway crossings for contributing factors and implement Median Island Program or make other improvements such as visibility, advance warning, and geometrics.
7.5	Review existing or potential high-crash offset "T" intersections and convert to four-legged, signalized intersections as appropriate to improve traffic operations and safety.
7.6	Assess both the DMV's current California Driver Handbook and standard traffic school curriculum for information on intersection-interchange safety and make necessary additions and revisions.
7.7	Establish a State program to encourage local agencies to participate in blueprint visioning planning with participating MPOs/RTPA to provide streetscapes that incorporate land use and traffic measures that increase the safety of the intersections for pedestrian, bicyclists, and motorists.

Challenge Area 8: Make Walking and Street Crossing Safer

Priority	Action
8.1	Expand the SRTS to implement a comprehensive, age-appropriate approach to school traffic safety, including school facilities planning, collaboration, and coordination among those responsible for education, transportation, and land use planning to maximize safety for children walking to and from schools.
8.2	Develop pedestrian safety improvement programs to identify and improve safety at high-crash concentration locations involving pedestrians.
8.3	Form a task force to assist in development of pedestrian safety action plans, to facilitate training delivery, and to establish pedestrian safety improvement programs in California's urban and rural communities.
8.4	Promote pedestrian safety audits and implementation of recommendations.
8.5	Establish a Pedestrian Safety Data Think Tank to develop and implement a comprehensive Pedestrian Safety Data Plan which improves and institutionalizes pedestrian safety data collection and analysis, ensures that existing data collection efforts include information on pedestrian fatalities, injuries, and exposure, and implements a readily available format for local research and investigation.
8.6	Improve pedestrian striping and include standard safety upgrades in routine maintenance and striping projects.
8.7	Assess both the DMV's California Driver Handbook and standard traffic school curriculum for information on pedestrian-related laws, collision factors, and defensive walking and make additions/revisions as necessary. Develop and provide complementary ongoing pedestrian safety education materials reinforced with public information programs.
8.8	Implement Complete Streets–providing safe access for all modes –and model pedestrian safety principles as fundamental in transportation and land use plans with incentives to cities, counties, and regions to integrate pedestrian safety in general and specific land use plans, transportation plans, and other policy documents.



Challenge Area 9: Improve Safety for Older Roadway Users

Priority	Action
9.1	Implement and widely disseminate older driver safety and mobility programs of partner organizations.
9.2	Improve left-turn options and intersections to meet the needs of older drivers.
9.3	Provide statewide training, tools, and outreach to physicians and other health care providers on driving and dementia.
9.4	Continue to hold the yearly Senior Safe Mobility Summit to: (1) stimulate communities to assess the need for, and if needed, offer transportation choices more responsive to the needs of older adults, and (2) assist seniors to remain safe drivers for as long as possible.
9.5	Encourage implementation and installation of traffic control devices included in California Manual on Uniform Traffic Control Devices (CAMUTCD) to accommodate older drivers and pedestrians, particularly in areas with senior populations.
9.6	Provide training to local and county design engineers and others on CAMUTCD-approved recommendations for accommodating older drivers and pedestrians.
9.7	Expand senior orientation and travel training by all major transit systems initially and smaller systems eventually.
9.8	Implement a multimedia education campaign to: (1) broaden senior awareness of transportation options; (2) increase senior willingness to use these options; and (3) enlist the support of families, friends, and the community in helping seniors transition to alternative forms of transportation.
9.9	Encourage all California law enforcement agencies to adopt a policy to use the revised Form DS427, Notice of Priority Re-Examination, to standardize the process throughout the State.
9.10	Encourage formation and expanded use of supplemental transportation systems, particularly where standard public transit is sparse or unavailable.
9.11	Seek approval from the Commission on Peace Officers Standards and Training to incorporate the National Highway Traffic Safety Administration National Older Driver Law Enforcement Curriculum into the core curriculum taught at California's law enforcement academies.
9.12	Develop models for funding occupational therapist evaluation of older persons' functional driving skills.
9.13	Encourage efforts to establish a mobility action plan as described in Senate Bill 910 for California and to form a Mobility Council, which would oversee activities to ensure the action plan is carried out. Recommend that the Mobility Council include consumer representation.

Challenge Area 10: Reduce Speeding and Aggressive Driving

Priority	Action
10.1	Develop a statewide definition for aggressive driving.
10.2	Conduct a public information and education media outreach campaign.
10.3	Develop and encourage implementation of a systematic approach to identify and improve safety in high-crash concentration locations involving speeding and aggressive driving.
10.4	Form multijurisdictional traffic enforcement teams to address speeding and aggressive driving.
10.5	Employ vehicle impounding as a potential deterrent to speeding and aggressive driving.
10.6	Educate traffic commissioners and judges with consistent training programs on speeding and aggressive driving.
10.7	Develop a pilot re-education program to assess the effectiveness of behavior modification training on recidivism rates of repeat aggressive driving offenders.

Challenge Area 11: Improve Commercial Vehicle Safety

Priority	Action
11.1	Establish minimum training standards for new commercial vehicle drivers.
11.2	Increase the number of strike force operations.
11.3	Conduct joint studies at high-crash collision locations involving commercial vehicles, identify appropriate infrastructure improvements, and make adjustments as needed.
11.4	Enhance the Commercial Industry Education Program.
11.5	Increase Biennial Inspection of Terminal inspections from 2006 levels.
11.6	Study the feasibility of improving commercial vehicle safety by adding additional rest stops in identified locations, and increase the number of rest stops as needed.
11.7	Advertise next rest stop location, use rest stop smart technology, and add rest stop information on the Caltrans website.

Challenge Area 12: Improve Motorcycle Safety

Priority	Action
12.1	Develop a monitoring program to identify motorcycle high-collision concentration locations and implement engineering, enforcement, and education improvements.
12.2	Hold a motorcycle safety summit to review the SHSP actions and create an action plan for statewide motorcycle safety initiatives. Include stakeholders representing riders, government, safety organizations, law enforcement, insurance companies, and dealers.
12.3	Assess both the DMV's California Driver Handbook and standard traffic school curriculum for information on sharing the road with motorcycles and make additions and revisions as necessary.
12.4	Create and implement an on-line traffic violator school curriculum specifically for motorcyclists.
12.5	Install signs and markings at high-crash concentration locations involving motorcycles, that are consistent with the CAMUTCD; remove, relocate, make breakaway or shield fixed objects; consider crashworthy barriers that are more "forgiving" to motorcyclists, or make curve corrections.
12.6	Identify owners of motorcycles who are not licensed to operate a motorcycle and alert them to California's requirement to be licensed in order to operate their motorcycle.
12.7	Educate judges, judge pro-tems, and court commissioners through DMV court liaisons to make them aware that the Basic Rider Course can be used to educate violators and to help them recognize proper and legal safety equipment.
12.8	Focus motorcycle-related law enforcement activities on areas with high motorcycle volumes.
12.9	Develop and implement motorcycle media campaigns such as "Ride like you're invisible, not invincible!" using a social marketing approach and using new media (YouTube, My Space, etc.).
12.10	Encourage the development and distribution of the CHP brochure, a DVD, and new media that describe the difference between the United States Department of Transportation (USDOT) and a non-USDOT approved helmet.
12.11	Encourage use of approved USDOT helmets. Establish opportunities for helmet exchange and discount certificates towards the purchase of a safer helmet.
12.12	Create a Motorcycle Initiatives Review Committee to increase quality, continuity, and relevance of materials as well as to promote sharing of information related to motorcyclist-safety or motorcycle-awareness.

Challenge Area 13: Improve Bicycling Safety

Priority	Action
13.1	Establish a bicycle safety improvement program-with project selection criteria-for State highways and local roads. Establish more bicycle and pedestrian corridors and create partnerships in high-collision incident areas.
13.2	Increase bicycle helmet usage through education and promotion.
13.3	Enhance bicycling information in DMV materials and procedures.
13.4	Enhance bicycling information in current Peace Officer Standards and Training, California Vehicle Code, and traffic law enforcement modules.
13.5	Support and expand the California Bicycle Coalition Complete Streets Sub-Committee to develop a curriculum and design standards for complete streets, traffic calming, safe intersection design, and appropriate vehicle speeds for environments where pedestrians and bicyclists are legal users.
13.6	Provide improved guidance and standards in the CAMUTCD for safely accommodating bicyclists in work zones.
13.7	Provide information about policies concerning bicycling to transportation professionals-including State and local agencies and transportation consultants.
13.8	Implement and encourage bicycle safety inspections, training, and education at schools as part of physical education or other programs.
13.9	Support expanding Safe Routes to School programs for noninfrastructure projects focusing on education, bicyclist visibility, motorist awareness, and accommodation of bicyclists.
13.10	Improve data collection-from various sources-regarding bicycle trips and bicycle collisions.
13.11	Develop and implement a bicycle safety public education, information, and enforcement program for all age groups of road users.

Challenge Area 14: Enhance Work Zone Safety

Priority	Action
14.1	Expand present efforts to create and implement a joint training program for field personnel and law enforcement officers to better understand each others' responsibilities and coordinate activities in the work zone.
14.2	Improve collection, storage, and evaluation of work zone crash data.
14.3	Encourage present efforts to increase use of dynamic merge systems to reduce rear-end collisions and aggressive driving.
14.4	Encourage and permanently fund present efforts to influence driver behavior with Slow for the Cone Zone and Work Zone Awareness campaigns and to reduce traffic through work zones using project-specific public awareness campaigns.
14.5	Encourage present efforts to deploy more and better mobile and temporary barriers and attenuators (rather than just cones) to provide positive protection for workers and safe deflection of errant vehicles.
14.6	Increase work zone safety training and proficiency of workers and traffic control staff.
14.7	Encourage present efforts to consider full closures early in the project design process with the goal of increasing the use of this option.
14.8	Develop a web-based system that records or gathers in one location information about the number, duration, and location of actual major, minor, blanket, and rolling work zones. Local road work by counties and cities, including utility companies, will be gathered at a minimum, but other data needs should be identified as well.
14.9	Encourage incorporation of the Safety Edge in construction paving projects.
14.10	Assess the DMVs' California Drivers Handbook for information on work zone safety and update or expand it as necessary.
14.11	Form a team to develop industry standards to evaluate innovative technology on a routine basis as practitioners propose new methods and technologies to improve work zone safety.
14.12	Encourage present efforts to improve access and detours for bicyclists and pedestrians near work zones.
14.13	Expand improvements to traffic control and encourage use of project-specific websites to provide motorists with work zone delay information.
14.14	Form a team to evaluate best work zone safety practices in other states and to develop a request for proposal purchasing process for innovative technology to allow routine use with minimum legal challenges.

Challenge Area 15: Improve Post Crash Survivability

Priority	Action
15.1	Implement the CEMSIS with appropriate linkage to other data systems, which include but are not limited to the SWITRS, Office of Statewide Health Planning and Development, and Vital Statistics.
15.2	Increase hospital participation in an inclusive State Trauma System, supporting the *California Statewide Trauma Planning: Assessment and Future Direction Document.*
15.3	Increase communication linkage between all emergency response agencies.
15.4	Develop a multifaceted educational program with common language for identifying location of crash, destination, and appropriate transportation of injured persons. The education will be aimed at the public (e911 cellular phone calls), law enforcement, Caltrans, and all prehospital personnel.
15.5	Implement a full-spectrum education program developing collaborative practice for rural trauma care. To cover the continuum of care, this education will encompass the bystander public, prehospital responders, and hospital personnel.

Challenge Area 16: Improve Safety Data Collection, Access and Analysis[a]

Priority	Action
16.1	Implement the Allied Agencies Collision Reporting-SWITRS.
16.2	Implement the CEMSIS Update (Inclusive of State Trauma Registry.)
16.3	Implement a statewide Records Management System (RMS)-Automated Citation.
16.4	Implement the Crash Medical Outcomes Data Project.
16.5	Implement the TSN/TASAS Database Enhancements.
16.6	Improve the Department of Motor Vehicle's Database Accuracy and Completeness.
16.7	Implement the E-Filing for the Courts. Improve data accessibility within the courts, law enforcement, and the DMV.

[a] Challenge Area 16 actions represent project proposals voted on by the California Traffic Records Coordinating Committee/Challenge Area 16 Team and included in the *State Traffic Safety Information Systems California Strategic Plan (2006-2009)* submitted for Section 408 funding. These projects address issues identified in the Traffic Records Assessment and/or are related to various SHSP Challenge Area groups.

Resources

This section describes existing funding sources that may be available to support implementation of the SHSP actions. These sources are listed below. Note that for some sources, matching funds from the State or local governments may be required.

- **State transportation programs.** These include major State-administered transportation programs, as well as ongoing State agency activities that support the SHSP actions.
- **FHWA safety programs.**
- **NHTSA programs.**
- **FMCSA programs.**
- **Local sources.**

These funding programs are summarized in a table at the end of this section. If SHSP actions meet the required criteria of a funding program, they may be eligible for competing with other projects to receive funding.

State Programs

State Transportation Improvement Program (Government Code 14529)

The STIP process determines which capacity-increasing transportation projects will be funded and when these projects will be constructed. Under current law, 75 percent of STIP funds are designated for the Regional Transportation Improvement Program (RTIP) with projects chosen by Regional Transportation Planning Associations, while the remaining 25 percent are designated for the Interregional Transportation Improvement Program (ITIP) with projects chosen by Caltrans. Projects also may be jointly funded by the ITIP and the RTIP.

All STIP projects must be capital projects (including project development costs) needed to improve transportation. These

projects generally may include, but are not limited to, improving State highways, local roads, public transit, intercity rail, pedestrian and bicycle facilities, grade separations, transportation system management, transportation demand management, sound walls, intermodal facilities, safety, and environmental enhancement and mitigation, including Transportation Enhancement Activities (TEA) projects. Regional Transportation Planning Associations should include improvements for mobility, accessibility, reliability, sustainability, and safety as part of their fundamental goals. Note that the STIP draws in part on federal funding programs described separately.

State Highway Operation and Protection Program (Government Code 14526.5, Streets and Highways Code 164.6)

The State Highway Operation and Protection Program (SHOPP) primarily funds eligible, non-capacity increasing, and operational improvements, including roadway (pavement) and roadside (landscape and other non-pavement facilities) rehabilitation. SHOPP is based on a 10-year plan (updated every two years) that projects State highway rehabilitation needs. While STIP funds are distributed according to a formula based on population and highway lane miles, SHOPP funds are distributed according to need. As a result, some counties receive substantially more STIP funds than SHOPP funds, such as San Diego and Los Angeles counties, while the reverse is true for other counties, such as Nevada and Siskiyou. Note that SHOPP draws in part on federal funding programs described separately.

Bicycle Transportation Account.

This program provides State funds for city and county projects that improve safety and convenience for bicycle commuters. To be eligible for Bicycle Transportation Accounts (BTA) funds, a city or county must prepare and adopt a Bicycle Transportation Plan that complies with Streets and Highways Code Section 891.2. Funding level is contingent upon the annual State budget.

Safe Routes to School (SR2S).

This program provides State funds for construction improvements to enhance the safety of pedestrians and bicycle facilities and related infrastructure and encourage walking and bicycling among students. Funding level is contingent upon the annual State budget.

State Agency Activities

Other State agencies receive State and federal funds to execute their responsibilities and programs. Commitments from other agencies (for example, CHP and the California Department of Education), to align resources with the SHSP, will produce additional support for SHSP implementation. For example, in some states the DMV plays a leadership role in safety education. Often the key is to educate public employees about their potential roles and responsibilities related to road safety.

FHWA Safety Programs Administered by Caltrans

Highway Safety Improvement Program (Section 148)

Section 1401 of SAFETEA-LU amended Section 148 of Title 23 United States Code (USC) to establish a new HSIP as a "core" FHWA funding program to reduce traffic fatalities and serious injuries on public roads. The new HSIP replaces the Hazard Elimination Program in Section 152 of Title 23 USC, effective October 1, 2005. The purpose of the HSIP, as stated in Section 148(b)(2), is to reduce traffic fatalities and serious injuries on public roads. This program is primarily aimed at infrastructure improvements, but the new law allows more flexibility than in the past. For example, safety conscious planning activities and traffic records improvements are eligible under Section 148. In addition, up to 10 percent of the funds can be used to carry out public education and enforcement-related activities, so long as the State (a) certifies it has met its infrastructure safety needs related to highway safety improvement projects (for example, those programmed in the current year) and (b) has met its needs relating to railway-highway crossings.

If the SHSP actions meet the required criteria for HSIP funding, they may be eligible for competing with other HSIP projects to receive funding to support the implementation of the actions. HSIP funds will be available to Caltrans and local transportation agencies for infrastructure projects and activities eligible under SAFETEA-LU. Funding for other types of projects (enforcement, education and EMS) will require the realignment of resources and funding commitments by the appropriate agency.

Two additional safety set-aside programs are funded through the HSIP. They include the following:

- **Railway Highway Crossings (Section 130) Program**. These funds are based on the number of railway-highway crossings, and are to be spent on installation of protective devices at rail highway crossings and related improvements. Up to 2 percent of the funds can be used for data analysis and compilation for an annual report.

- **High-Risk Rural Roads.** These funds may be used on any roadway functionally classified as a rural major or minor collector or a rural local road. States must demonstrate that the selected location (a) experiences a collision rate for fatalities and incapacitating injuries that is greater than the statewide average for those functional classes of roadways or (b) that will likely have increases in traffic volume that are likely to create a collision rate for fatalities and incapacitating injuries that exceeds the statewide average for those functional classes of roadway. The funds must be used for construction and operational improvements.

Safe Routes to School

The purpose of this federally-funded program is to enable and encourage children to walk and bicycle to school; make walking and bicycling to school a safer and more appealing transportation alternative; and facilitate planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity (that is, within a two-mile radius) of schools.

The funds are apportioned according to a ratio based on the relationship of the total student enrollment in elementary and middle schools in each state to student enrollment in all states. The law requires each state to hire and fund a Safe Routes to School coordinator out of its apportionment.

Road Safety Improvements for Older Drivers and Pedestrians

SAFETEA-LU provides incentives for states to adopt the recommendations contained in the Guidelines and Recommendations to Accommodate Older Drivers and Pedestrians (FHWA, October 2001). The Act specifically mentions improved traffic signs and pavement markings. These projects

are **100 percent federally funded** (for example, a state match is not required as it is in other areas), but no specific apportionment is set aside to support this category. A thorough analysis of crash data might reveal regions, corridors, or areas where the size and characteristics of the crash problem among older road users would address the State's safety problem.

Other FHWA Programs Administered by Caltrans

Other FHWA programs provide funding to states and metropolitan areas for the construction and maintenance of transportation facilities. Safety improvements are an eligible use of up to 50 percent of the funds for these programs, with the exception of the Transportation Enhancements program, in which only 25 percent may be used for safety. Note that these programs flow through other funding packages described previously (for example, California's STIP and SHOPP).

- **National Highway System.** The National Highway System (NHS) Program funds construction and improvement of the NHS, which consists of the Interstate System and other nationally important routes.
- **Interstate Maintenance.** The Interstate Maintenance program finances projects to rehabilitate, restore, resurface, and reconstruct the Interstate System. Reconstruction activities are eligible for funding if they do not add capacity, except for high-occupancy vehicle (HOV) or auxiliary lanes.
- **Surface Transportation Program.** The Surface Transportation Program (STP) funds construction, improvement, and other transportation-related projects, and is mandated to be a cooperative effort between State and local government entities. The STP funds a diverse range of projects and includes those related to safety improvements for highways, transit, and railway-highway grade crossings.
- **Highway Bridge Replacement and Rehabilitation Program.** Funds may be used for any deficient highway bridge on a public road, including bridge rehabilitation and or total replacement of the bridge.
- **Congestion Mitigation and Air Quality Improvement Program.** The Congestion Mitigation and Air Quality Improvement Program (CMAQ), jointly administered by the FHWA and the Federal Transit Administration, provides funds to state Departments of Transportation, MPOs, and

transit agencies to invest in projects that reduce criteria air pollutants regulated from transportation-related sources. Funding is available for areas that do not meet, or have not previously met, the National Ambient Air Quality Standards. A number of different project types are eligible those most relevant to safety include traffic flow improvements and pedestrian and bicycle programs.

- **Recreational Trails Program.** These funds are for the development and/or restoration of recreational trails and trail facilities. Funds could be applied to improve bicycle and pedestrian safety by creating dedicated, off-street routes for pedestrian and bicycle travel.

- **Transportation Enhancement Activities.** These funds are used for transportation-related projects that enhance the quality of life in or around transportation facilities. The projects should have a quality-of-life benefit and fall within the 12 allowed types of activities, including bicycle and pedestrian infrastructure and educational projects.

- **Discretionary programs.** The FHWA administers a set of discretionary funding programs based on applications received. Each program has its own eligibility and selection criteria that are established by law, regulation, or administrative rules.

NHTSA Safety Programs Administered by the California Office of Traffic Safety

Education and Enforcement (Section 402)

Section 402 of the SAFETEA-LU is the base funding program for education and enforcement projects. The OTS is responsible for the distribution of these funds. In general, the priorities are impaired driving, occupant protection, traffic records, and speeding, but a wide variety of other programs are funded as well. These funds can be used for training, equipment, program delivery, overtime enforcement, and many other activities. Projects in support of the SHSP can be programmed into the annual HSP.

Traffic Records (Section 408)

Access to timely and complete crash data is a high priority. The data is necessary to clearly identify safety problems, evaluate alternative countermeasures, track progress, measure performance, and keep the public and safety partners informed. Good data is also needed to support funding applications.

Section 408 provides for traffic records systems improvements. The data grants are larger than previous allocations. To qualify, states must establish an active Traffic Records Coordinating Committee with representation from all agencies with responsibility for collecting, managing, and analyzing traffic data; have had a recent (within five years) traffic records assessment; and write a strategic traffic records improvement plan. After satisfying these criteria, California is eligible for an annual apportionment for a total of four years (Note: Section 148 funding also may be used to improve traffic records and other safety data systems).

■ NHTSA Incentive/Transfer Programs Administered by the California OTS

California currently qualifies and received funding under the federal incentive grant and transfer programs discussed below.

Section 164: Minimum Penalties for Repeat Offenders for Driving While Intoxicated or Driving Under the Influence

Section 164 provides for a transfer penalty if states do not enact and enforce a law having certain minimum penalties for repeat intoxicated drivers. States may use the transferred funds for alcohol-impaired driving countermeasures or for any activities eligible under the HSIP.

Section 405: Occupant Protection

Section 405 provides occupant protection incentive grants up to 100 percent of the fiscal year 2003 Section 402 apportionment for occupant protection programs.

Section 406: Safety Belt Performance Grants

Section 406 provides large incentives for states that have passed a primary or standard safety belt law after 2002. Incentives also are provided to states that had the law in place prior to 2002. These funds may be used to support the SHSP (Note: Highway safety funds may not be used for lobbying, but they can be used for educating officials and the public).

Section 410: Alcohol Impaired Driving Countermeasure Incentive Grants

Section 410 provides funding for impaired driving programs. The programmatic eligibility criteria include high-visibility enforcement, prosecution, and adjudication outreach, increased BAC testing of drivers in fatal crashes, high-risk drivers programs, alcohol rehabilitation or DUI court programs, underage drinking prevention, administrative license suspension or revocation, and self-sustaining impaired driving prevention programs.

Section 2010: Motorcycle Safety Grants

Section 2010 is a new grant program to improve motorcycle safety. Eligibility criteria include statewide motorcycle training courses, motorcycle awareness programs, and impaired motorcycle driving programs.

■ Federal Motor Carrier Safety Administration Programs

Motor Carrier Safety Assistance Program (Section 4101)

Motor Carrier Safety Assistance Program is a federal grant program, authorized by SAFETEA-LU, which provides financial assistance to states to reduce the number and severity of crashes and hazardous materials incidents involving commercial motor vehicles (CMV).

Federal Motor Carrier Safety Grants (Section 4106)

This program issues safety grants to states that provide "accurate, complete, and timely" safety data and "participate in a national motor carrier safety data correction system." States will include information on driving around commercial vehicles in the manuals for noncommercial vehicle drivers, enforce registration regulations, conduct high-visibility traffic enforcement operations, enforce drug regulations, and enforce traffic regulations in conjunction with safety operations.

High-Priority Activities (Section 4107)

This program provides a set aside for State and local agencies to improve commercial vehicle safety, increase compliance, increase public awareness and education, demonstrate new technologies, and reduce the number and rate of crashes involving CMVs.

Performance and Registration Information Systems Management Grant Programs (Section 4109)

The Performance and Registration Information Systems Management (PRISM) Program, provides implementation grants to states. PRISM determines the fitness of the motor carrier prior to issuing license plates, and encourages carriers to improve their safety performance.

Commercial Driver's License Program Improvement Grants (Section 4124)

This discretionary grant program provides funding for improving implementation of the State's (CDL) Program, including expenses for computer hardware and software, publications, testing, personnel, training, and quality control.

Commercial Vehicle Information Systems and Networks (Section 4126)

This program funds core and expanded Commercial Vehicle Information Systems and Networks (CVISN) activities. CVISN is the collection of State, federal, and private sector information systems and communications networks that support safe commercial vehicle operations.

Safety Data Improvement Grants (Section 4128)

This program provides grants to states to improve accuracy, timeliness, and completeness of motor vehicle safety data. The State must complete a comprehensive audit of its commercial vehicle safety data system within the preceding two years. It also must develop a plan that identifies and prioritizes its commercial vehicle safety data needs and goals.

■ Local Funding

Local funds constitute about one-half of all public funds spent on transportation in California. Over one-third of local funds for transportation are derived from local sales tax measures dedicated to transportation purposes; the balance is made up from local transportation funds, local general funds, transit fares, fees, assessments, and other local funds. In many cases, local funds can be used to fund traffic safety projects. These funds may include the following:

- **Local Sales Tax Measures.** Cities and counties are allowed to impose up to 1 percent additional local sales taxes if approved by the voters in the local jurisdiction.
- **Share of State General Sales Tax.** A 0.25 percent of the State general sales tax generated in each county is returned to the respective county's local transportation fund. This money is allocated for local and regional transit services.
- **Local General Funds.** In some cities and counties, a certain level of general funds must be spent on city and county roads as a precondition to receiving a share of State fuel tax revenues.

Summary of Funding Sources

Administrative Agency	Funding Program	Description
State Funding	State Transportation Improvement Program	Capital improvement program (capacity-enhancing)
	State Highway Operation and Protection Program	Roadway and roadside rehabilitation projects (non-capacity enhancing)
	Safe Routes to School (SR2S)	State construction program to promote walking and bicycling among students
	BTA	Construction projects to improve bicyclist safety
	Other State Agencies	Funding contributions from other agencies
FHWA	HSIP (Section 148)	Construction, planning, and implementation
	Railway Highway Crossings (Section 130)	Construction of safety devices at railway highway crossings
	High-Risk Rural Roads	Construction and operational improvements on high-risk rural roads
	Safe Routes to School (SRTS)	Planning and Implementation of safety projects/programs near schools
	Road Safety Improvements for Older Drivers and Pedestrians	Improvements to traffic control devices
	Other FHWA Programs: National Highway System, Interstate Maintenance, STP , CMAQ Improvement Program , Highway Bridge Rehabilitation and Replacement Program , Recreational Trails Program , TEA, and discretionary programs.	Primarily for construction and maintenance of infrastructure
NHTSA	Education and Enforcement (Section 402)	Education and enforcement projects
	Traffic Records (Section 408)	Assessment and improvement of safety data systems
	Section 164: Minimum Penalties for Repeat Offenders for Driving While Intoxicated or DUI	Development of alcohol-impaired driving countermeasures
	Section 405: Occupant Protection	Education and enforcement programs for occupant safety
	Section 406: Safety Belt Performance Grants	Education and enforcement programs for safety belt use
	Section 410: Alcohol Impaired Driving Countermeasure Incentive Grants	Outreach and enforcement activities
	Section 2010: Motorcycle Safety Grants	Training and awareness programs
FMCSA	Motor Carrier Safety Assistance Program (Section 4101)	Education and enforcement projects for commercial vehicles
	Federal Motor Carrier Safety Grants (Section 4106)	Enforcement of commercial vehicle safety and improvement of data systems
	High-Priority Activities (Section 4107)	Education and enforcement projects for commercial vehicles
	PRISM Grant Programs (Section 4109)	Improve safety compliance by motor carriers
	CDL Program Improvement Grants (Section 4124)	Improvements to licensing data systems
	CVISN (Section 4126)	Improvements to CVISN
	Safety Data Improvement Grants (Section 4128)	Audit and improvement of commercial vehicle safety data
Local	Local Sales Tax Measures Share of State General Sales Tax Local General Funds Developer Fees	To be determined by local officials; can be used as a matching funding source for projects

Additional Information

Additional information on the development of the SHSP actions, including the SHSP document, safety data relevant to the actions, information on the activities of the Challenge Area Teams, background information, and safety reports and resources can be found on the California SHSP web site:

http://www.dot.ca.gov/SHSP/

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- **Advisory Group Members.** Federal Highway Administration, Federal Motor Carrier Administration, Federal Railroad Administration, National Highway Traffic Safety Administration.

- **Steering Committee Members.** California Department of Transportation, the California Highway Patrol, the Office of Traffic Safety, California State Association of Counties/County Engineers Association of California, Department of Motor Vehicles, California Department of Alcoholic Beverage Control, California League of Cities, City of Folsom Police Department, Metropolitan Planning Organizations, Regional Transportation Planning Agencies, California Department of Public Health, American Traffic Safety Services Association, Emergency Medical Services Authority.

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- **Challenge Area Team Participants.** A complete list is available at: http://www.dot.ca.gov/SHSP/.
- **Consultants.** Cambria Solutions, ProProse, and Cambridge Systematics, Inc.

SHSP Acronym List

4 E's	Education, Engineering, Enforcement, and EMS
AACR	Allied Agencies Collision Reporting
ABC	California Department of Alcoholic Beverage Control
ATSSA	American Traffic Safety Services Association
BAC	Blood Alcohol Content
BTA	Bicycle Transportation Account
BTP	Bicycle Transportation Plan
Caltrans	The California Department of Transportation
CCMS	California Case Management System
CDL	Commercial Drivers' License
CDPH	California Department of Public Health
CEAC	County Engineers Association of California
CEMSIS	California Emergency Medical Services Information System
CHP	California Highway Patrol
CMAQ	Congestion Mitigation Air Quality Improvement Program
CMV	Commercial Motor Vehicle
CODES	Crash Outcome Data Evaluation System
CSAC	California State Association of Counties
CVISN	Commercial Vehicle Information Systems and Networks
CVSP	Commercial Vehicle Safety Plan
DMV	Department of Motor Vehicles
DOT	Department of Transportation
DUI	Driving Under the Influence
EMS	Emergency Medical Services
EMSA	Emergency Medical Services Authority
FARS	Fatality Analysis Reporting System
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
FTA	Federal Transit Administration
GDL	Graduated Driver's License
HBRRP	Highway Bridge Replacement and Rehabilitation Program
HPMS	Highway Performance Monitoring System
HR3	High Risk Rural Roads Program

HSIP	Highway Safety Improvement Program
HSP	Highway Safety Plan
IM	Interstate Maintenance
ITIP	Interregional Transportation Improvement Program
MPO	Metropolitan Planning Organization
MCSAP	Motor Carrier Safety Assistance Program
MTP	Metropolitan Transportation Plan
MUTCD	Manual on Uniform Traffic Control Devices
NHS	National Highway System Program
NHTSA	National Highway Traffic Safety Administration
OSHPD	Office of Statewide Health Planning and Development
OTS	Office of Traffic Safety
PRISM	Performance and Registration Information Systems Management
RMS	Records Management System
RT	Recreational Trails Program
RTIP	Regional Transportation Improvement Program
RTPAs	Regional Transportation Planning Agencies
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users
SHOPP	State Highway Operations Protection Program
SHSP	Strategic Highway Safety Plan
SNAP	Safety Needs Action Plan
SRTS	Safe Routes to Schools Program (Federal)
SR2S	Safe Routes to Schools Program (State)
STIP	Statewide Transportation Improvement Program
STP	Surface Transportation Program
SWITRS	Statewide Integrated Traffic Records System
TAPPED	Teenage Party Prevention, Enforcement and Dispersal
TEA	Transportation Enhancement Activities
TIP	Transportation Improvement Program
TRACE	Target Responsibility for Alcohol Connected Emergencies
TSN/TASAS	Transportation Systems Network/Traffic Accident and Surveillance Analysis System database
VMT	Vehicle Miles Traveled