



NEBRASKA SAFETY CONSCIOUS PLANNING FORUM

ITHACA, NEBRASKA

SEPTEMBER 14, 2005

SPONSORED BY

**DEPARTMENT OF ROADS
DEPARTMENT OF MOTOR VEHICLES
LOCAL TECHNICAL ASSISTANCE PROGRAM
FEDERAL HIGHWAY ADMINISTRATION**

PREPARED BY CAMBRIDGE SYSTEMATICS

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■ Introduction

Injury is the leading cause of death in the United States for people whose ages range from about six months to 45 years and, because it so disproportionately strikes the young, it also is the leading cause of lost years of productive life. Motor vehicle injury is overwhelmingly the largest component of these losses.

Safety improvement requires progress toward reducing the crash experience of drivers, passengers, and other more vulnerable road users. In 2004, 42,636 people died on the nation's roadways and nearly three million were injured in motor vehicle-related crashes. Over the past few years, the number of fatalities has remained essentially unchanged. The human and economic consequences of these crashes are unaffordable and unacceptable. In the absence of substantial progress, more than 400,000 people will die on the roadways during the current decade at a cost of nearly \$2.0 trillion. The majority of motor vehicle crashes are predictable and preventable; the carnage is unnecessary.

In summary, traffic crashes are a serious public health problem, with multiple causes; therefore, collaborative efforts are necessary for finding and implementing effective solutions. There are no "silver bullets"; the future requires bold, innovative, comprehensive strategies. To make progress, it will be necessary in some cases to restructure organizational priorities and approaches.

■ Background

In 2003, U.S. Secretary of Transportation Norman Mineta issued a "Call to Quarters" and set a national goal of reducing fatalities to a rate of 1.0 fatalities per 100 million vehicle miles of travel (VMT) by 2008. All U.S. Department of Transportation (DOT) modes and many other organizations are supporting this goal, including the American Association of State Highway and Transportation Officials (AASHTO), the Governors Highway Safety Association (GHSA), the American Association of Motor Vehicle Administrators (AAMVA), the Commercial Vehicle Safety Alliance (CVSA), and the International Association of Chiefs of Police (IACP).

A number of strategies are being implemented across the nation to drive down the human and economic costs of motor vehicle crashes and meet the goal of 1.0 fatalities per 100 million VMT by 2008. One initiative focuses on the explicit consideration of safety in the traditional transportation planning processes. This action was first mandated by the Transportation Equity Act for the 21st Century (TEA-21). A second relevant and important initiative is the AASHTO Strategic Highway Safety Plan. The plan encourages all states to develop comprehensive, collaborative, data driven strategic highway safety plans. This initiative was mandated by the Safe, Accountable, Flexible, Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU).

Both of these efforts are supported by a group of strategies led by a broad-based coalition of transportation agencies and professional associations known as the Transportation Safety Planning Working Group (TSPWG). One of their strategic initiatives is to sponsor state and regional safety conscious planning (SCP) forums to start a dialogue among the traditionally “siloeed” transportation and safety agencies and to develop collaborative strategies for improving safety. Nebraska was the 25th state to participate in a forum but the first to explicitly design the forum to support the rapid implementation of both initiatives believing that SCP and development of a strategic highway safety plan (SHSP) are based on compatible and mutually supporting principles.

■ Forum Objectives

The Nebraska Department of Roads (DOR), with assistance from the Department of Motor Vehicles/Office of Highway Safety (DMV/OHS) and the Federal Highway Administration (FHWA) planned the forum agenda, recruited the participants and speakers, and managed logistical needs. The Nebraska L-TAP hosted the event. To ensure progress in developing a SHSP would result from the forum, the planning team established the following objectives:

- Explain how to integrate specific safety projects into comprehensive transportation plans;
- Foster peer exchange and networking;
- Increase communication and collaboration among organizations statewide;
- Identify the safety data needs of state, regional, local, and tribal planning agencies;
- Explore methods for connecting land use planning and safety at all levels, look for areas not being addressed and explore new opportunities for increasing integration at the state level; and
- Learn the contents and requirements of SAFETEA-LU.

■ Effective Safety Strategies

The forum planning team structured the event to provide useful, “real world” information that the participants could utilize immediately. They invited Tom Welch, Iowa’s State Safety Engineer, to share his experiences and recommendations. He presented information focused on specific, realistic safety policies, practices, and approaches from Iowa and other states.

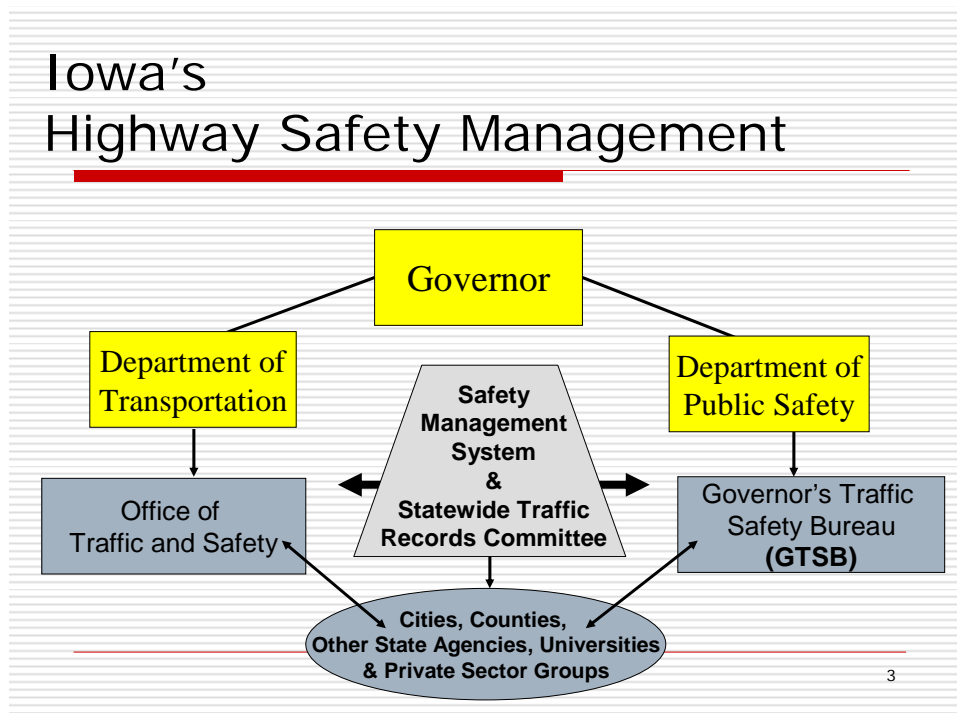
Iowa focuses its safety efforts on the most severe crashes, i.e., those that involve fatalities and serious injuries. The safety candidate analysis strategy uses a rating process with 60 percent on severity, 20 percent on the number of crashes, and 20 percent on the crash rate. This process is designed to ensure that a high crash location with a large number of “fender benders” does not receive preference in the funding decisions over a location with a smaller number of very serious crashes.

The safety decision process in Iowa is guided by a multidisciplinary safety management system (SMS) coordinating committee and a “toolbox” containing strategies and other information focused on high-priority emphasis areas with promise for improving safety (Figure 1). The SMS is a “...diverse partnership of highway safety practitioners in engineering, enforcement, education, and emergency services dedicated to reducing the number and severity of crashes on Iowa’s roadways.”

We aren't concerned about the plastic and glass on the roadways, our job is to get the blood off the road. We want to take business away from trauma centers and funeral homes.

Tom Welch, Iowa State Safety Engineer

Figure 1. Iowa Safety Management System



Statewide Safety Strategies

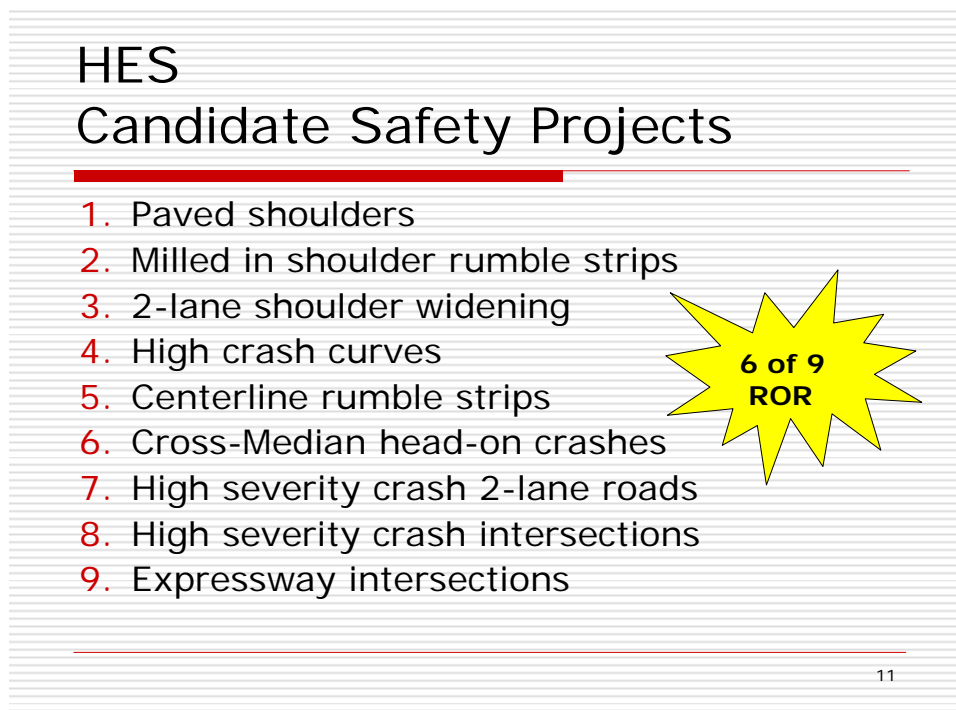
The Iowa safety management program is funded in part by one-half of one percent of the State Road Use Tax Fund. It also receives funding from the Federal Highway Safety Improvement Program. In the latter case, three categories receive funding: safety studies to conduct research and evaluate countermeasures, traffic control devices such as the purchase of materials for installation of new or replacement of obsolete signs and signals, and site-specific construction or traffic operations improvements.

IDOT and GTSB provide incentive grants to entice the larger cities to develop community-based, collaborative, multidisciplinary safety teams (MDST). These arrangements are often located in and supported by the local metropolitan planning organization (MPO). Six cities are participating in this program, and two additional cities are being recruited.

Training and technical assistance is provided on a statewide basis, e.g., roadway resurfacing safety workshops, a “3R Checklist,” an annual traffic and safety engineering forum, and distribution of the AASHTO countermeasure guidebooks to local engineers.

Iowa optimizes its safety funds by using a data driven process, targeting infrastructure improvements and enforcement, and using low-cost solutions where possible. The result is a focus on run-off-the-road crashes, which constitute 52 percent of Iowa’s traffic fatalities, and other high-crash locations (Figure 2).

Figure 2. Hazard Elimination Program Projects



Iowa currently is involved in a pilot program based on a successful European design. The analytic technique used in that program treats the first fatality on a specific road segment as a major injury to avoid overemphasis on fatal accidents. Welch mused that perhaps states should always consider fatalities as serious injuries which would prevent the data from being skewed by overemphasizing fatalities, which are rare and random events.

Older drivers also are emphasized in Iowa where people ≥ 65 have become the “design drivers” because the population is aging in place, younger people are seeking opportunities elsewhere, and for the most part, young families are not moving into the State. Countermeasures to provide safe mobility for Iowa’s aging population include fluorescent yellow warning signs, new and improved pavement marking practices, large street name signs on rural expressways, and four- to three-lane conversions.

IDOT also has staged one statewide and several regional forums on the older driver issue. This allows widespread input from older citizens themselves. It also brings visibility to the issues and generates support for IDOT’s safety improvement strategies.

Removing the Barriers

The Iowa Department of Transportation (IDOT) and its partners, especially the Governor’s Traffic Safety Bureau (GTSB), provide a range of services to assist local agencies in implementing safety initiatives because they believe effective highway safety programs must include a local emphasis. Welch believes it is critically important for the DOT to focus energy and resources on removing the barriers to safety planning and programming for the local agencies.

A number of strategies can be implemented to assist regional, local, and rural transportation agencies. For example, Iowa provides high-quality and timely data for identifying high-crash locations and examining the nature of the safety problems. These data also help local agencies prepare successful funding applications. The data are provided on a CD, along with a suite of analysis tools, technical assistance, and training to agencies with data analysts on staff. However, smaller agencies often have neither an analyst nor an engineer to help them identify problems and solutions. In these cases, a service sponsored by IDOT and GTSB and managed by Iowa State University, analyzes the data and provides GIS maps, charts, and other useful tools to the locals.

IDOT and GHSB also support the Traffic Engineering Assistance Program where three on-call consultants provide engineering expertise. The engineers help identify solutions to existing problems on all roads and develop studies and reports. The service is free of charge to smaller cities and all counties.

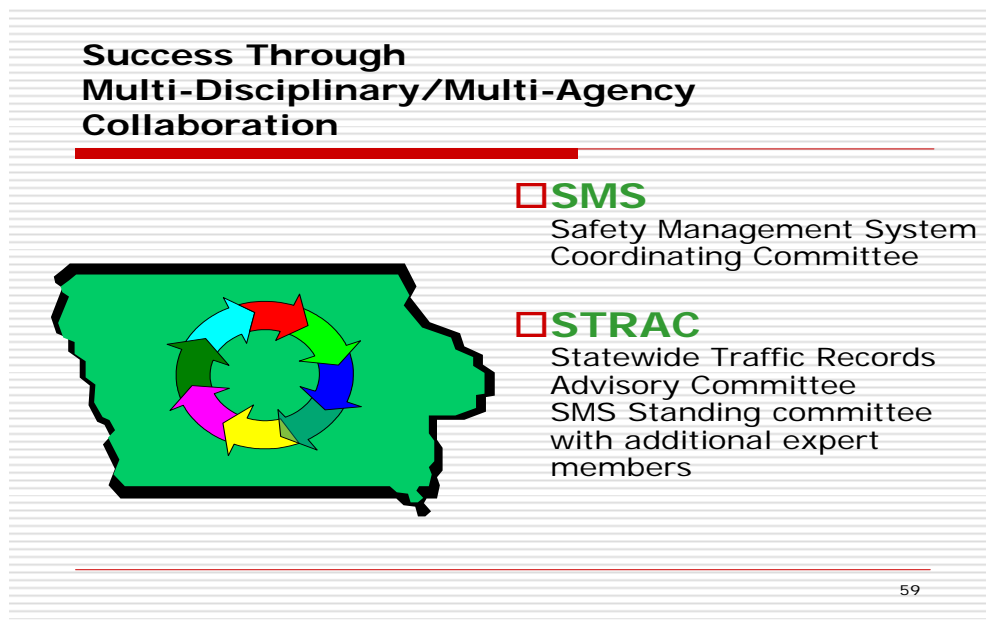
A small town signing program assists towns with less than 5,000 population by providing an inventory and quality review of their signage program along with free replacement signs.

Keys to Success

Welch identified a number of factors that he believes are closely associated with success.

- He noted the presence of DOR's chief executive, John Craig and suggested this level of leadership support is critical to successful development and implementation of an SHSP.
- Iowa uses a data driven process to identify problems and solutions and has developed a measurement and analysis system for ensuring that safety issues are weighted appropriately in relation to other transportation priorities. The State has an exceptionally high-quality data management system that allows for portraying data using GIS capability. Countermeasures are then matched to the problems identified.
- The safety management system coordinating committee ensures an ongoing, collaborative, multidisciplinary approach for addressing safety issues and problems (Figure 3).

Figure 3. Iowa's Collaboration Model



- Iowa makes excellent use of low-cost infrastructure improvements wherever possible. This allows them to do more with less. Welch favors performance driven design over standards driven design. He says engineers need to use judgment and innovation in making decisions. The safety improvement program elements include:

- Four-foot paved shoulders with rumble strips on most two-lane roads.
- Larger and brighter Chevrons on the 30 curves with highest number of crashes which represent 11 percent of Iowa's fatalities.
- Road Safety Audits on resurfacing projects. This practice provides a nonthreatening way for sharing safety knowledge and data with district engineers. Welch and his staff encourage the engineers to look for the "low-hanging fruit" and take advantage of an ongoing resurfacing project to implement safety improvements.

■ Introduction to the Strategic Highway Safety Plan

Randy Peters, DOR State Traffic Engineer, set the stage for the afternoon by explaining the purpose of the safety conscious planning forum - to collaborate among the engineering, transportation planning, and safety communities and move forward in the development of a comprehensive highway safety plan (CHSP). (A CHSP is another term for an SHSP.)

This process started when the Directors of DOR and DMV and the Colonel of the Nebraska State Patrol provided dedicated staff for a working safety committee and challenged them to work toward reducing motor vehicle fatalities and injuries. They set an aggressive goal of reaching 1.0 fatalities per 100 million vehicle miles of travel (VMT) by 2008 which would save 100 lives each year in Nebraska. In 2004, there were 254 fatalities in 229 fatal crashes at an economic cost to the State of \$1.725B.

DOR already had initiated a safety committee with representation from the cities of Lincoln and Omaha, DMV, the state patrol, county engineers, and others. The Committee reviews and approves the expenditure of DOR's safety funds. The next step is to uncover the mystery of how to develop an SHSP. The obvious place to look for guidance may be other states that already have begun or completed an SHSP. Peters described this process as a "focused approach" to safety.

Mission Statement

Develop, promote, and implement cost-effective traffic safety strategies to improve safety within the state transportation system

Vision Statement

Nebraska will be a role model in leadership for creating the safest transportation system in the country.

Progress already has been made. The working group has crafted a vision and mission statement and meets on a regular basis. Peters acknowledged that the SHSP must relate to existing planning products, such as the Highway Safety Performance Plan, the Long-Range Transportation Plan, the Highway Safety Improvement Plan, the Commercial Vehicle Safety Plan, etc.

He described the need for a SHSP by saying, "The status quo approach to highway safety has only limited potential. Improvement requires an approach that expands on the tradi-

tional methodologies and results in a much more comprehensive approach and framework for reducing highway fatalities and injuries.”

SHSPs consider a wider cross-section of issues that transcend the organizational boundaries of any one agency and incorporate safety conscious planning principles and processes. Bringing a wide variety of stakeholders in addition to responsible State, regional, and local transportation and safety officials together to develop an SHSP can provide a strong framework for coordinating programmatic action plans. These plans can lead to improvements in highway safety and save thousands of lives on our nation’s roadways.

The steps for creating an SHSP include gaining a broad constituency through champions, convening a Safety Summit, forming a coalition; establishing a Charter demonstrating coalition commitment; analyzing available data and determining goals, identifying critical highway safety improvement opportunities; identifying strategies and countermeasures, establishing targets and timeframes, leveraging resources across stakeholders, and providing a continuing forum to improve highway safety.

The safety plan must be “data-driven” which means that data must be analyzed to identify high-crash locations, road segments, and corridors, to identify and prioritize effective countermeasures, and to evaluate outcomes. It also must be comprehensive which implies a 4E approach (engineering, enforcement, education, and emergency management).

The SHSP will result in leveraged resources by focusing investments on identified problems, providing access to increased Federal safety dollars, and increasing flexibility in spending categories. According to Peters, “More importantly, it’s the right thing to do.”

■ Nebraska Safety Agency Programs

The forum proceeded with several presentations to demonstrate current safety programs in operation that can be included and leveraged within the framework of an SHSP.

Highway Safety Improvement Program (HSIP)

Bob Grant, DOR Safety Analyst, described the HSIP as a Federal program supporting safety construction projects. The program was originally offered by Congress in Title 23, Section 152 of the U.S. Code. (SAFETEA-LU changed the section number to 148 as is discussed below.) It provides \$1.6 to \$1.8 million annually to Nebraska for data driven safety improvements. The goal is to reduce the number and severity of traffic crashes, or the potential for such crashes on all public roadways.

The program’s elements are planning, implementation, and evaluation and it follows a standard process: collect, manage, and analyze crash data; identify hazardous locations; complete studies at identified sites; develop countermeasures; choose the most desirable alternative; and seek approval from the Safety Committee.

Some of the more common types of projects include reconstruction or modification of intersection geometrics, addition of left- or right-turn lanes, installation of traffic signals or flashing beacons, modification of existing traffic signals; roadway lighting, and upgrading guardrails and bridge rails.

Nebraska Office of Highway Safety

Fred Zwonechek is Administrator of the Nebraska Office of Highway Safety (NOHS), which is located within the Department of Motor Vehicles. The agency is responsible for administering a Federally funded highway safety program focused primarily on education and enforcement programs. The grant funding document is known as the Highway Safety Performance Plan (HSPP).

Like the HSIP, the HSPP begins with the analysis of data and other information to identify and prioritize problems. The analyses review crash, driver, and vehicle data, isolate and identify contributing crash factors, and consider other influencing factors. They also utilize public opinion surveys and program review or assessments conducted by experts for input to problem identification.

The next step is to select performance goals. Nebraska's goals center on alcohol-related fatal, A, and B injury crashes (A and B injury crashes are the crashes involving the most severe injuries), occupant restraint use, speed-related fatal, A, and B injury crashes, and youth involved fatal, A, and B injury crashes. A final general category examines all other factors to ensure a comprehensive approach.

After statewide problem identification, the data are broken down by geographic areas, the emphasis areas are prioritized and ranked, and goals are selected for each of those areas. This process brings a focus to 32 of Nebraska's counties defined as those with at least 40 fatal, A, and B crashes. These counties cover 83 percent of the State's population and serve as trade centers for other counties so an even greater proportion of the population is subject to the enforcement and education messages.

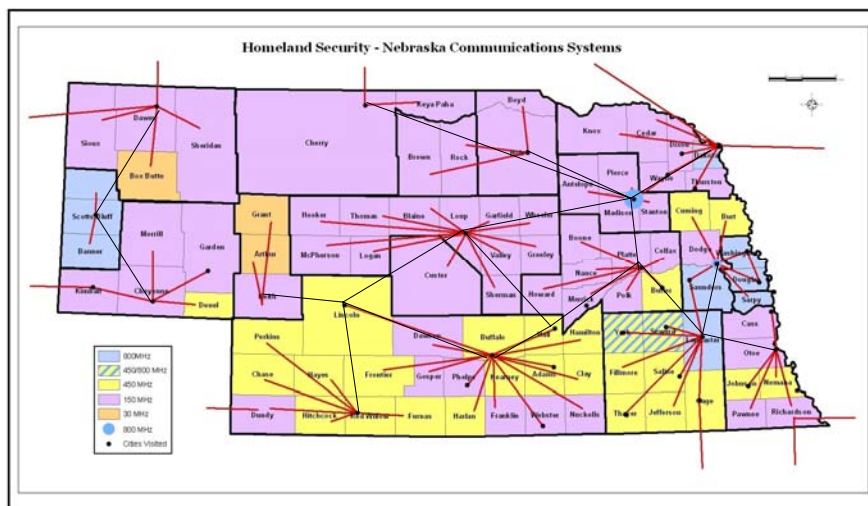
NOHS solicits and reviews proposals, assess its resources, and selects projects based on activities perceived to have the greatest impact with respect to safety improvement. Title 23 contains a number of highway safety funding categories. In total, the State receives approximately \$3.5 million for its program. It funds projects for system support, selective overtime enforcement, training, education, and other initiatives.

Nebraska State Patrol – Interoperability Communications Projects

Major Bill Hobbs, Administrative Services Division, Nebraska State Patrol (NSP), discussed the communications improvements funded by the Federal Homeland Security Administration, which are designed to improve trooper response time to crashes. The system engages the six state patrol districts and will network all communications centers together (Figure 4).

This project brings potential for major safety improvements. Data could not be transmitted under the old system. With Computer-Aided Dispatch (CAD), NSP will no longer have to call the officers to ascertain their locations. The CAD system will show the dispatchers the officers' locations. The system also will assist in identifying high-crash locations, enhance GIS and mapping capabilities, transfer calls for service, and show roads under construction.

Figure 4. Proposed NSP and Regional Project Interoperability



Motor Carrier Safety Assistance Program

Doug Donscheski, NSP, Carrier Enforcement Division, described the Motor Carrier Safety Assistance Program (MCSAP) as a Federal grant program for all States, Territories, and the District of Columbia. The goal of the Motor Carrier Safety Assistance Program is to reduce commercial motor vehicle (CMV) involved accidents, fatalities, and injuries through consistent, uniform, and effective CMV safety programs.

A Commercial Motor Vehicle (CMV) is defined as a vehicle used in commerce with any one of the following characteristics:

- A gross weight, gross vehicle weight rating, gross combination weight, or gross combination weight rating of 10,001 lbs or more;
- Regardless of weight, designed or used to transport eight or more passengers, including the driver; and
- Regardless of weight, used in the transportation of hazardous materials and required to be placarded

The NE MCSAP Program provides \$1.7 million each year, most of which is used to support personnel costs. The State must match the Federal dollars by 20 percent. In addition, Nebraska's New Entrant Program is 100 percent funded with Federal dollars at \$525,354. It is predicted that 600-800 new carriers will enter the trucking industry in Nebraska alone over the next one to two decades. The program is funded according to several categories:

- **Basic Program Funds** - Allocated by formula to States that qualify;
- **Incentive Funds** - Awarded to States that achieve certain performance goals;
- **High-Priority Activity Funds** - Provided to States and local agencies to support national priorities for CMV safety and compliance; and
- **Border Activity Funds** - Provided to States and local agencies to support CMV safety and enforcement along the U.S. border.

To qualify for the funds, states must adopt and enforce state laws that are compatible with the Federal Motor Carrier Safety Regulations and develop an annual performance plan. In addition to enforcement activities, NE MCSAP also conducts the popular "Share the Road" public education and awareness programs in town hall meetings across the state and trains local law enforcement to conduct inspections. The local inspection efforts reach many vehicles that the state program would ordinarily not contact. The result is an increase in out of service citations and a reduction in truck crashes.

The national MCSAP program elements include driver/vehicle inspections, traffic enforcement, carrier compliance reviews, public education and awareness, and data collection.



Donscheski explained the various inspection levels.

- Level I - North American Standard Inspection.
- Level II - Walk-Around Driver/Vehicle Inspection.
- Level III - Driver Only.
- Level IV - Special Inspections (Inspections under this heading typically include a one-time examination of a particular item. These examinations are normally made in support of a study or to verify or refute a suspected trend.)

- Level V – Vehicle-Only Inspection (An inspection that includes each of the vehicle inspection items specified under the North American Standard Inspection (Level I), without a driver present, conducted at any location.)
- Level VI – Enhanced NAS Inspection for Radioactive Shipments.

CMV crashes present a serious part of the safety problem in Nebraska; hence, it is important that MCSAP be intimately involved in creating solutions. Even though the CMV fatality rate is above the national average, the NE MCSAP program is a safety success story. According to estimation statistics, 939 fatal crashes have been prevented by the program since 1989.

University of Nebraska, Mid-America Transportation Center

The Mid-America Transportation Center (MATC) is a research and education facility located within the University of Nebraska. According to the web site (<http://www.matc.unl.edu>), the vision and mission of the Center are as follows:

- **Vision** – Our vision is to become one of the premier transportation systems engineering programs in the United States.
- **Mission** – Our mission is to develop leaders in transportation education, practice, and research. Our mission includes making the transportation system safer, more effective, more efficient, and sustainable.

Professor Aemal Khattak discussed the research program at MATC. The Center focuses research in the following areas:

- Transportation system modeling;
- Geometric design;
- GIS applications; and
- Traffic control and ITS.

Current research projects are examining automatic bridge anti-icing systems using GIS to determine which bridges to address first, deceleration lanes on expressways, curves with approaching stop signs, and at-grade railway-highway intersections.

The Midwest Roadside Safety Facility conducts safety evaluations of roadside appurtenances, vehicular impact simulations, design costs, and full scale crash testing. In addition several past and current projects are searching for methods to reduce the time required for building bridges.

Nebraska Local Technical Assistance Program

The Nebraska L-TAP Program is implementing a technology-oriented pilot program that will catalogue roadway data in a web-based architecture. Kearney County was chosen as a pilot site. L-TAP staff is collecting data on bridges, signs, culverts, small structures, railroad crossings, average daily traffic, and crash data (1997-2002). Additional information is available at <http://www2.dor.state.ne.us/CoNECTAR> (password: N3ct0r5C0).

■ The Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users

Steve Burnham, FHWA, reported that the safety planning factor established in TEA-21 is maintained in SAFETEA-LU. The only difference is that safety and security are separated in the recent legislation which gives greater emphasis to both factors. As before, however, safety is just one of a number of planning priorities, such as environmental protection, congestion mitigation, etc., required by the legislation.

Michael Davies, FHWA, Maine Division, explained new safety opportunities associated with SAFETEA-LU. The legislation addresses several categories of requirements and funding.

Highway Safety Improvement Programs (Section 148)

The highway bill replaces Section 152 with Section 148. To obligate HSIP funds, States must:

- Develop and implement a State Strategic Highway Safety Plan;
- Produce a program of projects or strategies;
- Evaluate the plan on a regular basis; and
- Submit an annual report to the Secretary.

The annual report, among other requirements must include a description of not less than five percent of locations exhibiting the most severe safety needs, with an assessment of potential remedies for the identified hazardous locations, estimated costs associated with remedies, and impediments to implementation other than cost. The reports must be made available to the public through the State DOT web site.

In general, the annual report also must describe progress being made to implement highway safety improvement projects, assess the effectiveness of those improvements, and describe the extent to which improvements reduce the number of roadway fatalities, injuries, and roadway-related crashes, mitigate the consequences of roadway-related crashes, and reduce occurrences of crashes at railway highway crossings.

States may use up to 10 percent of the HSIP funds to carry out other safety projects identified in the SHSP, but first they must certify that the State has met its safety needs relating to railway-highway crossings and the roadway infrastructure.

Partners

Section 148 makes it clear that the DOT is expected to lead this effort and provides a list of suggested partners which include:

- State Highway Safety Office;
- Regional transportation planning organizations and metropolitan planning organizations;
- Major modes of transportation;
- State and local traffic enforcement officials;
- State persons responsible for administering the Federal rail-grade crossing program;
- Operation Lifesaver;
- State MCSAP administrators;
- State motor vehicle administrators; and
- Major state and local stakeholders.

Experience in other states has shown that several divisions within a typical DOT need to be involved, e.g., traffic engineering, planning, maintenance, and design.

Process and Content Requirements

- Use different types of crash data.
- Establish a crash data system with the ability to perform problem identification and countermeasure analysis.
- Address engineering, management, operations, education, enforcement, and emergency medical services elements.
- Identify hazardous locations, sections, and elements and establish criteria that indicate relative crash severity of these locations.
- Adopt strategic and performance-based goals that address the broad spectrum of safety improvements (including behavioral improvements), focus resources on the areas of greatest need, and coordinate with other highway safety programs.
- Advance the State's capabilities for traffic records data collection, analysis, and integration with other sources of safety data and include information on all public roads.
- Consider the results of state, regional, and local transportation and highway safety planning processes.

- Set priorities for corrective action on high-hazard locations, segments, and elements.
- Identify opportunities for preventing the development of new hazardous locations.
- Establish an evaluation process to assess the results achieved by the highway safety improvement projects.
- Produce a program of projects that is consistent with the state transportation improvement program (STIP).
- Seek approval by the Governor or the appropriate state agency.

Eligible Funding Categories

- Intersection safety improvements.
- Pavement and shoulder widening (including addition of a passing lane).
- Installation of rumble strips or other warning devices as long as they do not affect the mobility of bicyclists.
- Installation of devices that improve the safety of pedestrians and the disabled.
- Installation of skid-resistant surfaces at intersections and other high-crash locations.
- An improvement for bicycle or pedestrian safety or the safety of the disabled.
- Elimination of hazards at railroad grade crossings (including grade separations).
- Construction of a rail-highway grade crossing feature (including the installation of protective devices).
- Traffic enforcement activity at a rail-highway grade crossing.
- Construction of traffic calming features.
- Elimination of roadside obstacles.
- Improvement of highway signage and pavement markings.
- Installation of a priority control system at signalized intersections for emergency vehicles.
- Installation of traffic control or other warning devices at high-crash locations.
- Safety conscious planning.
- Improvements in the collection and analysis of crash data.
- Planning emergency communications.
- Work zones operational improvements or traffic enforcement activities.
- Guardrail installation.

- Barriers and crash attenuators.
- Structures or other measures to eliminate or reduce accidents involving wildlife.
- Installation and maintenance of signs and construction at ped/bike crossings and in school zones.
- Construction and operational improvements on high-risk rural roads.
- Improvement projects on any public roadway or publicly owned bike or pedestrian pathway or trail.

Table 1. HSIP Authorization by Federal Fiscal Year

Fiscal Year	2006	2007	2008	2009
Authorization	\$1,236 M	\$1,256 M	\$1,276 M	\$1,296 M

Railway Highway Crossings (Section 130)

SAFETEA-LU contains a \$220 million per year set aside for addressing safety at railway highway crossings. In the new funding formula 50 percent is based on the surface transportation program (STP) formula factors, and 50 percent is based on the number of public railway-highway crossings. The minimum amount any state will receive is one-half of one percent of the program funds.

Fifty percent of the State's apportionment is designated for the installation of protective devices. Up to two percent of these funds can be used for data analysis and compilation for an annual report to Secretary. Section 130 activities also are eligible under the Highway Safety Improvement Program (Section 148). A report to Congress is required every two years beginning April 1, 2006.

High-Risk Rural Roads

SAFETEA-LU contains a \$90 million per year set aside for addressing high-risk rural roads. These funds may be used on any roadway functionally classified as a rural major collector, a rural minor collector, or a rural local road. States must demonstrate that the selected location experiences an accident rate for fatalities and incapacitating injuries that is greater than the statewide average. The funds must be used for construction and operational improvements, but flexibility is allowed if the State certifies it has met all its needs relating to high-risk rural roads.

Safe Routes to School (SR2S)

The purposes of SR2S are to enable and encourage children to walk and bicycle to school, to make walking and bicycling to school a safer and more appealing transportation alternative, and to facilitate planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools.

The funds will be apportioned according to a ratio based on the relationship of the total student enrollment in primary and middle schools (K-8) in each state to enrollment in all states. Each state will receive a minimum: \$1,000,000 per Fiscal Year. The law requires each state to hire and fund a SR2S coordinator out of its apportionment.

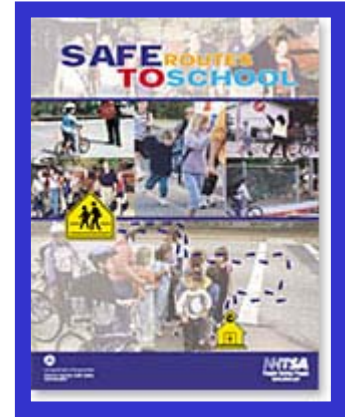
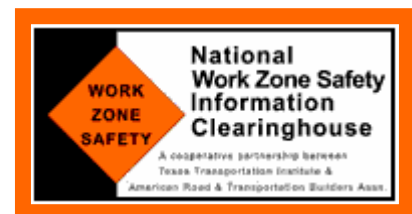


Table 2. SR2S Authorization by Federal Fiscal Year

Fiscal Year	2005	2006	2007	2008	2009
Authorization	\$54 M	\$100 M	\$125 M	\$150 M	\$183 M

Work Zone Safety

Work zone safety grants are provided to support the National Work Zone Safety Information Clearinghouse, programs to prevent worker injury and to improve the free flow of vehicular traffic, and temporary traffic control devices.



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 but specific funds are not designated for this category.

Incentive/Transfer Programs

The following incentive grants and transfer programs in TEA-21 were carried over into SAFETEA-LU.

Section 154 – Open Container Requirements

Each State shall have in effect a law that prohibits the consumption or possession of any open alcoholic beverage in the passenger area of any motor vehicle located on a public highway, or the right-of-way of a public highway. If a State does not have in effect or is not enforcing the open container law, three percent of the funds apportioned to the State for that fiscal year from the NHS, STP, and IM apportionments, shall be transferred to the States 402 program. States may use the transferred funds for alcohol-impaired driving countermeasures or for activities eligible under the Highway Safety Improvement Program.

Section 157 – Safety Incentive Grants for use of Seat Belts

Section 157 provides an incentive to States to improve their safety belt use rates or to achieve seat belt use rates that are higher than the national average. It extends incentives to \$112,000,000 for FY 2004 and \$112,000,000 for FY 2005. No incentive funding is authorized for FY 2006 and beyond.

Section 163 – Safety Incentives to Prevent Operation of Motor Vehicles by Intoxicated Persons

SAFETEA-LU amends Section 163 to include a penalty if a State does not have a 0.08 BAC law. This updates the existing 0.08 BAC Sanction Legislation and places it in Section 163. Funding is extended to \$110,000,000 for FY 2004 and \$110,000,000 for FY 2005. No incentive funding is authorized for FY 2006 and beyond.

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. If a State does not have in effect or is not enforcing the open container law, three percent of the funds apportioned to the State for that fiscal year from the NHS, STP, and IM apportionments, shall be transferred to the States 402 program. States may use the transferred funds for alcohol-impaired driving countermeasures or for activities eligible under the Highway Safety Improvement Program.

National Highway Traffic Safety Administration

In addition to the base Section 402 program which primarily provides resources for education and enforcement programs, new programs are announced in the Act. Section 406 provides large incentives for states that pass a primary or standard safety belt law after 2002 or achieve and maintain a high safety belt use rate for two years in a row prior to applying for the grant. Eligible states will receive a grant that is 4.75 percent of its Section 402 allocation. For Nebraska, this translates to more than 16 million dollars.

Section 408 provides for a new grant to states for traffic records systems improvements. The data grants are larger than previous allocations. To qualify, Nebraska must establish and/or maintain 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.

■ Conclusion

The forum concluded with an open discussion. Randy Peters reminded the audience that a committee has been formed to develop the SHSP, and it meets monthly. He invited interested participants to join the committee. One of the committee's initiatives has been researching long-range plans and SHSPs in other states to use for guidance.

John Craig told the participants that nothing matters, except getting results, i.e., reducing fatalities and injuries. He said a team effort will be required and acknowledged that there is a need to reach out beyond the safety community. DOT and other partners have staged three summits and built a strong coalition. It is now time to gain participation from a broader audience, including elected officials and the public.

Nebraska has made great progress, e.g., work zone crashes have been cut in half over the past six years, even with increased construction. Further progress, as Craig noted, will be more a function of human will than a question of scarce resources. He encouraged everyone to become involved and to help not only develop but also implement Nebraska's strategic highway safety plan.

Appendix A

Forum Participant List

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Appendix B

Forum Agenda

SAFETY CONSCIOUS PLANNING FORUM

September 14, 2005

UNL ARDC Research and Education Building
Ithaca, Nebraska Department of Roads

AGENDA

- Moderator Randy Peters, Traffic Engineer, Nebraska Department of Roads
- 9:00-9:15 a.m. Opening Remarks - Susan Herbel, Cambridge Systematics
- 9:15-10:00 a.m. “Removing the Barriers to Safety Conscious Planning and
Implementation of Safety Programs” - Tom Welch,
State Safety Engineer, Iowa Department of Transportation
- 10:00-10:15 a.m. Break
- 10:15-12:00 a.m. Federal and State Agency Safety and Planning Funding Programs -

Nebraska Department of Roads - Randy Peters and Bob Grant
DMV/Nebraska Office of Highway Safety - Fred Zwonechek
Nebraska State Patrol - Major Bill Hobbs and Doug Donscheski
- 12:00-1:00 p.m. Lunch (provided)
- 1:00-1:30 p.m. University of Nebraska - Aemal Khattak
- 1:30-2:15 p.m. SAFETEA-LU Transportation Reauthorization - Michael Davies,
Federal Highway Administration, Maine Division
- 2:15-2:30 p.m. Break
- 2:30-3:15 p.m. Hot Topics Open Forum - Susan Herbel
- 3:15-3:30 p.m. Wrap-up - Susan Herbel
Closing - John Craig, Director, Nebraska Department of Roads