

Toward Zero Deaths

A Summation Related to the Guardrail Industry

On an average day in the
U.S., there are 116 fatalities.
Thirty percent of those
fatalities will be under the
age of 25 and it will cost
Americans \$630 million.

- AAA Foundation

The American Traffic Safety Services Association
15 Riverside Parkway, Suite 100, Fredericksburg, Va. 22406
(800) 272-8772 • ATSSA.com

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ATSSA's Vision

TOWARD ZERO DEATHS: A Vision For Safer Roads in America

Federal, state and local governments will unite with private industry toward a single overarching goal – *To annually reduce roadway fatalities until we reach the goal of Zero Deaths on America's roadways.*

Foreword: **Toward Zero Deaths: A Vision for Safer Roads in America**

People die on America's roadways every day. For the past 10 years, an average of 42,642 people have lost their lives each year. As cited in a recent summary by the AAA Foundation, "In 2006, 42,642 people died in traffic crashes in the United States. That's 116 every day, almost five every hour, one every 12 minutes. And 2006 was a good year. The toll was 868 higher in 2005, of every traffic death in 2006 there were about 60 injuries; more than 7,000 every day, almost 300 every hour, one every 12 seconds."¹

The AAA Foundation summary also states: "Each individual death and injury is sudden, shocking, and unpredictable. They strike young and old, rich and poor, in all seasons and at all hours. Everyone who drives or rides in a motor vehicle or walks or bicycles on or across a road is at risk."² This includes those who work on or near the roadway itself and may only be separated from traffic by cones and barrels.

It is time that we start thinking of those who die on our roadways as people, not fatalities or statistics. Every person who dies is a loss to someone; they are a mother or father, sister or brother, husband or wife. Certainly each such death is a loss to the community of which the person was a part.

We can no longer accept deaths – thousands of deaths - as a natural or normal consequence of motor vehicle use in our country. We do not and would never do so for any other mode of transportation – planes, trains, or ships. As roadway safety professionals, legislators, administrators, citizens and road users, we must set a new goal. ATSSA proposes that the new goal be: **TOWARD ZERO DEATHS**.

We further propose the following vision statement: Federal, state, local and municipal governments will unite with private industry toward a single overarching goal: To annually reduce roadway fatalities until we reach the goal of zero deaths on America's roadways.

This new goal of **TOWARD ZERO DEATHS** should be the central focus of the 2009 Reauthorization of the "Safe, Accountable, Flexible, and Efficient Transportation Equity Act – A Legacy for Users" (SAFETEA-LU).

By pursuing TOWARDS ZERO DEATHS at all levels of government – federal, state and local – substantial reductions in roadway fatalities can be the end result.

The concept of setting a goal of zero deaths was first adopted in Sweden in 1997 as "Vision Zero," and has since been adopted in several other countries.³ In addition, several state Departments of Transportation in the United States have identified zero roadway deaths as the core objective in their Strategic Highway Safety Plans.⁴

TOWARD ZERO DEATHS brings multiple agencies and organizations together to create a "toolbox" to address roadway safety issues using the concept of the "4 E's" of safety (engineering, education, enforcement, and emergency medical services). Given the broad experience and expertise of ATSSA members, as well as a substantial body of research, we believe that thousands of lives can be saved through proven roadway infrastructure improvements that will make our roadways safer.

¹ AAA Foundation. Improving Traffic Safety Culture in the United States: The Journey Forward, Summary and synthesis. Hedlund. Sept. 2007, Page 1.

² Idem.

³ Vision Zero - An Ethical Approach to Safety and Mobility, Claes Tingvall and Narelle Haworth. Monash University Accident Research Centre, presented to the 6th ITE International Conference on Road Safety and Traffic Enforcement: Beyond 2000, Melbourne, Sept. 6-7, 1999, <http://www.monash.edu.au/muarc/reports/papers/visionzero.html>

⁴ See Utah's Strategic Highway Safety Plan, Moving Toward Zero Fatalities, located at http://www.atssa.com/galleries/default/file/Utah_SHSP.pdf. Also, Minnesota, Oregon and Washington State have adopted a version of zero deaths in developing their Strategic Highway Safety Plans. Minnesota uses the term Toward Zero Deaths. Washington state uses Target Zero.

Over the years, ATSSA has demonstrated that the installation or upgrade of roadway safety features – many of them available at low-cost – can provide immediate and substantial safety benefits for all. Here are some examples taken from a recent study:⁵

1. In Mendocino County, Calif., the number of crashes plummeted 42 percent, while fatalities fell 61 percent, following an aggressive sign installation program. The total program cost of \$79,260 netted accident cost savings of over \$12 million.
2. In 2002, the City of Redmond, Wash. installed 13 in-street pedestrian crossing signs at crosswalks on roadways with speeds at or under 30 mph. Before the sign installation, driver-stopping compliance ranged from 19 – 67 percent. After the sign installation, the compliance ratio ranged from 68 – 98 percent.
3. In Lamar County, Miss., the DOT there found that right side run-off-the-road crashes were reduced by 25 percent after the low-cost installation of edge line rumble strips.
4. The Florida Turnpike Enterprise's Traffic Operations Department confirmed a nearly 70 percent reduction in cross over accidents as a result of the installation of median guardrails.

Congress designated the Highway Safety Improvement Program (HSIP) as a “core program” and recognized the necessity of establishing a focus on saving lives if we are ever to reduce the number of fatalities on our roadways when it passed SAFETEA-LU. In many states, this program has succeeded beyond our initial expectations. In evaluating the HSIP, the California Department of Transportation, CALTRANS, states that: “The results of the analysis of the before and after collision data for the 95 highway locations shows statistically significant reductions in the number of fatal collisions by 19.6 percent, fatalities by 19.6 percent, and number of persons injured by 18.8 percent... The effectiveness of the program was established by using benefit cost ratios. The total cost of implementing improvements at these locations during the three-year evaluation period was \$82.8 million. The minimum savings, in terms of reductions in collision frequency and severity during the same time period was estimated at \$482.8 million. This translates to a savings of \$2.5 billion, or a benefit cost ratio of 30.5 assuming a project life-cycle of 15 years.”⁶

The expertise, knowledge and experience of ATSSA members are in the development and installation of traffic control devices and roadside safety features that make the roadway safer and more forgiving for all users of the roadway system. The remainder of this document focuses on the policies and practices needed to move America TOWARD ZERO DEATHS.

⁵ Low Cost Local Road Safety Improvements, American Traffic Safety Services Association. March 2006. Research and case studies developed by the Texas Transportation Institute.

⁶ AASHTO Subcommittee on Safety Management participant manual. Sept. 26 - 28, 2007, Portland, Ore. State Safety Report Tab, Calif., Page 2.

Introduction

In 2005, Americans traveled almost three billion vehicle miles.⁷ People must use our surface transportation system to get to school, to work or to simply go about their daily business. With that in mind, it is imperative that we make our roadways as safe as possible.

Crashes on our nation's roadways have become part of our everyday lives. People speed, talk on cellular telephones, eat, and even read while driving. The National Highway Traffic Safety Administration reports that 42,642 people were killed in 2006 in motor vehicle accidents.⁸

Human error should not be punishable by death. By increasing efforts to make our roadways as forgiving as possible, we can collectively limit the damaging effects these behaviors can produce.

During consideration of SAFETEA-LU, ATSSA helped frame the debate on safety by making several recommendations that became a cornerstone of the new bill. ATSSA worked closely with Congress and the Administration to make roadway safety a key feature in the legislation. The culmination of those efforts was the creation of the new core-funding program – the Highway Safety Improvement Program (HSIP).

ATSSA is proposing improvements to SAFETEA-LU in 11 issue areas. Implementing the recommendations included in this report will advance us TOWARD ZERO DEATHS.

The issue areas are:

- Highway Safety Improvement Program
- Strategic Highway Safety Plans
- Work Zone Safety
- High Risk Rural Roads
- Roadway Hardware
- Brightness and Visibility of Signage and Markings
- Older Drivers
- Congestion Mitigation
- Funding Roadway Safety
- Funding the Highway Trust Fund
- Additional Recommendations

ATSSA's Reauthorization Proposals Highway Safety Improvement Program (HSIP)

Perhaps the greatest achievement for safety in SAFETEA-LU was the creation of the Highway Safety Improvement Program (HSIP). ATSSA strongly supports the continuation and expansion of this core Federal-aid program. Despite the fact that this is a new program and that many states delayed implementation until after they had completed development of their Strategic Highway Safety Plans, we see some very significant safety accomplishments.

In 2003, the Minn.-DOT developed a Comprehensive Highway Safety Plan (the predecessor of the Strategic Highway Safety Plan included in the SAFETEA-LU legislation and built on a model plan developed by AASHTO) to set a goal of reducing traffic fatalities from an annual average of 626 to 500 or less by 2008 (i.e. over a five year period).

⁷ 2006 Cumulative Monthly Vehicle-Miles of Travel in Billions, Tables at URL: <http://www.fhwa.dot.gov/ohim/tvtw/07jantvt/page3.htm>

⁸ Associated Press News Release dated July 23, 2007 posted at the "National News" link of ATSSA.com

Through its comprehensive approach, Minnesota beat that goal by two years, registering 494 traffic deaths in 2006. The DOT reports that it “and its Toward Zero Deaths partners have adopted a new goal of fewer than 400 by 2010.”⁹

As stated earlier, CALTRANS has documented a reduction in fatalities due to the HSIP and measured a benefit-cost ratio of 30.5. States such as Kansas, Nevada and others have taken the lead in using Roadway Safety Audits as a proactive tool to make their roadways safer for all drivers. The Ohio-DOT reports that it completed more than 900 low cost safety items from 2004 to 2006.¹⁰ North Carolina, Minnesota, Ohio, Texas and Washington all report dramatic success in reducing crossover deaths through the use of median barrier, with effectiveness ranging from 90 to 100 percent.

These are real examples of cost-effective infrastructure improvements that result in saving lives of American drivers. Congress should continue and expand this investment. Let us try to bring every driver home safely every day.

Some of ATSSA's key recommendations include:

- **Recommendation: Congress should include the eligibility of “systemic” improvements for this program and target investments to proven roadway safety strategies.**
- **Recommendation: Redefine the scope of eligible activities under the Highway Safety Improvement Program in order to target investments toward cost-effective roadway safety improvements.** One of these eligible activities is:
 - ***Installation of guardrails, barriers and crash attenuators***



Additional Recommendations:

- **Recommendation: Funding for the HSIP should be reserved exclusively for saving lives and should not be transferable to other programs.**
- **Recommendation: Each state should be required to designate a full time staff person to manage the HSIP and the SHSP.**

Strategic Highway Safety Plans (SHSP)

Recommendation: Require the use of Roadway Safety Audits to plan roadway safety countermeasures and assess current safety levels.

SAFETEA-LU requires that states develop Strategic Highway Safety Plans (SHSPs) to identify the safety improvements needed on each state's roadway system. This in turn allows safety decisions to be based on demonstrated need. In order for these tools to be successful, states must identify not only where crashes occur, but also why they occur. The data used to develop the SHSP can help identify where crashes are occurring, but not necessarily why. There are tools available to help states with this issue.

⁹ AASHTO Subcommittee on Safety Management participant workbook. Sept. 26 – 28, 2007. State Safety Reports tab. Minn.-DOT report, Page 1.

¹⁰ Idem. Ohio Report, Page 1.

Work Zone Safety

With many of our highways and bridges at or near the end of their useful life, system preservation (resurfacing, restoration, rehabilitation, reconstruction) has become critical and roadway work zones are likely to be more prevalent in the future. Work zones impact the safety and mobility of the traveling public, businesses, highway workers, and transportation agencies. Unsafe work zones can result in the loss of life, the loss of productivity and a growing frustration on the part of the motoring public.

Maintenance and reconstruction activities on our nation's highways are increasingly taking place while traffic is being maintained and at night. This results in an increased risk of injury or death for highway workers who already suffer a fatality rate that is more than double that of other construction workers.¹¹

Run-off-road crashes and vertical edge drop-offs are significant work zone safety problems. Cost-effective safety solutions to improve these and other unsafe work zone condition could include, but are not limited to, high visibility striping with audible alerts, barriers, and markings to improve wet and/or nighttime visibility.

High Risk Rural Roads

Fifty-four percent of traffic fatalities nationwide occur on rural roads,¹² even though those roads bear only 35 percent of all travel.¹³ Run-off-road fatalities are designated as a target area in most state Strategic Highway Safety Plans. The bulk of run-off-road deaths occur on two lane rural roads.

Recommendation: Redefine the scope of eligible activities under the HRRR Program in order to target investments and improve safety on our nation's rural roads.

ATSSA recommends that the scope of eligible activities should include the following items in order to target funds towards proven and cost-effective safety improvements:

1. An intersection safety improvement;
2. Installation of rumble strips or another warning device, if the rumble strips or other warning devices do not adversely affect the safety or mobility of bicyclists, pedestrians, and the disabled;
3. Installation of roadway safety devices for pedestrian or bicyclist safety or safety of the disabled;
4. Installation of protective devices at a railway-highway crossing;
5. Construction of a traffic calming feature; (e.g. speed bumps; radar speed feedback devices; bump outs)
6. Improvement of highway signage and pavement markings, including but not limited to any material upgrades and the implementation of any assessment or management method designed to meet state-established performance standards or required by federal regulation or the Manual on Uniform Traffic Control Devices to meet minimum levels of retroreflectivity;
7. Installation of a priority control system for emergency vehicles at signalized intersections;
8. Installation of a traffic control or other warning device at a location with high accident potential;
9. Operational or traffic enforcement activities relating to work zone safety;
10. Installation of guardrails, barriers, and crash attenuators;
11. Installation of barriers between construction work zones and traffic lanes for the safety of motorists and workers;
12. The addition or retrofitting of structures or other measures to eliminate or reduce accidents involving vehicles and wildlife;
13. Installation and maintenance of signs (including Fluorescent Yellow-Green signs) at pedestrian-bicycle crossings and in zones.

¹¹ Department of Transportation, Federal Highway Administration, Federal Docket No. FHWA-2006-25203 IN 2125-AF10 Temporary Traffic Control Devices, Notice of Proposed Rulemaking.

¹² Persons Fatally Injured in Motor Vehicle Crashes - 2005 1/, Table FI-20, U.S.-DOT, FHWA

¹³ Functional System Travel - 2005 1/, Table VM-2, U.S.-DOT, FHWA

14. Installation of a skid-resistant surface at an intersection, horizontal curve, or other location with a high frequency of accidents.

Roadway Hardware

Since 1991, Congress has recognized that improving roadway safety hardware can significantly reduce fatalities and injuries on our nation's roadways. In addition, as early as 1994, the FHWA called for the replacement of old and obsolete roadway safety features such as blunt end guardrail terminals. A comprehensive approach to updating and improving roadway safety hardware can be an effective method to accomplishing the goal of TOWARD ZERO DEATHS.

The AASHTO model Strategic Highway Safety Plan identified 22 emphasis areas for states to pursue in order to significantly reduce highway crash fatalities. Emphasis Area 15 is Keeping Vehicles on the Roadway, and Emphasis Area 16 is Minimizing the Consequences of Leaving the Road. Three key focus areas evolved from these two emphasis areas – run-off-road crashes, head-on crashes, and crashes with trees in hazardous locations.

There are a number of devices that are specifically designed to mitigate the severity of and/or prevent roadway departures. Examples of such devices include:

- Median barriers
- Shoulder-applied guardrail hardware safety features
- Crash cushions

The Mo.-DOT reports a 94 percent reduction in crossover crashes as the result of the installation of median cable barrier.¹⁴ The Texas-DOT reports that it has installed or is in the process of installing over 500 miles of median cable barrier. Their report states that “An informal study of the first complete year of post installation has shown that cross median fatal crashes have been reduced from approximately 47 crashes to one crash.”¹⁵

Likewise, the Washington report states: “Apart from a 10-mile stretch of I-5 in Marysville, not a single crossover fatality has been recorded on Washington's freeways in locations where cable median barrier has been installed.”¹⁶ It is clear that the installation of roadway safety features that mitigate run-off-road, head-on, and crashes with fixed objects results in saving lives with a high return on investment.

Recommendation: Establish national guidelines – with deadlines – to ensure that all roadway safety features are updated so that they are compliant with NCHRP-350 or successor standards.

It is important that national guidelines ensure that all roadway safety features be updated so that they are in compliance with NCHRP-350. To accomplish this, states should be encouraged to develop a “Roadway Safety Feature Asset Management System” in which they would inventory currently installed roadway safety features on the National Highway System, including rural roads that are owned or maintained by the state government. This process would allow states to develop an implementation plan for updating the system's safety features to meet currently accepted standards that would better protect the current fleet of vehicles using the system.

Recommendation: Establish an accelerated program to replace outdated guardrail safety devices.

Deaths on rural roads account for approximately 54 percent of roadway fatalities nationwide.¹⁷ Guardrail safety improvements on these more dangerous rural roads could provide immediate and substantial benefits by making these

¹⁴ Performance of Guard Cable in Missouri, Missouri Department of Transportation, 2005 Data.

¹⁵ AASHTO Subcommittee on Safety Management participant workbook. Sept. 26 – 28, 2007. State Safety Reports tab. Texas-DOT report, Page 1.

¹⁶ Ibid. Wash.-DOT report, Page 2.

¹⁷ National Association of Country Engineers (NACE) Priority Issues in the Reauthorization of Transportation Equity Act for the 21st Century (TEA-21).

roadways more forgiving. Outdated guardrail with old style end treatments do not perform to modern standards – they need to be updated. Modern guardrail safety features can mitigate the severity of – or even prevent – roadway departure accidents.

Recommendation: Require states to establish a process by which local entities of government will receive federal and/or state financial assistance to meet their obligations, if any, arising under a federal program to accelerate the replacement of outdated guardrail safety devices to be compliant with NCHRP-350 or successor standards.



There are about 700,000 miles of rural major and minor collector roads in the United States, of which 400,000 are owned by county governments.¹ If we are serious about achieving a major reduction in deaths and injuries, we need to provide a funding source for local officials to add to and update their guardrail inventory as part of a “local” rural road safety program. Local governments currently receive no federal support to offset the cost of upgrading their current hardware to modern safety standards. This proposal would ensure that local governmental entities with jurisdiction over public roads will receive federal or state financial assistance to help them meet their obligations under the NCHRP-350 or successor standards. By adopting this requirement, Congress can help ensure the timely and widespread implementation of this important roadway safety measure.

*N*early 60 percent of roadway fatalities are the result of roadway departures.

*F*ifty-four percent of traffic fatalities nationwide occur on rural roads, even though rural roads bear only 35 percent of the travel.

Funding Roadway Safety

In 2006, almost 43,000 people lost their lives in motor vehicle crashes. Close to three million more were injured. Apart from the profound human suffering and loss, a report issued in 2000 by the National Highway Traffic Safety Administration estimates that the economic consequences are staggering – \$230.6 billion annually, or \$820 for every person living in the United States.¹⁸

¹⁸ The Effects of Traffic Crashes. URL: <http://www.safemotorist.com/articles/trafficcrashes.aspx>

We are gratified that Congress created the Highway Safety Improvement Program (HSIP) as part of the SAFETEA-LU legislation. This new core federal program is funded at \$1 billion per year and its stated purpose is “to achieve a significant reduction in traffic fatalities and serious injuries on public roads.” Also included in the legislation were two new and vital programs created to enhance roadway safety – the High Risk Rural Roads (HRRR) Program and the Safe Routes to School Program (SRTS).

Even though SAFETEA-LU was a major step forward, there is more to do.

Recommendation: Increase funding for the Highway Safety Improvement Program, with a target of 10 percent of overall funding.

Congress has already recognized the considerable gap between the amounts required to maintain and improve our nation’s roadways and the funds currently available through the Highway Trust Fund. Under SAFETEA-LU, two commissions were established to address this issue, the National Surface Transportation Policy & Revenue Study Commission and the National Surface Transportation Infrastructure Financing Commission. There is no doubt that

Congress will need to take bold steps in order to identify funding sources to maintain the integrity of the Highway Trust Fund. ATSSA urges all Members of Congress concerned with saving lives on our roadways to give careful consideration to dedicating 10 percent of total roadway funding to saving lives on our nation’s roadways.

Recommendation: Increase funding for the High Risk Rural Roads Program to at least \$1 billion annually and target that funding at cost-effective improvements for maximum return on investment.

As documented earlier, fifty-four percent of all roadway fatalities occur on rural roads,¹⁹ even though rural roads bear only 35 percent of all travel.²⁰ Many states have identified rural roads as key problem areas, especially for run-off-road crashes and fatalities. These are our nation’s deadliest roadways. In SAFETEA-LU, Congress exhibited considerable leadership in developing a pilot program to target some safety funding to our nation’s most dangerous roadways. ATSSA recommends that this program be increased to \$1 billion annually, and that additional Congressional guidance be provided to ensure that these funds are expended on cost-effective improvements on local roadways.

Recommendation: Provide a separate obligation limit for the Highway Safety Improvement Program.

Due to the complex nature of the federal authorization, appropriations, apportionment and obligation limits, ATSSA strongly supports the establishment of a separate obligation limitation that would encompass the HSIP, HRRR, SRTS programs as well as the proposed program for Older Driver improvements in order to ensure that all federal-aid recipients comply with Congress’ priorities regarding saving lives on America’s roadways.

Recommendation: Continue the policy established in SAFETEA-LU of targeting funds toward the improvement and standardization of data collection.

Under SAFETEA-LU, \$110 million annually was targeted over a four-year period to improvements in data collection by the states. Accurate data is essential to the successful planning and design of safety countermeasure. We recommend that this effort be continued over the next six years and that it include a specific focus on work zone crash data.

Funding the Highway Trust Fund

One of the most difficult issues that Congress will handle during the reauthorization process is that of funding. Given the growing infrastructure needs in the United States, it will be important that funding from the federal government be increased, be sustainable, and be dependable.

¹⁹ Persons Fatally Injured in Motor Vehicle Crashes - 2005 1/, Table FI-20, U.S.-DOT, FHWA

²⁰ Functional System Travel - 2005 1/, Table VM-2, U.S.-DOT, FHWA

ATSSA urges Congress to carefully consider options to increase the level of transportation investments made by the federal government. The following are several policy options that can be utilized to increase the level of revenue into the Highway Trust Fund:

Recommendation: Support an increase in the federal motor fuels tax to make up a significant portion of the purchasing power that has been lost since the last federal motor fuels tax increase in 1993.

The federal motor fuels tax rates have not been increased since 1993. Since that time, the purchasing power of the revenue generated has been significantly diminished. ATSSA strongly supports an increase in the federal motor fuel taxes at a rate that will make up a significant portion of this loss of purchasing power.

Recommendation: Support the indexing of the federal motor fuels tax rate on a biennial basis (beginning in 2011).

Revenue from the federal motor fuels taxes are collected and deposited into the Highway Trust Fund. Due to increased vehicle fuel efficiency and the increased mileage of hybrid vehicles, the amount collected from the motor fuels taxes has been decreasing. This has led to a reduction in funds available for the reauthorization of the federal transportation programs. In addition, the cost of materials used in transportation projects has been increasing at an alarming rate – thereby diminishing the purchasing power of the funds that are available.

ATSSA supports an increase in the federal motor fuels taxes that is tied to the consumer price index. This indexing should be done on a biannual basis beginning in 2011.

Recommendation: Support federal bonding proposals – such as the Build America Bonds – to provide additional funding resources.

During the reauthorization process, Congress will be considering various proposals to provide federal bonds to finance transportation projects. One such proposal is known as the Build America Bonds. The legislation creates a multi-state entity known as the Transportation Finance Corporation that will issue \$50 billion in bonds. The proceeds of the sale will be used to fund the construction of significant new projects across all modes of transportation including roads, bridges, transit, rail, and waterways.

ATSSA supports increased investment in transportation. Because the level of investment needed to improve this nation's transportation system is estimated to be \$155 billion annually for highways and bridges, funding for these projects will have to be derived from various funding sources – not just the federal motor fuels taxes. Therefore, providing additional resources through federal bonding proposals is another key method to increasing the available funding for transportation projects.

Recommendation: Expand the cap on the use of private activity bonds and require that at least 10 percent of the proceeds of each bond be dedicated to roadway infrastructure safety.

Private activity bonds can be a useful tool that states can use to upgrade and improve infrastructure. Private activity bonds, as defined by SAFETEA-LU, are tax-exempt bonds issued by states to be used on transportation infrastructure. These bonds are treated like any other bond, except they must be approved for transportation use by the U.S.-DOT. The project may be built and operated by a private entity.

However, under SAFETEA-LU, the total amount of private activity bonds that can be issued is capped at \$15 billion. When states issue private activity bonds, they are adding revenue and funding to the project that is above and beyond what a state would receive from the Highway Trust Fund. Therefore, the use of private activity bonds increases the funding available for critical transportation projects. ATSSA supports the expansion of the cap on the use of private activity bonds.

Additional Recommendations

The following are additional recommendations that ATSSA urges Congress to consider during the reauthorization of the transportation bill:

Recommendation: Standardize the collection and reporting of nationwide fatality and crash data with an emphasis on gathering more standard and accurate information regarding crashes in work zones.

Congress should require the standardization of fatality and crash data to be collected by the states. It is important that law enforcement be a partner in this effort. Standardizing the collection and reporting of such data will be beneficial in designing appropriate countermeasures to save lives on the nation's roadways. For example, better collection of data to include run-off road crashes and the types of fixed objects being struck by motor vehicles can lead to a better understanding of the life-saving benefits to be derived from the use of modern guardrail technology. There is also a need to have more consistent and accurate information on work zone crashes nationwide so that industry and government partners at all levels can work in an informed manner to make these areas safer for both workers and road users.

Recommendation: The FHWA should be directed to establish training and certification standards for Traffic Control Installers and Supervisors who work in temporary traffic control zones on all federally funded projects. In addition, the FHWA should be directed to establish required minimum levels of training for "competent persons" in the areas of guardrail installation and inspection, pavement marking installation and inspection, and sign installation and inspection.

ATSSA urges Congress to direct the FHWA to establish training and certification standards for Traffic Control Installers and Supervisors on all federally funded projects. In addition, the FHWA should establish minimum levels of training for supervisors and lead technicians - frequently referred to as "competent persons" - in the areas of guardrail inspection and installation, pavement marking installation and inspection, and sign installation and inspection.

Recommendation: The FHWA should be directed to conduct a research program to measure the benefit cost ratios of various highway safety and congestion improvements.

In the 1970s and 1980s, the FHWA and others undertook research to determine the benefit cost ratios of certain roadway work zone and infrastructure safety devices. This research may serve as a valuable tool to states in the development of safety countermeasures in their Strategic Highway Safety Plans. Yet, existing data is often as much as 30 years old, and does not include updates for newer traffic control devices or roadway safety features invented since that time.

ATSSA urges Congress to authorize \$2 million annually for fiscal years 2010 through 2014 for the purpose of establishing benefit-to-cost ratios for traffic control devices and roadway safety features that have the potential to improve highway safety and congestion. The Secretary should deliver such a report to Congress by June 30, 2014 so that relevant findings may be considered in the next reauthorization cycle.