Letter from The Administrator

I have the privilege to recognize the tremendous work by those who have been selected for the 2009 National Roadway Safety Awards. I want to thank everyone who participated in the program this year for their respective contributions toward safeguarding America’s roads. The partnership with the Roadway Safety Foundation (RSF) to showcase and share the “best safety practices” throughout the nation is one that we at the Federal Highway Administration (FHWA) value highly.

It is clear that States, local governments, regional organizations and others are taking full advantage of all the safety resources made available in SAFETEA-LU to improve their respective programs. The initiatives recognized this year are a reflection of those efforts. As we move forward toward reducing fatalities and crashes, innovative concepts that rely on robust data will benefit everyone and improve the safety of America’s roads. Please continue the great work.

I extend my congratulations to this year’s award winners as well as to each of this year’s 113 nominees. The RSF and FHWA look forward to the next round of awards in 2011 and encourage agencies that share our goal of a safer American roadway to participate. Together, across the nation, we can reduce highway fatalities and injuries. As I say often, while we are on the right track with the decline in highway deaths, nearly 37,000 fatalities each year is 37,000 too many. Please continue to invest, and to innovate, in your highway safety program – we all depend on it.

This Best Practices Guide Book showcases the winning entries of the 2009 National Roadway Safety Awards program. Entries were rated on their innovation, effectiveness, and efficient use of resources. Of those received, the entries showcased here were found to be the outstanding examples of highway safety projects. We congratulate all of the award recipients and are proud to display their projects as models for all agencies to emulate as we continue the work of improving the safety of the nation’s road system.

Victor M. Mendez
Administrator, US DOT Federal Highway Administration

About the National Roadway Safety Awards Program

Now in its tenth year, the National Roadway Safety Awards Program is jointly sponsored by the US Department of Transportation Federal Highway Administration and the Roadway Safety Foundation. The program recognizes exemplary projects for their innovation, effectiveness and efficient use of resources in reducing fatalities and injuries on our nation’s roadways.

For more information, visit www.roadwaysafetyawards.org
# Table of Contents

## Award Winners

### Infrastructure

<table>
<thead>
<tr>
<th>Location</th>
<th>Project Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arkansas</td>
<td>Highway 7 Centerline Rumble Strip Project</td>
<td>1</td>
</tr>
<tr>
<td>California</td>
<td>Vasco Road Traffic Safety Improvement Projects</td>
<td>2</td>
</tr>
<tr>
<td>Florida</td>
<td>CityTrails® - Pedestrian Crosswalk Enhancer</td>
<td>3</td>
</tr>
<tr>
<td>Texas</td>
<td>Texas Safety Bond Program</td>
<td>4</td>
</tr>
</tbody>
</table>

## Operational Improvements

<table>
<thead>
<tr>
<th>Location</th>
<th>Improvement</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>Ticketing Aggressive Cars and Trucks (TACT)</td>
<td>5</td>
</tr>
<tr>
<td>Florida</td>
<td>Senior Zone Program</td>
<td>6</td>
</tr>
<tr>
<td>Illinois</td>
<td>Operation Teen Safe Driving</td>
<td>7</td>
</tr>
</tbody>
</table>

## Program Planning, Development & Evaluation

<table>
<thead>
<tr>
<th>Location</th>
<th>Improvement</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Jersey</td>
<td>Plan4Safety: Crash Analysis and Decision Support Tool</td>
<td>8</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>Strategies to Reduce Alcohol-Related Crashes and Fatalities in PA</td>
<td>9</td>
</tr>
<tr>
<td>Washington</td>
<td>Highway Safety Issues Group</td>
<td>10</td>
</tr>
</tbody>
</table>

## Honorable Mentions

### Infrastructure

<table>
<thead>
<tr>
<th>Location</th>
<th>Improvement</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>California</td>
<td>Installation of a Soft Delineator Barrier System on Interstate Rte. 10</td>
<td>11</td>
</tr>
<tr>
<td>Nebraska</td>
<td>Midwest States Pooled Fund Program</td>
<td>12</td>
</tr>
</tbody>
</table>

### Operational Improvements

<table>
<thead>
<tr>
<th>Location</th>
<th>Improvement</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas</td>
<td>Teens in the Driver Seat® Program</td>
<td>13</td>
</tr>
</tbody>
</table>

## Program Planning, Development & Evaluation

### California

<table>
<thead>
<tr>
<th>Improvement</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>California’s Strategic Highway Safety Plan</td>
<td>14</td>
</tr>
</tbody>
</table>

### Wisconsin

<table>
<thead>
<tr>
<th>Improvement</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roundabout Implementation Program</td>
<td>15</td>
</tr>
</tbody>
</table>

## Sponsor Mission Statements and Acknowledgements

<table>
<thead>
<tr>
<th>Page</th>
</tr>
</thead>
</table>
Winner - Infrastructure Improvements

Highway 7 Centerline Rumble Strip Project

In 2004, the Arkansas State Highway and Transportation Department implemented a pilot project to install centerline rumble strips on a 74-mile segment of Highway 7 in north central Arkansas. This rural, two-lane road had a high frequency of roadway departure crashes involving fatal and serious injuries. Because this designated scenic highway runs through a mountainous area and the Ozark National Forest, many horizontal and vertical curves exist. Many of the fatal and serious injury crashes occurred in these curves.

Centerline rumble strips were installed as part of a statewide project to install shoulder rumble strips on more than 382 miles of Interstate and multi-lane facilities in the State. By incorporating the installation of centerline rumble strips on Highway 7 as part of the overall statewide shoulder rumble strip project, a more efficient use of funds and resources was utilized. The centerline rumble strips were installed at a total cost of $59,000 - an average of 15 cents per linear foot.

To determine the effectiveness of the project to reduce crashes, a crash analysis was conducted using three years of crash data before the rumble strips were installed (2001 – 2004) and three years of crash data after the rumble strips were completed (2005 – 2007). The analysis showed a 41% reduction in all crashes. Further analysis showed a 64% reduction in fatal crashes (11 crashes to 4 crashes), and a 26% reduction in injury crashes (160 crashes to 119 crashes). In particular, head-on and opposite direction sideswipe crashes were reduced by 56% (25 crashes to 11 crashes) during the study periods. The overall crash rate was reduced from a high of 1.54 crashes per million vehicle miles traveled (VMT) to a low of .92 crashes per VMT. Furthermore, the State realized an annual economic benefit of $3.7 million from the reduction in crashes. Due to the effectiveness of this project to reduce roadway departure crashes, similar type low-cost safety improvements may be implemented on other highways in the State.

Agency: Arkansas State Highway and Transportation Department
Contact Person: Jon Waldrip
Telephone: 501.569.2648
Email: Jon.Waldrip@arkansashighways.com
Winner - Infrastructure Improvements

Vasco Road Traffic Safety Improvement Projects

Winding curves, lack of guardrails, and short sight distance in certain areas were creating a difficult environment for motorists utilizing the heavily congested Vasco Road both in Contra Costa and Alameda Counties. The traffic volumes on Vasco Road have more than doubled from 10,000 vehicles per day (VPD) in 1990 to over 22,000 VPD in 2007, resulting in a high number of injury and fatal collisions. Between 2002 and 2004, over 72 crashes occurred along the project corridor.

To address the high incidence of crashes, a comprehensive, cooperative, and multijurisdictional approach was taken to address speeding and aggressive driving on Vasco Road. As a result, in 2004, the Alameda County Public Works Agency, the Contra Costa County Public Works Agency, City of Brentwood, City of Livermore, the Alameda County Sheriff’s Department, and the California Highway Patrol offices in both counties joined with community groups and elected officials to reduce the crash rate along Vasco Road.

They strategically introduced a variety of safety measures to reduce crashes including speed display signs, community safety signs, daytime headlight signs, centerline rumble strips, soft median barrier striping, centerline delineators, a double fine zone, AND coordinated speed enforcement. These measures were coordinated with the Vasco Road Realignment long-term improvement project.

These measures have produced extraordinary results. The collaborative traffic engineering, speed enforcement, and funding efforts of both Counties have significantly reduced head-on collisions and improved safety along Vasco Road. The crash rate per million vehicle miles dropped from 0.58 to 0.42. Between 2005 and 2007, there have been 46 collisions, a 36% reduction.

Agency: Alameda County Public Works Department
Contact Person: Paul Keener
Telephone: 510.670.5247
Email: PaulK@acpwa.org
Winner - Infrastructure Improvements

CityTrails® Pedestrian Crosswalk Enhancer

In 2003, the City of St. Petersburg, Florida started an ambitious program to improve pedestrian safety as part of a comprehensive Bicycle Pedestrian Master Plan: CityTrails®. A major component of this program was crosswalk safety, which has been a nationwide concern for many years.

The task was to dramatically increase motorist yielding compliance at mid-block locations, from a base rate of less than 2% and bring the pedestrian crash rate closer to the national average. St. Petersburg’s pedestrian crash rate was 68.9 per 100,000 population in 2000 compared with a State rate of 41.9 and a national rate of 23.4. Immediate action was imperative. The tool used was called the Rectangular Rapid Flashing Beacon or the “Enhancer”.

The installation of the Enhancer, which is mounted under the pedestrian crosswalk signs, was used at 18 uncontrolled crosswalks. Two-year evaluation results show an overall systemwide average motorist yielding compliance rate of 82%. These results indicate that the use of the Enhancer increased motorist yielding rates significantly and has maintained these rates over time. There are clear safety benefits associated with the introduction of this pedestrian-activated device. The pedestrian crash rate continued to decline to 23.9 in 2008 and indicates that this program using the Enhancer has dramatically improved pedestrian and crosswalk safety.

Agency: City of St. Petersburg, Florida, Department of Transportation and Parking
Contact Person: Joe Kubicki
Telephone: 727.892.5274
Email: Joe.Kubicki@stpete.org
Winner - Infrastructure Improvements

Texas Safety Bond Program

Since its inception in 2004, the Texas Department of Transportation Safety Bond Program has provided more than $1.2 billion for safety improvement construction projects aimed at reducing the number of motor vehicle crashes and associated fatalities and injuries on Texas highways. The program was established as an innovative approach to secure funds to improve highway safety by identifying and implementing projects proven to reduce motor vehicle crashes that, due to limited federal funding, would not ordinarily be included in the State’s construction and maintenance programs.

The 2004 Safety Bond program provided $605 million to fund 644 safety improvement projects including widening 1,600 miles of narrow two-lane roadways, constructing left-turn lanes at 171 highway intersections, constructing 10 highway overpasses, and installing 740 miles of concrete or cable barriers in medians of divided highways to reduce the number of head-on collisions.

The 2009 Safety Bond program allocated $600 million to fund 355 projects to widen approximately 617 miles of roadway, install 290 miles of concrete and cable median barrier, install 105 left-turn lanes or continuous left-turn lanes to reduce the number of rear-end collisions, and build 23 highway interchanges to improve traffic flow and reduce crashes.

Project success will be evaluated with three years of crash data collected after project completion, with the first measurable results of crash reduction for the 2004 Safety Bond Program expected in 2010. The Texas Transportation Institute’s Center for Transportation Safety estimates that the safety improvements associated with the 2004 Safety Bond Program could save 1,800 lives and prevent 21,000 injuries over the next 20 years. Similar results are expected for the 2009 Safety Bond improvements.

Agency: Texas Department of Transportation
Contact Person: Debra Vermillion
Telephone: 512.416.3137
Email: DVermil@dot.state.tx.us
Winner - Operational Improvements

Ticketing Aggressive Cars and Trucks (TACT)

Nationally in 2007, 4,808 people died in large truck crashes. To help reduce crashes and fatalities, the Federal Motor Carrier Safety Administration (FMCSA) and the National Highway Traffic Safety Administration (NHTSA) worked together to educate motorists on how to share the road safely with commercial motor vehicles (CMVs).

The result of this government collaboration was the development of the Ticketing Aggressive Cars and Trucks (TACT) program—a high visibility traffic enforcement program that uses communication, enforcement, and evaluation activities to reduce CMV-related crashes, fatalities, and injuries. FMCSA and NHTSA worked on the initial TACT program beginning in Spring 2004 for a two-year period with Washington being the first pilot State. On March 1, 2006, FMCSA assumed full responsibility for TACT. During FY 2007-2008, five States were engaged in TACT programs including Washington, North Carolina, Kentucky, Georgia and Pennsylvania.

The program combines outreach, education, and evaluation with targeted enforcement activities to raise awareness among car and truck drivers about safe driving behaviors. The communications’ plan includes print and/or web-based outreach as well as paid or earned media placement. Evaluation of the reduction in crashes following a TACT enforcement period is followed by post-program activities such as reporting results, and recognition and rewards for key program personnel.

TACT’s evaluation in Washington, which included comparing two highway corridors with media messaging and increased enforcement to two highway corridors without the increased attention, showed that a total of 4,737 contacts were made with drivers during the two enforcement waves and 72% of these contacts led to a citation. Drivers at the intervention sites who said they saw or heard any of the TACT messages increased from 17.7% in the pre-period to a high of 67.3% in the post period. Drivers at the intervention sites also reported increased exposure to the core message of leaving more space when passing trucks (14% pre to 40% post period). The percentage of drivers who said they leave more room when passing trucks than when passing cars rose from 16% to 24% at the intervention sites, while comparison sites showed no change. Statistical analyses showed that violation rates were reduced significantly at the intervention sites between 23 and 46%, while remaining constant at the comparison sites.

Agency: Federal Motor Carrier Safety Administration
Contact Person: Anna J. Amos
Telephone: 202.366.3181
Email: Anna.J.Amos@dot.gov
Winner - Operational Improvements
Senior Zone Program

Hillsborough County Public Works Traffic Services Division in Tampa, FL has set a new standard of innovation in community safety by developing the first “Senior Zone” program in the nation. Senior Zones are similar to School Zones, which have the purpose of raising a driver’s awareness that they are entering an area where they must exercise additional caution. Some of the safety implementations include: large lettered overhead street name signs; retro reflective pavement markers; improved pedestrian crossings; advanced lane assignment signs to help reduce last minute decisions and lane changes at intersections; and warning signs and markings installed near elderly facilities. Factors such as roadway and driveway characteristics, average daily traffic volumes, crash rates, facility population, posted speed limit, and pedestrian activity are reviewed, evaluated, and prioritized to determine if an area is eligible for “Senior Zone” designation.

The County has implemented two pilot Senior Zones (one at Fletcher Avenue in September 2006 and one at Waters Avenue in May 2007). The most important achievement of the Senior Zone Program is the prevention of crashes and injuries at the two pilot locations. The frequency of crashes at the Fletcher Senior Zone decreased by 47% from 2006 to 2008 (January to November) and the frequency of crashes at the Waters Avenue Senior Zone decreased 37% during the same time frame. Additionally, at the Waters Avenue site there were two deaths in 2006, with no fatalities since the implementation.

Furthermore, average speeds in the Senior Zones have decreased 9 to 18%, a major improvement by traffic engineering standards. Additional Senior Zones are currently being studied and prioritized based on a number of criteria. Once ranked they will be implemented as resources allow.

Agency: Hillsborough County Public Works, Traffic Services Division
Contact Person: Buz Barbour
Telephone: 813.307.1833
Email: BarbourB@hillsboroughcounty.org
Winner - Operational Improvements

Operation Teen Safe Driving

In the spring of 2007, Operation Teen Safe Driving was launched in rural Tazewell County after automobile crashes took 15 teen lives in 15 consecutive months. The program drastically reduced teen fatalities in Tazewell County. Based on the success in Tazewell County, the Ford Motor Company Fund teamed up with the Illinois Department of Transportation’s Division of Traffic Safety (DTS), to take this lifesaving program statewide in 2008. The Allstate Foundation joined as a partner.

All 900 Illinois public and private high schools were invited to submit an application to DTS which identifies issues relating to traffic safety in their community (i.e., underage drinking, driving unbuckled, driving impaired, driving distracted). A total of 225 schools submitted applications and the list was narrowed to 105. Each school received financial assistance which provided the incentive to challenge students and their communities to participate. This year over 99,000 students statewide were influenced by this program. During the last three years, close to a quarter of a million students were reached. The top schools from each region were invited to send students to a “Ride and Drive” event sponsored by the Ford Motor Company Fund, where professional drivers provided critical driving skills. Over 800 students participated in Chicago and downstate events this year.

In Illinois the program seems to be working with a 40% reduction in teen deaths from 2007 (155) to 2008 (93). Saving lives and making the roadways safer for everyone spells success!

Agency: Illinois Department of Transportation
Contact Person: Michael Stout
Telephone: 217.782.4972
Email: Michael.Stout@illinois.gov

2009 National Roadway Safety Awards
Winner - Program Planning, Development & Evaluation

Plan4Safety: Crash Analysis and Decision Support Tool

Plan4Safety is an online comprehensive crash analysis software application developed by the Transportation Safety Resource Center (TSRC) and funded by the New Jersey Department of Transportation (NJDOT) to support New Jersey safety professionals in making data-driven decisions.

Receiving an average of 300,000 crash records per year and integrating them into Plan4Safety eliminates errors and man hours that would otherwise be spent manually processing piles of paper crash records. Plan4Safety offers 144 distinct pieces of data about any given crash, including crash type, injury level, cell phone use, alcohol impairment, seatbelt use, property damage and injuries sustained, and driver age and gender.

Using common methodologies, Plan4Safety ranks high-risk areas so safety professionals can more accurately and consistently budget for improvements in areas where they are most needed. Users can view analyses of incident frequency, compare crash types, find clusters of crashes on state roads, and view cross-sections of any of the 144 data points on a visual and highly functional table. Furthermore, interactive GIS tools plot filter data onto an ESRI World Street or aerial view map to help traffic professionals visualize the issues at stake and plan for future projects to improve road safety. Plan4Safety’s GIS feature is interlinked with Google Street View™ for user convenience.

Over 400 New Jersey safety professionals use Plan4Safety in their day-to-day safety planning procedures, reports, and briefings. Currently, the New Jersey State Police (NJSP), the Metropolitan Planning Organizations (MPOs), the New Jersey Department of Transportation (NJDOT), the Brain Injury Association of New Jersey (BIA-NJ), and several county and local-level engineering, planning, and enforcement agencies actively use Plan4Safety for their safety efforts.

Upholding a diligent commitment to traffic safety, the goal of TSRC is to provide a one-stop resource center for traffic safety materials, training, and guidance. TSRC is part of Rutgers’ Center for Advanced Infrastructure and Transportation (CAIT), an USDOT-designated University Transportation Center. Through research, education, and technology transfer, CAIT programs help address the complex and interrelated transportation and infrastructure issues facing our country today.

Agency: Rutgers University Transportation Safety Resource Center
Contact Person: Sarah Weissman, EIT
Telephone: 732.445.3919 x 135
Email: SCWeiss@rutgers.edu

Safety Best Practices
Winner - Program Planning, Development & Evaluation

Strategies to Reduce Alcohol-Related Crashes and Fatalities in Pennsylvania

In the past ten years, impaired driving crashes on Pennsylvania’s roadways have claimed over 500 lives annually. With proper enforcement and motorist education, these unfortunate incidents are 100% preventable. The Pennsylvania Department of Transportation (PennDOT) has employed various strategies to combat this dangerous trend, resulting in a high success rate. Alcohol-related crashes and major injuries for 2008 are at their lowest total in ten years, and alcohol-related fatalities are also on a recent downward trend. The five-year alcohol-related fatality average has declined each of the past four years. Some of the strategies PennDOT uses to reduce DUI related crashes and fatalities and reach their ambitious crash reduction goals include:

► Data driven enforcement in 1,600 high alcohol-related crash municipalities during national and statewide mobilizations. PennDOT works hard to ensure all officers are in possession of the most up to date crash maps and data for coordinated enforcement mobilizations. Funds for police overtime enforcement are provided through grants with PennDOT.

► Media coverage promoting the program and educating the public. In 2008, public awareness of the DUI message was achieved through newspapers, radio, TV, billboards, and brochures.

► DUI Courts for treatment of repeat offenders in hopes of lowering DUI recidivism. PennDOT will continue to expand its network of funded DUI courts in 2010 and 2011.

► Technology such as Ignition Interlock and the EyeCheck Pupilometer.

► Officer education and training in areas such as standard field sobriety testing (SFST), drug recognition, and sobriety checkpoints.

► Judicial outreach to educate judges of PennDOT’s highway safety goals and local enforcement and media campaigns.

Agency: Pennsylvania Department of Transportation, Bureau of Highway Safety and Engineering

Contact Person: Gary Modi, P.E.
Telephone: 717.783.1190
Email: GModi@state.pa.us

2009 National Roadway Safety Awards
Winner - Program Planning, Development & Evaluation

Highway Safety Issues Group

The Washington State Department of Transportation’s (WSDOT) coordinated and proactive roadway safety approach includes the Highway Safety Issues Group (HSIG): a team of safety experts, advocates, and executives. This approach allows decision buy-in from all agency regions and programs, allowing swift implementation of safety policy, programmatic changes, and funding.

HSIG’s multi-disciplinary approach has played a vital role in Washington State bettering the national milestone with the lowest fatality rate in state history of 0.94 fatalities per 100 million vehicle miles traveled (VMT).

The HSIG was instrumental in WSDOT providing greater resources and emphasis on safety by instituting centerline rumble strips, cable median barrier, and low-cost safety enhancement programs. These programs contributed to the decrease in fatal and serious injury collisions.

Preliminary results of “before and after” studies on centerline rumble strips indicate a 50% reduction in fatal and serious injuries caused by cross-centerline collisions. As of 2007, WSDOT had installed 177 miles of cable median barrier resulting in a 73% annual decrease of cross-median collisions. The Low-Cost Enhancement (LCE) program is designed to allow WSDOT to deliver lower-cost projects that provide immediate, sometimes interim or sometimes long-term safety improvements to the highway system.

The HSIG is working with the FHWA in developing policy that moves away from a strictly standards-based design to a tiered strategy to invest in substantive rather than nominal safety and offer the greatest return in terms of cumulative and annualized safety benefits.

Agency: Washington State Department of Transportation
Contact Person: John Milton
Telephone: 360.704.6363
Email: MiltonJ@wsdot.wa.gov
Honorable Mention - Infrastructure Improvements

Installation of a Soft Delineator Barrier System on Interstate Rte. 10

Interstate Route 10, commonly known as the Santa Monica Freeway, is a typical 8-lane, mixed flow lane, urban freeway (with auxiliary lanes) with a parallel 2-lane collector-distributor road in both directions. A portion of Route 10 is an east-west freeway servicing interstate, interregional, and commuter travel. It is heavily congested, highly developed, and varies from residential to commercial. It is a significant link to many trip generators located in the Los Angeles area.

Due to a high incidence of crashes involving traffic striking the raised islands separating the freeway from the collector road, it was proposed to enhance the delineation of the raised islands by the use of “Qwick Kurb”. These delineators are contemporary products which exhibit high visibility and low maintenance. The results thus far show a dramatic decrease of fatal crashes from eight fatal crashes in a three year period to none in a one year period after the project. Injury crashes were reduced by 35%. This project was proposed to be an interim measure until an ultimate project to modify the roadway could be implemented, but continued success may make it unnecessary to modify the roadway between Arlington Avenue and the Route 110 Interchange.

There are raised islands that separate the collector-distributor road and the freeway. There are also slip-ramps located along the raised islands that provide ingress/egress to and from the freeway. These slip ramps create eight distinct raised islands (four in each direction). Typically each island is approximately ten feet wide, but the island width varies between one and 30 feet depending upon location. Adjacent shoulder widths along the islands are typically ten feet along the freeway (right), 8 feet along the ramps (right), and two feet along the collector-distributor (left). Objects located on top of the raised islands include wood sign posts and signs, luminaries, call boxes, overhead sign structures, and associated crash attenuation systems.

The proposed longitudinal delineator system will supplement the existing shoulder pavement markings to further increase the conspicuousness of the raised islands especially at night and in inclement weather. This will define the raised islands and the locations of the slip ramps to drivers. This project was completed in December of 2007 at a cost of $3.3 million. The cost of the ultimate project to eliminate the islands and modify the roadway is about $38 million.

The improvements consisted of installing the Qwick Kurb delineators along a two-mile segment of Route 10 to increase the visibility of the raised islands separating the freeway from the collector road. These channelizers are flexible and resist damage by impact. Over a one year span there was no damage or replacements/repairs required.

Agency: California Department of Transportation  
Contact Person: Frank Quon  
Telephone: 213.897.0352  
Email: Frank_Quon@dot.ca.gov
Honorable Mention - Infrastructure Improvements

Midwest States Pooled Fund Program

In the late 1990’s, statistical analysis of W-beam guardrail crashes showed that light trucks were a higher rollover risk when striking W-beam guardrail than conventional automobiles. This same research found that light trucks had a greater propensity for going through or over guardrails. Finally, a number of guardrail crash tests involving light trucks produced unacceptable or marginally acceptable results.

Based on these research findings, the Midwest Roadside Safety Facility (MwRSF) and the Midwest States Pooled Fund Program concluded that a new guardrail system was needed to provide improved safety performance for light-truck impacts while maintaining its performance for automobiles, including small cars. After a great deal of modeling and dynamic testing of guardrail components, the MwRSF concluded that the safety performance of standard guardrail could be improved with three modest changes in the design: (1) raising the rail height from 27 to 31 inches, (2) increasing the blockout depth from 8 to 12 inches, and (3) moving rail splices to the midspan between posts.

This design has been subjected to more than 20 full-scale crash tests with excellent performance. The Midwest Guardrail System (MGS) has been shown to have more than twice the capacity of conventional W-beam guardrail and performs extremely well with tall light truck vehicles. Furthermore, it has been successfully tested in many locations where standard guardrail has failed including behind curbs, on high flare rates, and on slopes. Finally, crash testing has demonstrated that vehicles striking the MGS are not projected back into traffic but instead remain close to the barrier to minimize the risk of secondary crashes. As a result of its improved performance and low cost, the MGS has begun to be adopted across the nation. More than a dozen states are now in the process of implementing the MGS in place of conventional guardrail designs. It is anticipated that as the MGS begins to be installed across the nation the new design can begin to reduce the more than 1,200 fatal crashes annually associated with guardrail impacts.

Agency: University of Nebraska at Lincoln
Contact Person: Dean L. Sicking
Telephone: 402.472.9332
Email: DSicking@unl.edu
Honorable Mention - Operational Improvements

Teens in the Driver Seat® Program

The Teens in the Driver Seat® Program (TDS) is a peer-to-peer safety initiative for young drivers that has shown outstanding progress in reducing car crashes involving teen drivers. It stands apart from other programs in that it involves the teen audience directly in both the development and dissemination of safety messages. Because teens are far more likely to listen to each other than to adults, this peer-driven approach helps to ensure that those messages are both relevant and credible in the minds of the target audience. TDS is designed to support and augment graduated driver license (GDL) laws, offering states an effective “one-two punch” in the fight to stop the leading killer of teenagers in America.

The most common method of deployment of the TDS program is through groups of student leaders in high schools. All teams are provided with a wide variety of promotional materials, video tools, web-based materials and technical assistance from professional staff, but each team is responsible for developing and sustaining its own approach to spreading safety messages. The students typically employ a broad array of strategies, from the most basic (i.e. student-led assemblies and distribution of TDS materials at ballgames/community events) to the more complex (i.e. chair races requiring the “drivers” to text while driving in a dimly lit gymnasium) to convey messages in the way they believe will best resonate with their peers. Studies show that TDS has helped to raise risk awareness levels by up to 200%, reduce cell phone use while driving by 30%, and increase seat belt use by 14%.

TDS has been introduced in more than 300 schools in Texas, where the program was initiated in 2003. Since the program’s introduction, the number of teens involved in fatal crashes in Texas has dropped by 33% – more than any other state and more than twice the national average from 2003 to present. The program has also been introduced in Connecticut, Georgia and California. The program’s early success demonstrates that it holds great potential to foster a safety culture among young people and provide an essential and effective strategy to combat a persistent crisis that continues to claim over 5,000 young lives each year with an annual cost of over $40 billion to the U.S.

Agency: Texas Transportation Institute
Contact Person: Russell Henk
Telephone: 210.979.9411
Email: R-Henk@tamu.edu
Safety Best Practices

Honorable Mention - Program Planning, Development & Evaluation

*California’s Strategic Highway Safety Plan*

Safety is the first of the California Department of Transportation’s (Caltrans) five strategic goals. This dedication to safety has been the driving force for California’s Strategic Highway Safety Plan (SHSP), a statewide effort coordinated and led by Caltrans. To develop the SHSP, Caltrans partnered with safety stakeholders from federal, state, and local agencies, as well as private groups and individual citizens. Over 500 stakeholders provided input to develop the 16 “Challenge Areas” addressed by the SHSP.

To implement the SHSP, Caltrans facilitated the data-driven analysis that identified the highest-priority safety issues and ultimately defined 152 distinct “Actions” in support of the 16 Challenge Areas. Currently, over 300 safety stakeholders representing 80 different agencies and organizations are working together to implement the Actions within the SHSP. These working relationships are delivering efficiencies and progress in safety improvements never before seen on such a large scale.

The SHSP has provided a mechanism for non-governmental safety stakeholders to provide input and resources to the planning and implementation of statewide safety strategies, countermeasures, and actions. Furthermore, the SHSP has delivered significant improvements and efficiencies in communication and cooperation between State and local agencies with transportation safety-related responsibilities. The SHSP has also developed an ongoing and evolving forum for continued participation and motivation of interested safety stakeholders. And finally, the SHSP team is developing a web-based performance measurement tracking tool that will be accessible to all safety stakeholders and will make reports available to the public. Cooperation is fostered because the goals of the jointly developed SHSP and implementation plan are also shared among the separate agencies and stakeholders. This inclusive approach ensures that all major stakeholders are represented in what serves as an unofficial statewide traffic safety policy committee, providing information, analysis, and expert opinions to the highest levels of State policy and legislative decision-makers.

In 2008, California’s traffic fatalities decreased 13.2% (3,451 vs. 3,974), reaching their lowest level since the federal government began recording traffic fatalities in 1975.

Agency: California Department of Transportation
Contact Person: Jesse Bhullar
Telephone: 916.654.5026
Email: Jesse_Bhullar@dot.ca.gov
Honorable Mention - Program Planning, Development & Evaluation

Roundabout Implementation Program

The Wisconsin Department of Transportation (WisDOT) has embarked on an extensive intersection safety improvement effort through the use of roundabouts. According to research, roundabouts may reduce fatalities by about 90%, injuries by about 75%, and overall crashes by about 35%. WisDOT has gone from installing four roundabouts with state or federal funds in 2004 to installing 68 by the end of the 2009 construction season.

Education and outreach have been important aspects of the roundabout safety improvement effort. A new WisDOT video has been sent to all state legislators, public access television stations, private and public driver training school instructors, trucking firms, and AARP instructors. Also, statewide there are 33 newspapers that are running a prepared roundabout graphic and “How to drive roundabouts” advertisement. In addition, the DMV is inserting a flier “How to drive roundabouts” in each license plate/registration renewal, four million in all, over a two-year period. Further, the DMV has updated the Wisconsin Driver’s Handbook, which is the instruction manual for all new drivers, with roundabout specific signs, pavement marking and guidance on driving single and multi-lane roundabouts.

Additional measures include a legislative proposal to mandate roundabout driver training in all private and public schools. The University of Wisconsin is conducting a three-year study for the Department on the safety effectiveness of roundabouts that have been installed. The study will also include speed checks at entrance and exits.

Agency: Wisconsin Department of Transportation, Division of Transportation System Development, Bureau of Project Development
Contact Person: Patrick Fleming, PE
Telephone: 608.266.8486
Email: Patrick.Fleming@dot.wi.gov
The Federal Highway Administration

FHWA is focused on improving mobility and increasing safety on our nation’s highways. The agency has improved highway system performance -- particularly its safety, reliability, effectiveness and sustainability -- and will continue to explore new methods of doing so. FHWA is a central contributor in the ongoing policy discussions that address the future of the national transportation system, and continues to work toward a more productive America with greener, more livable communities.

The Roadway Safety Foundation

The Roadway Safety Foundation is a 501(c)(3) nonprofit charitable and educational organization solely dedicated to reducing the frequency and severity of motor vehicle crashes by improving the safety of America’s roadways. To this end, RSF focuses on improving the physical characteristics of roadways, such as design and engineering, operating conditions, removal of roadside hazards and effective use of safety features.

We are especially grateful to the esteemed panel of Blue Ribbon Judges who have supported this program. Their contribution of expertise, time, talent and vision has been extremely important in ensuring the continued success of this program, now in its tenth year.

2009 Blue Ribbon Panel

Philip J. Caruso
Deputy Executive Director for Technical Programs, Institute of Transportation Engineers

Anthony Giancola
Executive Director, National Association of County Engineers

Cathy Gillen
Managing Director, Roadway Safety Foundation

Peter Kissinger
President and CEO, AAA Foundation for Traffic Safety

James McDonnell
Deputy Program Director, Engineering, American Association of State Highway and Transportation Officials