

## Introduction

Traffic crashes are the number one killer of children, adolescents, and young adults in the United States, accounting for more years of potential life lost before age 80 than all other sources of unintentional injury combined. In the last decade, the number of Americans injured in crashes added up to more than the combined resident populations of twenty states. In September 2001, motor vehicle crashes killed more Americans than the terrorists did on September 11th. And, while our government tells us that our roads are safer than ever -- and in many ways they are -- the cold hard fact that seems to escape our collective consciousness is that year after year, about 43,000 people lose their lives on America's roads -- one every 13 minutes!

Meanwhile, experts have suggested that we could cut this toll in half or better if only we would implement a few proven lifesaving countermeasures that we already know about. So why don't we?

The preponderance of evidence suggests that as a whole, Americans are simply too complacent about traffic safety, and are willing to accept the toll of traffic crashes -- estimated at over \$230 billion annually -- as the price of our mobility. While we were once the safest country with respect to standard measures of traffic risk, we now lag far behind most of Western Europe and Australia. While many other countries have cut their traffic-related death tolls dramatically over the years, ours reached an all-time low 15 years ago in 1992 and has been increasing virtually ever since.

Today, more and more motorists, confronted with the demands of fast-paced multi-tasking lifestyles, seem willing to ignore their once-undisputed civic duty to obey the law and, for example, stop completely at red lights or comply with the speed limit. Motorists do not seem to truly recognize the real risks associated with various behaviors, such as driving while talking on a cell phone or text messaging.

We need to change how our society thinks about safety and we need to foster a stronger safety culture. A "traffic safety culture" is not merely a culture in which people drive safely, highway authorities build safe roads, automakers build safe cars, and legislators pass effective safety laws. A safety culture entails a network of interdependent relationships in which all members value safety, do their part, and seriously engage in public dialogue to demand that all of the other members do their parts as well.

Implementation  
of usRAP will  
reduce the number  
of deaths and  
serious injuries  
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## Proposal

The AAA Foundation for Traffic Safety proposes to create a Center of Excellence in Safety Culture to 'lead the way' with a core research mission of measuring and evaluating attitudes and behaviors, and using that information to develop tools and strategies for use by stakeholders and partners that will change attitudes and behaviors and ultimately prevent crashes, injuries, and deaths on our roads. For the first time, multi-disciplinary research will be applied to the overarching issues and problems facing traffic safety. In the process, strategies will be deployed to actively engage the public, motivate sustained focus by decision-makers, overcome resistance to safety measures that are known to work, and increase local, state and federal funding for traffic safety research and implementing proven countermeasures.

- To reduce death and serious injury on the roads through a program of systematic assessment of risk that identifies major safety shortcomings, which can be addressed by practical road improvement measures, and
- To ensure that assessment of risk lies at the heart of strategic decisions on route improvements, crash protection, and standards of route management.

Under the auspices of the Center of Excellence for Road Safety, within a clearly defined time-frame, the focus and efforts of usRAP will result in two distinct products to benefit the motoring public:

- Risk maps, which color-code roads according to their crash history, and
- Star ratings, which are assigned to roads on the basis of their engineering design and physical characteristics.

For example, a road with a relatively high crash rate might appear in red or black on a risk map, whereas a road with a low crash rate would be green. Similarly, a road with few safety design features might receive only one star, whereas a road built to U.S. Interstate highway standards would likely receive four or five stars.

The short-term goal of USRAP is to use these products in partnership with state and local road authorities to guide cost-effective road safety investments. For example, adding inexpensive proven lifesaving features such as rumblestrips, widening shoulders, removing roadside hazards, or improving road signage would upgrade a road's star rating from one star to two or three stars.

Additionally, USRAP will track the performance of roads over time, highlighting the successes of effective safety measures that highway agencies have implemented, and encouraging increased investment in simple measures that save lives. Eventually, risk maps and star ratings will provide a direct benefit to road users by including this information in maps, as well as in-vehicle navigation systems to provide real-time risk information. These risk maps will also form the basis and authority for citizen engagement to demand safer roads from their county and state highway authorities.

The Foundation has already completed successful pilot work in the states of Florida, Iowa, Michigan, and New Jersey, and is planning to expand into several more states in 2008. Pending successful completion of the final phase of this pilot study, expanded efforts may include:

- Conducting annual USRAP safety assessments of all primary state and local roads in every state.
- Publishing USRAP risk maps and star rating maps annually for each state.
- Highlighting annually the “Most Improved Roads” in each state and nationwide, and conducting and publishing case studies of the successful road safety projects that resulted in the improvements.
- Employing a “RAP team” field staff to provide technical assistance to highway agencies to help them identify safety needs and select the best countermeasures to address them. The RAP team might also conduct safety impact evaluations of innovative road safety projects around the country.

### **Core Activities**

Ultimately, the Center will conduct the risk mapping portion of the USRAP safety assessment in every state on a yearly basis and publish USRAP risk maps of all states. A fully operational Center would be able to phase additional states into the program at a rate of six to seven additional states each year, thus requiring approximately seven years to reach full nationwide implementation. Once initial risk mapping has been conducted in any given state, maps will be kept relevant with current data, and new maps will be published annually.

Beyond producing annual risk maps, the Center will also conduct periodic assessments of the engineering design and physical characteristics of roads to assign and map star ratings on each state’s primary roads. A star rating program, including data collection, processing, and mapping, will be phased in over time, with initial emphasis being placed on local roads where crash data is not available (and thus risk maps cannot be completed) and road segments identified with the highest risk through risk mapping.

### **Strategic Communications and Public Education**

To amplify the important results gleaned from the risk mapping projects underpinning this Center of Excellence, a strategic communications and public education effort will be developed and launched. Prevailing circumstances at the time various maps are completed will ultimately define the type and scope of outreach. Illustrative examples of projects may include:

- Partnering with web/satellite navigation services to enhance their outputs, allowing the general public access to mapping the safest routes to get from point A to point B.
- Collaborating with state Departments of Transportation to use risk mapping as a means of generating and targeting funding for road improvements from both state and federal governments.
- Developing and promoting a communications campaign to inform consumers on the value of traveling the safest roads.
- Providing data, guidance and direction for consumers and communities to engage local governments for road improvements.

'State of the art' marketing and communications strategies will be applied as "best practices" on an ongoing basis for the Center, and will include vital fundamentals such as release of regular press releases when research milestones occur, development and distribution of radio PSA scripts to enhance awareness of Center issues and impact on society at large, website development and content management, as well as site optimization for increasing traffic and visit duration and deployment of a strategic web marketing campaign to drive traffic to the website. The media will be engaged through regular updates of an online media resource 'kit', and ongoing outreach to media will extend the reach and impact of all research projects. Sophisticated and unique message development will leverage research findings to enhance impact in the real world.

### **Outputs, Measurement and Evaluation**

Results from pilot programs in Iowa and Michigan are already available, and results of the Florida and New Jersey pilot programs will be released in early 2008. This year, at least four additional states will be added to the final pilot phase, and additional development work on the star rating process will be completed, providing all of the information necessary to transform USRAP into a fully operational program.

Under the current budget assumptions, the USRAP effort will transition from pilot phase into an operational program in 2009, at which point approximately 8-10 states will be collaborating on this important effort.

As risk maps are completed, these selected state safety assessments will be available through the Center's website, as well as through partner websites and online data mapping systems.

As additional states join the program, nationwide benchmarks will be developed to facilitate state-by-state comparisons. Annual safety assessments will then be performed to track progress and to provide updates, including highlighting star ratings and identifying the "most improved roads". A complete United States road safety assessment is anticipated to be complete by year seven, with annual updates provided thereafter.

The development of a "RAP team" is anticipated for year four, and will serve as field staff to provide technical assistance to state highway agencies to help them identify safety needs and select the best countermeasures to address them.

Continuing Center efforts by year three will include safety impact evaluations of innovative road safety projects around the country, and will provide the Center with an annual "state of the roads" publication to identify best practices.

At such time as the Center is fully operational, program outputs – including annual safety assessments of primary roads and star ratings – will have a pronounced public benefit. State and local road authorities will be operating under enhanced safety management protocols that link resource allocations to explicit real world risks. Getting the public more engaged in the process and making the decision making processes more transparent will lead to increased investments in road safety. And, most importantly, these institutional changes will ultimately result in fewer serious traffic crashes.