

## Technology Transfer Brief

### Rural Safety Innovation Program

Rural roads make up 70% of all roads in the U.S. but only account for approximately 40% of vehicle miles traveled (VMT). In 2006 a study showed that almost 55% of vehicle accident fatalities occurred on rural roads. If the VMT on rural roads is less than that of urban roads, why do more fatalities occur on rural roads? Over the years studies have been conducted in efforts to answer this question. Experts believe some of the major contributing factors to the severity of crashes in rural areas are higher speeds, lack of seat belt usage, response time of first responders, leaving victims waiting longer for medical attention, outdated roadway design, and roadside hazards such as sharp-edged pavement drop-offs, and utility poles and trees close to the roadway.

So, what can be done to combat this problem? The U.S. Department of Transportation (DOT) has come up with a comprehensive plan which focuses on five main areas:

Safer Drivers  
Better Roads  
Smarter Roads  
Better Trained Emergency Responders and  
Outreach and Partnerships

For detailed information about the topics listed above visit

<http://www.dot.gov/affairs/ruralsafety/ruralsafetyinitiativeplan.htm>.

One of the key components of the U.S. DOT's initiative is the Rural Safety Innovation Program. Through this program local rural road owners are given the opportunity to improve rural road safety through infrastructure and technological approaches using up to \$15 million in available funds.

#### **Purpose of the Rural Safety Innovation Program**

The purposes of the Rural Safety Innovation Program is to provide funds to counties, towns, townships and Tribal governments that partner with their State department of transportation to improve the rural roads in their area. The goal of the U.S. DOT's initiative is to "help state and local leaders get solutions implemented in rural areas faster" in order to make the nation's rural roads safer for public travel and decrease the number of highway fatalities and injuries.

#### **Who should apply?**

Entities that are responsible for rural roads in their area should apply. Coordination with the Arkansas State Highway and Transportation Department (AHTD) is strongly encouraged.

#### **Funding**

Allocated funding for this program for FY 2008 is approximately \$15 million; approximately \$9.2 million for rural road improvement in the Delta Region and \$6 million will be made available for the deployment of Intelligent Transportation Systems (ITS) used in rural areas for road safety. Projects must be consistent with the program objectives and must also meet the eligibility requirements of one or both the Delta or ITS program. Criteria and eligibility requirements for both programs can be found in the Federal Register

<http://a257.g.akamaitech.net/7/257/2422/01jan20081800/edocket.access.gpo.gov/2008/pdf/E8-3716.pdf> or the U.S. DOT's press release at: <http://www.dot.gov/affairs/ruralsafety/ruralsafetyinitiativeplan.htm>.

#### **U.S. Rural Roads 2006 statistics:**

- Of the 8.4 million lane-miles of roads in the United States, over 6 million lane-miles are rural.
- Almost 80% of rural roads are owned and operated by local entities.
- While the majority of deaths occur on rural roads, fewer miles are driven there. Just over 1 trillion miles were driven on rural roads verses approximately 2 trillion miles on urban roads.
- The fatality rate per VMT on local roads is more than twice that of Interstates.
- Nearly 50% of total highway fatalities occur on two-lane rural roads. The fatality rate overall on local roads is more than twice that of interstates.
- The fatality rate per 100 million vehicle miles traveled was more than double in rural areas than it was in urban areas (2.25 and 0.93 respectively).
- Rural drivers made up 62% of total drivers found to have been drinking, speeding and unrestrained.
- Of the passenger vehicle occupant fatalities involving impaired driving crashes (BAC .08+), 58% were in rural areas. At most blood alcohol concentration (BAC) levels, the percent of rural drivers involved in fatal crashes exceeds the percent of urban drivers involved at the same BAC.
- 57% of all the people who died on rural roads were not restrained, compared to 52% in urban areas. Last year, the seat belt use rate among occupants of vehicles in urban areas was 84% compared to 78% in rural areas. 68% of fatally injured pickup truck drivers were unrestrained; the restraint use rate among these drivers is the lowest of any vehicle type.
- Head-on collisions are more frequent in rural areas, occurring about twice as often as in urban areas.
- 66% of rural drivers killed in crashes died at the scene, compared to 51% of urban drivers. 72% of drivers who died en route to a hospital were in rural areas.
- Rural collector roads account for 31% of all rural road deaths, whereas urban collector roads account for only 8% of urban road deaths.
- Although 23% of the U.S. population lived in rural areas in 2006, rural fatal crashes accounted for 55% of all traffic fatalities.
- 12,190 drivers involved in fatal crashes were speeding; 57% were drivers in rural areas.
- Over 70% of the fatal crashes on high speed roadways (speed limit of 55 mph or higher) occurred in rural areas.

Federal funds used for this initiative should not exceed 80% of the total project cost. Each Applicant is encouraged to solicit funds from other sources such as, state and local governments and private sector partners to cover remaining project cost. These funds cannot be combined with other federal-aid to cover the remaining cost. Federal-aid requirements will apply.

### Application Submission and Deadlines

Applications must be forwarded through and endorsed by the AHTD. Applications must be received at the U.S. DOT no later than April 14, 2008. **Applicants should submit their applications to AHTD, ATTN: Research Section, P. O.**

**Box 2261, Little Rock, AR 72203 no later than April 10, 2008.** Qualified Phase I Applicants selected for the final competition (Phase II) will be notified sometime in early April 2008. Applicants chosen to participate in Phase II (by invitation only) must submit a formal Rural Safety Innovation Program Proposal. This proposal is to be received no later than June 20, 2008. Proposals that are selected from Phase II for funding will be announced in August 2008.

### Important Dates:

April 14, 2008	Application
April 2008	Applicants Selected for Phase II Notified
June 20, 2008	Phase II Proposal Submitted
August 2008	Announce Funded Proposals

Detailed information on Phase I & II requirements and evaluation criteria used in the selection process is covered in the Federal Register and can be found at the website listed above.

### Brief outline of both Phase I and II:

Phase I, the application phase. The application should describe the proposed Rural Safety Innovation Program project. It should include:

- general project description including location,
- design and implementation outline,
- financial plan, and
- management and staffing plan as well as a proposed project schedule.

Application should be no longer than 10 single-spaced pages. Each Applicant must identify in their application others sources that will be used to fund remaining project cost. During this phase some applicants may be required to submit additional information.

Phase II, the project Proposal phase. This will be by invitation only. Applicants that make it to Phase II must submit a formal Proposal. The proposal must include, at a minimum:

- detailed project description that consists of goals, objectives, location, proposed countermeasures and expected benefits,
- design and implementation plan,
- financial plan, and
- management and staffing plan that includes a detailed project schedule and timeline.

### Evaluation Criteria

- An Active Rural Roads Program
- Highway Safety Program
- Participation by State Highway Safety Office
- Ability to provide appropriate non-Federal match to Federal Funds requested
- Ability to meet the criteria and requirements for proposed Federal funding sources
- Sufficient data and analysis procedures to identify problem areas and appropriate countermeasures.

Additional evaluation criteria can be found in the Federal Register at the website listed in the brief.

For additional information contact:

Joe Heflin, FHWA, Arkansas Division, Safety Program Manager, [joseph.heflin@fhwa.dot.gov](mailto:joseph.heflin@fhwa.dot.gov), 501-327-6443

### Where to find additional information on Delta and ITS programs:

Information on the Delta Region Transportation Development Program requirements can be found at:

<http://www.fhwa.dot.gov/planning/ind1308drtdp.htm>

The U.S. Department of Transportation Intelligent Transportation System Program and types of ITS applications can be found at:

Safety applications [http://www.itsdocs.fhwa.dot.gov/jpodocs/repts\\_te/13609\\_files/Contents.htm](http://www.itsdocs.fhwa.dot.gov/jpodocs/repts_te/13609_files/Contents.htm)

DOT ITS Web page <http://www.its.dot.gov>

DOT Highway Safety Web page <http://safety.fhwa.dot.gov/>

Benefits information <http://www.itsbenefits.its.dot.gov/>

Cost information <http://www.itscosts.its.dot.gov/>

Lessons learned <http://www.itslessons.its.dot.gov/>

Deployment information <http://www.itsdeployment.its.dot.gov/SurveyOutline1.asp?SID=swcps>

FHWA research <http://www.tfhrc.gov/research.htm>

Statistics and other information taken from Federal Register/Vol. 73, No. 41, February 29, 2008, the Rural Safety Innovation Program and the U.S. DOT's February 2008 press release, "The Department of Transportation Rural Safety Initiative."