Rural Safety and ITS
National Rural ITS Conference
September 3, 2008

Shelley Row
Director
ITS Joint Program Office, RITA, USDOT
The Problem

• Rural Roads make up 78% of US road miles
  – 3.1 million of the 3.9 million miles of roads

• Local governments own 79% of the rural road miles
  – Only 661,000 miles owned by States

• Less than half of the VMT
  – 39% of travel

• More than half the deaths
  – 55% of fatalities
The Problem

• The fatality rate per 100 million vehicle miles of travel for rural crashes is more than twice (2.5 times the fatality rate in urban crashes)

Rural Fatality Rate: 2.37
Urban Fatality Rate: 0.95
The Problem

• Rural crashes tend to be at higher speeds
• Victims are more likely unbelted
• Longer response and transportation times
Secretarial Rural Safety Initiative

- Safer drivers
- Better roads
- Smarter roads
- Better trained emergency responders
- Outreach and partnerships
Secretarial Rural Safety Initiative

• Funding: $15M
  – $6M from ITS funds
  – $9M from Delta funds

• Three phase process
  – Phase I: Competition and selection of rural partners
  – Phase II: Assisted deployment
  – Phase III: Independent evaluation and publication of results
Technical Approach: Phase I

- Issue RFA to rural communities and State DOTs
  - Applicant requirements:
    - Applicants identified hazardous rural location(s) and described specific safety problem set with quantitative supporting data
    - Applicants identified applicable technology solutions
    - ITS deployments must be operational 1 year from grant award date
    - Applicants committed to assist with data collection for evaluation
  - Applicants with the most compelling applications were selected as rural partners to develop formal technical grant proposals for consideration in Phase II
    - 30 applications received
      - 21 for ITS
      - 9 for Delta
**Technical Approach: Phase II**

- Each partner submitted technical proposals for ITS technology deployments

- DOT Team selected technical proposals to fund

- Rural partners are responsible for actual deployment
Technical Approach: Phase III

• DOT will conduct an independent evaluation of each rural partner deployment
  – Data-driven
  – Objective
  – Goal is to document the effectiveness of ITS technologies for identified problem set
• Successful deployment results will offer media and outreach opportunities to highlight successful implementations of rural safety technology enhancements
  – Goal is to facilitate and expedite ITS deployments for similar rural problem sets nationwide
• $600K set aside for management & independent evaluation of all sites
**Rural Safety Awards**

- Announced on August 27th
  - Total 21 projects selected
    - 12 ITS projects
    - 9 Delta projects
  - Projects include
    - 14 States
    - 3 Counties
    - 2 Parishes

- Total $18.9M (14.7M Federal share)
  - ITS: $7.1M (5.4M Federal share)
  - Delta: $11.8M (9.5M Federal share)
## Rural Safety Awards

<table>
<thead>
<tr>
<th>Project Lead</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>Interstate 10 Severe Weather Warning System</td>
</tr>
<tr>
<td>California</td>
<td>Coordinated Speed Management in Work Zones including Infrastructure and Augmented Speed Enforcement</td>
</tr>
<tr>
<td>California</td>
<td>Intersection Safety using ITS Technologies</td>
</tr>
<tr>
<td><strong>El Dorado County</strong></td>
<td>Speed Management via LED In-Road Line Markings and Electronic Warning Signs on US 160 Wolf Creek Pass Snow Shed</td>
</tr>
<tr>
<td>Colorado</td>
<td>Speed Information on Approach to Curves on US Highway 50 in Freemont County</td>
</tr>
<tr>
<td>Iowa</td>
<td>Traffic and Criminal Software Improvements – Upgrading Software to a Web Based System</td>
</tr>
</tbody>
</table>
# Rural Safety Awards

<table>
<thead>
<tr>
<th>Project Lead</th>
<th>Project Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illinois</td>
<td>Vehicle Actuated Advanced Warning on Curves</td>
</tr>
<tr>
<td>Kansas</td>
<td>Dynamic Message Signs, RWIV and Cameras</td>
</tr>
<tr>
<td>Minnesota</td>
<td>Installation of Dynamic Curve Warning Systems</td>
</tr>
<tr>
<td>South Carolina</td>
<td>Decrease hydroplaning US 25 Greenville County using Multiple ITS Technologies</td>
</tr>
<tr>
<td>Washington King County</td>
<td>Advanced Curve Warning and Driver Feedback Signing</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>Emerging Technology to Address Rural Thru-Stop Intersection Crashes</td>
</tr>
</tbody>
</table>
Summary

- ITS technology component is just one part of a multi-dimensional safety initiative

- Goal is target specific hazardous locations and that have sufficient safety data to pinpoint cause(s) of accidents and potentially effective ITS countermeasures

- End goal is to demonstrate positive, quantifiable safety enhancements to facilitate and expedite additional safety technology deployments nationwide