

RUMBLE

on the RESERVATION



using rumblestrips to prevent
run-off-the-road crashes



Campaign History

- **2008:** Roadway Safety Foundation announces the 6 winners of technical assistance grants for its “*Safer Roads: Building Safety into Your Drive*” public education campaign
 - Michigan Technological University’s Tribal Technical Assistance Program (TTAP) among the winners
 - Grant awarded to develop outreach program for American Indian/Alaska Native (AI/AN) communities promoting importance of roadway safety treatments



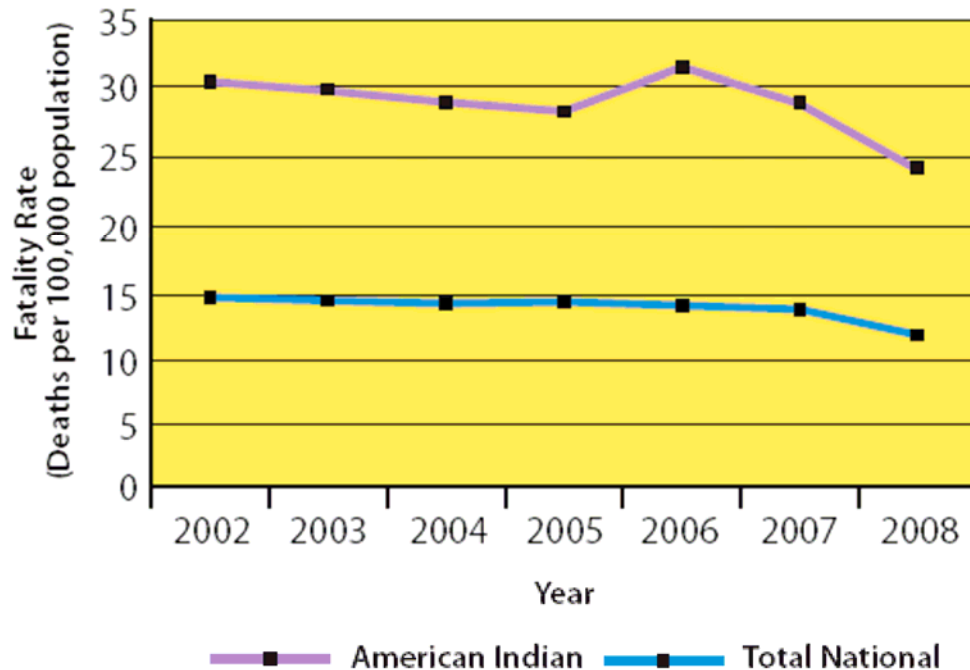
Why this Audience?

- AI/AN population **over-represented** in motor vehicle crashes, fatalities, and injuries
- AI/AN population primarily served by the most dangerous type of road: **rural highways**
- Limited budgets for road projects and transportation investments necessitate **cost-effective approaches**



Audience (cont): *Crash Facts*

Fatality Rates in Motor Vehicle Crashes

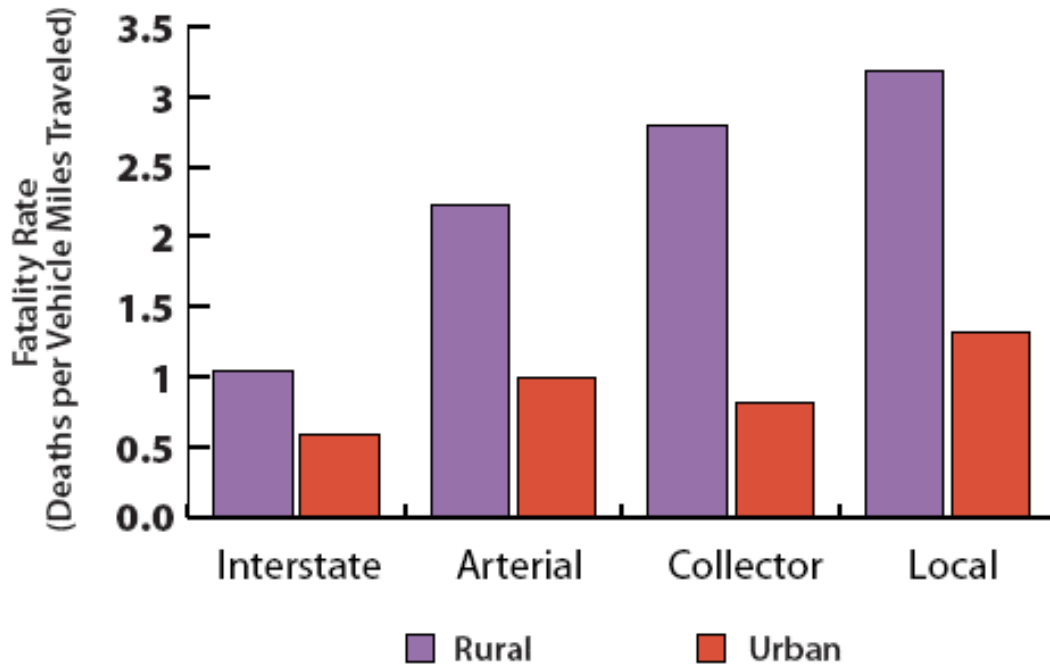


The American Indian/Alaska Native population has experienced a traffic fatality rate roughly **double the national average** for many years



Audience (cont): Rural Roads

Fatality Rates (2007) by Function Class



AI/AN communities are primarily served by rural highways, the most dangerous type of roadway in the country, with fatality rates **2-3x higher** than those of other roads



Audience (cont): Funding

- Roads on tribal lands generally only receive **1/10 – 1/5** the funding per mile that state DOTs spend on their road networks
- Roughly 3% of federal roadways are part of the Indian Reservation Roads network, but only 0.5% of federal highway funding is allocated to such roads
- Cost-effective solutions are needed!



What Are Rumble strips?

Rumble strips are grooves or raised bumps in the pavement that create a loud **noise and vibration** when your tires roll over them



Edgeline rumble strips alert drivers they are about to **run off the road**



Centerline rumble strips alert drivers they are about to **cross into on-coming traffic**



Why this *Solution*?

- Rumble strips address a type of crash that is especially severe *and* common: **roadway departure crashes**
- The AI/AN population is particularly over-represented in this type of crash
- Rumble strips are a highly-effective roadway departure countermeasure *and* are **much less expensive than other options**



Solution (cont): Roadway Departures

- Roadway Departure crashes account for the **majority of traffic fatalities** (>53%) in the U.S.
- Approx. **two-thirds** of these crashes occur on **rural roadways**
- Rumble strips address this by alerting drowsy or distracted drivers of a lane departure **while there is still time to avoid a crash**



Solution (cont): AI/AN Crashes (2009)

Approx. 75% of AI/AN traffic fatalities occurred on rural non-interstates, compared with national average of 51%

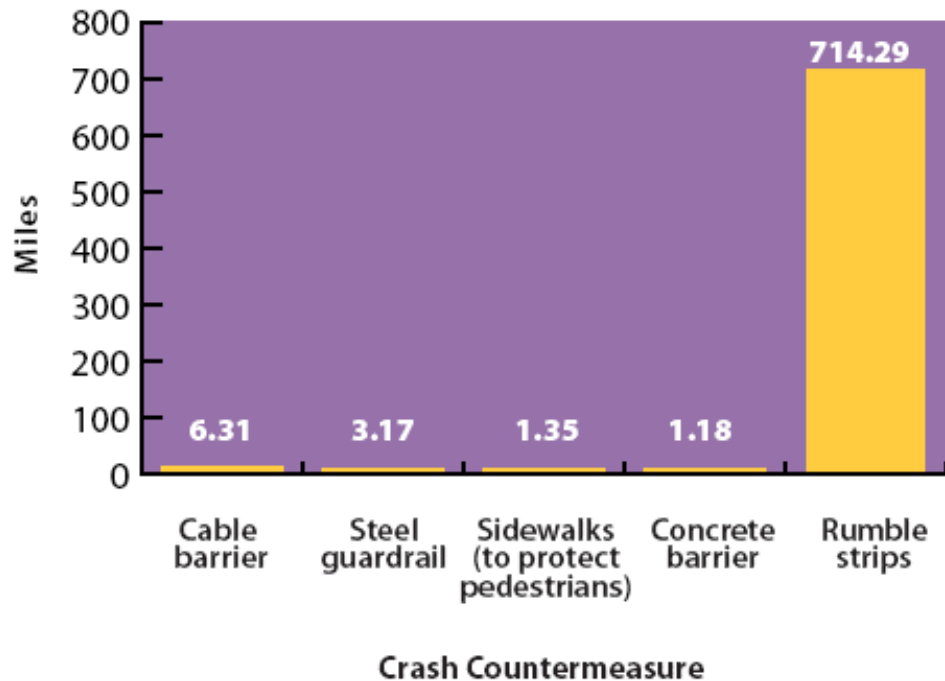


Almost 71% of AI/AN traffic fatalities occurred in **single-vehicle crashes**, compared to the national average of 58%



Solution (cont): COST-effectiveness

If you had \$500,000, how many miles of roadway could you outfit with...?



Quick to install and costing just 10-30 cents per foot, rumble strips are much less expensive than other common roadway departure treatments, allowing communities to **protect hundreds of additional miles of roads almost immediately**



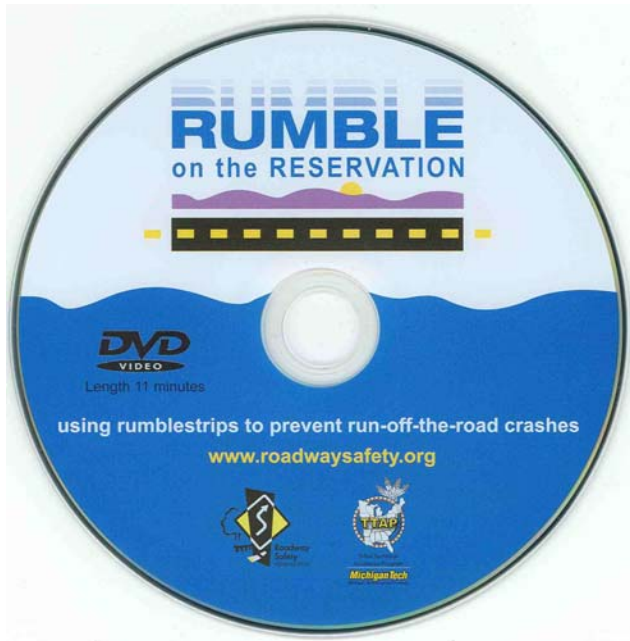
Solution (cont): Cost-EFFECTIVENESS

Rumble strips have been shown to be up to **80% effective in reducing single-vehicle, run-off-the-road crashes**, a kind of crash that disproportionately impacts AI/AN communities and the types of roadways that serve them

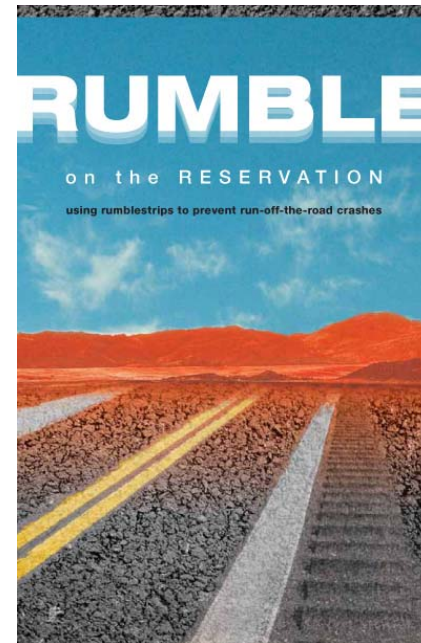


Primary Campaign Products

11-minute DVD



6-panel brochure

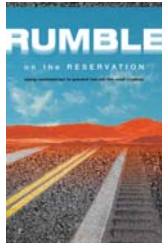




The DVD

- Explains what rumble strips are and how they work
- Explores the issue of rural roads and the impact they have on transportation safety on tribal lands
- Features interviews with transportation planners and safety experts from AI/AN communities and the Federal government
- Details real-life stories of communities that have realized tangible safety benefits using rumble strips
- Unveiled at the Annual National Tribal Transportation Conference, November 2010 in Albuquerque, NM





The Brochure

- Corresponds with the DVD, but can serve as standalone handout
- Provides more detail on rural road crashes and AI/AN traffic fatality rates
- Makes the case that rumble strips serve as a crucial last line of defense against inevitable driver error
- Unveiled at the Transportation Research Board Annual Meeting, January 2011 in Washington, DC



For Materials or More Info...

RSF is pleased to make all of its materials available **free of charge**. To order the *Rumble on the Reservation* DVD and brochure, or to find a complete listing of RSF's materials, please visit www.roadwaysafety.org.

ALSO AVAILABLE – View, download, and print a PDF of the *Rumble on the Reservation* poster RSF presented at the Transportation Research Board's Annual Meeting, January 24, 2011.



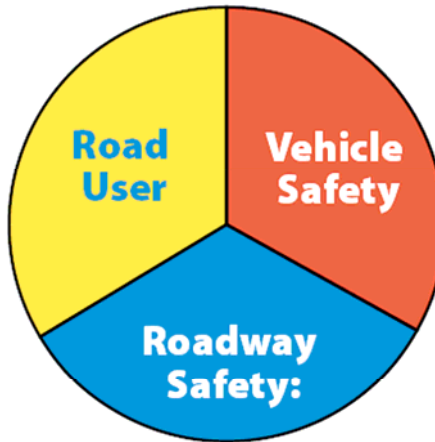
SAFER ROADS:
Building Safety into Your Drive



About Us

RSF is the only national organization solely dedicated to reducing deaths by improving the physical characteristics of America's roadways. In this way, we support one of the three primary components of overall highway safety:

Three Aspects of Highway Safety



The contribution to overall highway safety made by the physical and operational characteristics of the roadway and its environment.

RSF works to attain its goals by building awareness through media campaigns and outreach activities, developing educational materials, and forming partnerships. It is a private non-profit 501(c) (3) organization.

