Collaborating with American Indian Communities to Understand Transportation Safety Risks in Tribal Lands

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A high-stakes issue

• Unusually high rates of MVC fatalities and injuries among American Indians, nationally:
  – Their rate increased by 52%, compared a nationwide decrease of 2% (Poindexter 2004, 1975-2002 data).
  – MVC fatality rate is higher than for any other ethnic or racial group (Pollack et al. 2012).
  – Leading cause of unintentional injury for American Indians aged 1-44 (Raynault et al. 2010).

• USDOT Strategic Plan (2012-16) highlights rural safety, including collaborating with tribal governments.
Existing explanations in the literature

- **Individual behaviors**: impaired driving, low rates of safety restraint use, speeding
- **Road conditions**: signage, lighting, signals, roadway design, surface repair, ice and vegetation management
- **Historic and structural disparities**: unmet health needs, poverty, distance to travel to jobs and services, limited or delayed access to emergency medical care.
- **Institutional resources and policies**: enforcement, conflicts or gaps in road ownership and responsibility, possibly dry reservation policies
Existing literature
• Only 20 peer-reviewed studies
• National, population-level, epidemiological studies
• No differentiation of reservation and urban areas
• Lots of “conventional wisdom” to address

Need for situated, qualitative, collaboratively produced data
• Attention to contextual conditions (legal, geographic scale, climatic, etc.)
• Probe distinctions of tribal and other rural transportation issues
• Be inclusive of American Indian communities, tribal governments, academics

Collaborating with American Indian Communities to Re-Interpret Transportation Safety Risks in Tribal Lands
• Focus on perceived sources of risk
• Suggest interventions for those settings, building on success stories
• Build and sustain ongoing relationships with tribal governments
Methods

• Collaboration with Advocacy Council on Tribal Transportation (ACTT)
• Review of crash data
• Interviews with key stakeholders
  – 11 tribal governments in Minnesota (7 so far, including 5 visits)
  – Interest groups; state, federal, county governments
  – Other researchers
• Collaborative case study partnerships with 4 tribal governments
  – Focus groups, interviews, “virtual tours” to characterize sources of risk
  – Review of best practices, success stories, options for policy interventions
  – Ongoing partnership for research, implementation
Preliminary findings of interest

• It is not clear that tribal transportation safety problems are distinctively different from the rural safety problem.
  – Exception: Lots of emphasis on pedestrian safety.

• Tribal transportation leaders are not mentioning residents’ DUI as one of their top challenges. What they do mention re drivers:
  – Lack of awareness of pedestrians. Poor visibility and barriers to protect them.
  – Congestion, confusion, and speeding from nonlocals, especially during peak tourism periods
  – Poor visibility due to lighting, vegetation maintenance
  – Casinos as attractors for impaired drivers.

• MN safety and injury prevention educators concerned with low rates of correct usage of restraint systems (echoing prior research).
**Preliminary findings of interest**

- Enforcement is key, not just for supporting safety but for the reporting / monitoring of safety issues
  - Success stories involve good coordination with adjacent county governments
  - Problems involve poor communication and/or mismatched priorities between units (e.g., BIA and tribal government; tribal government & MnDOT or county government; transit, public works, & public safety within tribal government)

- Inter-jurisdictional coordination issues
  - Reports of some improvements in tribal government relationships with MnDOT or FHWA around transportation safety (e.g. being proactive to promote funding opportunities; advocacy for signage in tribal areas).
  - Mismatch of “best practice” guidance and judgment from MnDOT with tribal leaders’ on-the-ground knowledge of safety priorities (e.g., critical pedestrian crossings)
Our questions / next steps

This year:

• Probing the impaired driving findings
• Elaborating PL 280 and inter-jurisdictional contexts
• Incorporating non-”expert” perceptions
• Identifying best practices and success stories
• Ongoing policy and management translation
• Collaborating with the GIS project on findings re data sharing, quality, and interpretation issues

Longer term:

• Incorporating additional sites, beyond Minnesota
• Moving from problem definition to implementation
Questions (initial general interview)

Intro, confidentiality agreement, participant’s role in transportation safety

Perspectives on the nature of transportation safety risk

3. How would you describe the transportation safety problem in [your location, geographic and/or jurisdictional, or population?]?

4. For example, is it a problem? If so, how big of a problem is it?

5. What are the transportation safety problems that you observe?

6. How do you know there is a problem? For example, what kind of information do you have (or do you need)?

7. Thinking about your area, what are the major sources of risk for transportation safety problems? We’re interested in what seems to be causing the problems you have observed and in whatever concerns or other hunches you have about transportation risks that might be a problem?

Management options

8. What are you most interested in doing to improve safety? Maybe you are most interested in continuing to do something that is working very well, maybe there is something you would like to get started, or maybe there is something you wish that another agency would do. We’re interested in all of those areas, depending on what seems most important to you.

Thank you, other recommended contacts, next steps