Rural Road Safety Workshops

CTS Annual Transportation Research Conference
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Minnesota Toward Zero Deaths Campaign

• Established in 2001
• Vision: To reduce fatalities and serious injuries on MN roads to zero.
• Goals:
  – “Fewer then 500 fatalities by 2008” – met in 2006
  – “Fewer then 400 fatalities and 1,400 serious injuries by 2010”
TZD Projected Fatalities

Safety Goal
A 19% Reduction in the Number of Traffic Fatalities

The 2008 safety goal has already been achieved.
Workshops

The Local Road Research Board (LRRB) funded two workshops to help the TZD mission:

1. Rural Road Safety Solutions
   - Engineering Focus
2. Rural Road Maintenance Safety
   - Maintenance Focus
Rural Road Safety Solutions Workshop

• Developed in 2008
• Intended Audience: Engineers
  – City
  – County
  – Mn/DOT
  – Other
Creating an operating culture where safety is the mind set... and data drives priorities and decisions
Rural Road Safety Solutions Workshop - Outline

Part 1: Introducing the Issue

Part 2: Understanding the Problem

Part 3: Tools and Techniques

Part 4: Putting Safety Into Practice
Workshop Outline – Introducing the Issues

- A. 99 in 100 people will be involved in a crash
- B. Traffic crashes were the leading cause of death for ages one through 34
- C. Economic impact of traffic crashes was $230.6 billion
- D. All of the above
Workshop Outline – Understanding the Problem

Minnesota 2007 SHSP
Critical Emphasis Areas (CEAs)

1. Seat belt use/airbag effectiveness
2. Impaired driving
3. Design and operation of highway intersections
4. Keeping vehicles on the roadway
5. Curb aggressive driving
Workshop Outline – Understanding the Problem

Minnesota 2007 SHSP
Critical Emphasis Areas (CEAs)

6. Graduated drivers license-young drivers
7. Reduce head-on/cross-median crashes
8. Increase driver safety awareness
9. Improve information and decision support systems
Workshop Outline – Tools & Techniques

- Strategic Highway Safety Plan (SHSP)
- Minnesota Crash Mapping Analysis Tool (MnCMAT)
- Road Safety Audits (RSA’s) and Road Safety Plans (RSP’s)
- Safe Communities Coalition
Workshop Outline – Tools & Techniques

- Pavement Markings
- Lighting
- Signing
- Sightline Improvements
- Rumble Strips/StripEs
- Safety Edge
- Clear Zone Management
- General Maintenance
- ITS Applications
- Shoulder Paving/Widening
- Turn-lane Treatments
Workshop Outline – Putting Safety into Practice

- Funding
- Stakeholder Involvement
- Foster a “Culture of Safety”
- Case Studies
Rural Road Safety Solutions Workshop

Workshop Delivery:
- Presented 8 Different Workshops Statewide
- Presented by: FHWA, Mn/DOT, MN Counties and SRF
- 136 Engineers Attended
Rural Road Maintenance Workshop

- Developed in 2010
- Intended Audience:
  - Maintenance Staff
- Workshop Outline – 3 Parts
1. Traffic Safety as a Major Concern
2. Promotion of Safety Through Change
3. Maintenance Tasks, Safety Concerns, and Potential Responses
Traffic Safety as a Major Concern

- **In 2008 in Minnesota**
  - 455 people died
  - 33,379 people injured
  - 79,095 traffic crashes were reported to DPS
  - $1.5 billion estimated economic cost to Minnesota

- **On an average day**
  - 1.2 people die
  - 91 people injured
  - 216 crashes occur
  - $4.0 million average daily cost
Promotion of Safety Through Change

- Current policy
- Suggest policy change
Rural Road Maintenance Workshop

Maintenance Tasks, Safety Concerns, and Potential Responses

- On-Road Issues
- Off-Road Issues
- Miscellaneous Issues
Rural Road Maintenance Workshop -
On-Road Issues

- Obstructions in Roadway
- Pavement Condition
- Shoulder Drop-Off
- Signs and Pavement Markings
- Traffic Signals
- Work Zone Safety
Rural Road Maintenance Workshop - Off-Road Issues

- Vegetation Control
- Roadside Hazards - Clear Zone
- Drainage
- Winter Maintenance
- Guardrail & Cable Median Barrier
Workshop Delivery

- Presented at the 2010 Minnesota Spring Maintenance Expo
- Presented by: Keith Knapp - CERS and Renae Kuehl - SRF Consulting Group
- 40 Maintenance Staff Attended
LRRB Workshop Outcome

- Define the significance of the roadway safety problem & some MN initiatives
- Promote roadway safety through policy or procedure changes
- Recognize maintenance tasks that impact safety and various potential responses
- Overall – Better understand their role in the MN Toward Zero Deaths initiative
Future Workshops

- LTAP will take over schedule/delivery
- Rural Road Safety Solutions Workshop
  - No current plans
- Rural Road Maintenance Workshop
  - Will be offered Fall 2010
Ongoing Local Safety Initiatives

- Minnesota Strategic Highway Safety Plan (SHSP)
- Toward Zero Deaths Campaign (TZD)
- Minnesota County Road Safety Plans
- LRRB Workshop
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Questions?