



National
Center
for
Rural
Road
Safety



Rural Roadway Safety and the Role for TIM

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Impact of Rural Safety



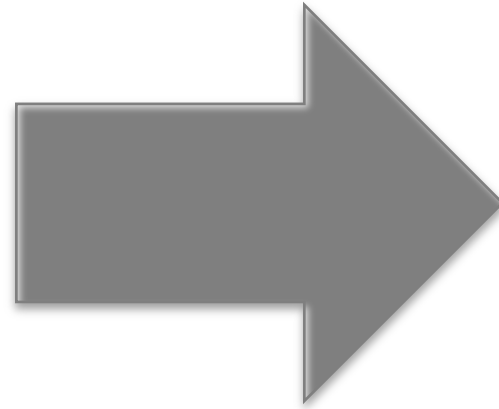
Let's save the people behind the numbers

- FoRRRwD





How do we get to Zero?





Safe System Elements Create Redundancy

The “Swiss Cheese Model” of redundancy creates layers of protection

Death and serious injuries only happen when all layers fail



Adapted from James Reason’s model for analyzing accident causation
<https://royalsocietypublishing.org/doi/10.1098/rstb.1990.0090>

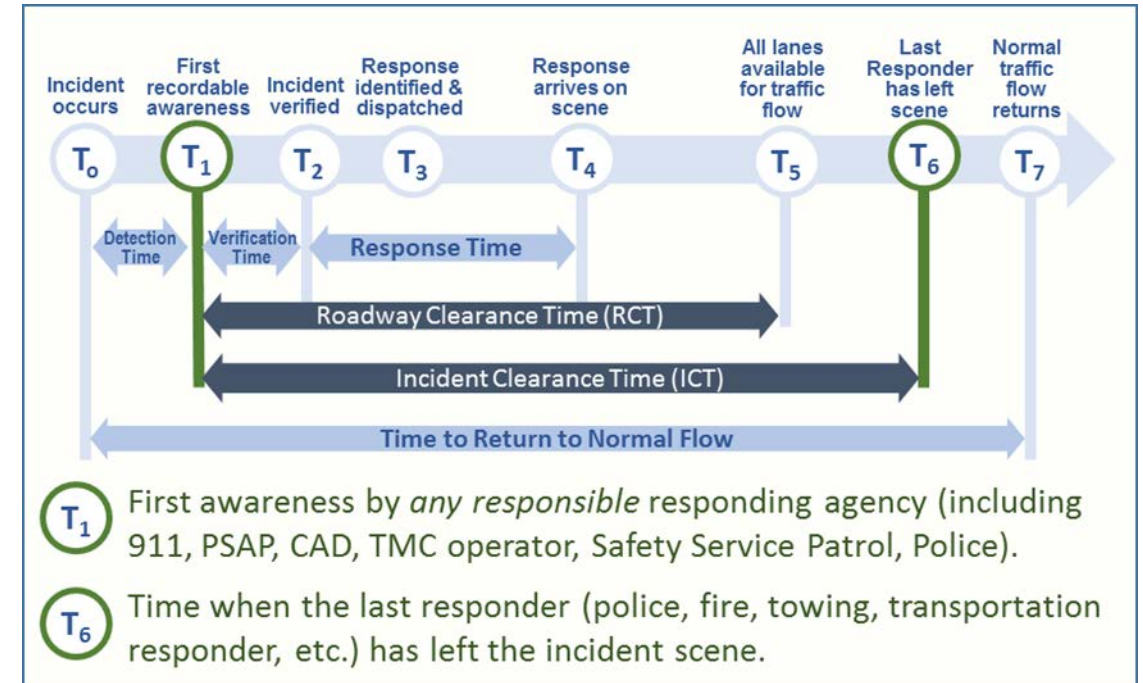
Image Source: FHWA





TIM Stages Acutely Affected by Rural Characteristics

- **Detection**
 - Low traffic volume
 - Gaps in communication
 - Long distances
- **Notification**
 - Cellular coverage lacking
- **Arrival**
 - Large geographic coverage areas
 - Volunteer responders
 - Limited resources





Examples of Overcoming Detection & Notification Challenges

- E-911 and NG911
- Wireless priority systems
- WYDOT “where I’m at feature” on WY511
- Georgia piloting Carbyne 911 application
- Crowdsourcing through 511
- Waze’s Connected Citizen Program
- Service Safety Patrols such as Georgia DOT’s CHAMP program
- WYDOT collaboration with freight companies





Examples of Overcoming Communication Challenges

Mobile
command /
communications
vehicles

SAFECOM

Interoperability
technology

WyoLink Radio
Network

Communications
on Wheels
(COWS) trailers

Smartphone
applications

Caltran's
Responder
System

Florida Fleettalk





Unique Circumstances

- Unpaved roads
- Severe weather impacts
 - WY Commercial Vehicle Operator Portal
 - WY Connected Vehicle Pilot
- Horse and Buggy Incidents
- Livestock Crashes





Key Takeaways

- Pre-planning is key to overcome rural challenges
- Training and tabletop scenario exercises adapted to local scenarios prepare responders
- Relationship building pre-event is necessary
 - Rural TIM Teams
 - Cooperation with FLMA
 - Fire Police Units
 - Partner/allied agency contact information





Want to Learn More about Rural Issues?

- Center of Excellence funded by FHWA since 2014
- Monthly webinar series
- Rural Safety Summits every two years
- Road Safety Champion Certificate Program
- Rural Road Safety Awareness Week
- Training and technical assistance



**Road SAFETY
CHAMPION Program**





Contact Information

***If you have any questions related to this presentation,
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