NETC Project: Applying SHRP2/ Naturalistic Driving Study Data

Joyce Taylor
Chief Engineer
MaineDOT
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About New England Transportation Consortium

- Six New England state DOTs and land grant universities engaged – leveraging resources and technical expertise
- Conduct research of common need to the DOTs
- Operates in similar fashion to NCHRP - oversight committee for the program and technical committees on project level
- Technical committee defines the project scope of work based on funded research problem statement
- Research conducted by New England land grant university

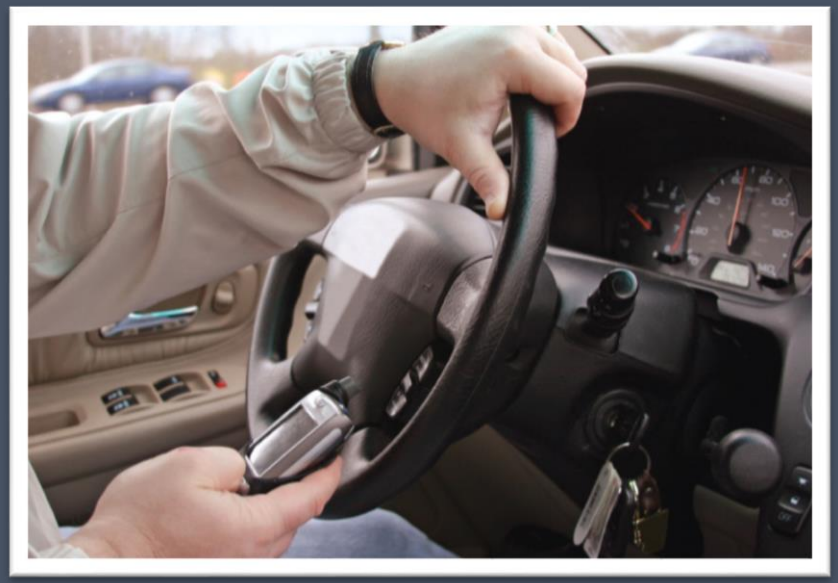
Naturalistic Driving Study

BACKGROUND:

- ✓ Over 3,400 volunteer participants
- ✓ Six sites across the U.S.
- ✓ Each participant's vehicle heavily instrumented with cameras and sensors
- ✓ Data collected continuously from all trips taken by each participant over 1-2 years
- ✓ Resulting in a dataset that includes 2 petabytes of data covering 5.4 million trips

SHRP2 Safety Research

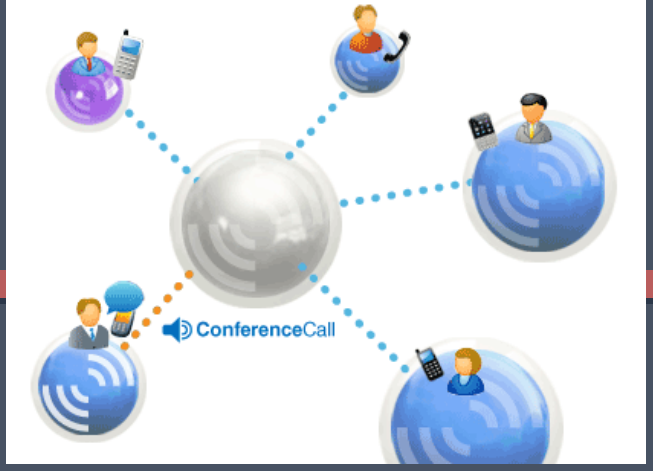
- Three-phase implementation process to use the SHRP2 Safety Naturalistic Driving Study; Phase 2 is now underway.
- **Nine teams from eight states** are researching these important safety concerns:
  - Pedestrian Safety
  - Roadway Departures
  - Speeding
  - Work Zones
  - Horizontal and Vertical Curves (Rural Roads)
  - Interchange Ramps
  - Adverse Weather Conditions
  - Roadway Lighting



The New England Project

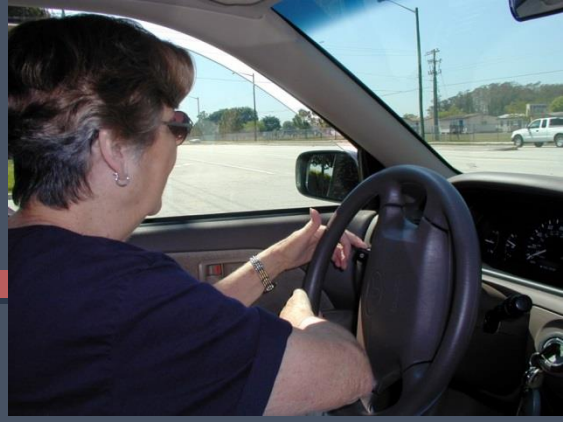
- Coordinated by MaineDOT Safety Office
- Supported by other NE State counterparts – data-driven leading consensus safety needs
- Kicked Off in June 2015
- Original Project : **NETC 15-2 "Using the New SHRP2 Naturalistic Driving Study Safety Databases to Examine Safety Concerns for Teens and Older Drivers"**
- Engaged NDS data experts from FWHA & others to provide guidance and insight (a terrific resource)

Defining the Project



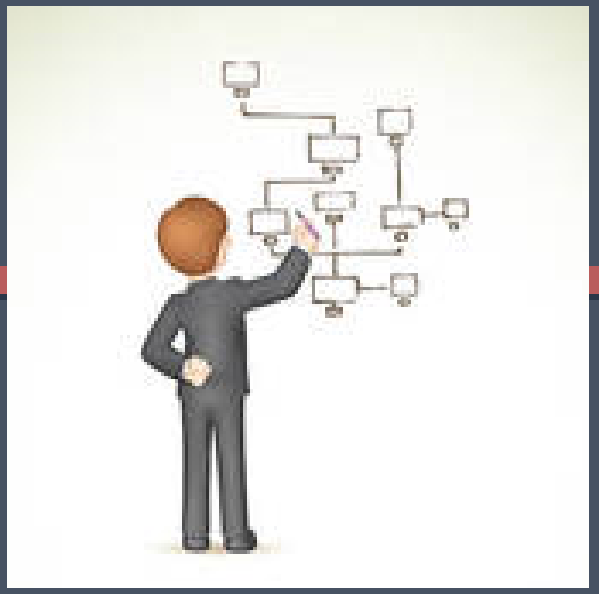
- Proof of Concept aspect
- Task 1: Develop a realistic scope of work that would translate to an RFP
- This effort consisted of a series of:
  - RFP Drafts
  - NE team & NDS data expert discussions
    - State crash data analysis comparisons to determine key issues
    - MA screened locations for appropriateness

Defining the Project



- Project scope re-defined - **'To evaluate…the behaviors of drivers 65 years old and older when making left turns at signalized intersections.'** (much narrower scope than original)
- **Why older drivers?** Mature drivers over-represented in most New England states' crash data (especially at signalized intersection crashes/left turn maneuvers)
- NDS data will help better understand the decision process of an older driver. Findings will help enhance safety/reduce crashes.

What's Next:



Next Project Steps:

- RFP developed and issued by NETC
- Research contractor selected
- Consultant & NETC team - Refine this study's scope, determine relevant data, methodologies & limitations.

Project Outcomes:

- Better understand available data and linkages
- Better understand crash causal factors
- Data-driven recommendations – Design & Behaviors.
- Possibly define scope for a Phase 2

THANK YOU

- For more about NETC, contact netc@uvm.edu
- For more about this project, contact
  - duane.brunell@maine.gov
- For more about the SHRP2 Safety NDS, contact
  - FHWA: Aladdin Barkawi, Aladdin.Barkawi@dot.gov
  - AASHTO: Kelly Hardy, khardy@aashto.org