



**U.S. Department of Transportation**  
Office of the Under Secretary

# Rural Speed Pilot Project

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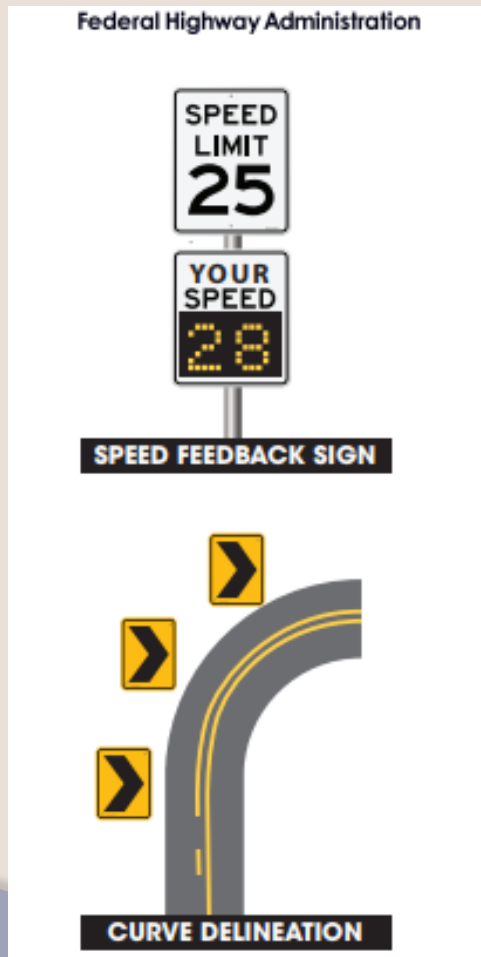
# Speeding is a Major Problem in Roadway Safety

- ◎ 10,111 speeding-related fatalities in 2016
- ◎ 27% of all traffic fatalities involve speeding
- ◎ Around half of all speed-related fatalities are on rural roads
- ◎ Speeding increases the likelihood of a crash, and increases its severity



Source: FHWA Website

# Project Goal - Find Patterns of Risk Using Speed Data



- Find heightened risk in traffic speed patterns to inform policy and decision making
- Dream deliverable: provide a tool to identify speed risk at the roadway segment level for State and local governments to use
- Identify where to invest in engineering, education, and/or enforcement to reduce speeding

# Probe Data Provides a New Opportunity to Better Understand Speed Safety Risk

- ◎ **NPMRDS = National Performance Management Research Data Set, which is purchased by the Federal Highway Administration**
- ◎ **Anonymized data from GPS-enabled devices that gets average traffic speeds along the National Highway System every few minutes**
- ◎ **Purchased for measuring highway congestion**

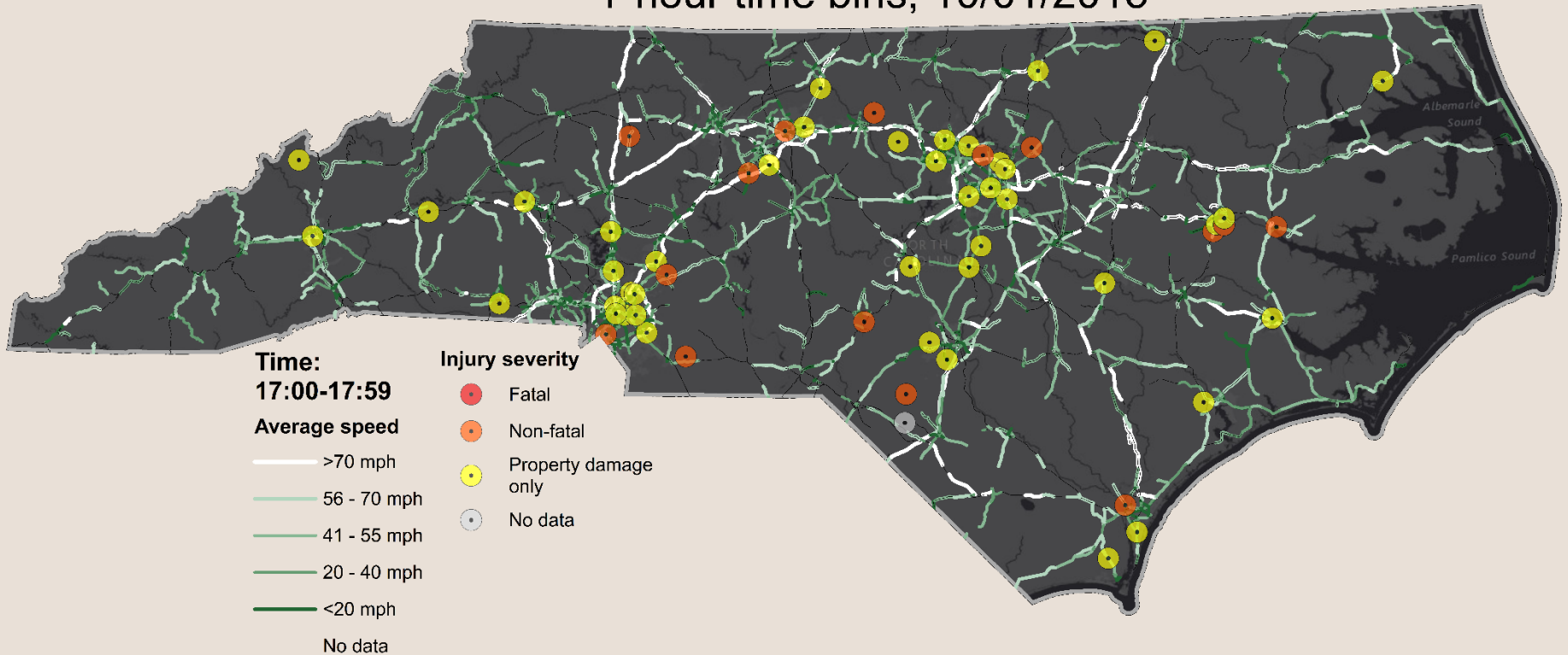


Source: FHWA Website

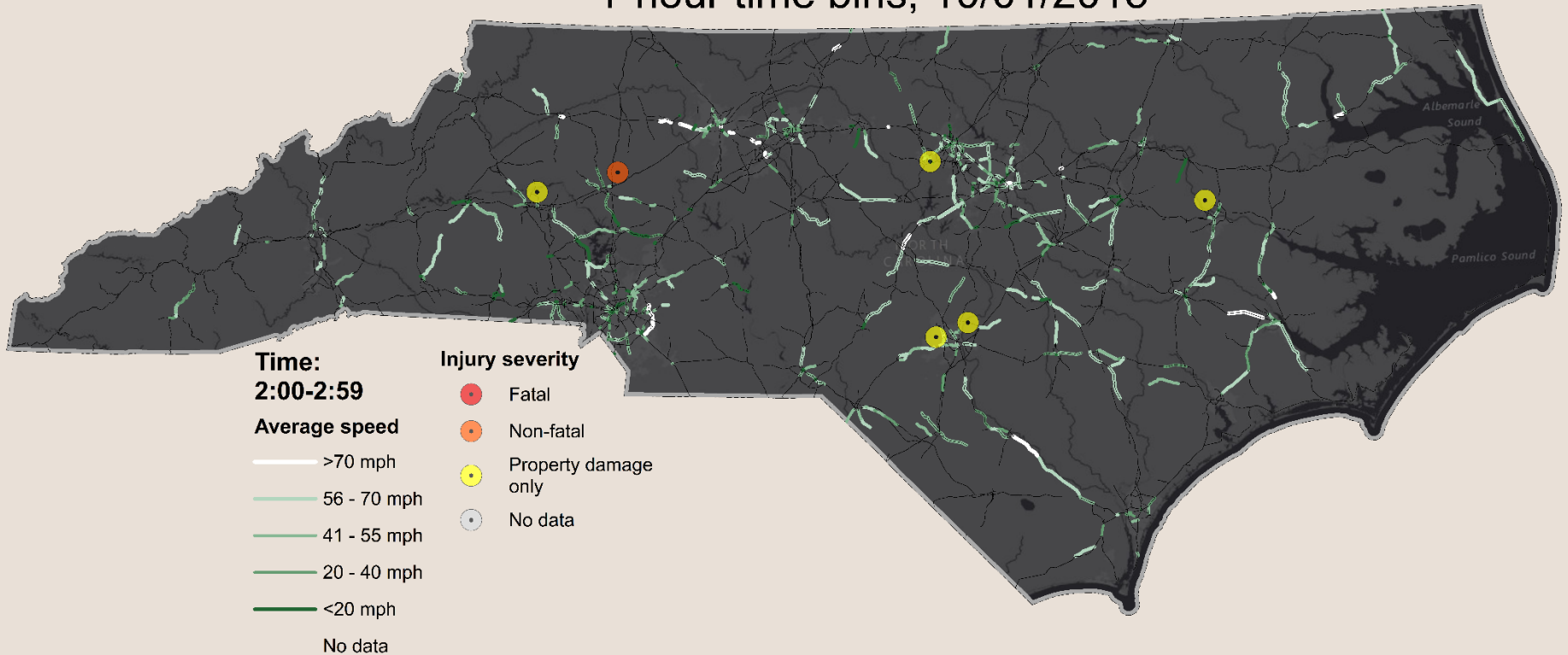
# Rural Speed Pilot Details

- ⦿ Integrate crash data, roadway attributes, traffic volumes, and speed information
- ⦿ Connect crashes to the traffic speeds on the roadway using time, and determine crash rates at the segment level
- ⦿ New twist to prior research: NPMRDS data
- ⦿ North Carolina, Ohio, and Washington State case studies
- ⦿ Quantify the effects the speed differential (travel speed versus posted speed limit) and speed variation over time have on outcomes

# North Carolina NPMRDS and Crash Data, 1-hour time bins, 10/01/2015



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# The Pilot Continues

- ◎ **First iteration completed**
- ◎ **Very preliminary results show correlations between speed and crash rates**
- ◎ **Second iteration continues**