

# Increasing Nighttime Seatbelt Usage Rates: An Evaluation of Enforcement, Education, and Outreach Strategies

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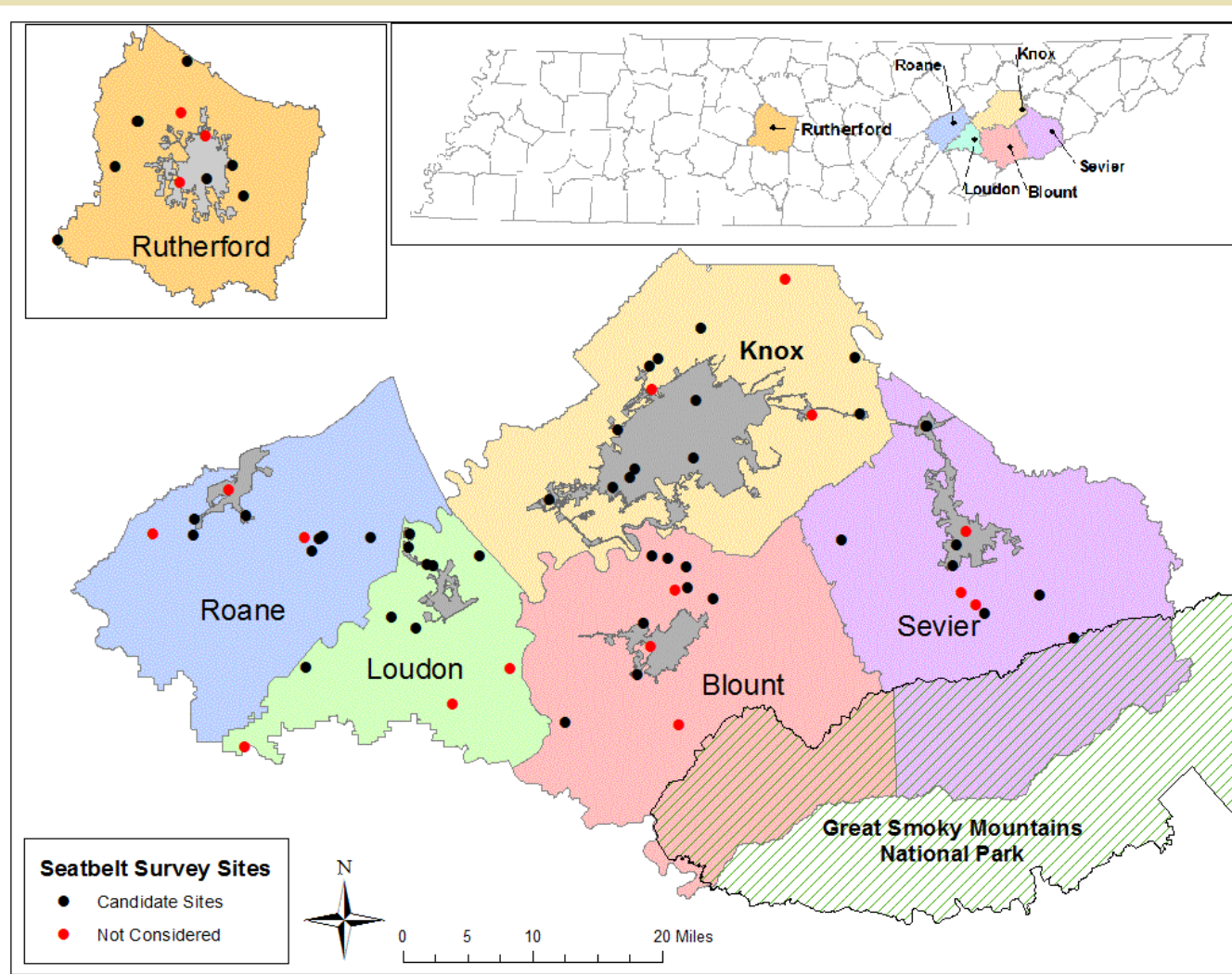
Tennessee Section ITE Spring 2015 Meeting

Kingsport, TN  
May 21, 2015

# Project Overview

- 3-year CDC funded research project
- Additional support from TN GHSA
- Target age group: 16-34 year olds
- Study area: 5 east TN counties + control county
- Community support/participation is key
- Lessons learned to be shared across US

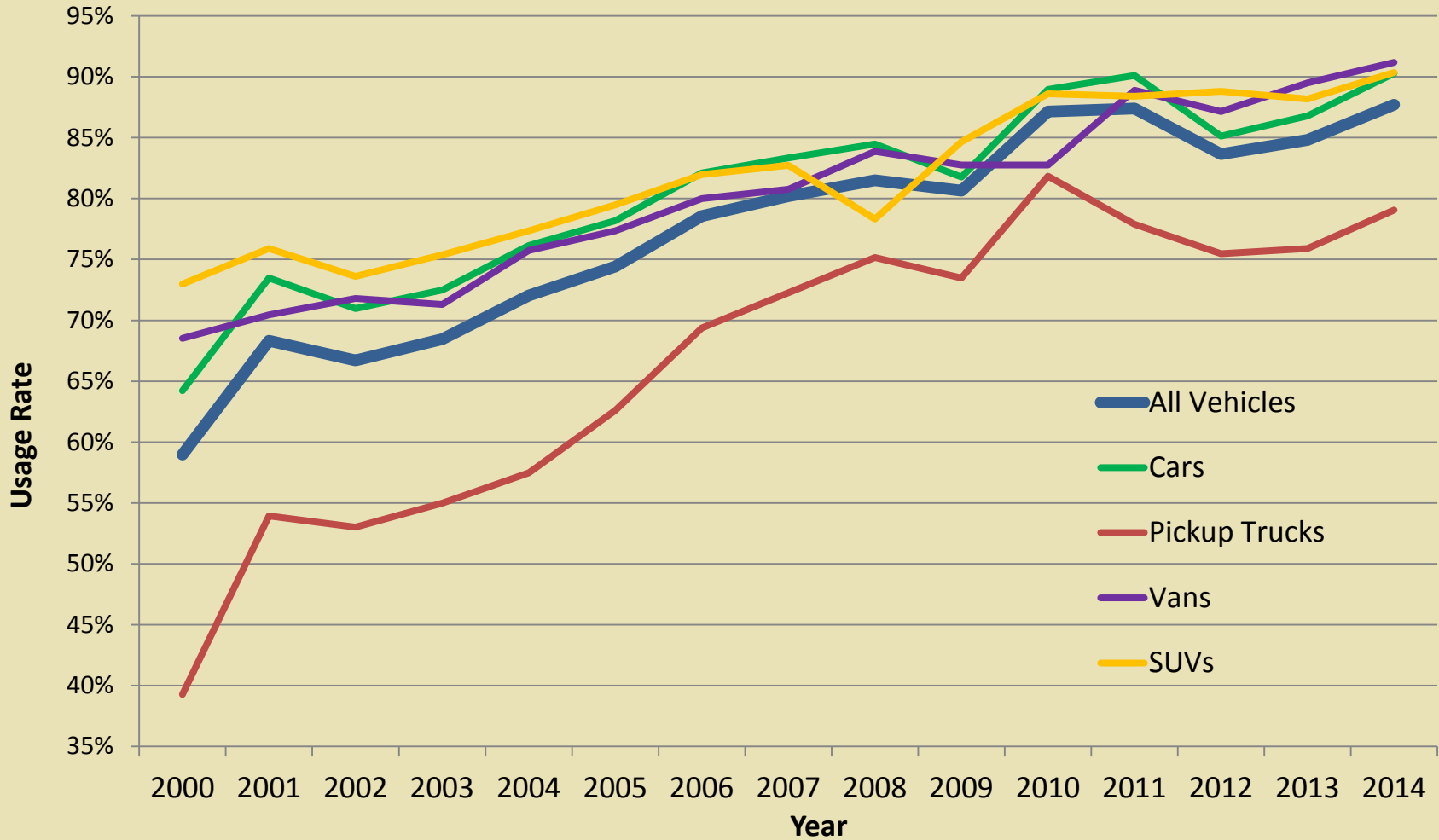
# Study Setting and Potential Observation Sites



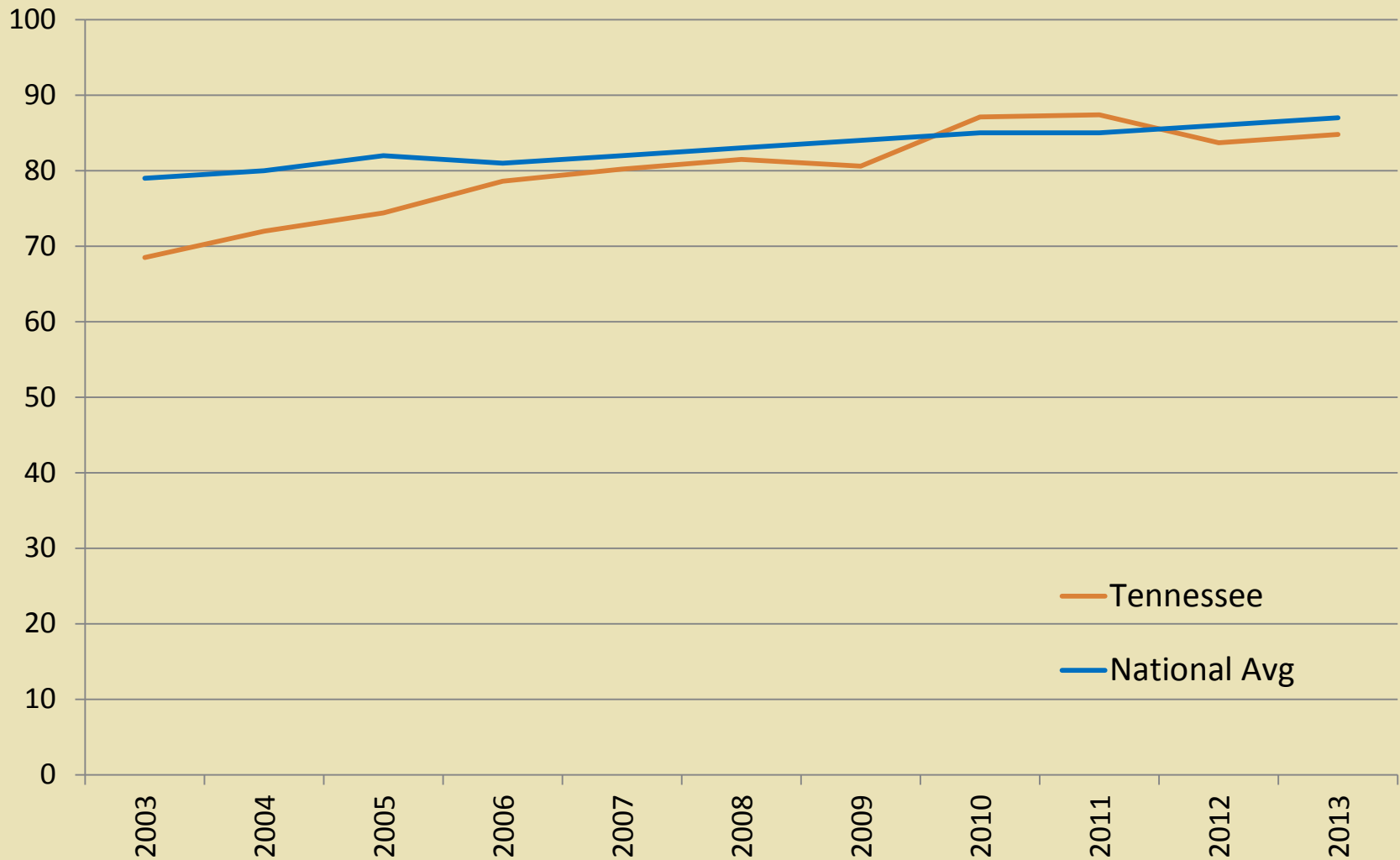
# Seatbelts Save Lives

- Use of seatbelts save > 15,000 annually
- Statewide ave. daytime SB use rate in TN ~88 %
- Nighttime seatbelt usage rate ~ 15 % lower
- Studies show that about half of TN highway traffic crash fatalities are unbuckled
- => 50% of the traffic fatalities come from 12% of our population

# TN Seat Belt Usage 2000-2014



# Average: TN vs National



# CTR Survey Research Findings

Seat belt usage tends to be **lower** for those

- With a high school education or less (vs. college)
- Who are black or Asian (vs. Caucasian)
- Who are between the ages of 18-45
- Who earn less than \$30K/year
- Who drive pick up trucks

# Project Aims

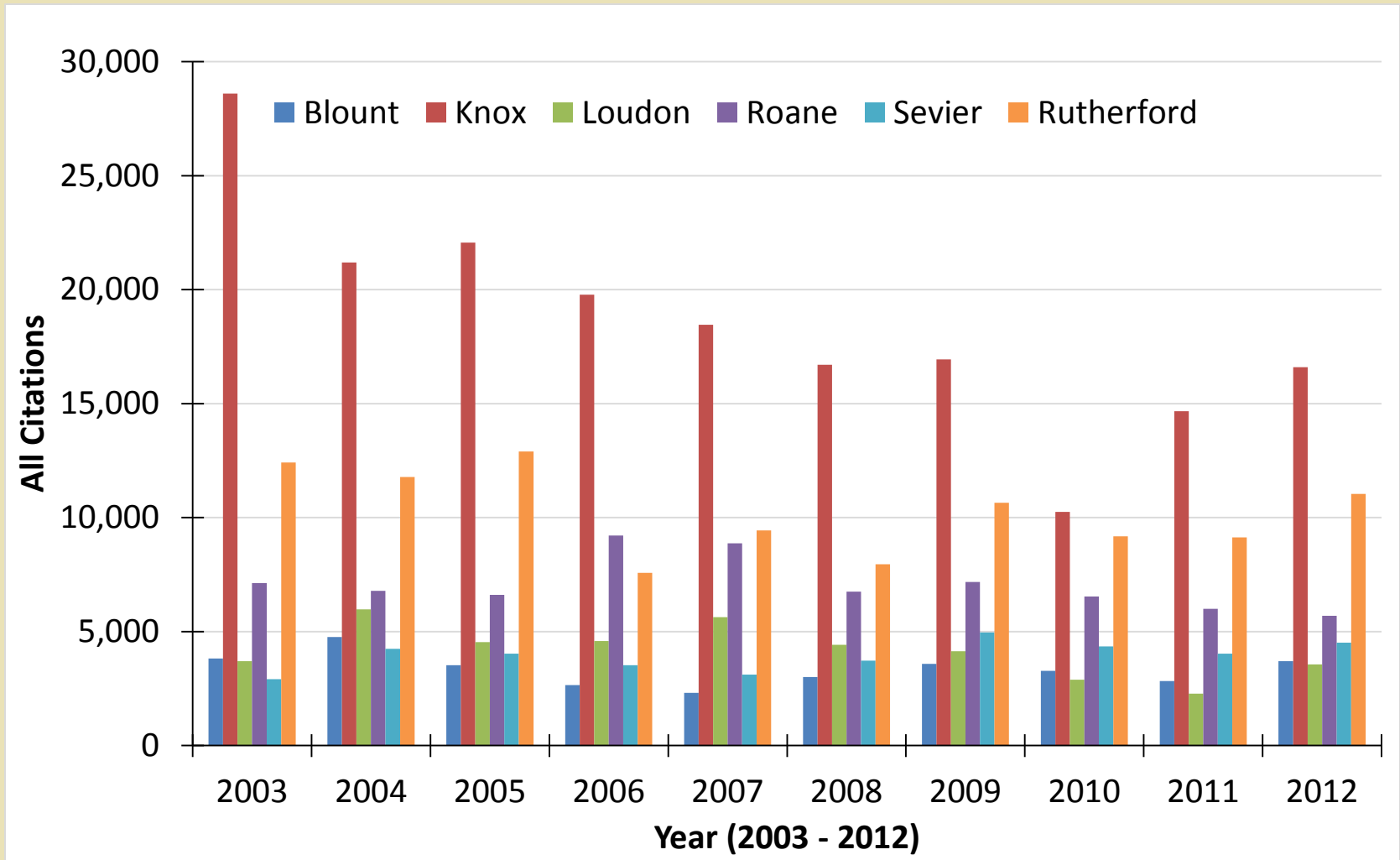
- Develop, implement, and evaluate a pilot program which
  - combines increased targeted nighttime seatbelt use enforcement and
  - broad community-based outreach & education (O&E) activities including paid media campaigns
- Assess how such interventions
  - affect nighttime seatbelt usage rates and impaired driving
  - are related to socio-demographic, spatial, and temporal characteristics
  - affect other traffic violations
  - are related to other societal indicators of public safety
  - influence morbidity and mortality due to such crashes



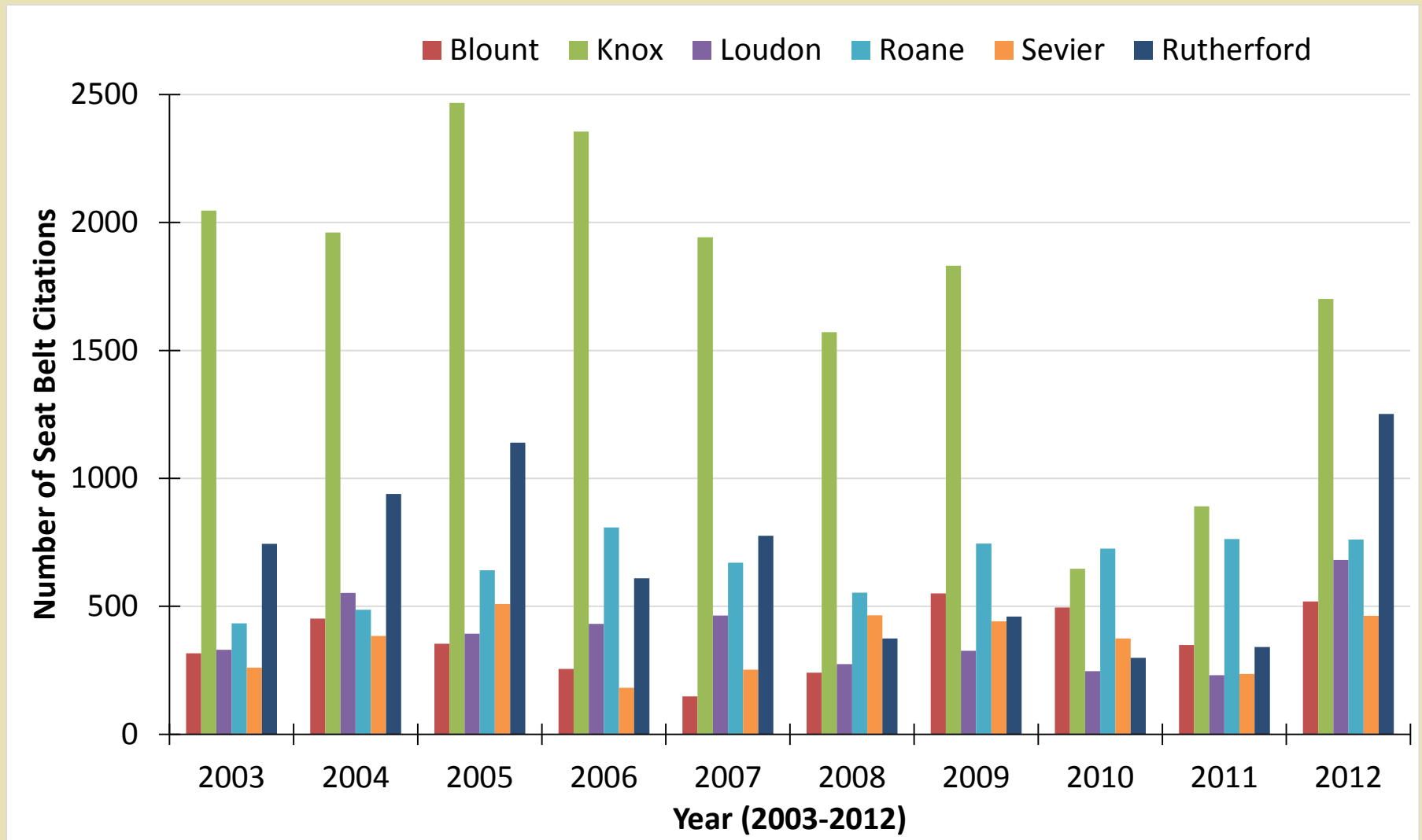
# Collaborators and Partners

- Centers for Disease Control and Injury Prevention
- Prof. Mack Shelley, Iowa State University (Statistician)
- Tombras, Knoxville, TN (Advertising and media)
- Law Enforcement Agencies: State and Local
- TDOT and TDOS
- Hospitality industry
- University of Tennessee
  - Athletics, Greek Communities, College of Business, **ITE Student Chapter**
- Colleges and High-Schools
- Health Departments and Programs
- Arenas, Coliseums, Stadia
- Conventions and Professional Sports: Baseball, Hockey
- Others??: Regal Cinemas, UT Honors Council, Retail outlets

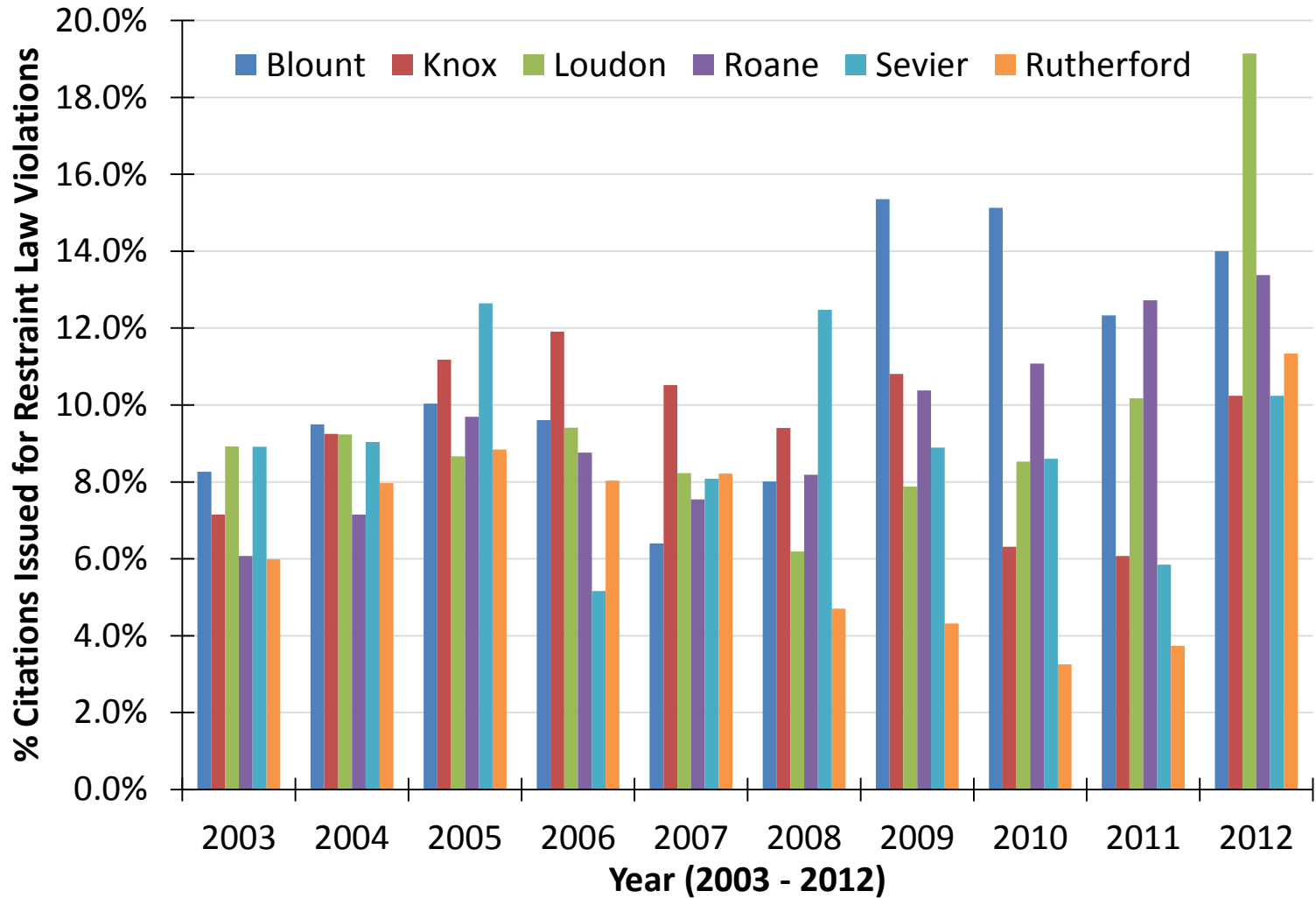
# Study Area: All MV Citations



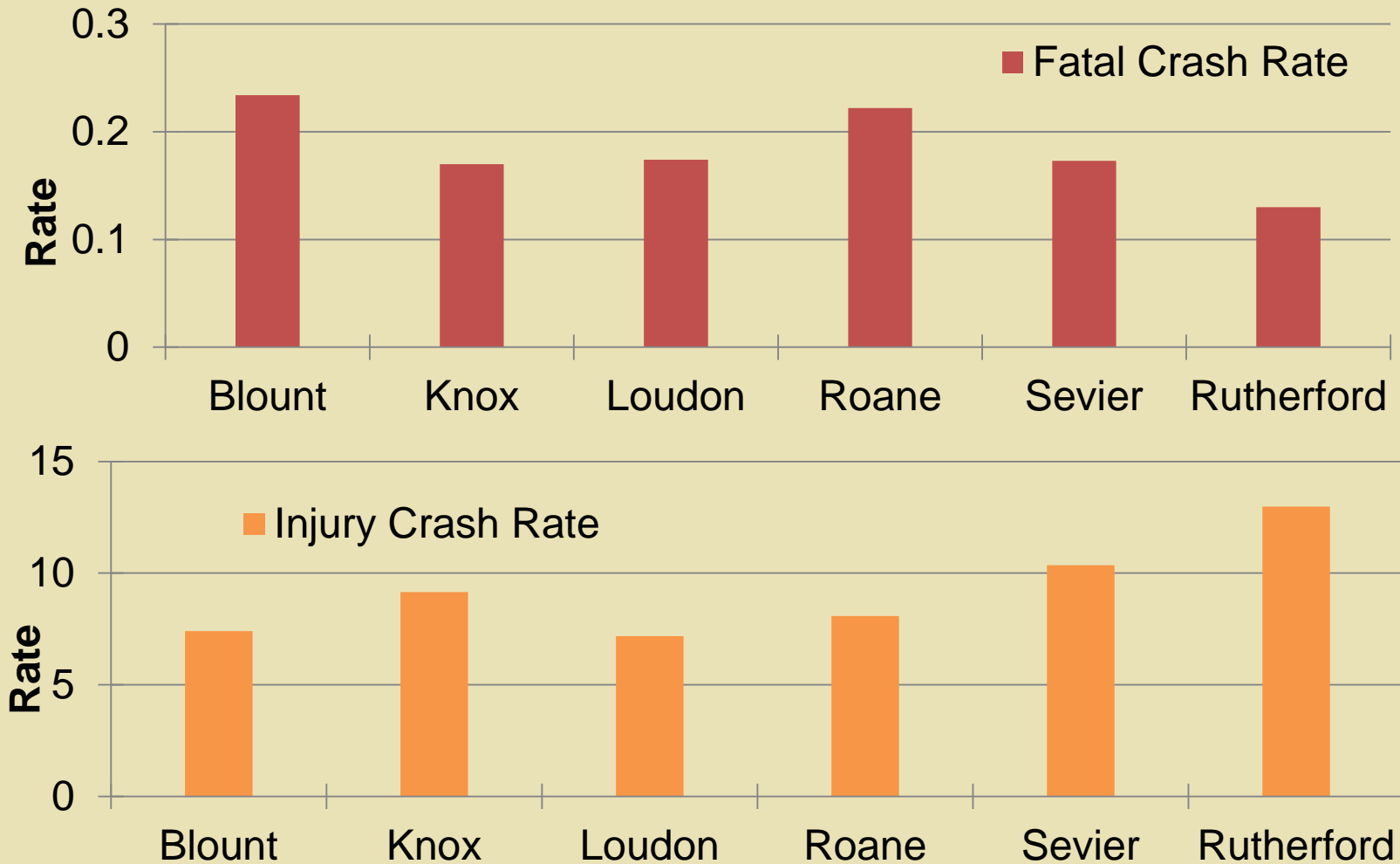
# Study Area: Seat Belt Citations



# Study Area: % Seat Belt Citations

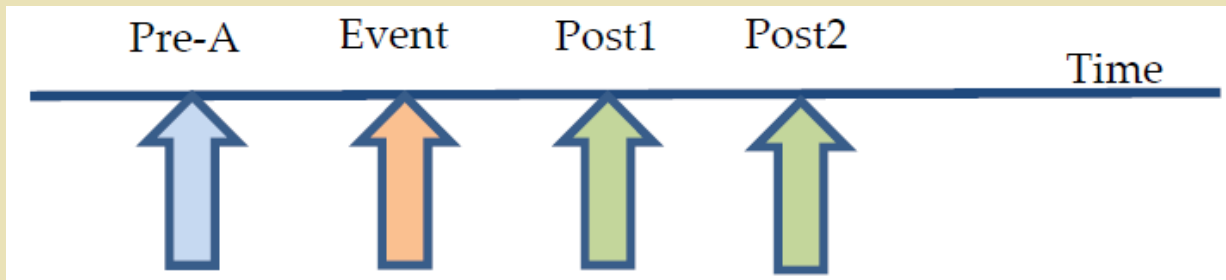


# Crash Rates Per 100,000 Drivers

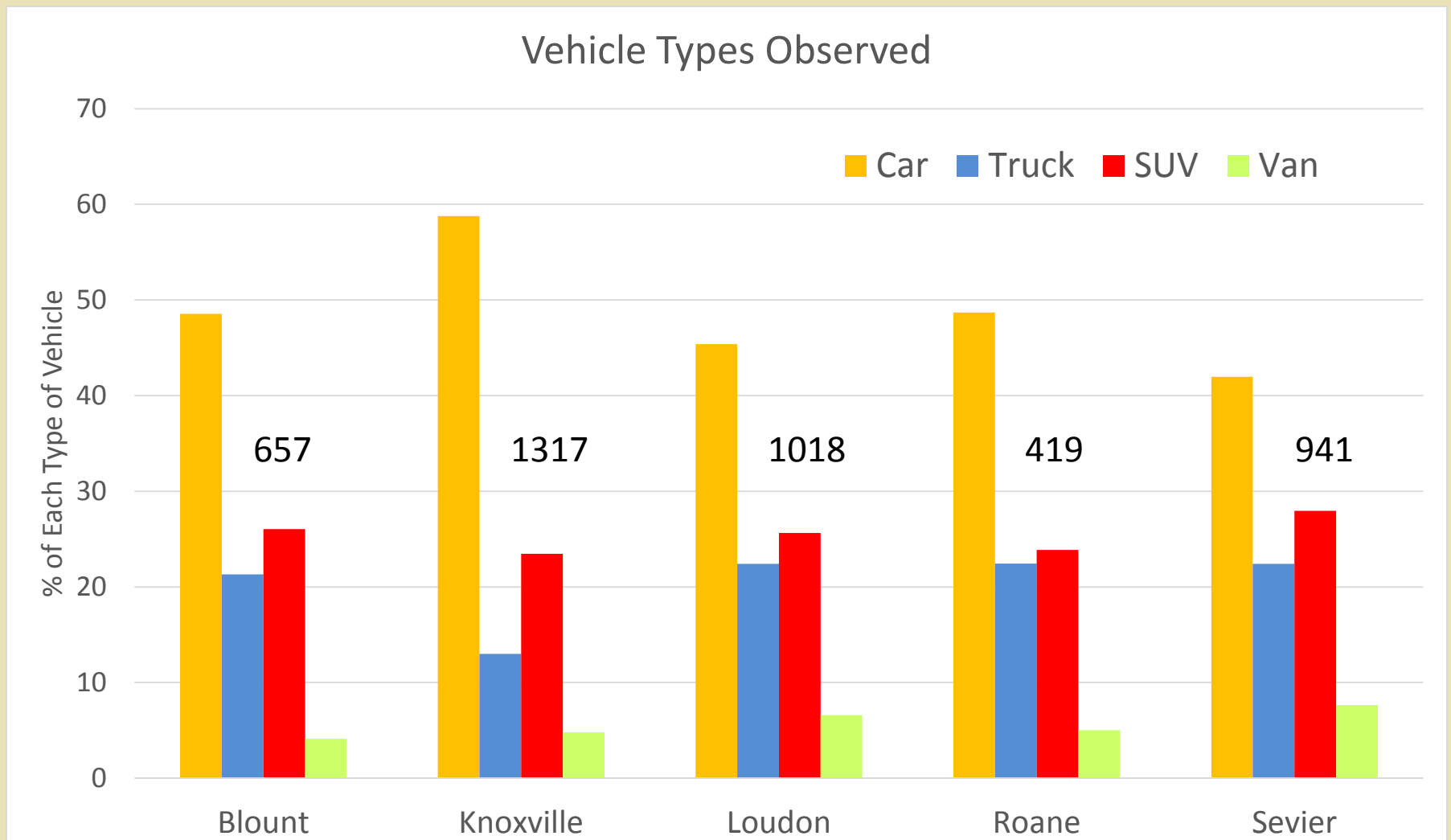


# Intervention and Evaluation

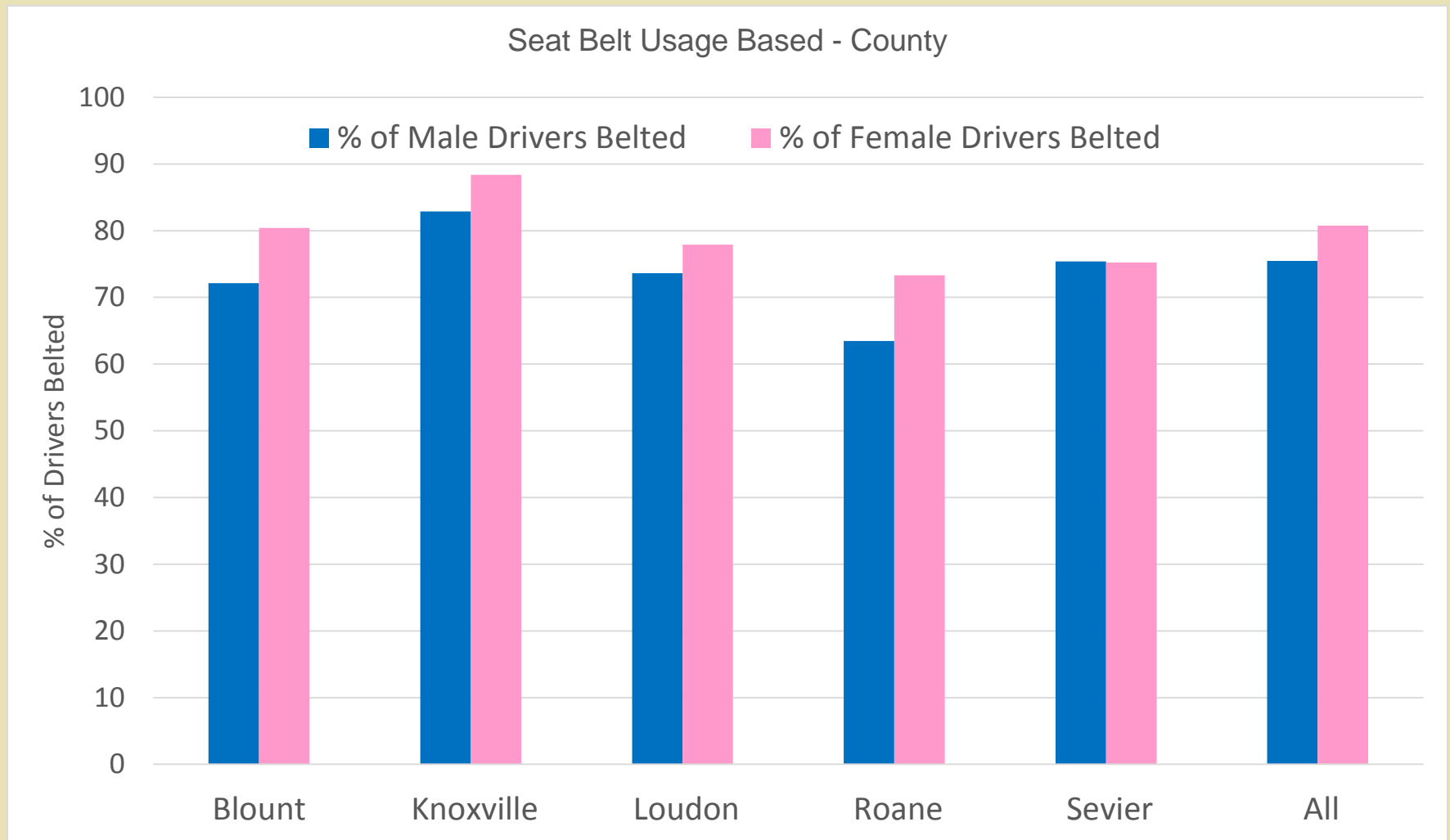
- Phased approach for targeted nighttime enforcement activities and O&E efforts
  - Coordinate schedules for broadcast and social media based O&E efforts with existing efforts
- Targeted enforcement activities similar to those for DUI enforcement
  - saturation patrols
  - check-points
- Typical timeline for enforcement activities and O&E intervention



# Baseline SB Usage Rates

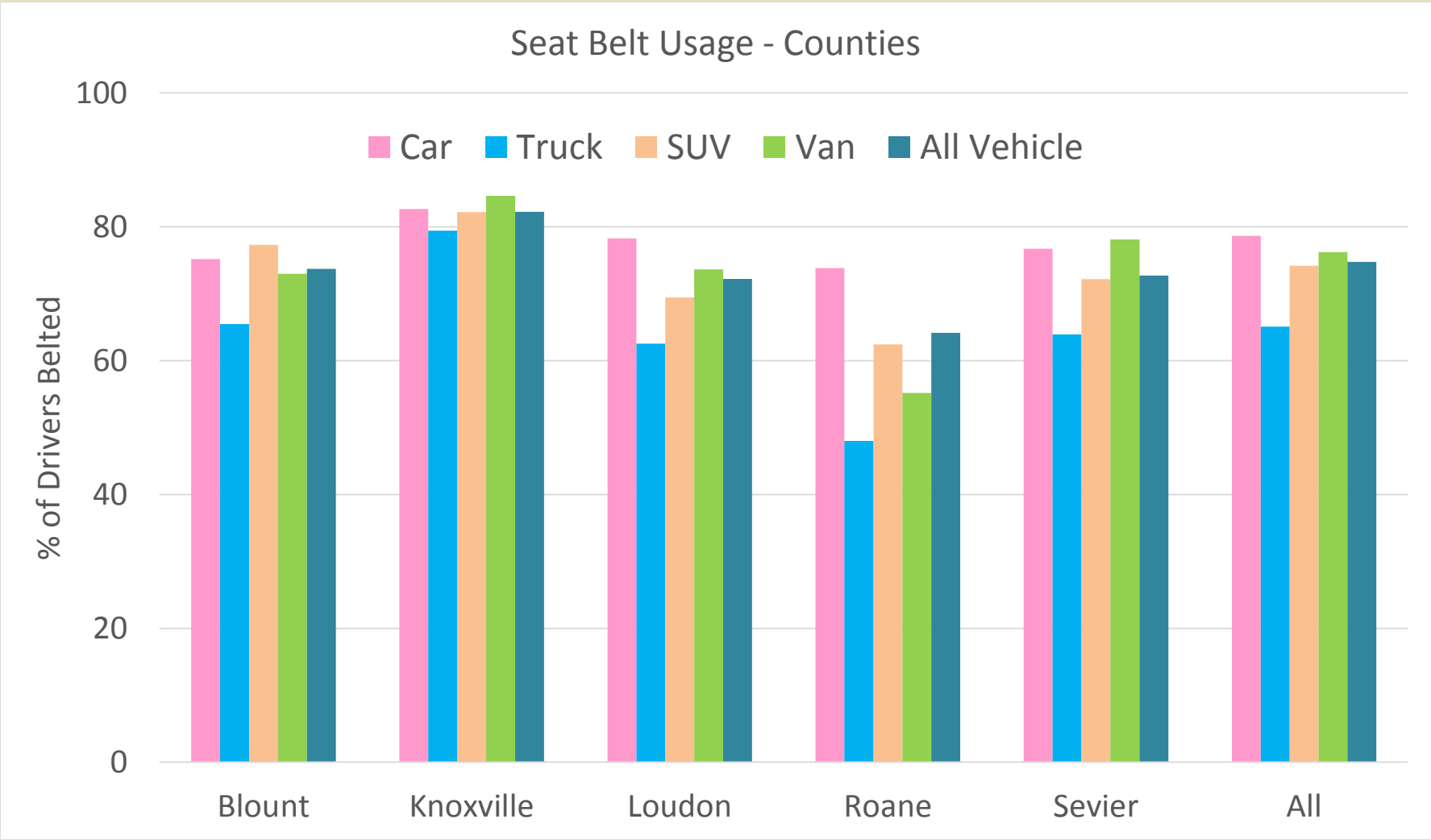


# Baseline SB Usage Rates: By Gender

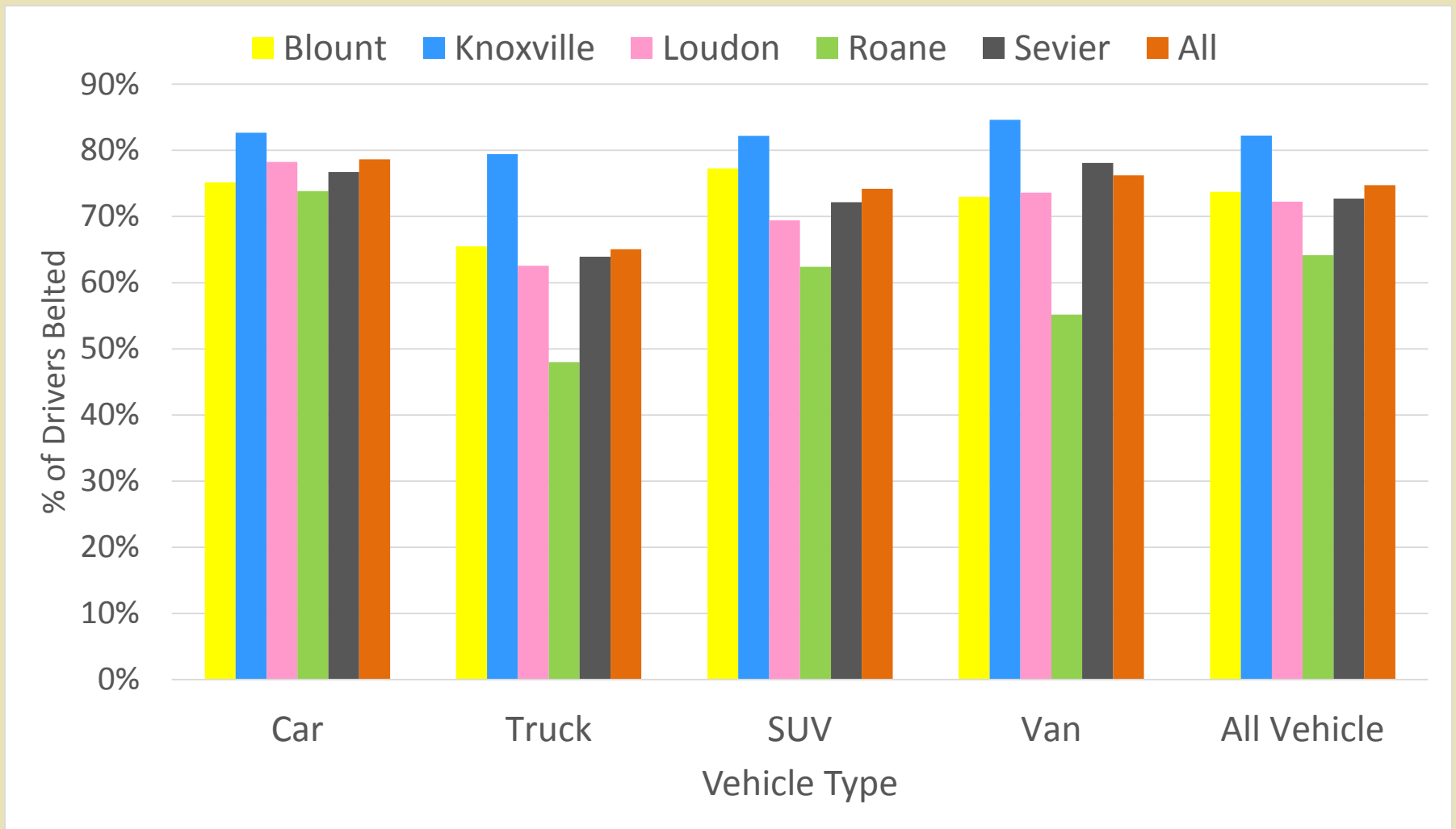




# Baseline SB Usage Rates: By County



# Baseline SB Usage Rates: By Vehicle Type



# Schedule

Activity	2014	2015												
	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	
<b>Intercept/Phone Surveys</b>														
<b>Seatbelt Surveys</b>	Pilot				Before	During	After/Before	After Before		After	Before		After	After Before
<b>GHSO Campaigns</b>							CIOT		Summer Heat					
<b>Law Enforcement Activity</b>														
Advise														
Backup														
Assist with Data Collection														
Additional locations														
Saturation Patrols														
Check Points														
<b>Outreach &amp; Education</b>														
Broadcast Media														
Targeted Digital Media														
Community-based														
Social Media														

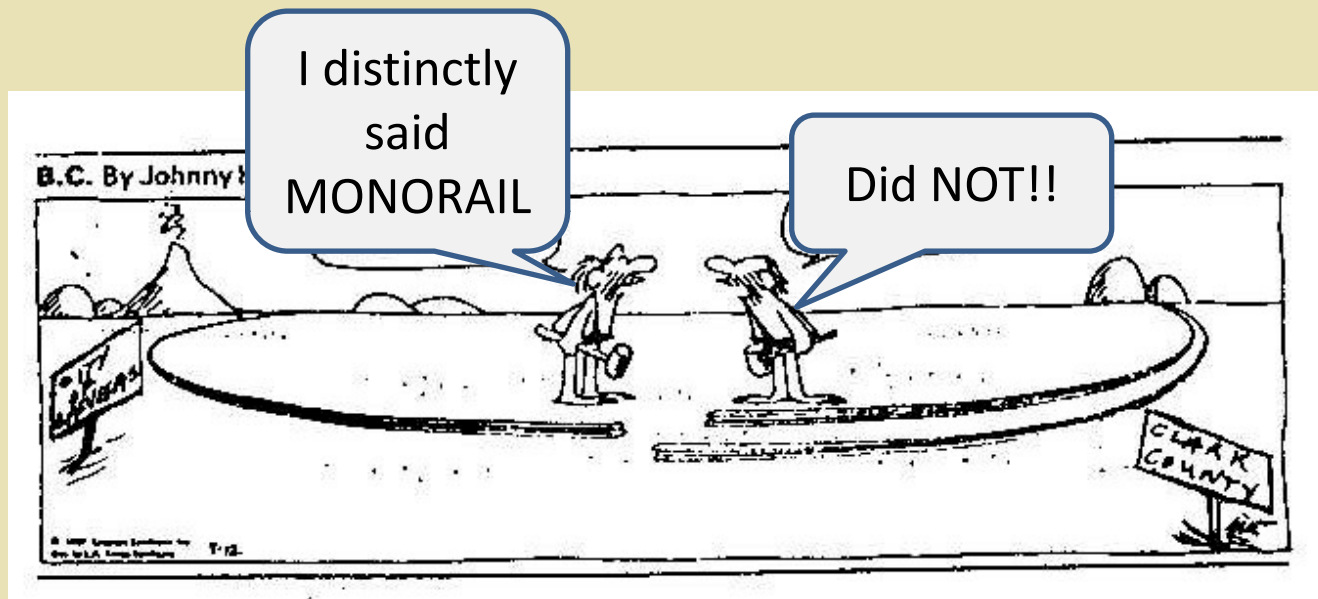
# Evaluation

- Observational seatbelt surveys
- Telephone/Web surveys
- Citation tracking
- Local assessments
- Statistical Analysis

# Contact Information

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# Revealed vs Stated Behavior

