



**ROAD SAFETY**  
RESEARCH, POLICING AND EDUCATION  
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# The Effects of Increased Traffic Enforcement on Other Crime

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# Background

- Two early studies: Communities that had higher levels of traffic enforcement experienced *lower rates of robbery*  
[Wilson & Boland, 1978; Sampson & Cohen, 1988]
- Kansas City Gun Experiment 1991: Traffic officers trained on how to search vehicles for illegal guns during traffic stops in high crime areas.
  - Gun seizures increased 65% in target areas (no increase in comparison areas)
  - *50% reduction in gun crimes* in target areas (no reduction in comparison areas)[Sherman, Shaw & Rogan, 1995, NIJ Research in Brief]

# Background

- Baltimore County **increased DUI arrests** from 61 in 1992 to 275 in 1993:
  - **12% reduction** in robberies
  - **63% reduction** in burglaries

[NHTSA, 1997]
- However, **no evidence** in the Dayton Traffic Enforcement Experiment that increased traffic enforcement reduced robberies or auto thefts or arrests for index offenses.

[Weiss & Freels, 1996]



# The Problem

- American communities confronted with several **public safety challenges**:
  - Homeland security
  - Violent crime
  - Illegal drugs
  - Property crimes
  - Calls for service
  - Unintentional injuries
- Law enforcement resources stretched thin. Traffic enforcement given lower priority in some communities because of increased workload in other areas.

# The Problem

- However, **traffic crashes** result in more deaths, injuries and societal costs than other problems-----in most communities.
- Impaired driving enforcement and the employment of **sobriety checkpoints** in particular not only result in DUI arrests, but also arrests for stolen vehicles, illegal firearms, drug violations and **other crimes**.

**How can we convince communities to increase traffic enforcement to improve public safety overall?**



# The Approach

## Data Driven Approach to Crime and Traffic Safety (DDACTS):

- Supported by NHTSA, NIJ, BJA
- Integrates location-based crime and traffic crash data to establish effective and efficient methods for deploying law enforcement
- Geo-mapping, temporal & spatial analyses used
- Saturate locations that have high crime and crash rates with HVE traffic enforcement

**Fight Crime, Reduce Crashes**

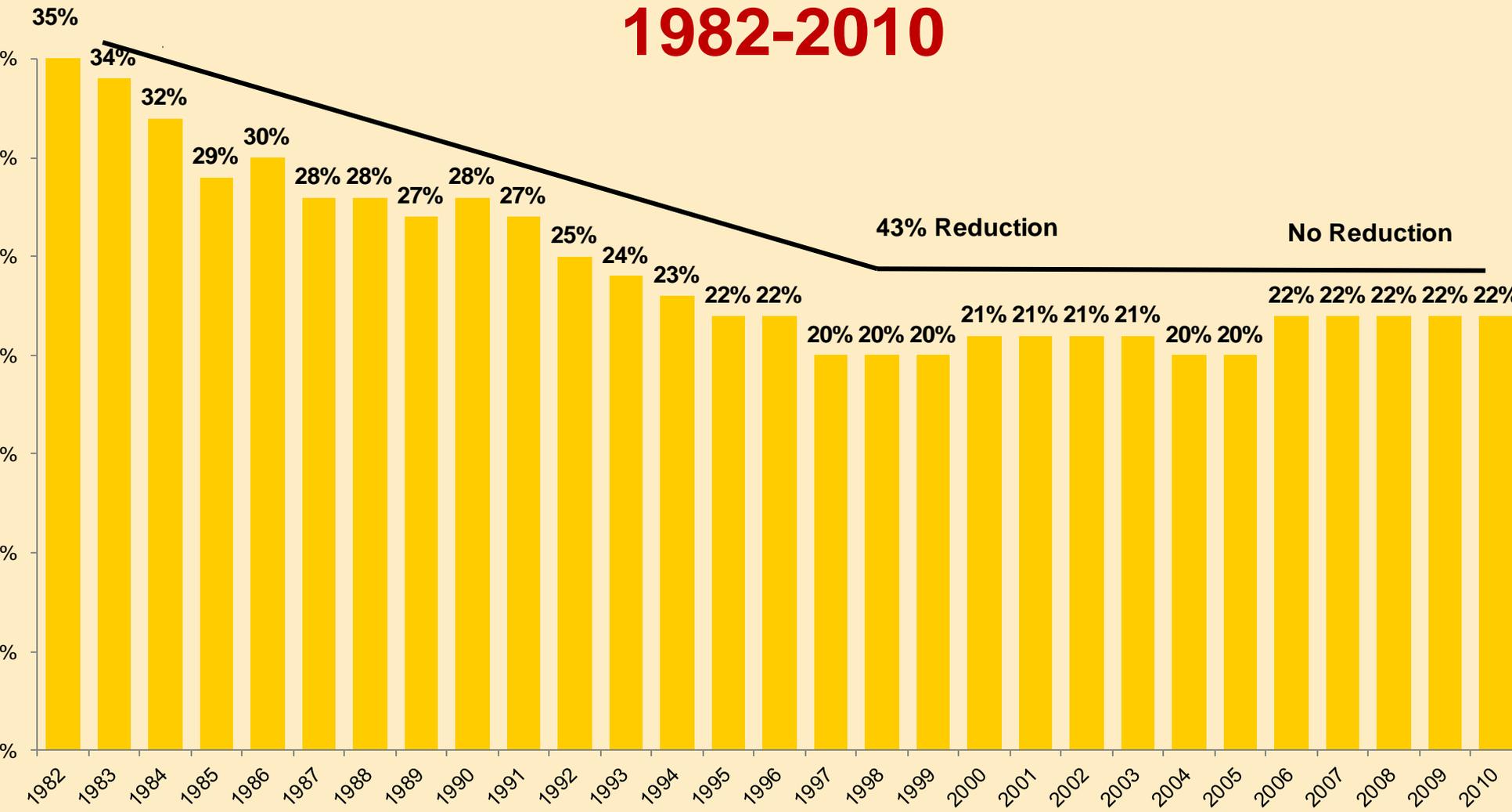


# Impaired Driving Problem in the United States: **2012**

- 10,000 – 11,000 killed in crashes involving intoxicated drivers.
- 300,000 people injured in drinking driving crashes.
- \$129.7 billion in annual costs to society.
- 1,400,000 drivers arrested annually for DWI or DUI.

# Proportion of All Drivers Involved in Fatal Crashes Estimated to Have Been Legally Intoxicated (BAC=>.08)

**1982-2010**



# Classical Deterrence Theory

## ■ Three Factors

- Probability of being Apprehended
- Speed with which the sanction follows apprehension
- Severity of Sanction

Sure, Swift and Severe





# Classical Deterrence Theory

- Based on Perception—Not necessarily on reality
- Two concepts:
  - **General Deterrence**-members of the general public who do not experience sanctions
  - **Specific or Special deterrence**—offenders who experience sanctions

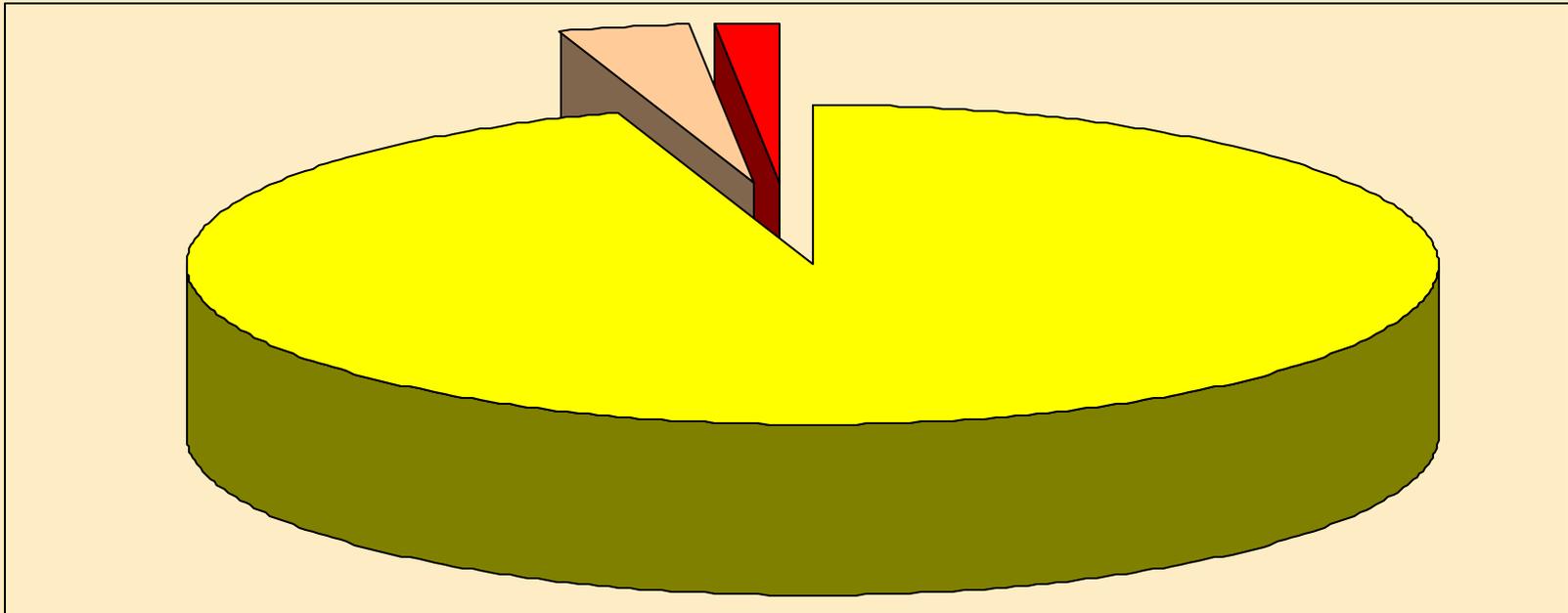
# Three Goals of Criminal Law

- Deter potential offenders
- Catch those who offend
- Sanction those you catch



# Estimated % of DWI's Caught

(One Year Period)



■ Uncaught ■ 1st Time ■ Repeat



# Highly Publicized and Visible Enforcement Deters Drinking and Driving

- Increases the perceived risk of arrest for DUI.
- General public says: “The police are out there in force. I had better not drive impaired.”
- “I have seen the DUI enforcement.” (Visibility)
- “I have heard about the DUI enforcement.” (Publicity)
- “I will get caught if I drive impaired.”
- “Even if I drive carefully when I have been drinking to avoid being stopped by the police, I will get arrested for DUI if I go through a sobriety checkpoint.”

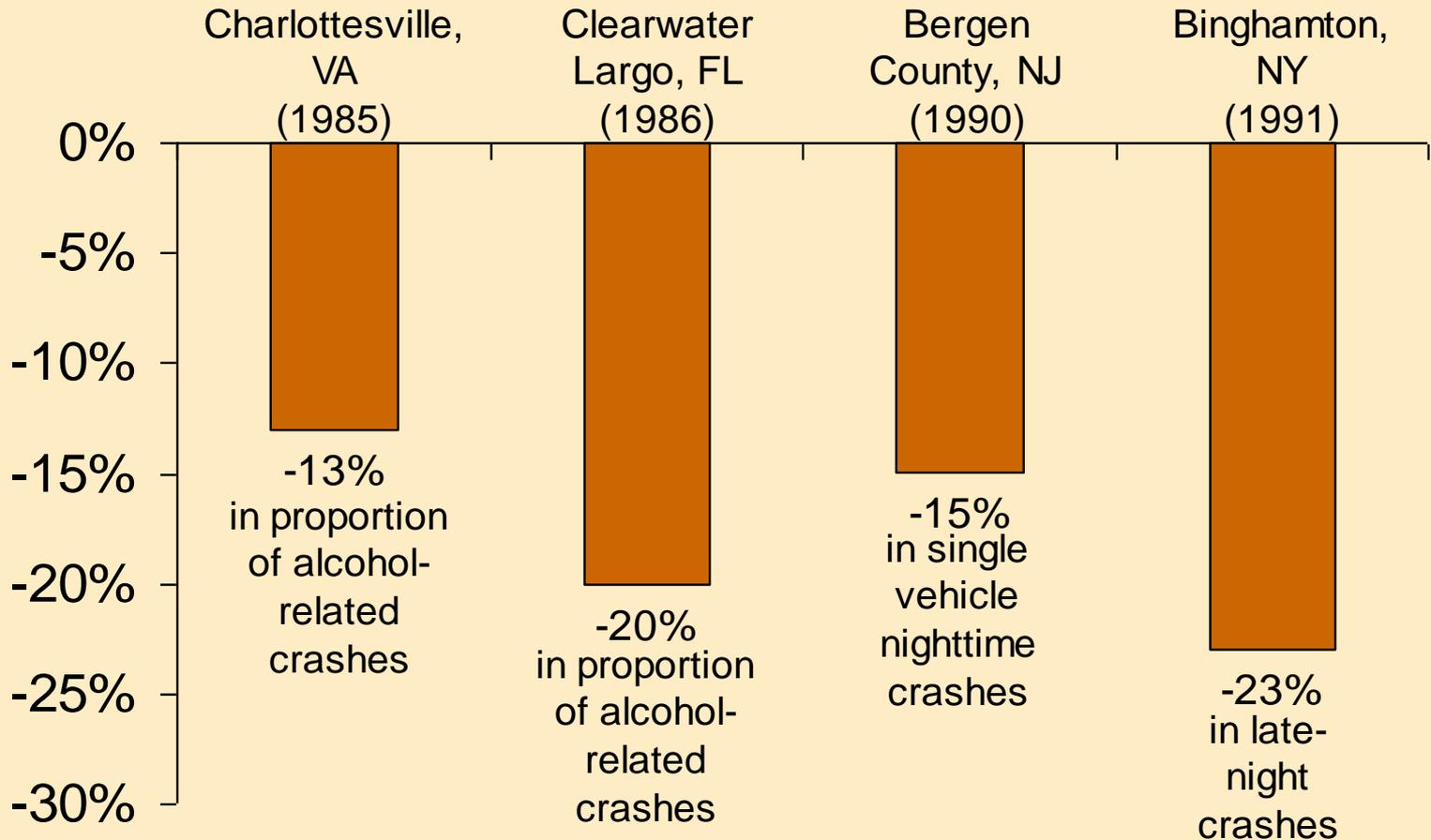


# The Effects of Drink-Driving Checkpoints on Crashes: A Meta-Analysis (Erke, Goldenbeld, Vaa, 2009)

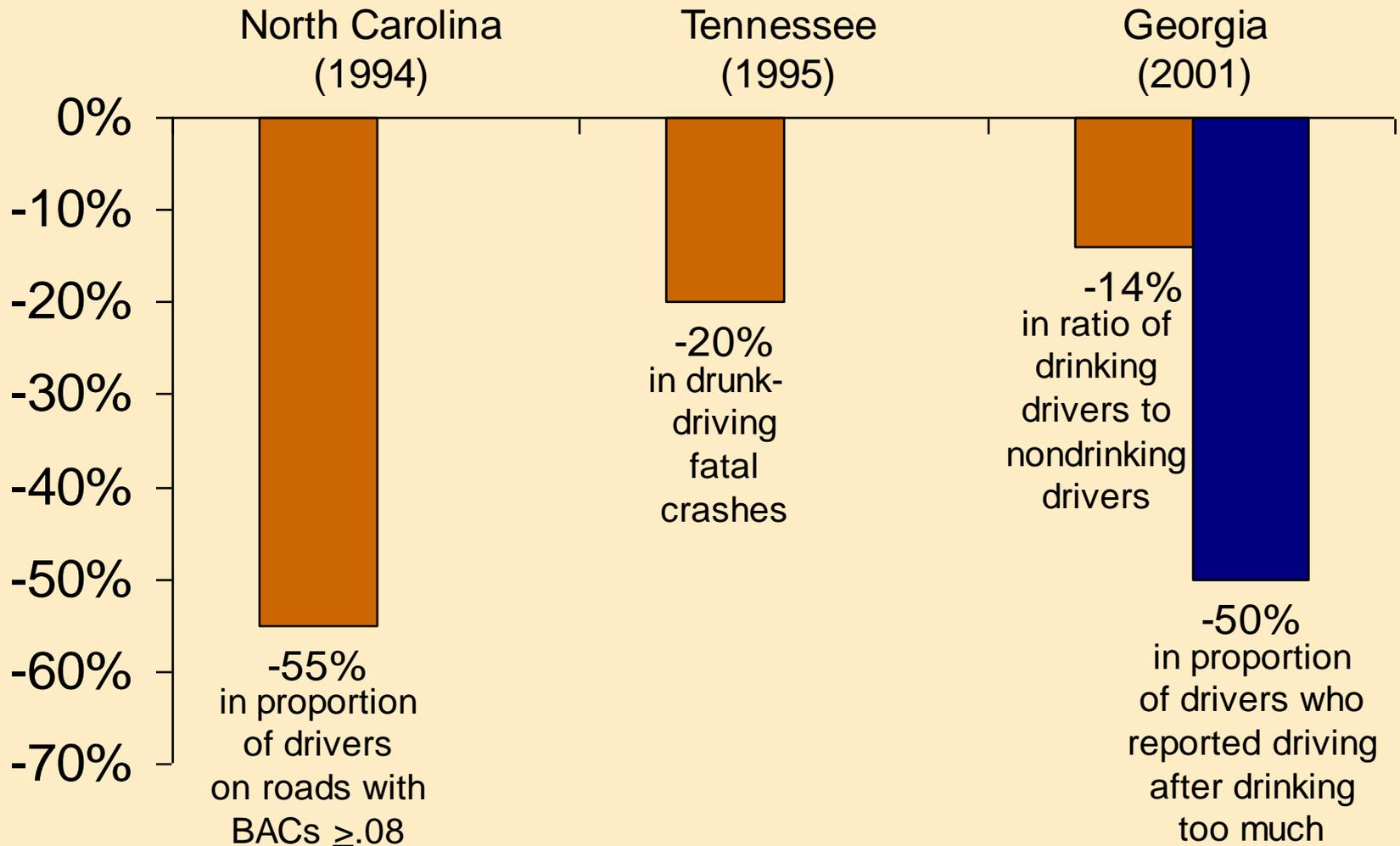
**DUI Checkpoints and RBT:** 40 studies  
included in the meta-analysis:

- Crashes involving alcohol reduced by **17%** at a minimum
- All crashes (alcohol and non-alcohol) reduced by **10%-15%**
- Australian RBT more effective

# Effectiveness of Community Sobriety Checkpoint Programs



# Effectiveness of Statewide Sobriety Checkpoint Programs

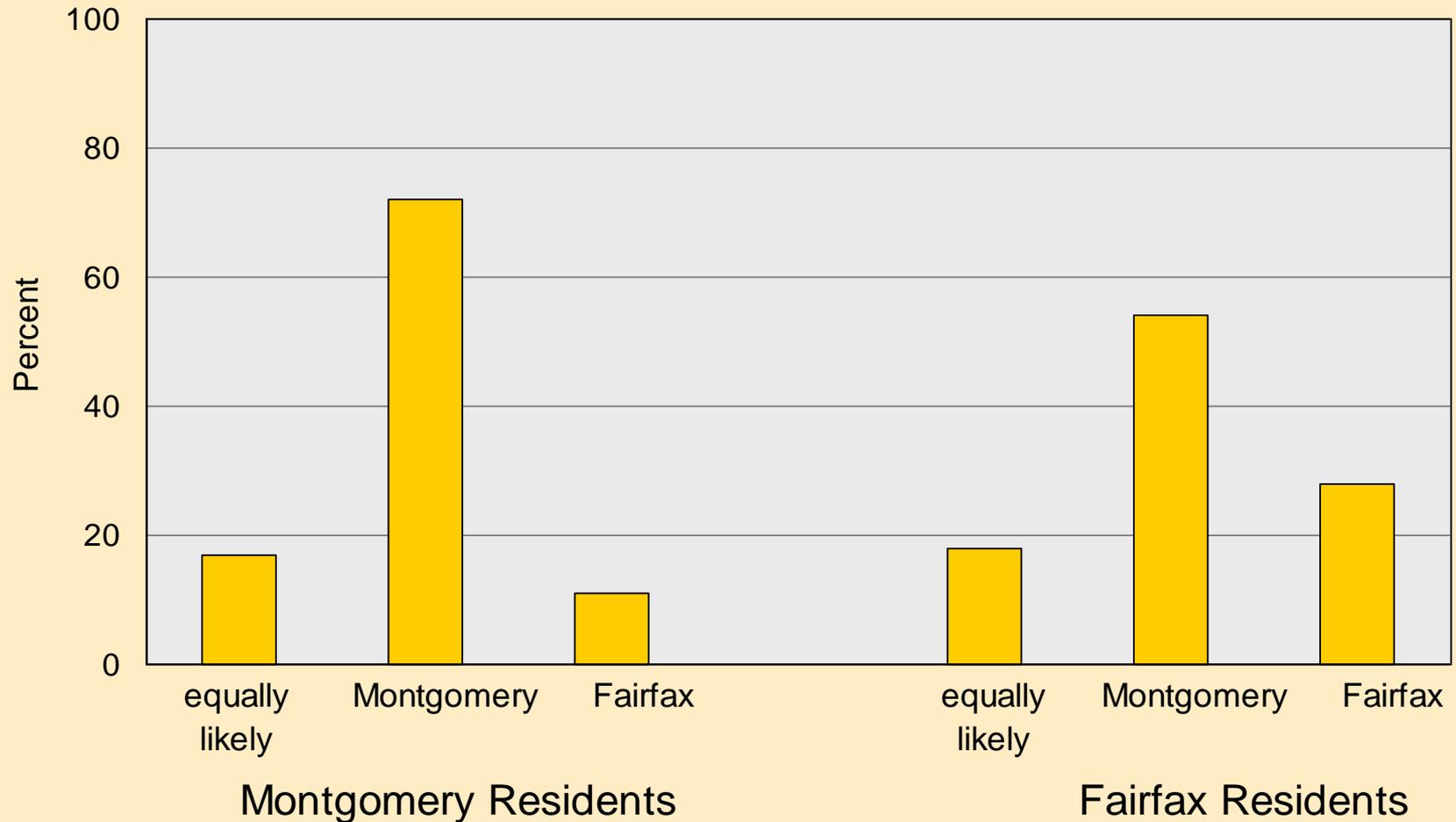




# Enforcement Activity in Fairfax County, VA and Montgomery County, MD: (Suburbs of Washington, DC)

	Fairfax	Montgomery
Number of sobriety checkpoints	<b>0</b>	<b>30-50</b>
DUI arrests per 10,000 drivers	<b>96</b>	<b>31</b>

# County in Which Respondents Thought they Would be More Likely to be Arrested for Drunk Driving





# North Carolina

## “Booze It and Lose It” Initiative

*November-December 1994*

■ Checkpoints conducted	1,233
■ DWI Arrests (checkpoints and patrol)	3,858
■ Drug related arrests	636
■ <b>Fugitives arrested</b>	<b>53</b>
■ Stolen vehicles recovered	55
■ Television coverage (# reports)	99

# Checkpoint Tennessee

*A Statewide Sobriety Checkpoint Program  
(Checkpoints 1994-1995)*

■ Checkpoints conducted	882
■ Drivers checked	144,299
■ Drivers arrested for DUI	773
■ Seat belt violations	1,517
■ Drug violation arrests	201
■ <b>Felony arrests, stolen vehicles, weapons</b>	<b>88</b>
■ Youth offender violations	84
■ Other traffic citations	7,351

# Georgia's Operation Zero Tolerance

*A Statewide Highly Publicized Sobriety Checkpoint Program (Checkpoints 2000-2001)*

■ Checkpoints conducted	2,837
■ Drivers checked	280,082
■ Drivers arrested for DUI	2,322
■ Seat belt violations	5,348
■ Drug violation arrests	1,001
■ <b>Felony arrests</b>	<b>236</b>
■ <b>Stolen vehicles recovered</b>	<b>57</b>
■ Suspended/Revoked Licenses	2,481
■ Other traffic citations	14,776

# Checkpoint Status in the U.S. 2011

- 38 states plus DC conduct sobriety checkpoints
- 12 states—checkpoints are illegal, prohibited, or not conducted
- 18 states conduct checkpoints on weekly basis somewhere in the state
  - AR, CA, FL, GA, HI, IL, KY, MD, MS, NE, NY, NC, PA, SD, VT, VA, WV
- 8 states: Checkpoint frequency not reported:
  - CT, IN, LA, ME, NM, ND, SC, UT

[Source: GHSA]



# Enforcement Barriers

- Resources (money, personnel, equipment)
- Complexity of the arrest process (for impaired driving)
- Knowledge about and buy-in to what works (general deterrence)
- Motivations, attitudes, priorities



# Dealing with the Barriers

- Smaller (4-5 person) checkpoints (sobriety and safety belt)
- Multi-agency cooperation
- Equipment/technology that facilitates enforcement, (e.g., passive alcohol sensors)
- Computerized forms, digital dictation systems that reduce paper work and recording errors
- Selling the “beyond the ticket” benefits



# Follow the Numbers

- In most communities, the number of injuries and deaths due to traffic crashes **far outweigh** injuries and deaths from other crimes.
- Traffic enforcement of impaired driving and nonuse of safety belts **will save more lives** than most other police enforcement measures.
- Impaired driving and alcohol-fueled violence are one of the three **top public safety issues** in any community in America.
- Increased traffic safety enforcement can also **reduce other crime** (DDACTS).

# The Fresno Experience

- In 2002, Fresno lost 52 people to traffic crashes compared to 43 for violent crimes.
  - Chief of Police increased DUI enforcement operations (mix of checkpoints and saturation patrols)
    - **2002: 2 DUI Operations**
    - 2003: 32
    - 2004: 75
    - 2005: 94 .....
    - ...
    - **2012: 114 DUI Operations**
- DUI injury crashes **declined by 48%** between 2002 and 2012

# The Fresno Experience

## ■ Preliminary Analyses:

- Fresno (CA) **burglary rates** per capita **decreased 17%** between 2002 and 2012
- Fresno (CA) **motor vehicle thefts** per capita **decreased 32%** between 2002 and 2012
- Simi Valley (CA) had no increase in DUI enforcement between 2002 and 2012
  - **5% increase** in burglary rates
  - **3% decrease** in motor vehicle theft rate

# Summary

- High-visibility traffic enforcement, where many drivers experience or see the enforcement activity, **raises the perceived probability of apprehension** for DUI, but also raises the perceived risk of being arrested for **other criminal activity**.
- How do we develop a traffic enforcement program that places only **minimal burden on police** (so they will be more willing to implement traffic enforcement activities regularly) while retaining **high levels of effectiveness**?
- If it can be demonstrated that **increased traffic enforcement reduces other crime** in the community, police departments may be more willing to implement that strategy.

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