



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

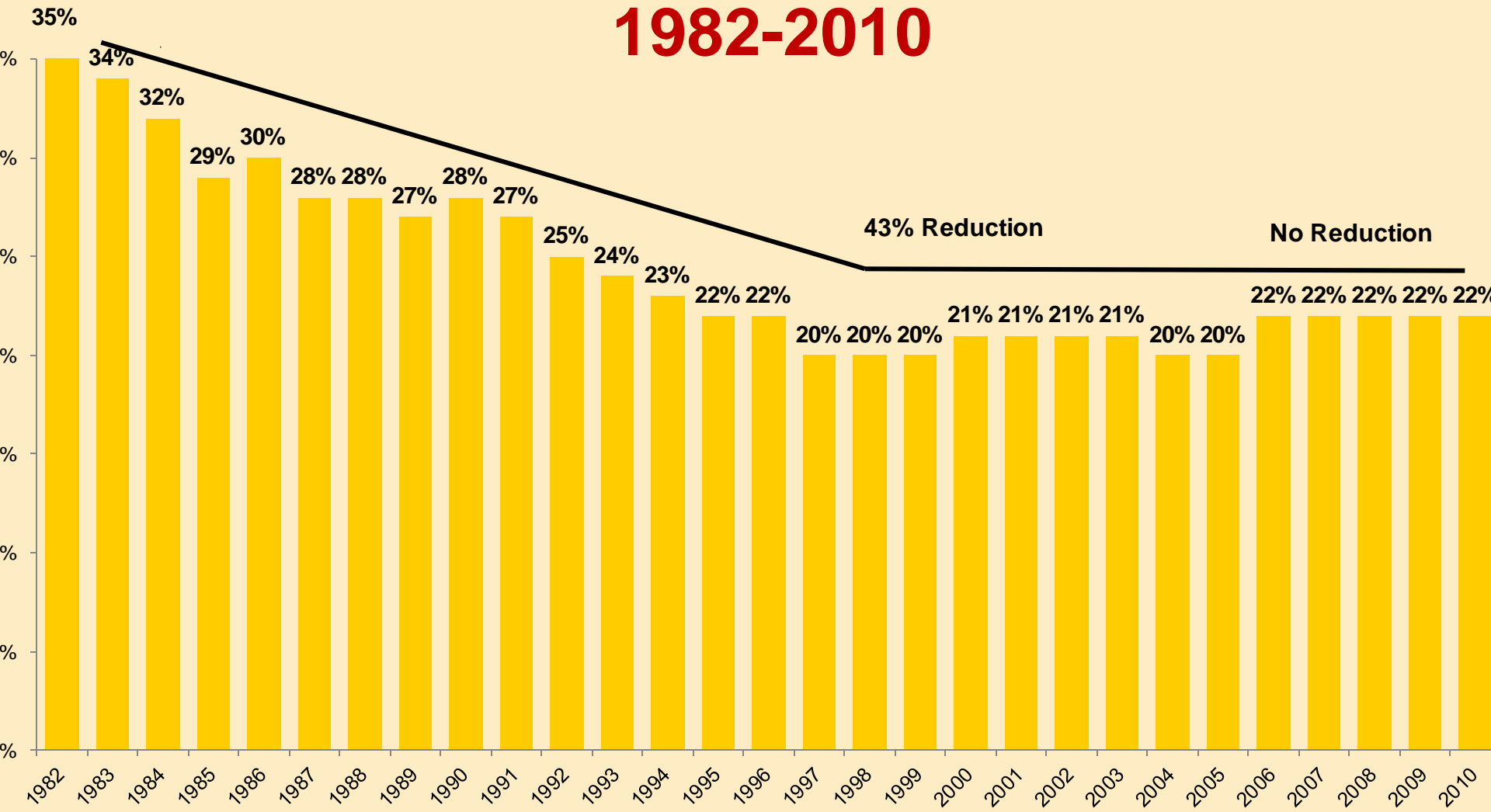


Impaired Driving Problem in the United States: **2012**

- 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

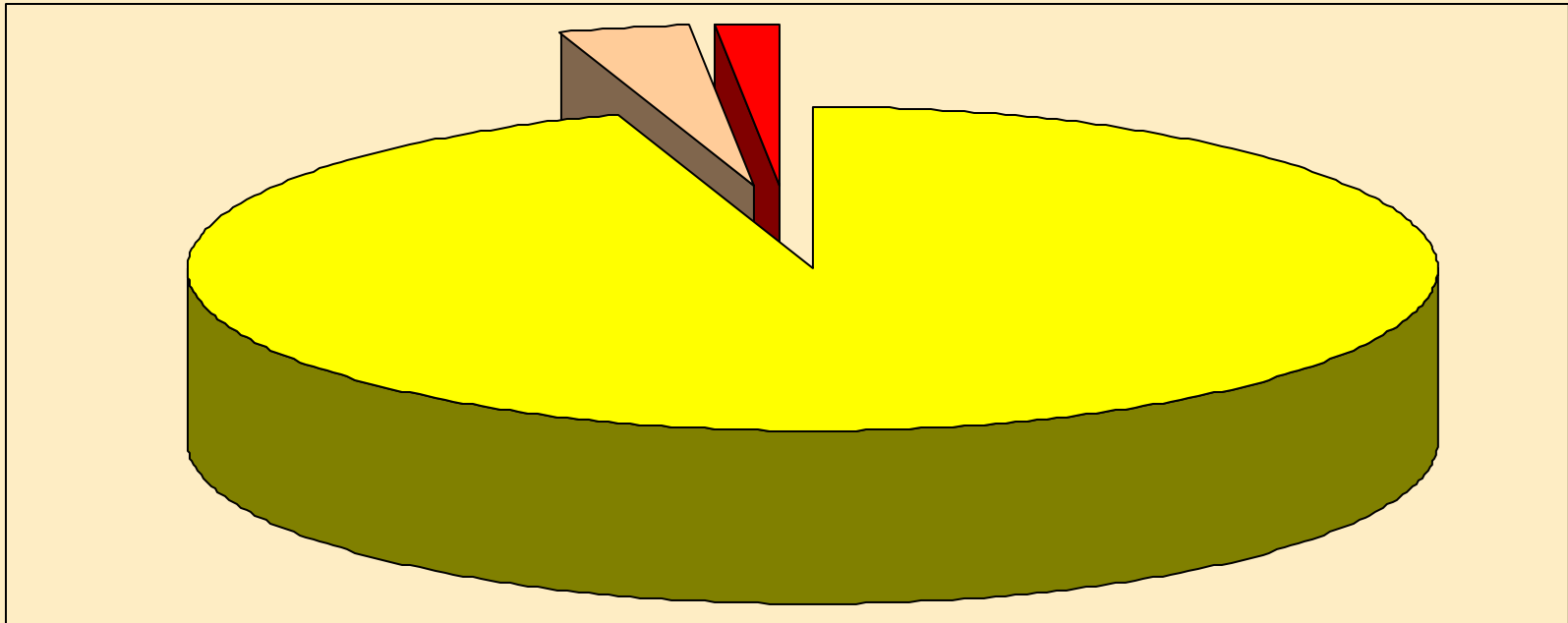
Three Goals of Criminal Law

- 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.”

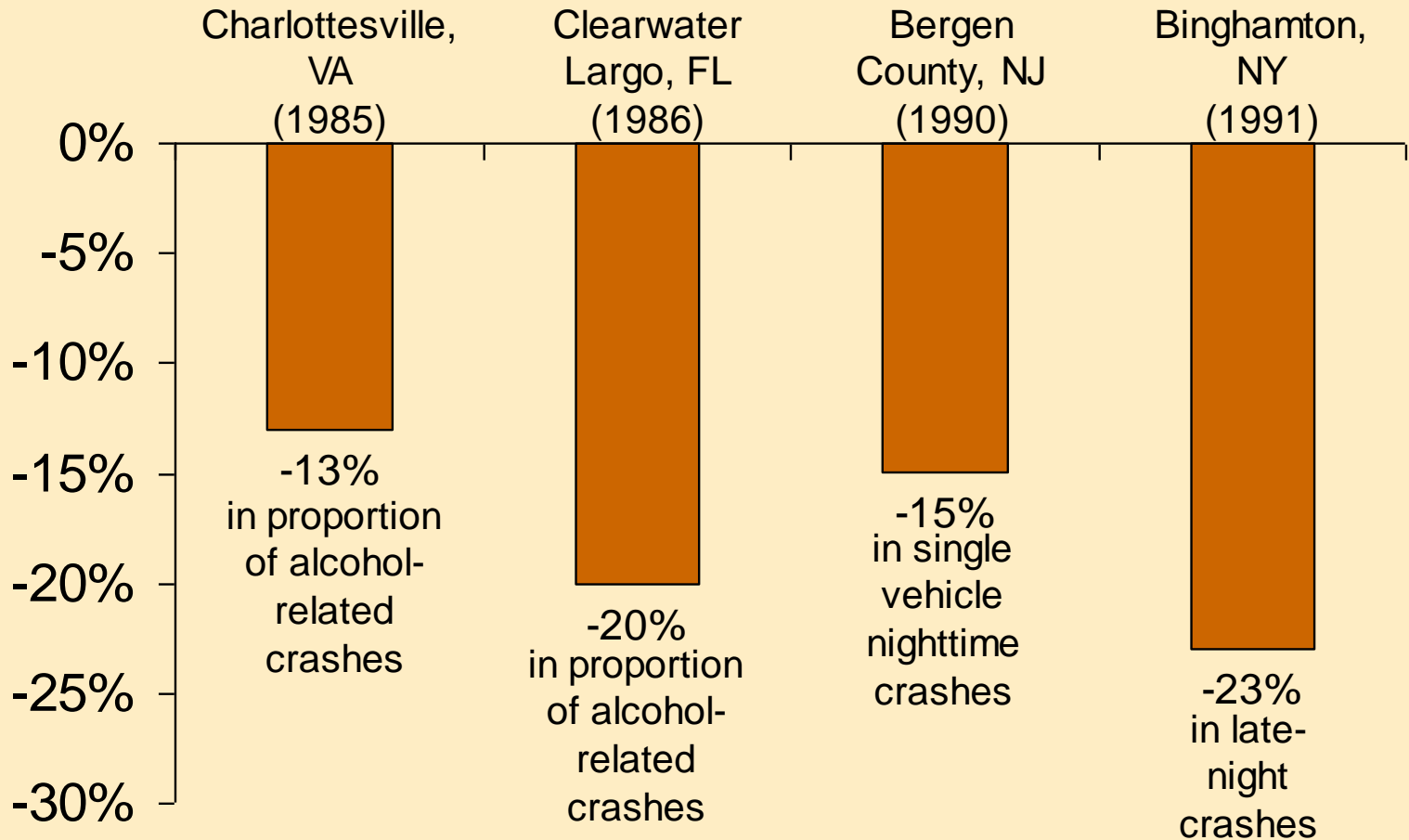


The Effects of Drink-Driving Checkpoints on Crashes: A Meta-Analysis (Erke, Goldenbeld, Vaa, 2009)

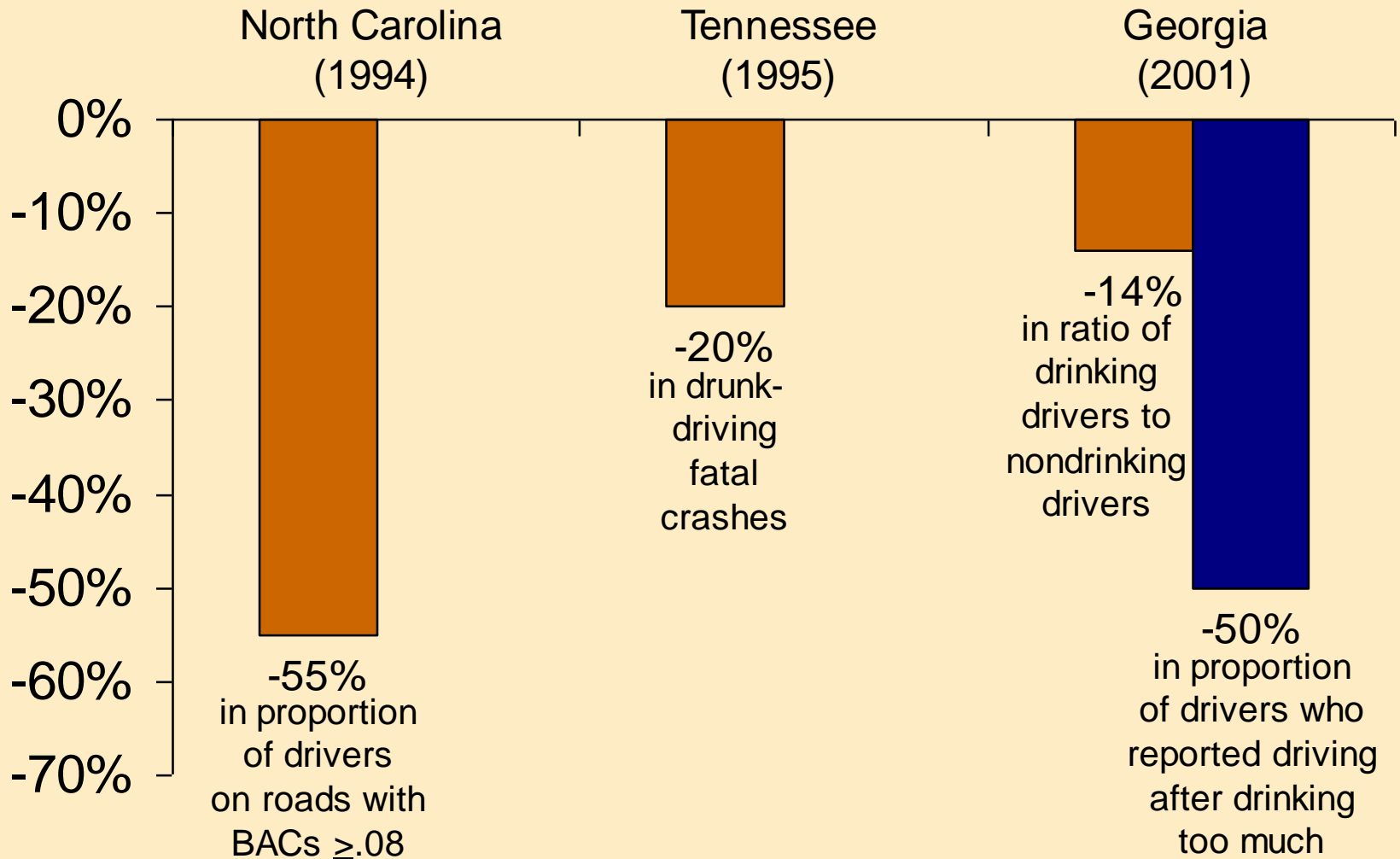
DUI Checkpoints and RBT: 40 studies
included in the meta-analysis:

- 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





64
NEXT LEFT

LOWER
LANE
ONLY

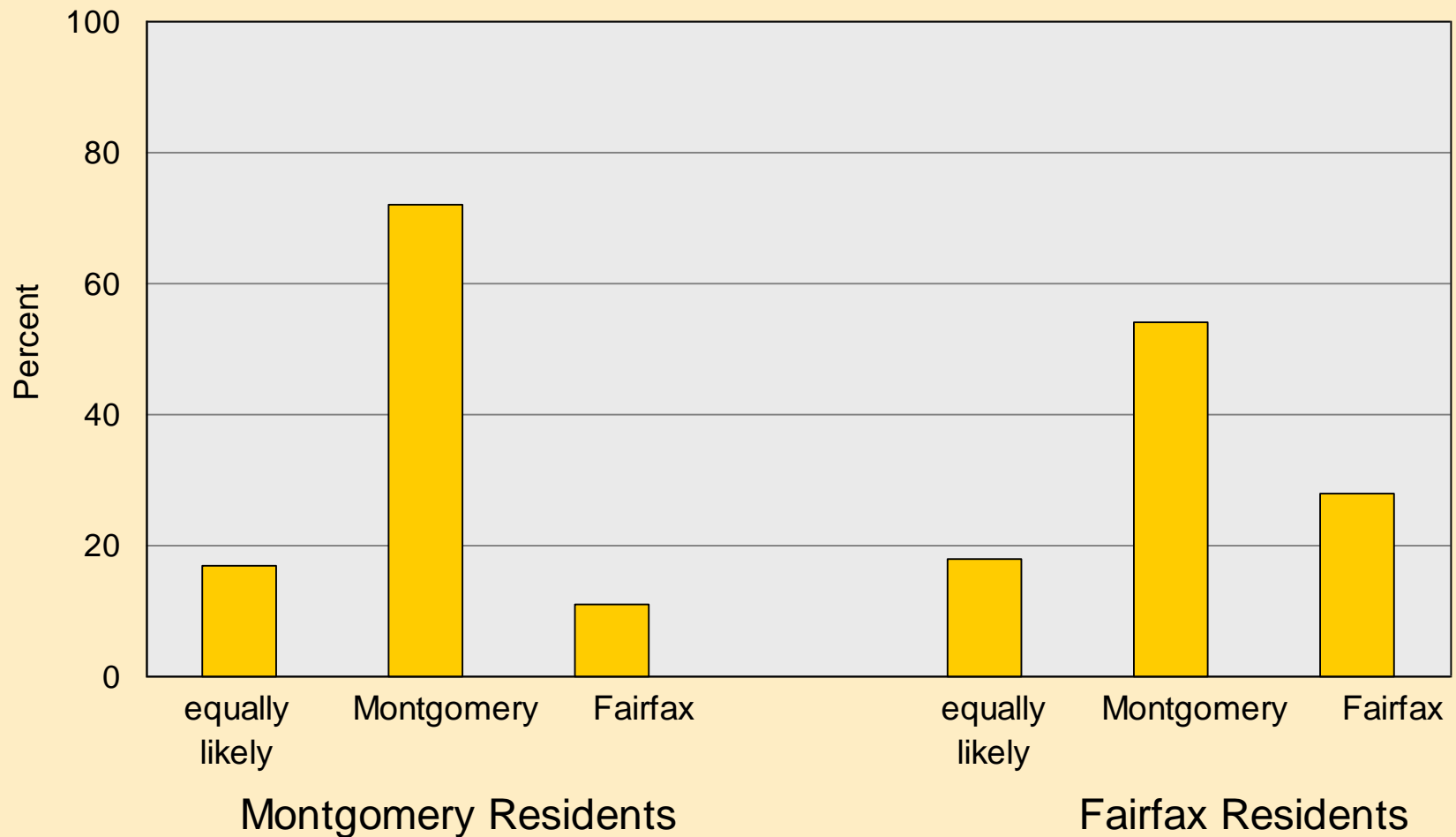
Chevron

McDonald's

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

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

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
■ Fugitives arrested	53
■ 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
■ Felony arrests, stolen vehicles, weapons	88
■ 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
■ Felony arrests	236
■ Stolen vehicles recovered	57
■ 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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