

Data Driven Approaches to Crime *and* Traffic Safety

(DDACTS)

Michigan's 2009 Traffic Safety Summit

Col. Ken Morckel (ret)

First Response Solutions

National Highway Traffic Safety Administration



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Goal:

- Reduce the incidence of crime, crashes and traffic violations in a community by:
 - Reducing Social Harm
 - Increasing the Quality of Life



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DDACTS

Data Driven Approaches to Crime and Traffic Safety is an operational model that uses the integration of location-based crime and traffic data to determine the most effective and efficient methods for deploying law enforcement and other resources.



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What is DDACTS?

- **Local ownership**
- **Uses local data**
- **Data-driven policing**
- **Uses non-traditional partners**
- **Reduces crime and crashes**
- **Coordinated effort between the National Highway Traffic Safety Administration (NHTSA) and Bureau of Justice Assistance (BJA)**
- **Provide training and technical assistance**



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Why DDACTS?

- Increasing demands and limited resources for law enforcement
- Law enforcement executives must prioritize competing demands for services
- Conflict between available resources and priorities is detrimental to traffic law enforcement and to crime prevention
- Crime and crashes often occur in close proximity
- Many crimes involve the use of a vehicle
- Traffic stops can yield criminal identification and arrests and impact crashes simultaneously



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DDACTS

Analyzing the Problem

- **Local** data is used
- **Local** ownership of the data
- Traffic analysis is combined with crime analysis
- Resources deployed based on resulting analysis



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Guiding Principles

- **Data Collection**

- Review Current Data Collection and Analysis Systems
- Finalize Selection of Mapping Software
- Create a Data Collection Plan and Identify Data Sources



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Guiding Principles

- **Data Analysis**

- Develop a Clear Process for Data Analysis
- Develop Reporting Procedures

- **Partners and Stakeholder Participation**

- Identify and Make Initial Contact with Potential Partners and Stakeholders
- Develop a Plan for Partner and Stakeholder Participation



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Guiding Principles

- **Strategic Operations**

- Identify Countermeasures
- Develop an Operational Plan
- Implement Plan

- **Information Sharing and Outreach**

- Review Partner and Stakeholder Plan To Identify Tactics for Information Sharing and Outreach
- Develop a Communications Plan for Working with the Media



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Guiding Principles

- **Monitor, Evaluate, and Adjust**
 - Use Data and Other Information to Make Adjustments to DDACTS Field Operations
 - Document and Report Changes
- **Outcomes are locally defined**



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Demonstration Sites



Oakland Police
Department



Vermont State Police



Rochester Police
Department



Metro Nashville
Police Department



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Demonstration Sites



Washoe County
Sheriff's Office



Baltimore County
Police Department



Lafourche Parish
Sheriff's Office



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Using a Crash/Crime Analysis Model

- Drilling down to local data
- Crash and crime analysis allows for a deeper understanding of a problem
- Provides efficiency in resource deployment
- A tool to address fiscal constraints
- Provides an unbiased basis for making strategic and tactical decisions

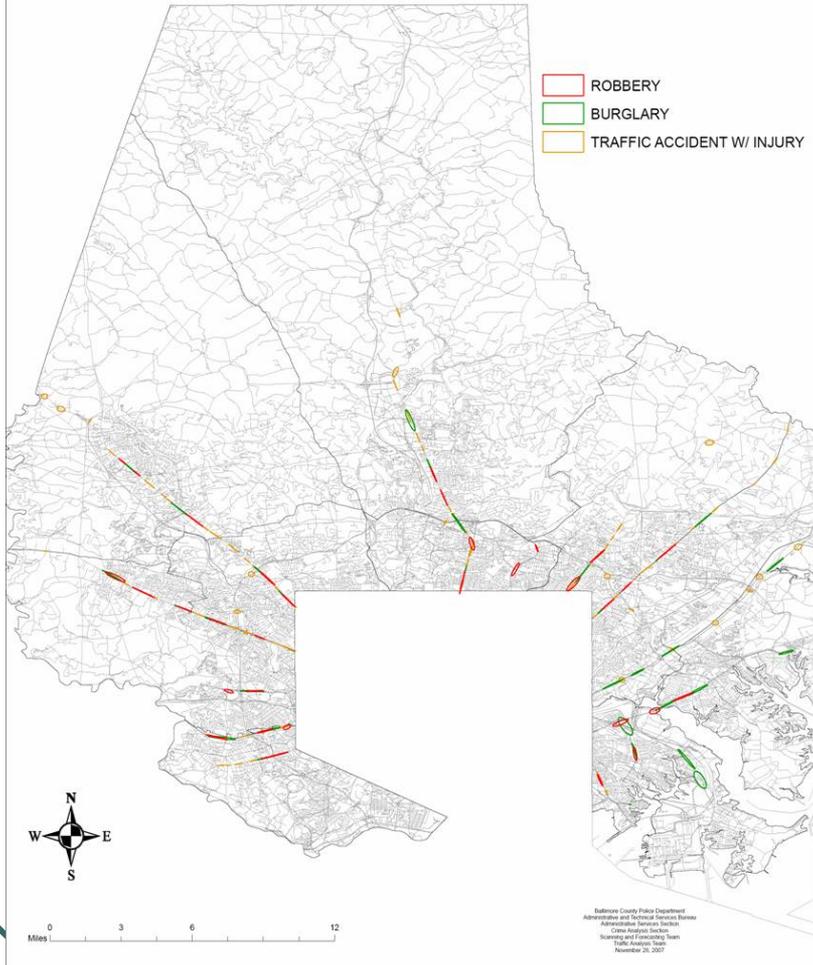


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Baltimore County Police SIX SELECTED DDACTS Sites

COMMERCIAL BURGLARIES AND ROBBERIES (11/01/2004 => 10/31/2007)
TRAFFIC ACCIDENTS WITH PERSONAL INJURY (01/01/2004 => 10/31/2007)
ON SELECTED STREETS IN BALTIMORE COUNTY



- **BALTIMORE NATIONAL PIKE**
- **LIBERTY ROAD**
- **REISTERSTOWN ROAD**
- **YORK ROAD**
- **BELAIR ROAD**
- **EASTERN BOULEVARD**



Baltimore County Police Department

DDACTS ENFORCEMENT ACTIVITY
FROM MARCH 2008 TO DECEMBER 31, 2008

- 51,625 patrol hours
- 1,169 arrests
- 20,945 citations issued
- 31,010 warnings



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Baltimore County Police Department Crash/Crime Summary March to December 2008

Robberies



- 13%

Burglaries



+ 2.4%

Crashes



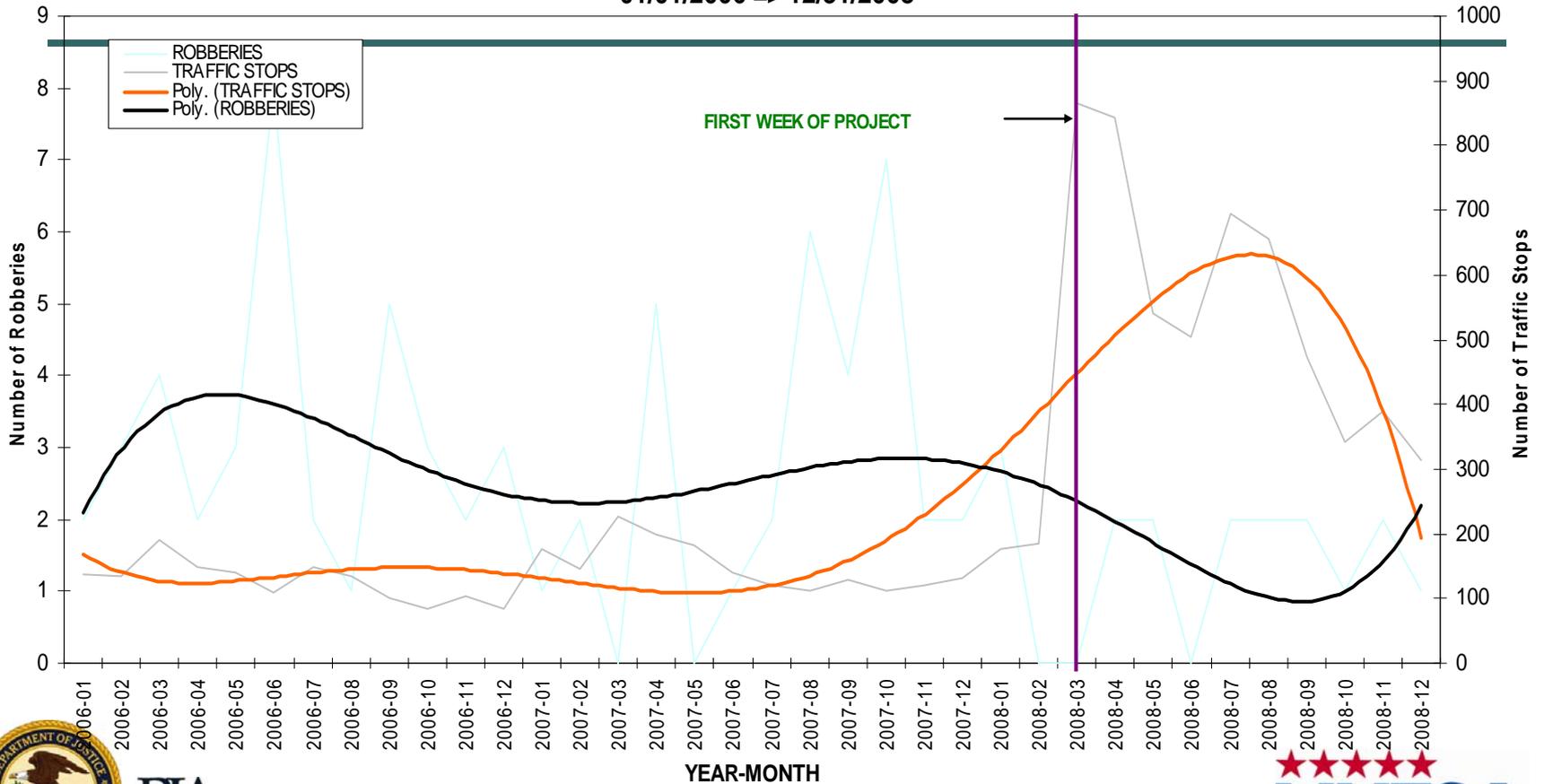
- 6.0%



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MONTHLY TRAFFIC STOPS AND ROBBERIES ON SELECTED ROAD SEGMENTS OF BELAIR ROAD 01/01/2006 => 12/31/2008



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St. Albans, VT Problem ID



- Significant increases in drug, vandalism and property crime began in 2005
- DDACTS focused on:
 - High Crash Locations
 - Drug activity
 - Property crimes associated with illicit drug activity and use throughout the city.



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St. Albans Results

October to December 2008 compared to
same time frame in 2007

- Assaults down 15%
- Burglary down 1%
- Vandalism down 20%
- Thefts from motor vehicles down 17%
- Larcenies down 3%
- Drug and narcotic violations down 36%
- Crashes down 18%
- DUI arrests up:
 - 156 arrests in 2007
 - 201 arrests in 2008

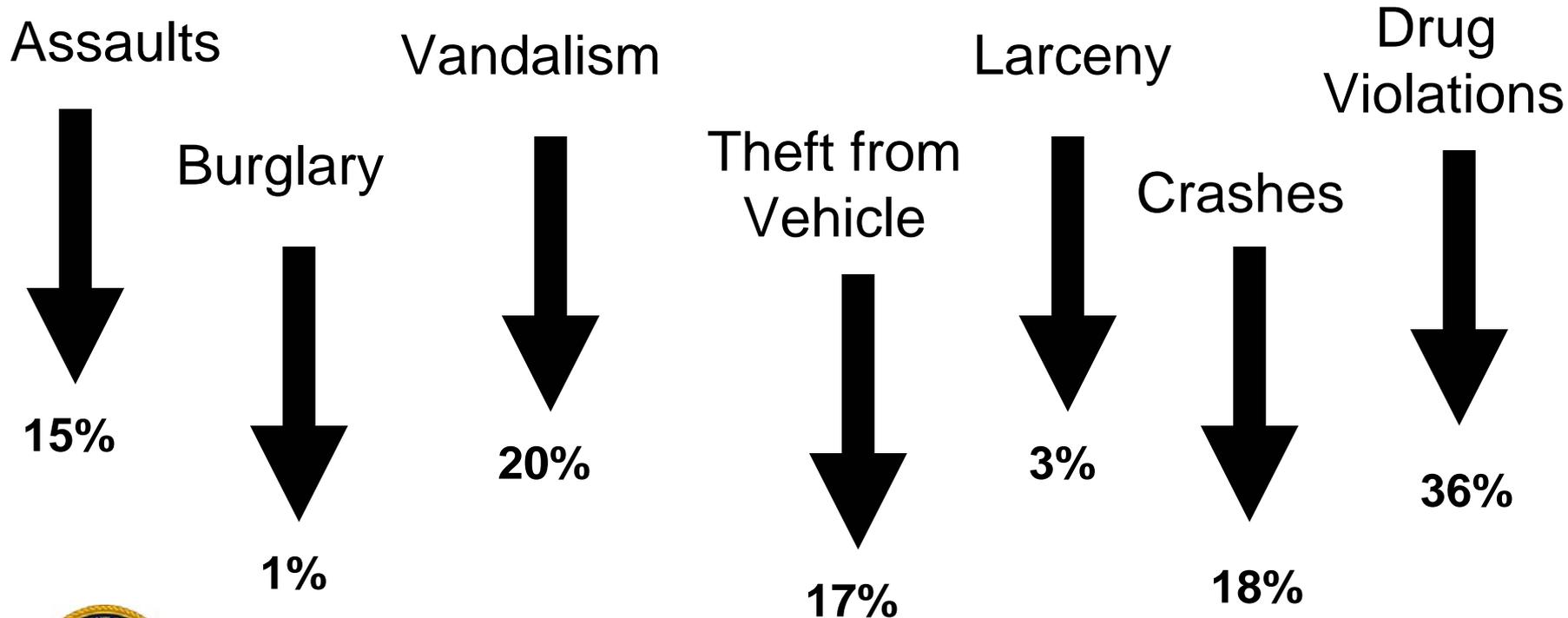


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St. Albans Results

October to December 2008 compared to
same time frame in 2007



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St. Albans

Test and Evaluation of License Plate Readers

- Single Pilot Deployment – November 8, 2008
- 2,672 plates read by two license plate readers
- Results showed 1 out of every 27 vehicles possibly being driven by a suspended driver



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Rochester, NY

DDACTS Project Goals



- Use “Hot Spots” evaluation techniques
- Identify specific crime and accident problems within the “hotspot” areas through:
 - Data Analysis
 - Intelligence Gathering
- Deter Gun Carrying Behavior in Vehicles in focus areas
- Deter Traffic Crashes in focus areas



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DDACTS

“If you’re not keeping score,
it’s just practice.”



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DDACTS

- **Locally Controlled**
- **Flexible, adaptable to any size agency**
- **Federal role is one of assistance and support**



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DDACTS – Next Steps

- Guideline and Marketing Development
- Website Improvements
- Traffic and Crime Mapping Curriculum
- Case Studies for Demonstration Sites
- National Deployment of Model



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About Data-Driven Approaches to Crime and Traffic Safety

Data-Driven Approaches to Crime and Traffic Safety (DDACTS) is a law enforcement operational model supported by a partnership between the National Highway Traffic Safety Administration (NHTSA), the Bureau of Justice Assistance (BJA) and the National Institute of Justice (NIJ).

DDACTS integrates location-based crime and traffic data to establish effective and efficient methods for deploying law enforcement and other resources. Using geomapping to identify areas that have high incidences of crime and crashes, DDACTS uses traffic enforcement strategies that play a dual role in fighting crime and reducing crashes and traffic violations. Drawing on the deterrent of highly visible traffic enforcement and the knowledge that crimes often involve the use of motor vehicles, the goal of DDACTS is to reduce the incidence of crime, crashes, and traffic violations across the country.

Background

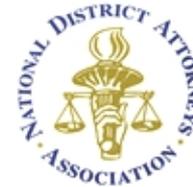
Law enforcement executives prioritize competing demands for police services every day. The scope of these demands continues to expand while operating costs increase and resources diminish. This conflict between available resources and priorities has been detrimental to traffic enforcement and crime prevention.

A number of law enforcement agencies have developed strategies based on the confluence of traffic incidents and crime to address this issue with enhanced effectiveness. These strategies are based on the use of data to identify high-crime and high-crash areas, and the use of targeted enforcement to reduce the incidence of crime and traffic violations in these areas.



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Questions?

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