Smart Policing in Action 2: Findings and Accomplishments from the Smart Policing Initiative (SPI)

New Haven SPI, Pharr SPI, Chula Vista SPI, and CNA   March 4, 2015

The New Haven Smart Policing Initiative Experience

Christopher M. Sedelmaier

University of New Haven

Project Background

- SEP 2011 – NHPD and UNH in partnership receive USDOJ Smart Policing Initiative (SPI) grant.

- GOAL - Sustain and support evidence-based policing at all department levels and seek to use research findings to inform police leadership and improve decision making throughout the department.

Initial Challenges

- One month after the grant award, NHPD chief resigns; new chief calls for return to foot patrol and community policing.

- NHPD also severely understaffed.

"How do we instill lasting change in organizational culture, when the organization is constantly changing?"

"How do we do more with fewer officers?"

Four-Legged Plan

- Foot patrol officers would use POP techniques to engage the public and involve them in identifying neighborhood problems.

- Application of SARA model:
  - Officers ID problems
  - CAU supplies "flash sheets" – neighborhood-level analysis products that the officers could take with them into the field.

- Treatment area selection by risk terrain modeling (RTM) to identify areas most at risk for future violent crime.

- Leadership stability in the form of a district manager and sergeant team assigned for the duration of the project.

The New Haven Project

- FEB 2013: New class of 19 sergeants received two-week training in problem-oriented policing techniques, the SARA model, and basic leadership issues.

- MAR 2013: New recruit class receives lesson on basic principles of problem-oriented policing and the SARA model.

- MAY - JUN 2013: NHPD CAU identifies high-risk violent crime areas in Newhallville neighborhood using location quotient, risk terrain modeling.

- JUL 2013: Walking beats begin in Newhallville neighborhood with specific directive to use SARA techniques to address violent crime, reach out to local community.

Site Selection

- Newhallville – highest location quotient of crime in New Haven.

- NHPD CAU then created risk terrain models to identify risky areas in a manner more complete than relying on any single variable.

- The same criteria used to create the Newhallville risk areas were used to generate risk areas in other parts of New Haven.

  - Comparison neighborhoods chosen based on location quotient calculation for violent crime. The selected neighborhoods scored higher than the rest of the city.

    - Fair Haven
    - West River
    - Hill
    - Edgewood

NEWHALLVILLE NEIGHBORHOOD - TOP HIGH RISK AREAS FOR VIOLENT CRIMES
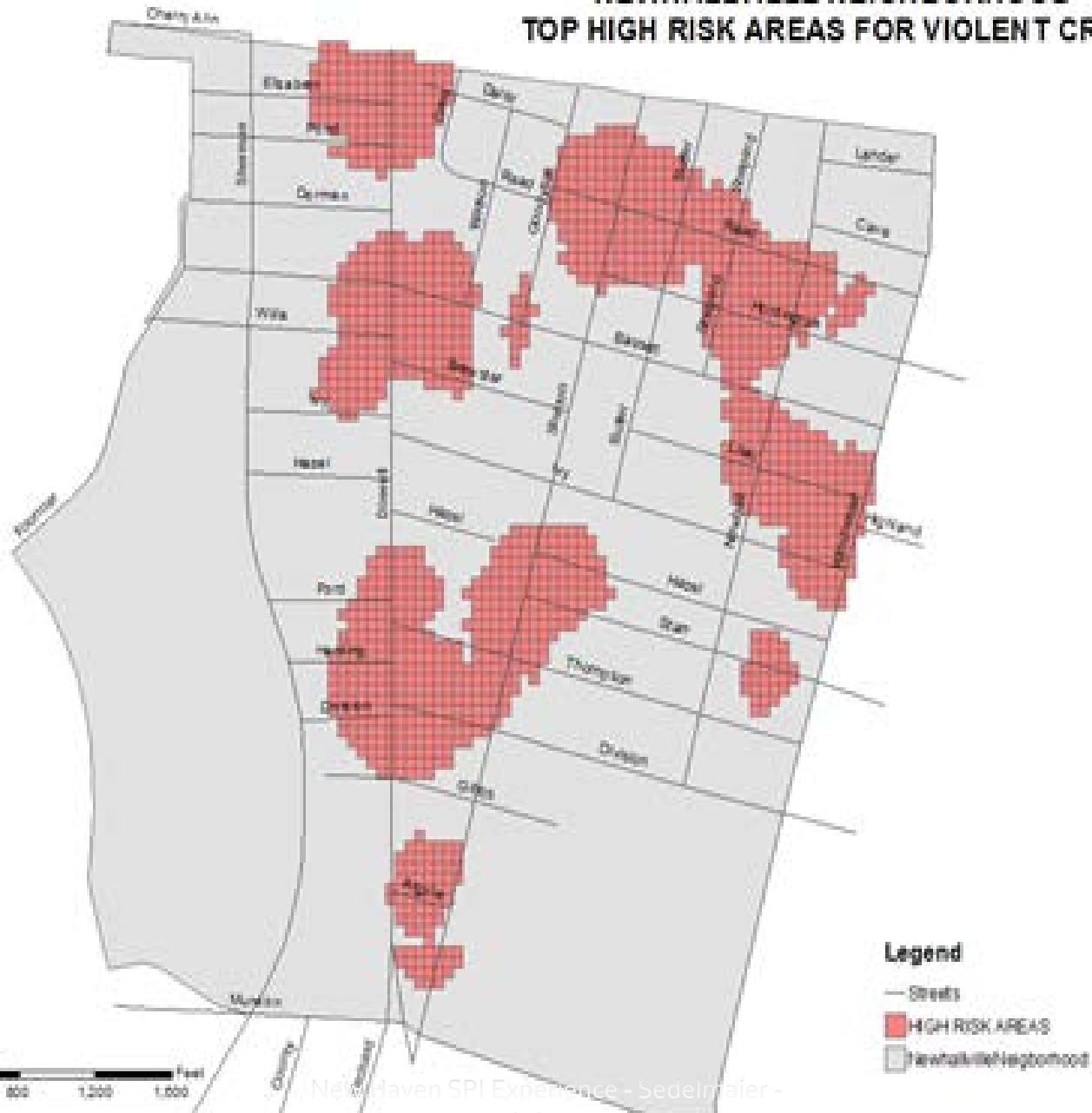
EDGEWOOD NEIGHBORHOOD - TOP HIGH RISK AREAS

FAIR HAVEN NEIGHBORHOOD - TOP HIGH RISK AREAS

WEST RIVER NEIGHBORHOOD - TOP HIGH RISK AREAS

HILL NEIGHBORHOOD - TOP HIGH RISK AREAS

Legend
— STREETS
■ TOP HIGH RISK AREAS
■ EDGEWOOD NEIGHBORHOOD

Legend
— STREETS
■ TOP HIGH RISK AREAS
■ FAIR HAVEN NEIGHBORHOOD

Legend
— STREETS
■ TOP HIGH RISK AREAS
■ WEST RIVER NEIGHBORHOOD

Legend
— STREETS
■ TOP HIGH RISK AREAS
■ HILL NEIGHBORHOOD

Data Collection – Violent Crime

- NHPD CAU produced weekly reports on Newhallville neighborhood.
  - Major Crimes (of which violent crimes are a subset)
  - CFS – Police-Initiated Calls vs Public-Initiated Calls
  - Comparison between RTM identified risk-areas, other areas
  - Major Crimes & CFS by TOD/DOW

- Measuring Change: A-B-A
  - 13 Weeks Prior, 13 Weeks Intervention, 13 Weeks Post.
  - Comparisons: 2012, comparison neighborhoods.
  - Seeking impacts on violent crimes, CFS

What Happened? (Neighborhood Level)

- Violent crime decreases in Newhallville
  - 19% reduction from pre-intervention through intervention period
  - 40% further reduction in the 13-week post-intervention period
  - Driven by sharp reduction in shootings
  - Significant difference from Edgewood neighborhood

What Happened? (RTM Area Level)

- Every violent offense decreases in Newhallville RTM areas, period-over-period
  - 36% reduction from pre-intervention through intervention period
  - 56% further reduction in the 13-week post-intervention period
  - Small raw numbers, but important reductions
  - RTM areas accounted for 60% of *all* violent crime in Newhallville before intervention; 47% during intervention
- Significant difference from comparison neighborhoods, but a caveat.
  - Seems due to robbery increase in Fair Haven.

Unforeseen Challenge: Labor Issues vs Treatment Integrity

- Union Contract and Treatment Integrity
  - **THIS ISSUE HAS IMPACTED <u>ALL</u> OTHERS**
  - Could not use static roster of officers for Newhallville walking beats – assignment goes to officer with lowest overtime hours.

- Traditional POP needs stable assignment
  - Individual or small team of officers remains dedicated to "their" problem for the duration of the issue.
  - How to implement with rotational assignment?

Comparing Models

Traditional POP

- Individual officer:
  - Scans
  - Analyzes
  - Responds
  - Assesses

New Haven SPI – "Adaptive POP"

- Patrol officer
  - Scans
- DM/SGT/CAU
  - Analyzes
  - Develops Response to be implemented by Patrol
  - Assesses

Treatment Strength Concern

Shifts Walked by Number of Officers
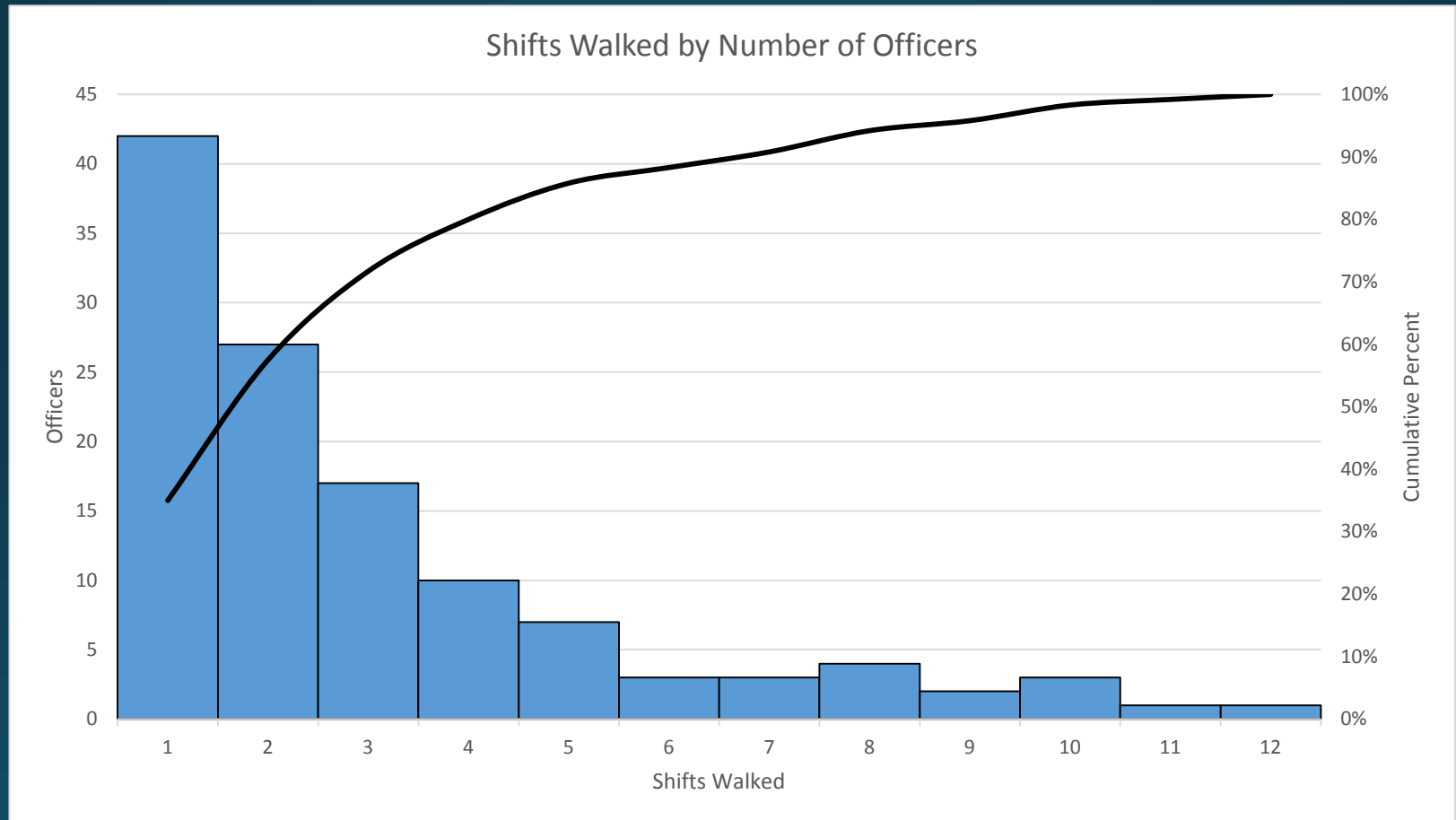
Comparing Frequent Officer Shifts vs Non-Frquent

- Activity log data

- No practical difference in citizen contacts, response activities

  - Frequent Officer shifts identified more emerging problems

  - May indicate comfort level between officers, community members

- Big Lesson: POP can work, even with rotational assignment!

Smart Policing in the Border City of Pharr, Texas:

Lessons and Successes

PHARR PD: Assistant Chief Joel Robles, Robert Garcia, and Officers Chris Hernandez, David Trevino, and Irving Segura

RESEARCHERS: S. George Vincentnathan & Lynn Vincentnathan

- ► **Population 74,000**
- ► **93% Latino**
- ► **Demographically young**
- ► **36% below poverty line**
  - • **crime**
  - • **gangs**
  - • **drug trafficking**
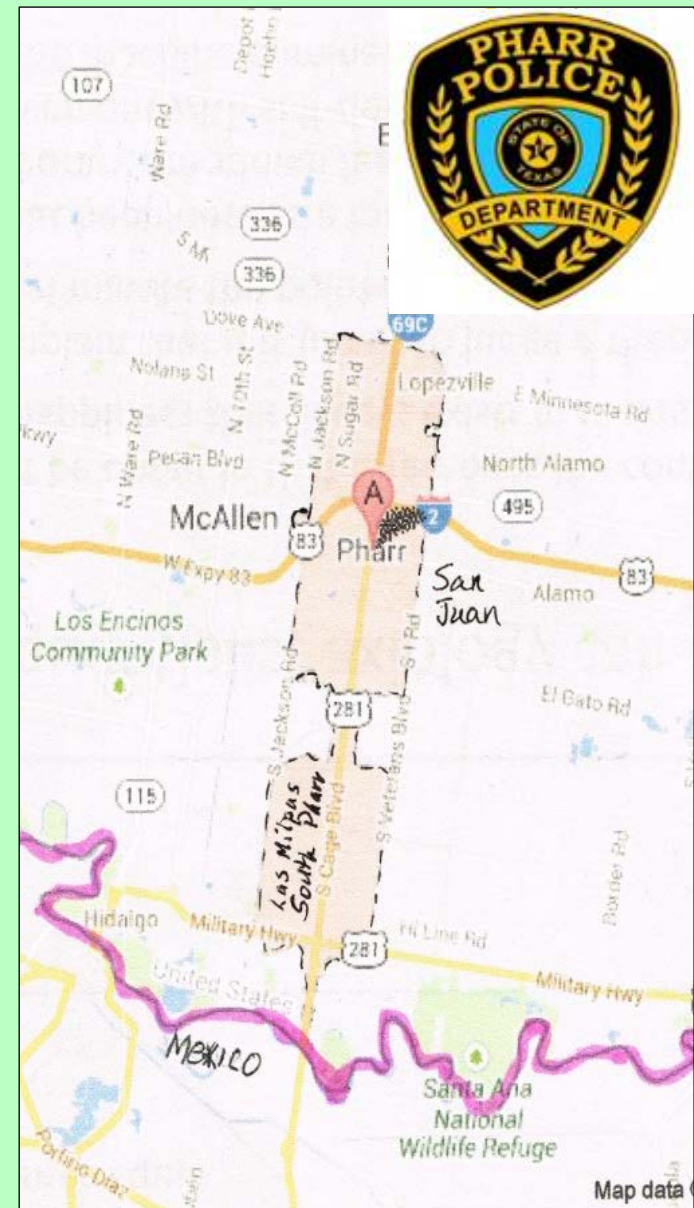
3 Projects:

1. COP-POP (SARA) Place-Based Strategy
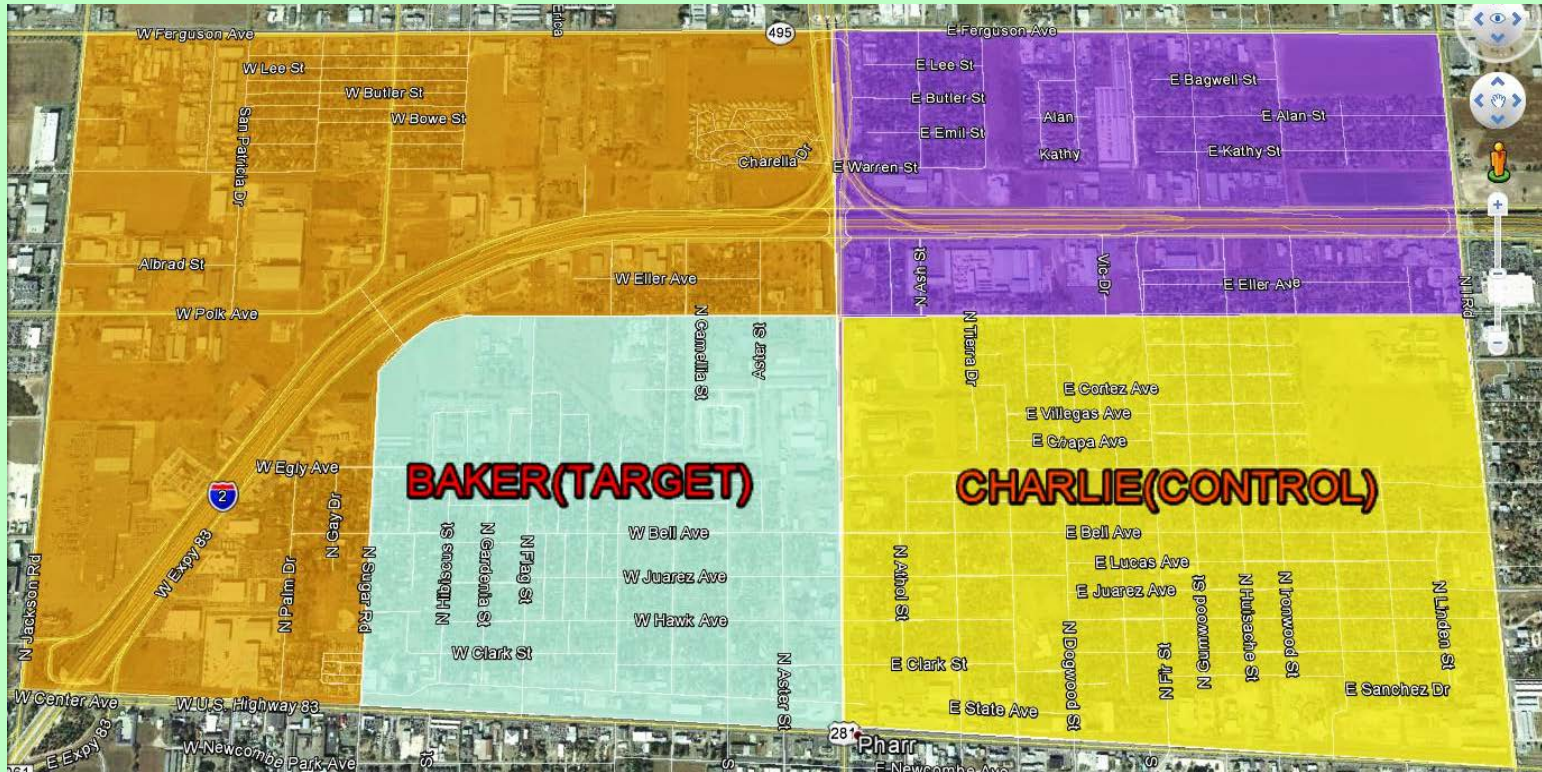
2. Offender-based Domestic Violence project
3. False alarm reduction project

C.A.P.E. STRATEGIES & EXPERIENCES

► **The CAPE-trained officers became agents of change, implementing COP & SARA**
- **Increase community trust**
- **Obtain more tips and information**
- **Facilitate community organization**

SMART POLICING
Data. Analysis. Solutions.

BJA
Bureau of Justice Assistance
U.S. Department of Justice

Proactive Patrol Tactics

- **Operation Phoenix**
- **CARE Contacts**
- **Cruise Lights**

SUCCESSES:

► **Reduced UCR Agg. Assaults (t = -2.6, p<.05)**

► **UCR property crime <u>seemed</u> to increase**

  ● **<u>reporting</u> of it increased (a success)**
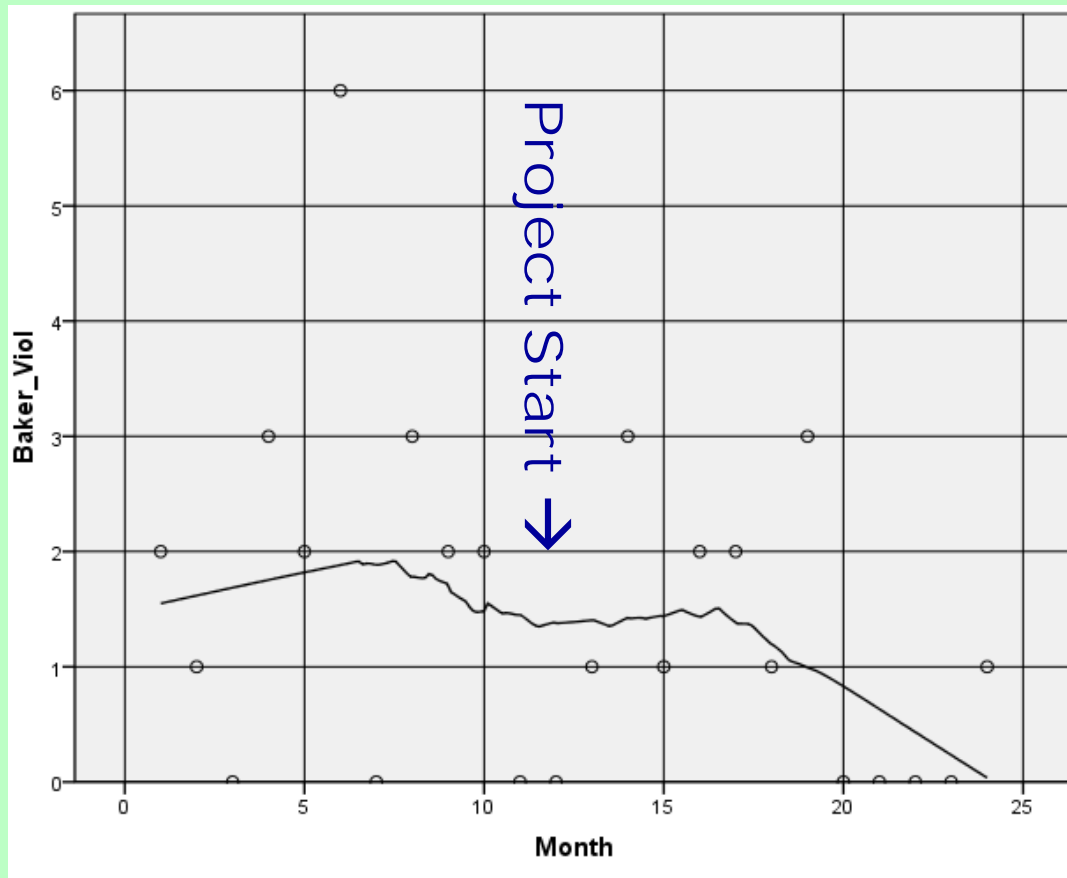
Loess curve for violent crime over 2 years

IMPACT ON COMMUNITY – Baker area

► **Pre-project community survey**

► **Residents and businessmen**

► **Post-project focus groups**

SUSTAINABILITY of C.A.P.E.

► The Pharr PD administration is making sure the program continues by supplying officer time and equipment, such as UTVs

► New and enthusiastic C.A.P.E. officers are being trained by "veteran" C.A.P.E. officers

► Residents and businesses want and ask for the program

New UTV,
Officer Hernandez & New CAPE-trained Officer

New CAPE-Trained Officer & Officer Segura
At Red-Ribbon Event at an Elementary School

Non-significant research findings in police research

Lessons to be learned

Ashley Miller

March 4, 2015

Overview

- Many SPI sites have documented significant crime decreases in their targeted areas, while others have been less successful.

- Reasons for this variation in success include:
  - Implementation problems,
  - Data analysis issues, and
  - Leadership turnover.

Findings

- Of the 38 SPI projects to date, the sites that did not experience statistically significant crime reductions that could be tied to their project were:
    - Cincinnati, OH
    - Joliet, IL
    - Lansing, MI

Cincinnati, OH

- Problem
  - Persistent robbery problem in the city's District 3
- Proposed SPI Solution
  - Investigated robbery problem, then implemented a series of prevention and intervention strategies over a period of 18 months
  - Targeted a one-mile corridor along two business thoroughfares that accounted for 28% of all robberies in 2009 in an geographic area less than 4% of the city

Joliet, IL

- ## Problem
  - Gun related crime persistently high despite decreasing crime
  - Clearance rate for gun offenses dropped under 20 percent due to residents' unwillingness to provide information to police

- ## Proposed SPI Solution
  - Developed an intelligence-based, rapid response strategy called the Strategic Tactical Deployment (STD) program that involved weekly CompStat-like meetings focused on geographic analysis of gun crime and related offenses
    - The team identified specific hot spots and STD resources were deployed to those areas
    - Representatives from probation and parole attended these meetings and exchanged information on high-risk individuals under their supervision
    - Engaged citizens in crime reduction efforts through the Joliet Community Committee for SMART Policing

Lansing, MI

- Problem
  - Struggled with violent crime, gang-related drug dealing, and neighborhood decay

- Proposed SPI Solution
  - Expanded their Police Enforcement and Community Engagement (PEACE) program as part of the SPI, which conducted ongoing problem analysis and support, proactive targeted enforcement, a focused deterrence Drug Market Intervention, and community engagement

Challenges

- These sites experienced the following challenges to implementation and impact:
  - **Challenge 1:** Utilizing continuous, real-time problem analysis to identify persistent, manageable "hot spots"
  - **Challenge 2:** Program dosage
  - **Challenge 3:** Limitations of key stakeholders
  - **Challenge 4:** Disentangling SPI effects from larger crime trends

Challenge 1: Cincinnati, OH

- Issue:
  - Target area expanded from the initially proposed one mile corridor to a 1.5 mile wide area

- Outcome:
  - Limited effectiveness of program because the area was too large and did not adequately tap the street knowledge and expertise of patrol officers

Challenge 1: Utilizing real time data to determine "hot spots"

Challenge 1: Joliet, IL

- Issue:
  - Information exchanges between police, probation, and parole officers did not play central role in program
  - Analysis generated at STD meetings were not translated into actionable intelligence

- Outcome:
  - All officers assigned to the program attended roll-call training that emphasized the purpose of the program, the need for accurate data collection, and the importance of maintaining the integrity of the identified target areas

Challenge 1: Utilizing real time data to determine "hot spots"

Challenge 1: Lansing, MI

- Issue:
  - The nature of street–level drug dealing in Lansing shifted to a technologically-driven model
  - The dynamic nature of the target problem required the SPI team to shift their intervention away from the place-based approach (i.e., hot spots)

- Outcome:
  - Intervention designed and implemented was based on different assumptions
  - Reduced potential effectiveness of their intervention

Challenge 1: Utilizing real time data to determine "hot spots"

Challenge 2: Cincinnati, OH

- Issue:
  - Over-relied on traditional, quantitative data from the police department
  - Increased the size of the target area substantially
- Outcome:
  - Responses did not sufficiently address the underlying causes of the problem
  - Expansion may have created a target area that was too large and weakened the intensity of the intervention

Challenge 2: Program Dosage

Challenge 2: Joliet, IL

- Issue:
  - STD teams continually moved around smaller areas within three sectors
  - Intervention may have lacked sufficient dosage

- Outcome:
  - Limitations regarding the intensiveness of the intervention, and the degree to which the effort was focused on stable "hot spots"
  - Officers' activities were diffused—and perhaps diluted—across the sectors based on short-term analysis of crime patterns

Challenge 2: Program Dosage

SMART POLICING
Data. Analysis. Solutions.

BJA
Bureau of Justice Assistance
U.S. Department of Justice

Challenge 2: Lansing, MI

- Issue:
  - Number of violent crimes in targeted areas was relatively low
  - Concentrate proactive patrols in target areas during summer months over a three-year period

- Outcome:
  - Low number of violent crimes presents challenges for generating significant reductions in crime
  - Unclear whether the temporary nature of these "crackdowns" was sufficient enough to generate crime reductions

Challenge 2: Program Dosage

SMART POLICING
Data. Analysis. Solutions.

BJA
Bureau of Justice Assistance
U.S. Department of Justice

Challenge 3: Cincinnati, OH

- Issue:
  - County probation and parole departments were unable to share their records with the SPI team
  - SPI team could not determine how often robbery offenders were on probation or parole
  - Tension between project management and problem management

- Outcome:
  - Different units owned a different portion of the project
  - Disconnect in implementation of the SPI program

Challenge 3: Limitations of key personnel

Challenge 3: Joliet, IL

- Issue:
  - Probation Department restricts authority of their officers in the field

- Outcome:
  - Limited enforcement options were available to the SPI team

Challenge 3: Limitations of key personnel

Challenge 3: Lansing, MI

- Issue:
  - Nature of the target problem shifted considerably, away from a geographic-based drug dealing in two areas to a more mobile and dispersed network of activity

- Outcome:
  - Research partners struggled to apply a research design "on the fly" that would sufficiently capture program impact
  - Diffused intervention well outside of the original target areas

Challenge 3: Limitations of key personnel

Challenge 4: Cincinnati, OH

- Issue:
  - Overly focused on robberies in the target area and gave small consideration to overall trends

- Outcome:
  - Could not fully examine the impact of the interventions during the first year of operation
  - Did not fully modify interventions in the second year that may have led to greater likelihood of crime reduction in the target area

Challenge 4: Disentangling SPI effects from larger crime trends

SMART POLICING
Data. Analysis. Solutions.

BJA
Bureau of Justice Assistance
U.S. Department of Justice

Challenge 4: Joliet, IL

- Issue:
  - Struggled to isolate the effects of the intervention
  - Failed to maintain the integrity of the research design
  - Did not limit parole enforcement to the STD target areas

- Outcome:
  - The parole compliance component of the STD program was diffused through the city of Joliet
  - Diluted program impact reduced likelihood of documenting significant crime reductions in targeted "hot spots"

Challenge 4: Disentangling SPI effects from larger crime trends

Challenge 4: Lansing, MI

- Issue:
  - Research design included both treatment and comparison areas
  - Integrity of research design was compromised because of the shifting nature of the crime problem

- Outcome:
  - Research partners were unable to disentangle any SPI-specific effects from larger crime trends

Challenge 4: Disentangling SPI effects from larger crime trends

SMART
POLICING
Data. Analysis. Solutions.

BJA
Bureau of Justice Assistance
U.S. Department of Justice

Lessons Learned

- Devise a strong process evaluation
- Important to thoroughly understand why a program did or did not produce the intended crime reduction benefits
- Think broadly about program impact, regardless of statistical significance

Lessons to be Learned

- The lessons learned from statistically non-significant research findings in the SPI should be applied to future police research, such as:
  - Evidence-based policing
  - Body-worn cameras
  - Early Warning Systems/Early Intervention Systems
  - Civilian Oversight

References

CNA. (2015). *Challenges in implementation and impact: Lessons from the Cincinnati, Joliet, and Lansing Smart Policing Initiatives*. Washington, DC: Michael D. White.

Sherman, L. W. (2014). Statement to the Division on Policing from ASC '14: *The Future of Policing Research*. San Francisco, CA.