



Data. Analysis. Solutions.

Welcome to the Smart Policing Initiative Spring 2014 National Meeting

April 29-May 1, 2014





Data. Analysis. Solutions.

Welcome from BJA Deputy Director for Policy Kristen Mahoney

May 1, 2014





SPI Spring 2014 National Meeting

Introductions and Overview of Agenda - Day 3

Kate McNamee & Chip Coldren

May 1, 2014

Meeting Goals

- Dialogue with BJA leadership
- Hear from sites at various stages of implementation
- Focus on core Smart Policing principles and issues
- Discuss capacity assessments and TTA plans
- Build the Smart Policing community of practice
- Record (podcasts) site updates





Agenda Overview

May 1

- Keynote from COPS Director Ron Davis
- Phase IV Site Presentations
- Roundtable on Smart Policing Challenges
- Wrap-up









Data. Analysis. Solutions.

Phase IV Site Presentations

Columbia and East Palo Alto

9:30-10:30 am

May 1, 2014





Using a Place-Based Technology to Address Shootings in East Palo Alto

East Palo Alto Police Department & Chief Justice Earl Warren Institute on Law and Social Policy

May 1, 2014

Project Overview

- City of approximately 30,000 residents with high levels of shooting incidents
- Citywide coverage of gunshot location detection system (GLDS) since January 2009
- Goal: To use GLDS above and beyond rapid response tool to help design and implement POP strategies and tactics to reduce shootings





Progress on Four Key Tasks

Key Task	Status
1. Document changes since 2009 in procedures and strategies because of the GLDS	Completed
2. Understand nature and context of universe of shootings and identify hot spots using GLDS data	Completed
3. Design and implement POP strategies and tactics to reduce shootings based on analysis	In process
4. Assess the implementation of targeted responses	In process





Task 1: Document changes in procedures and strategies because of the GLDS

Research questions

- Have there been changes in formal policies or protocols?
- Has the use of the technology changed since the system was launched 5 years ago?
- Have there been changes in officer workload because of more known shooting incidents?

Activities

- Interviews with officers, dispatchers, and ShotSpotter staff
- Document review





Key Findings

- Essentially no changes to written PD policies or protocols and no formal training for officers
- San Mateo County dispatch had to integrate GLDS into its calls for service data system
- High rates of false positives in the early years but have decreased over time
- No consensus among officers on whether system results in shorter response times
- Increasingly used as investigation and prosecution tool





Task 2: Understand nature and context of shootings and ID hot spots using GLDS data

- Research questions
 - How has the level of shootings changed over the last 5 years?
 - What are the patterns in shootings in terms of time of day, day of week, seasonal fluctuations?
 - Where are the shooting hot spots and to what extent do they change in size and location?

Activities

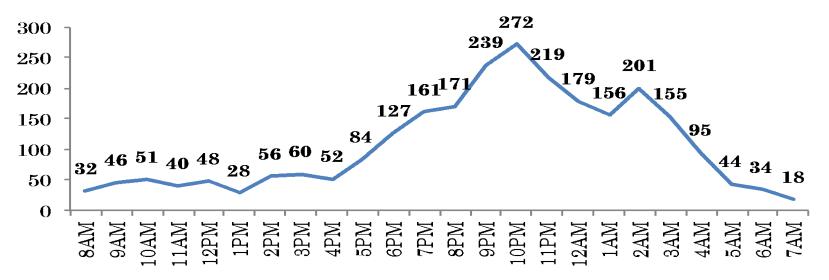
- Descriptive analysis of 4 years of GLDS data
- Mapping shooting hot spots



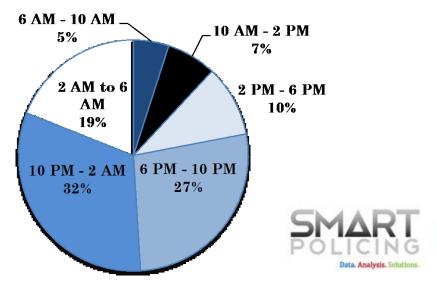


Shooting Incidents Peak Between 10 pm and 2 am

Citywide Gunshot Activations by Hour, July 2011 – June 2013



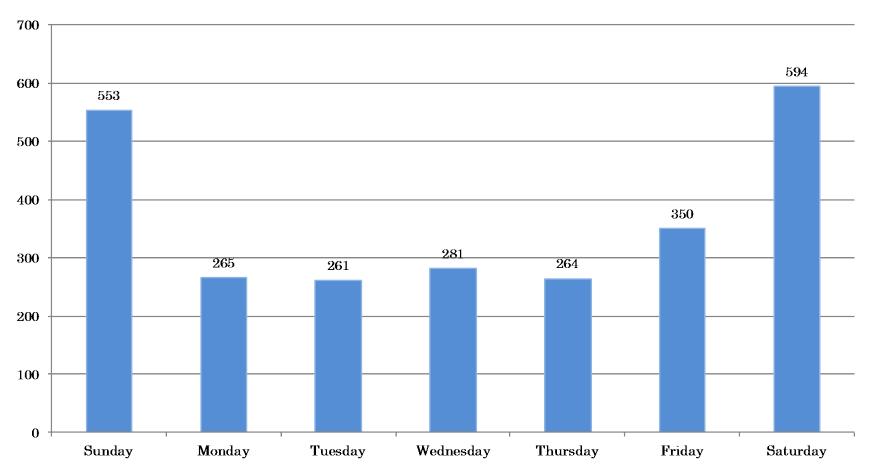
Citywide Gunshot Activations by 4-Hour Blocks, July 2011 – June 2013





Shooting Incidents Peak on Weekends

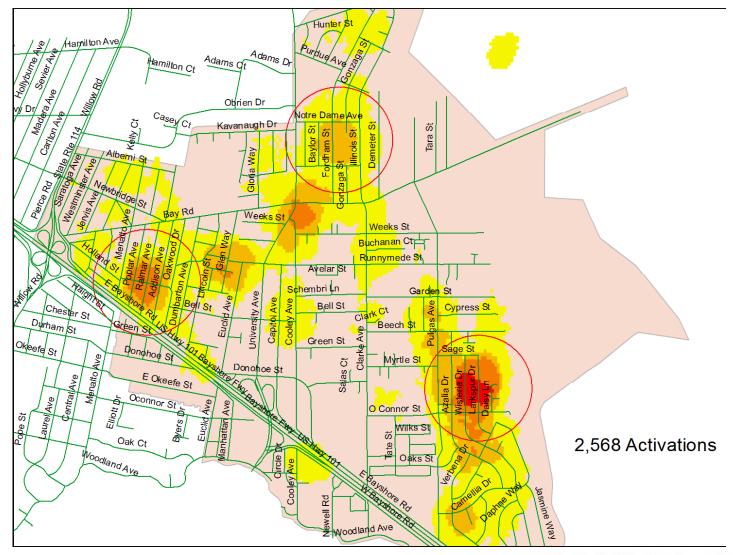
Citywide Gunshot Activations by Day of Week, July 2011 - June 2013







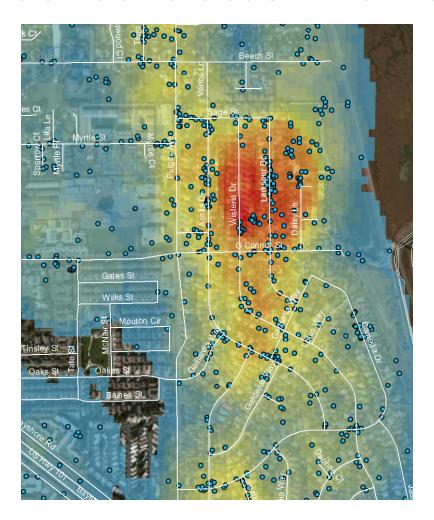
Three Chronic Shooting Hot Spots







Shooting Incidents in Gardens Hot Spot Concentrated in a Few Blocks









Challenge: Learning Curve with Untested Data Source

Assumption	Reality
Citywide coverage	Weak (and therefore inaccurate) in parts of the city
Consistent technology since 2009	Changed the "classifier" and system could be down for maintenance and repairs
Consistent process since 2009	ShotSpotter took over review from county dispatch in 2012
Clean data	Includes "noise" such as construction hot spots, duck hunting in wildlife preserve, and celebratory gunfire on holidays





Upcoming Milestones





Task 3: Design and Implement POP strategies and tactics to reduce shootings based on analysis

Activities

- Form gunshot reduction team
- Review analysis and shooting hot spot maps
- Compare gunshot data to case files
- Design and implement law enforcement interventions
- Design and implement community outreach based interventions





Law Enforcement Interventions

- Increased Presence
 - Additional patrols during peak times
- Intelligence Gathering
 - Increased field interviews in hot spots during peak times
 - Observation of subjects loitering in hot spots
- Home Searches
 - Conduct probation/parole searches of people who live and hang out in hot spots that have gun related offenses





Community Outreach Interventions

- Knock and Talks
- Block Meetings
- Anonymous Tip Communication
 - Phone tip line
 - TipNow Mobile Application
- Social Media Use
 - Nextdoor
 - Twitter
 - Facebook





Task 4: Assess the implementation of targeted responses

- Review data and logs
- Conduct interviews
- Evaluate gunshot frequency in areas that received "treatment" vs. control areas





Plans for Sustainability

- Continue use of ShotSpotter
- Maintain gunshot reduction as a task for our "Special Duty Unit"
- Maintain Community Outreach Efforts
 - Beat Meetings
 - Social Media Use
 - Anonymous Tip Communication









Integrated Data Exchange & Analysis Project

Columbia, South Carolina

Jeff Rojek, Scott E. Wolfe, Justin Nix, Melron Kelly & James Marchbanks

April 30, 2014

Introduction

- Initial focus: develop a broad-based implementation of Intel-Led Policing
 - Modeling after the British National Intelligence Model (Strategic and Tactical Coordinating Groups)
- Challenges posed by changes in personnel
- Adjusted focus to more manageable projects in line with site goals
 - Combining key organizational stakeholders and important issues facing the department

• Two projects:

- Repeat and Near-Repeat Burglaries in North Region
- Building upon existing gang intelligence through network analysis

Repeat and Near-repeat Burglaries

- Project emerged from an initial strategic-level analysis of crime hot spots – intent to develop SPI pilot project
 - Hot spots in the North Region: high rates of burglaries
 - Survey of citizens in North Region and other areas: burglaries as a number one concern.
 - Burglaries: one of the highest self-reported victimizations
 - Repeat Burglaries: 36.6% in North Region, 40.8% in Hyatt
 - Near Repeat Pattern: North Region and Hyatt within 500 ft. and 0-7 days.
- Response: Model Repeat & Near-Repeat programs from UK, Australia, & Redlands, CA/Baltimore, MD





Tiered Approach to Reducing Burglaries

1. After initial burglary:

- Officer conducts security survey and completes incident report
- Provide resident with a pamphlet with tips on how to lessen their chances of being re-burglarized in the future
- Ask resident to email serial numbers associated with selected items
- In addition (for the Near-Repeat Approach)
 - Homes within a one block radius will receive a door hanger and/or "knock & talk"

2. After subsequent burglary:

- Officer conducts follow-up security survey
- Resident may qualify for a temporary security system



- CPD and USC-CCJ have worked on issues related to gangs since 2007
 - Gang intelligence was very rudimentary and the department had limited resources dedicated
- Gang intelligence efforts have greatly improved
 - E.g. protocol for validating gangs, gang members, and gang crimes
 - However, gang investigators still have limited time for developing intelligence



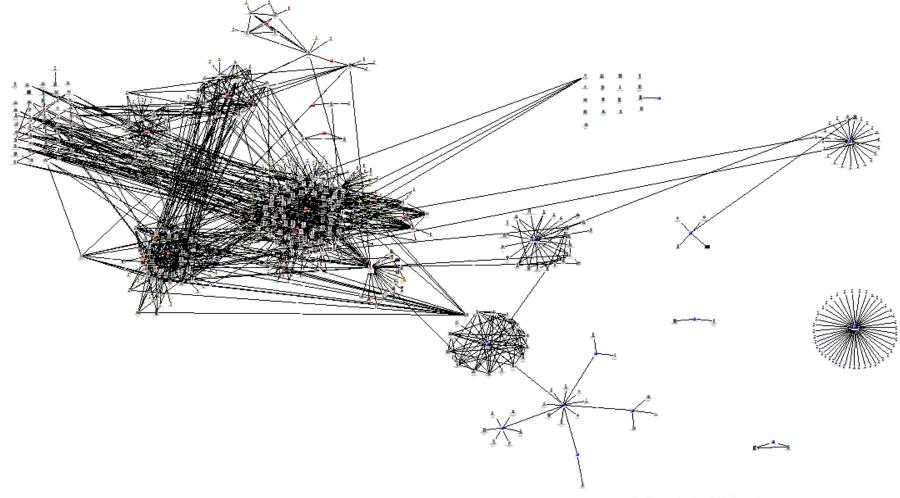


Project:

- Use network analysis to assist in developing intelligence on gangs, members, subgroups, areas of activity, conflicts, etc.
- Use existing gang database, contacts (arrests, field interviews, etc.), and social media.

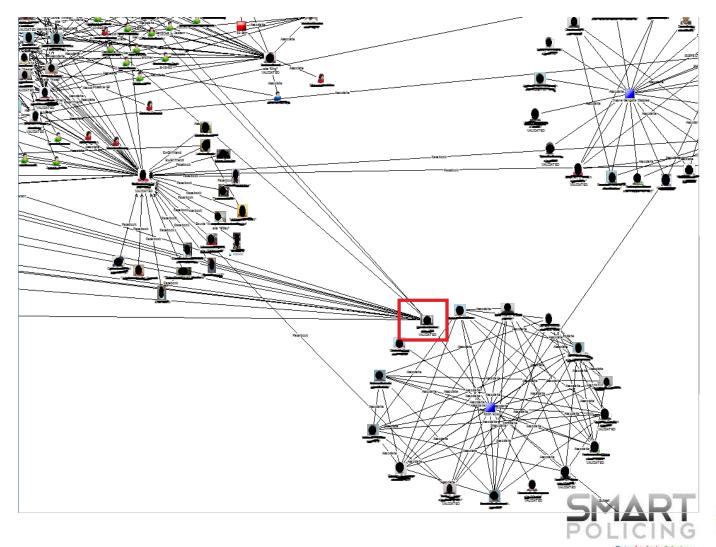




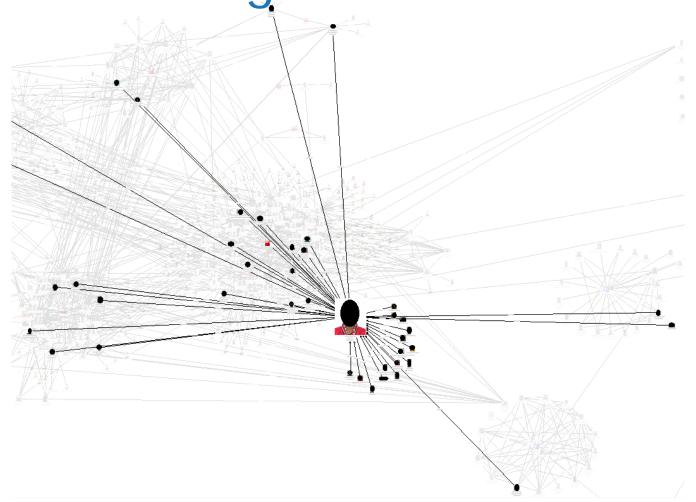
















Goals for the future:

- Build Intelligence
 - Continue identifying possible gang members and their associates
 - Identify cliques that known gang members belong to
 - Validate individuals who meet criteria
 - Understand patterns of individual gang activity, crime, and conflicts
- Develop response initiative
 - Focused deterrence and/or other approaches





Repeat and Near-Repeat Burglary Research Plan

Process Evaluation

- Verify completion of initial location security survey, nearrepeat notification, and crime prevention follow-up
- Document resident action resulting from first security survey at repeat locations

Outcome Evaluation

- Comparison of repeat and near-repeat events with two comparison areas.
 - 6-month interim analysis and 12 months
- Hyatt area represents a pilot project, with the logic that promising results will promote larger-scale randomized experiment in the city





Challenges & Lessons Learned

- Personnel changes and "moving parts"
 - Importance of staying focused on change and finding those committed to it, being flexible, and keeping manageable goals

Upcoming Milestones

- Implementation of the repeat and near-repeat burglary initiative
- Completion of the initial gang network analysis





Plans for Sustainability

Software and Training

- Purchase of SPSS modeler, i2 Analyst's Notebook
- Training of crime and intelligence analysts on software and analytic efforts
- Training all department personnel on intelligenceled policing and capacity of analysis unit

• If results from burglary project are promising:

- Expand to an entire region
- Or implement similar projects in other areas of similar size on a need-by-need basis
- Revamp the intelligence website
- Commitment of department stakeholders





Concluding Remarks









Break

Podcast Filming: Columbia, Kansas City, and East Palo Alto

10:30-10:45 am

April 30, 2014





Phase IV Site Presentations (cont.)

Kansas City, Port St. Lucie, and Rochester

10:45-11:30 am

May 1, 2014





Roundtables on SPI Challenges

Chip Coldren, Kansas City SPI, and Shawnee SPI

11:30 am - 12:00 pm

May 1, 2014





The Kansas City (MO) Smart Policing Initiative

No Violence Alliance (NoVA)

Ken Novak (UMKC), Joseph McHale (KCPD)

April 30, 2014

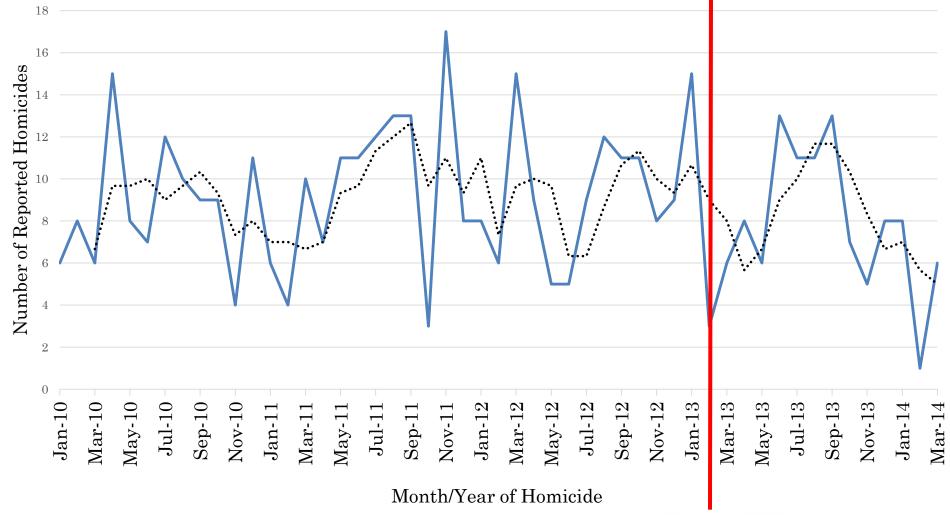
Progress (summary)

- Creation of focused deterrence strategy
 - Enforcement, intelligence, social services, communication
- Internal training
- Organizational realignment
- Moving from official data to street intel
- Nine (9) call-ins
- Enforcement





Homicides in Kansas City, Missouri January 2010 to March 2014







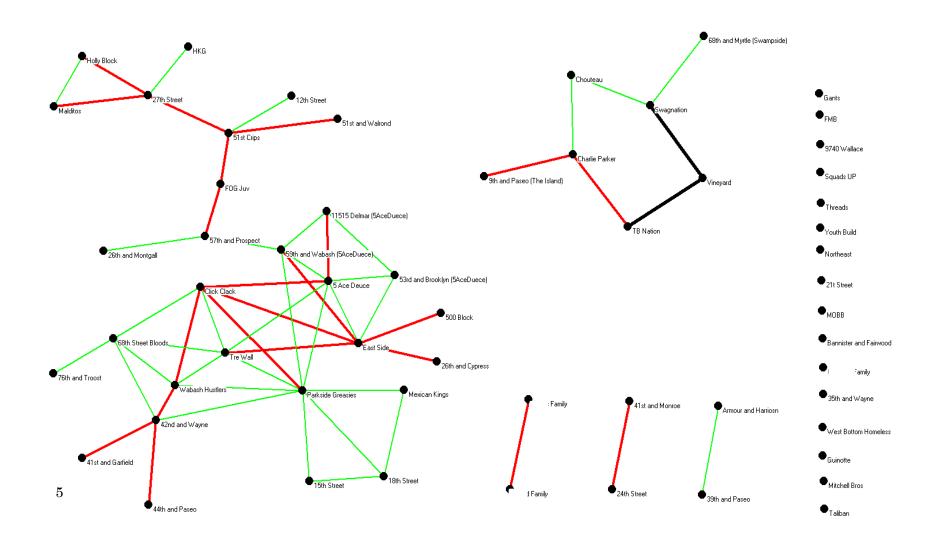
Challenges, Lessons

- Intra-organizational buy-in
- Focusing on Focused Deterrence
- Inter-agency communication
- Managing moving parts
- Evolving measures of impact





Upcoming milestones: Network of groups & Group enforcement



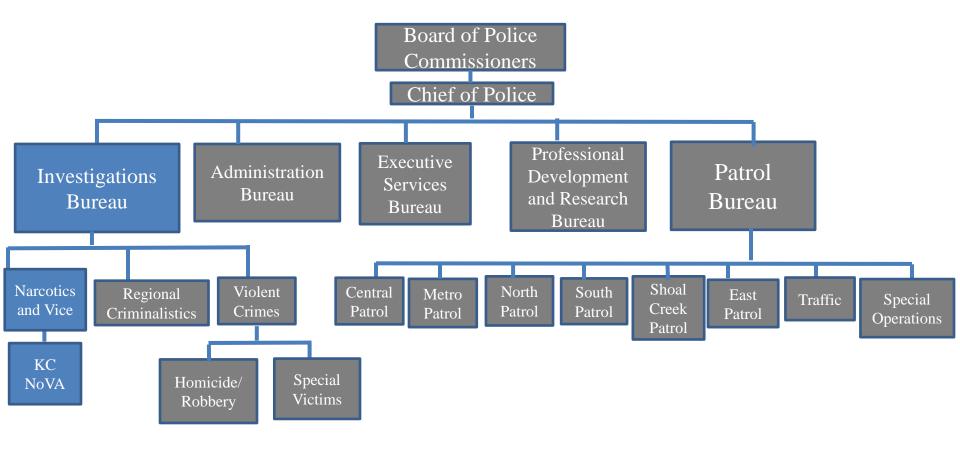
Sustainability

- Governing board
- Implementation guide
 - Process; functional differentiation across departments
- Leveraging resources beyond SPI
- Organizational change





KCPD Organizational Structure*

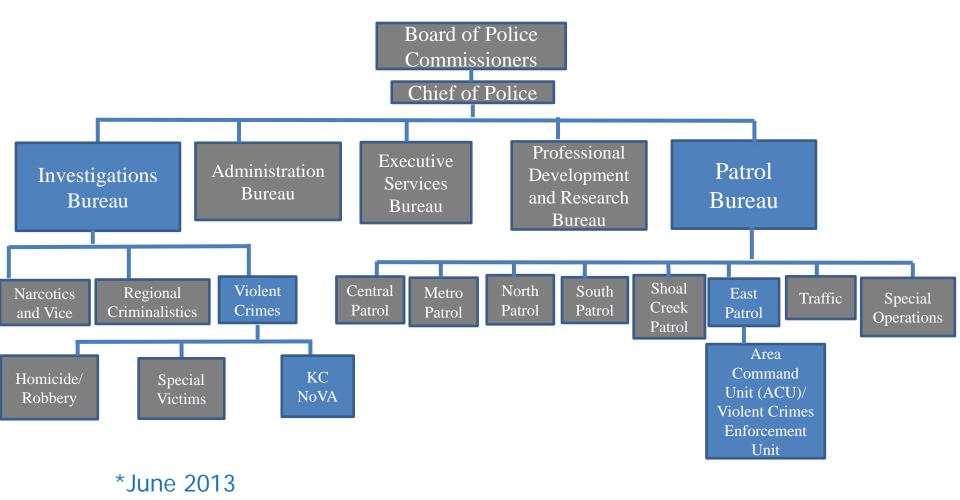


*September 2012





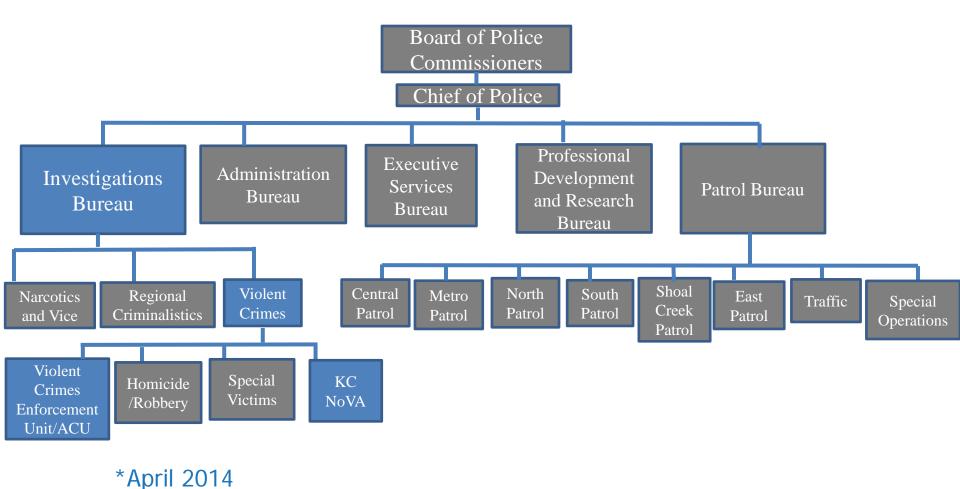
KCPD Organizational Structure*





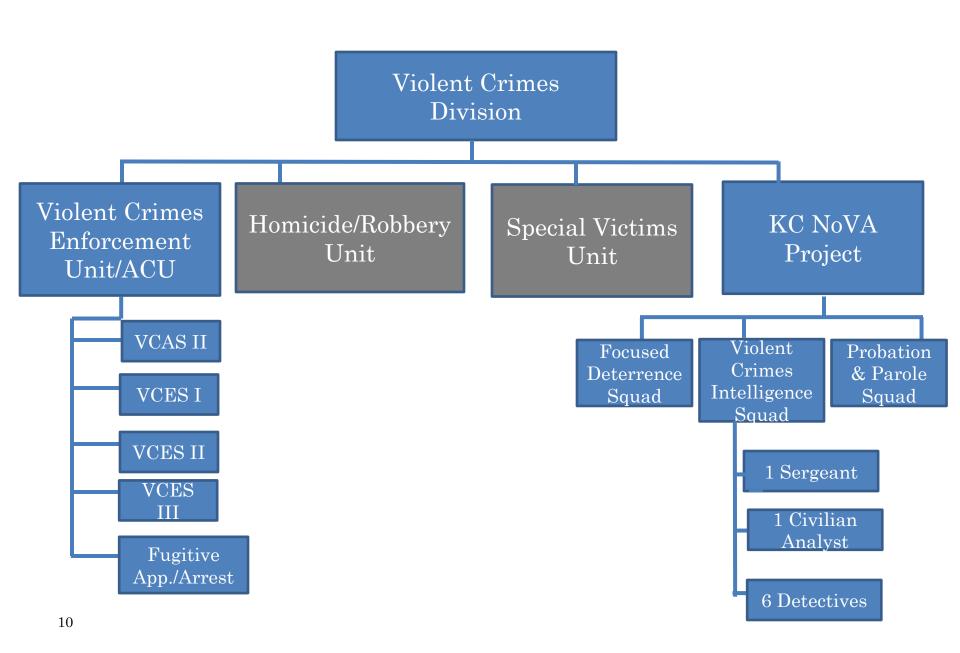


KCPD Organizational Structure*









Contact information

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Capt. Joe McHale, KCPD

Joseph.McHale@kcpd.org

http://www.KansasCityNoVA.org/









Offender-Focused Hot Spots Policing

Port St. Lucie, FL Police Department

Lt. Roberto Santos, Project Director

Florida Atlantic University

Dr. Rachel Santos, Research Partner

May 1, 2014

Port St. Lucie, FL PD SPI Team

- 2 detectives, 100% of their time (1 grant funded)
- Crime analyst (grant funded)
- Research partner to develop implementation and evaluation strategies (grant funded)
- Project director to oversee detectives, analyst, and implementation
- External partners





Project Overview

- Expand implementation of the Stratified Model of Problem Solving, Analysis, and Accountability
- Evidence-based: focus on place first then offenders
- High-quality research to test effectiveness of a given strategy
- Experimental research design





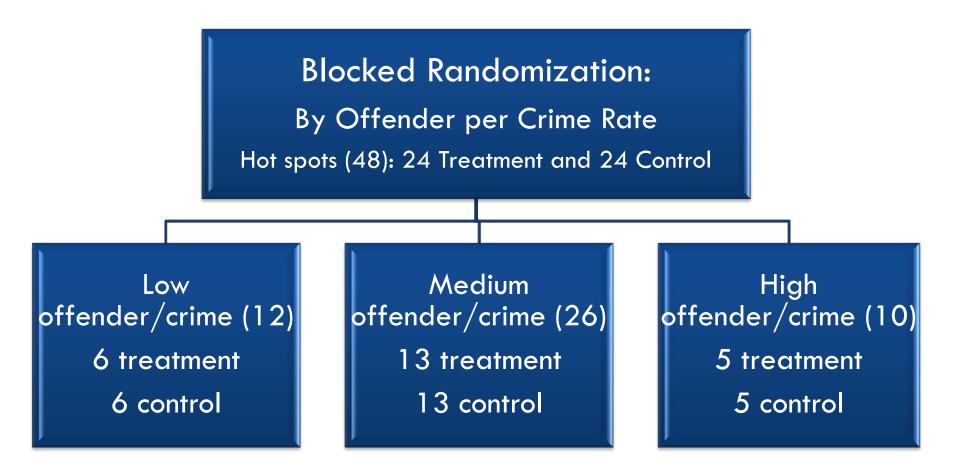
Offender-Based Hot Spots Experiment

- Identify long-term hot spots of residential burglary and theft from vehicle
- Randomly assign treatment and control hot spots (RCT)
- 3. Identify all offenders living in the hot spots
- 4. Prioritize offenders for response
- 5. Implement responses
- 6. Evaluate results





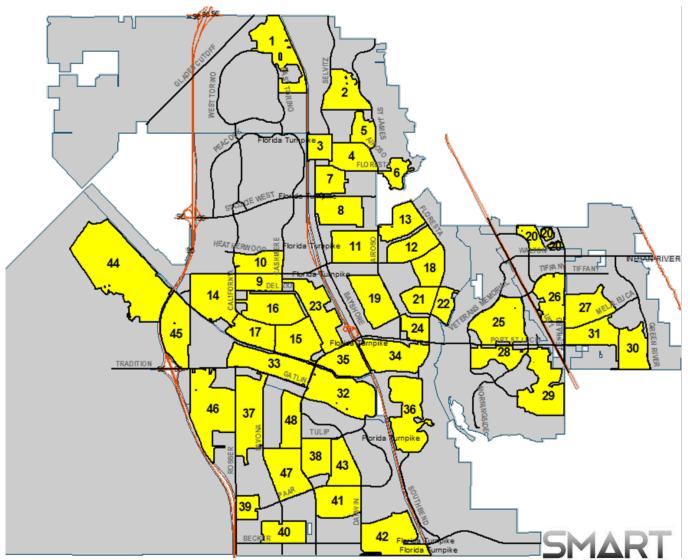
Offender-Based Hot Spots Experiment







Residential Burglary and Theft from Vehicle Hot Spots Random Assignment Results





Group Comparison

	Treatment	Control	T-Test (p- value)
Crime	14.83	16.70	.29
Offenders	11.91	14.04	.26
Size	.58	.73	.11
Targets	1,239	1,485	.22





Offender Analysis

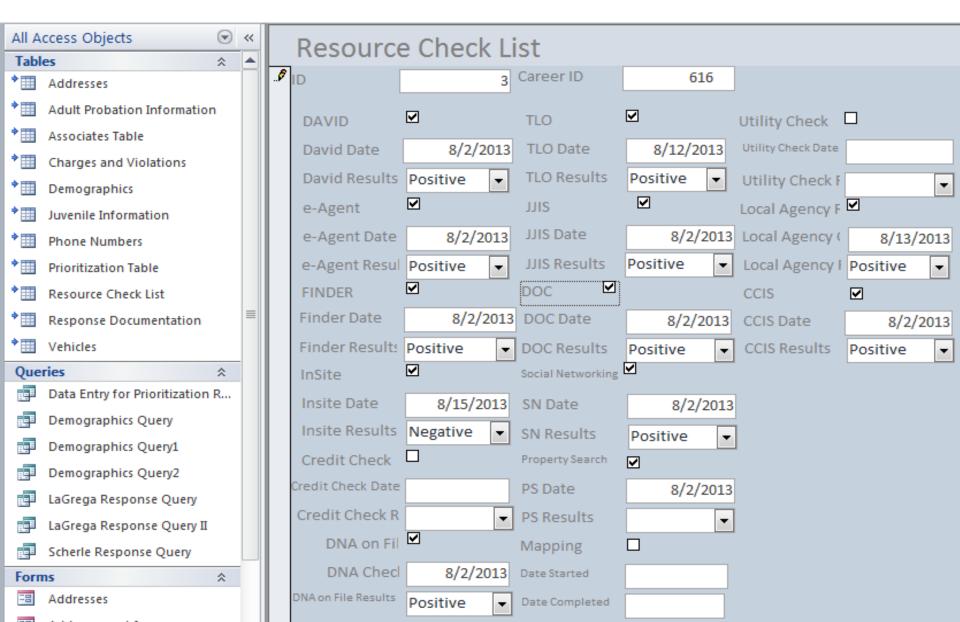
- Prioritize offenders
- Provide detectives an initial analysis packet for each offender
- Detailed criminal resume for high priority offenders
- Database for offender information and responses
- Number of offenders as of April 2014:

Offender Priority	Total
Priority 1A: Arrested for Burglary of a Dwelling	70
Priority 1B: Arrested for Burglary of a Conveyance	20
Priority 2: Probation with Prior Burglary	21
Priority 3: Drug Offender	80
Total	191





Sample Checklist



Data for Criminal Resume

Department of Motor Vehicles	NCIC	Criminal Justice Resources	Open Sources	Financial Resources
Photo Address history Date of birth Social security number(s) Birth records and historical documents Ticket history (area of travel)	Criminal history Gun permits Police reports, affidavits, FI from all other agencies based on history	Recent & local police agency call, crime, arrests, traffic Department of Juvenile Justice DOC: Incarcerations Gang affiliations Probation/parole Court records Fusion centers	Google, Bing, Yahoo searches Facebook, Twitter, Instagram, YouTube Source for associates and family Documentation of affiliations and opinions	TLO, Dfacts (others) Wage report (job) Credit reports Utilities account requests Property appraiser (ownership) Civil court: marriage records; litigations





Offender-Based Responses

- Initial response begins based on initial analysis:
 - Verify offenders residence
 - Verify correctional status
- In-depth responses based on criminal resume
 - Responses vary by nature of offender's activity
 - Work with other units (e.g., gang unit, narcotics) and divisions (e.g., patrol and CID) in the agency
 - Work with state attorney, judges, probation, parole, parents, and offender





Response

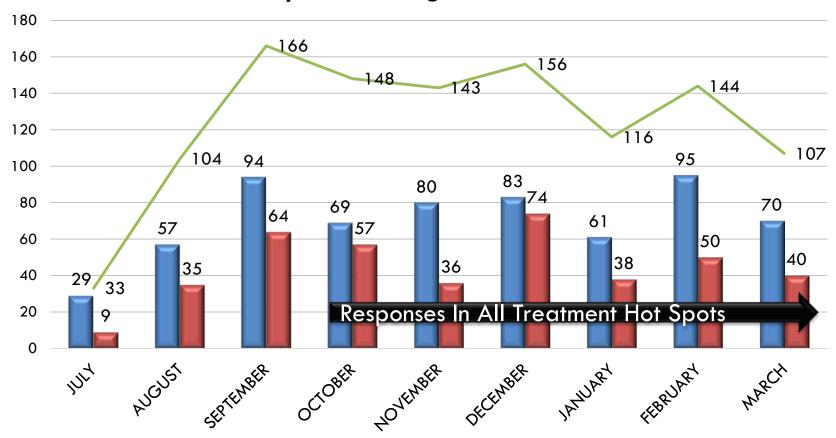
- Curfew checks on offenders with sanctions
- Follow up with probation officers regarding offender interactions
- Face-to-face contact with offenders
 - Referrals to programs (i.e. Job resources, DMV issues)
 - Family interaction (meetings include spouses, parents, siblings)
 - Discuss stressors that may lead to re-offending
- Response barriers
 - Offenders leave hot spot
 - Offenders with no current sanctions refuse contact with law enforcement

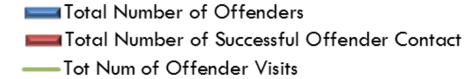




Responses By Month

July 2013 through March 2014









Evaluation

- Analysis of individual offender recidivism
- Analysis of crime in treatment and control hot spots and displacement of crime
- Offender interviews
- Process evaluation
 - Implementation of individual responses
 - Organizational implementation
 - Roles of detectives and crime analyst
 - Collaboration within agency and among partners





Contribution to the Field and Sustainability

- Experimental evaluation of offender-based strategies in <u>property crime</u> hot spots in a <u>suburban city</u>
- Perspectives of offenders
- Organizational model for systematizing offenderbased analysis and response
- Publications: academic and practical
- PSLPD to make analyst permanent and continue offender-focus





~Questions~









Offender-Focused Hot Spots Policing

Port St. Lucie, FL Police Department

Lt. Roberto Santos, Project Director

Florida Atlantic University

Dr. Rachel Santos, Research Partner

May 1, 2014





Intervening in Violent Retaliatory Disputes

Smart Policing Initiative: Rochester, NY

Cmdr. Wayne Harris, & John Klofas, Ph.D.

May 1, 2014

About Us

- **Geography:** 37.1 Sq. Miles (between Buffalo and Syracuse)
- City Population: 210,565 Metro: 1 million
- 11, 987 Part I Crimes (2013)
 - 228 shooting victims
 - 42 murders (31 from firearm) down from 50s as recently as 2007
 - Significant local gang/street crew activity
 - 2012: 36 Total Homicides, 21 involved a dispute- 9 of which involved a precipitating act at least two hours prior (7 with firearm)
 - 2012: Firearm Violent Crime: 33 per 100,000 (3rd in NYS)

Team

- Rochester Police Department
- Rochester Institute of Technology
- Secondary Partners across other initiatives





Opportunities for Intervention in Firearm Violence

- By Typology:
 - Robberies
 - Disputes
 - Immediate vs. Ongoing
 - Types:
 - Simple interpersonal (insult, girls, etc)
 - Domestic
 - Gang
 - Drug business-related
 - Limited opportunities for intervention on immediate disputes
 - Ongoing disputes are essentially crime patterns for assault

Violent Retaliatory Disputes

- An ongoing string (two or more) of back-and forth violence between the disputants and their associates
- Extends across multiple acts of violence and over a time frame of days, weeks, months, or years

Violent Disputes

- Argument leads to Violent Act
- Can be short-term and end, or can escalate to a violent retaliatory dispute

Non-Violent Disputes

- Verbal Confrontations
- Minor Physical Interaction
- Can be short or long-term in duration





Elements of Violent Dispute Management

Time Contexts

On-Scene/ Immediate (0-8 Hours)

> Next Day (8-24 Hours)

First Week (1-7 Days)

Second Week (8-14 Days)

Ongoing (Monitoring)

Intelligence-Gathering

- Identify key players, associates, motives & locations.
- Assess likelihood of retaliation and seriousness of risk for further violence

Goals

Case Investigations

• Arrest suspects in primary case(s)

Enforcement (Player Targeting)

· Pre-emptive arrest of key players who may be at highrisk for further violent retaliatory acts, and are currently involved in narcotics activity, have pending warrants, or probation/parol e violations

Prevention (Location Targeting)

• Deter key players from engaging in violent retaliations by focusing police resources at locations where retaliations are likely to occur

Intervention (Dispute Mediation)

- Engage key players, offer dispute mediation services
- Deter key players through personal contacts and relationshi p-building





Project Progress: Inform the Strategy

- Conducted a typology analysis
 - Data acquisition, coding and analysis
 - 2010-2012 Fatal and non-fatal shootings examined
 - 2010-2012 Non-firearm Aggravated Assault dataset for comparison
 - Focus groups on dispute identification perceptions
 - How do we do it now? Is it effective?
 - Incident reviews of retaliatory shootings
 - What risk factors make one dispute more likely than another to follow a pattern of retaliatory violence?





Project Progress: Define the Problem

• Retaliatory Dispute

A violent retaliatory dispute is an interaction involving conflict, over a period of time, between two or more individuals and/or people associated with them and marked by two or more events involving confrontation or intimidation, in which at least some of those events involve violent acts or credible threats of violence.





Project Progress: Build a Model

- Developed retaliatory dispute "risk assessment tools"
 - Field Review
 - Filled out by sworn personnel following event
 - Focus is on early identification and immediate tactical response
 - Reviewed by supervisor then sent to analysis center
 - Analyst Review
 - Completed by Violence Analyst
 - In-depth review of disputants' criminal history & intelligence
 - Forwarded to Project Lead for tactics assessment and strategy implementation





Project Progress: Pilot

- 3 months (Apr-Jun) in the SW quad
 - Focus is process oriented not outcome driven
 - Establish business processes and workflow for regular and specialized operations
 - Use of assessment tools
 - Tactical intervention
 - Case review and strategy meeting
 - Dispute maintenance and follow-up
 - Evaluation and finalization of the tools/structure





Results, Challenges, & Lessons Learned

- Late project start and additional time needed for data collection and analysis
 - Did not sacrifice data quality
 - Requested a 1-yr project extension
- Major changes in key personnel
 - Loss of original project champions
- Difficult to validate assumptions prior to implementation
 - Designed a pilot to assess process





Upcoming Milestones

- Evaluate pilot & make changes for full implementation
- Create a tactical toolbox of best practices
- 1-year implementation period
 - Monthly steering meetings
 - Ongoing shooting incident review process
- Conduct evaluation
- Documentation and communicate outcomes





Plans for Sustainability

- Internal and external communications plan
- Inclusion in RPD's annual strategic plan
- Development of project Key Performance Indicators
- Regularly scheduled review meetings





Questions?









Day 3 Wrap-Up / Phase V Meeting Evaluations

Kate McNamee & Chip Coldren

12:00-12:15 pm

May 1, 2014