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New Findings from the Smart Policing Initiative

Milwaukee, Brooklyn Park, Roanoke, and Kansas City March 23, 2017

This project was supported by Grant No 2015-WY-BX-0006 awarded by the Bureau of Justice Assistance. The Bureau of Justice Assistance is a component of the Office of Justice Programs, which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, the Office for Victims of Crime, and the SMART Office. Points of view or opinions in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice.

Milwaukee Police Department's Body Worn Camera Program: Initial Results of a Rigorous RCT and QED Evaluation

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Introduction

- Body-worn cameras (BWCs) are a growing, important area of research and practice in policing
 - President Obama's Task Force on Policing in the 21st Century: BWCs a national priority
 - Millions of federal dollars for BWC initiatives
 - Dozens of recent and ongoing studies
 - 95% of large police departments intend to implement, have already piloted, or have fully operational BWC programs (Major Cities Chiefs and Major County

Sheriffs, 2015)





BWC Research

- Most early studies show that BWCs decrease use of force & citizen complaints (Lum et al, 2015; White, 2014)
- But, more recent randomized controlled trial (RCT) studies suggest no impact of BWCs on use of force (Ariel et al., 2016a, 2016b)
- Also, some police departments are concerned that BWCs will:
 - "... cause officers to be <u>less proactive</u> or more reluctant to initiate contacts with citizens, instead focusing most of their time on dispatched calls" (Ready & Young, 2015, p. 454)





Milwaukee and MPD

- City of Milwaukee
 - Largest city in WI, 30th in U.S.
 - 600,155 city residents
 - 3rd in violent crime among 50 largest cities (2015 UCR)
 - 3rd poorest among cities with 500K+ (2015 ACS)
- Milwaukee Police Department (MPD)
 - Largest police department in WI, 22nd largest in U.S. (2013 LEMAS)
 - 2,518 employees (UCR, 2015)
 - 1,886 police officers
 - 632 civilian members





Milwaukee SPI

- Background/context
 - A 2014 MPD officer-involved fatal shooting was main impetus for BWCs program
 - Other national incidents (Ferguson, Baltimore)
 expedited BWC policy exploration and development
 - Milwaukee joined SPI in October 2015
- Goals
 - Increase accountability
 - Aid investigation of violent crime





Timeline of BWC Deployment

Phase	Description	# of cameras	Districts targeted	Timeline
One	Pilot demonstration	180	2, 5, NTF*	Oct. 2015
Two	RCT of 504 officers	270	1, 2, 3, 4, 6, 7	Mar. 2016
Three	Those not in the study	280	1, 2, 3, 4, 5, 6, 7	Jun. 2016
Four (Final)	All patrol officers and sergeants will have BWCs	390	1, 2, 3, 4, 5, 6, 7, NTF*, others	Dec. 2016

NTF = Neighborhood Task Force





Current Study

- Preliminary results from RCT
- Administrative MPD data (Mar 21 Dec 31)
- Outcomes
 - Use of force incidents (y/n)
 - » Video available
 - » Type of force
 - » Resisting arrest
 - » Injuries to officer/suspect
 - » Race of suspect
 - Citizen complaints (y/n)
 - » Substantiated vs unsubstantiated
 - Number of proactive activities
- Methods
 - Chi-square tests, Poisson regression





RCT

- Phase 2 of BWCs deployment
- 504 officers (252 treatment & 252 control)
- Stratified random assignment by district, race (white/nonwhite) and shift (power/late/days/early)

	#	% of	#	#	RCT	% of
Dist.	Officers	MPD	\mathbf{BWCs}	Control	Sample	Sample
1	95	11.7%	30	30	60	11.9%
2	146	18.0%	40	40	80	15.9%
3	168	20.7%	52	52	104	20.6%
4	144	17.7%	46	46	92	18.2%
6	103	12.7%	34	34	68	13.5%
7	156	19.2%	50	50	100	19.8%
Total	812	100%	252	252	504	100%





Summary Statistics

Proactive activities per officer

	N	Percent
Use of force incidents per officer		
None	317	63%
One or more	187	37%
$Total\ incidents$	314	
Citizen complaints per officer None	474	94%
One or more	30	6%
$Total\ Complaints$	41	
	Mean	Std. Dev Min-Max

383.73



355.23



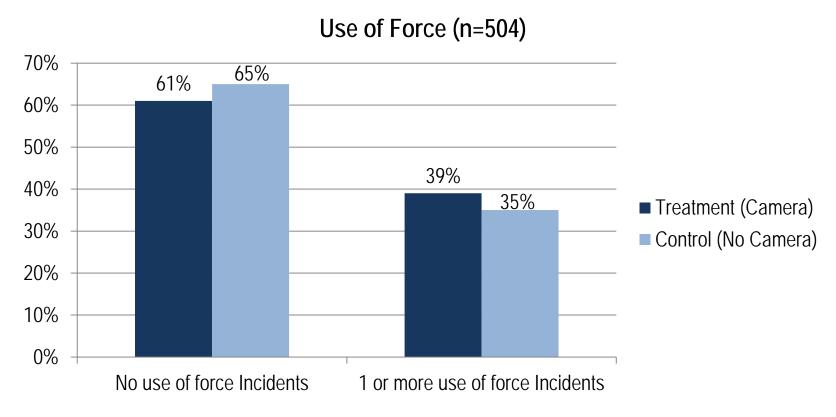
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Findings: Use of Force





Overall Use of Force



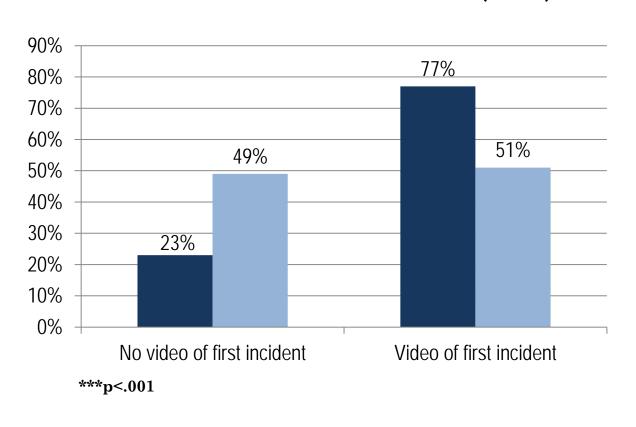
Not significant





Any Video of Incident

Video of Incident (n=311)***



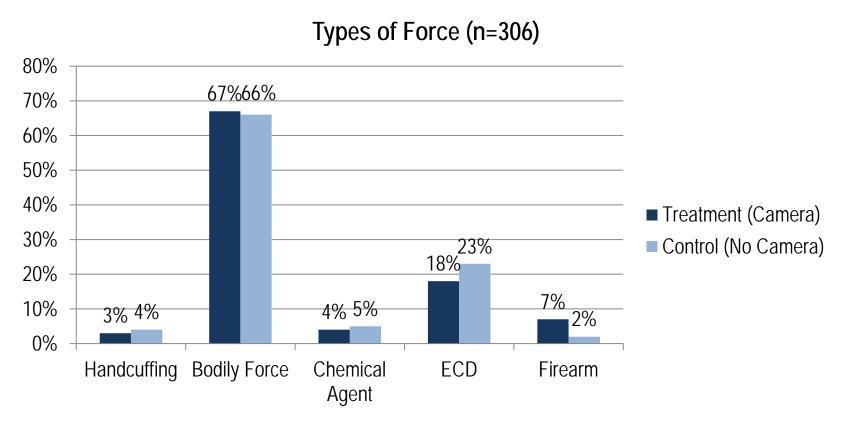
■ Treatment (Camera)

Control (No Camera)





Types of Incidents



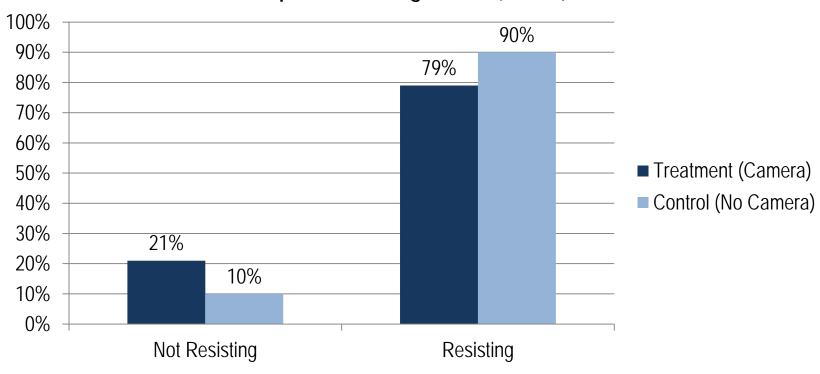
Not significant





Suspect Resisting Arrest

Suspect Resisting Arrest (n=295)**



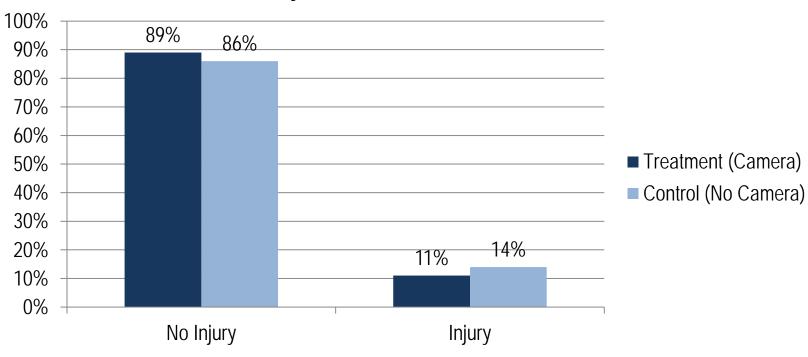
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Injuries to Police Officers

Injuries to Officers (n=313)



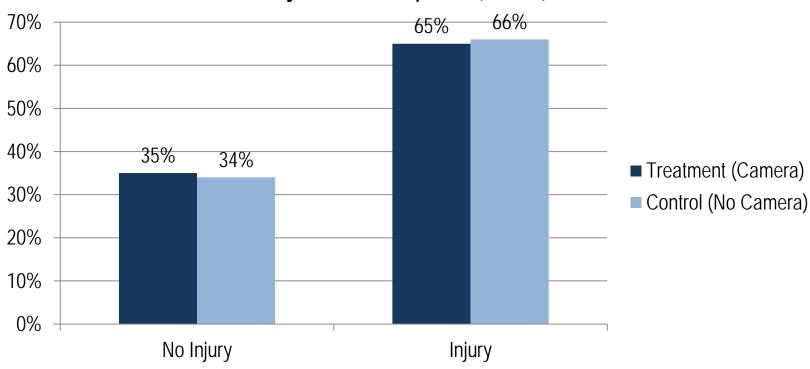
Not significant





Injuries to Suspects

Injuries to Suspects (n=306)

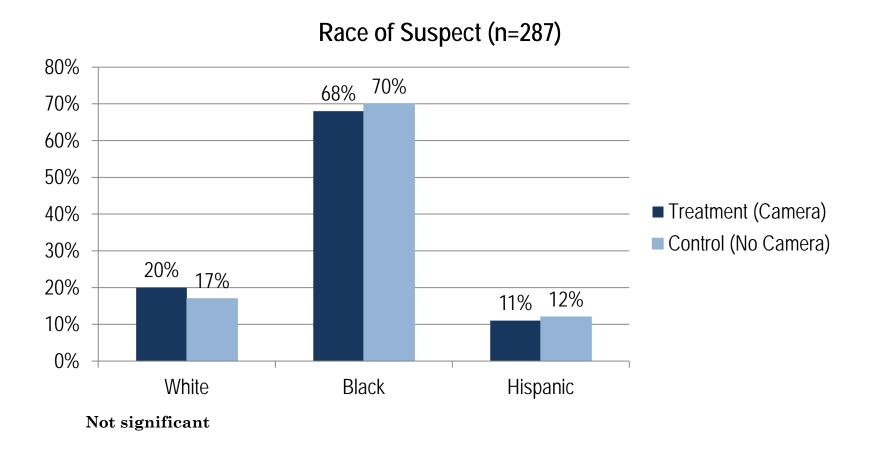


Not significant





Race/Ethnicity of Suspect







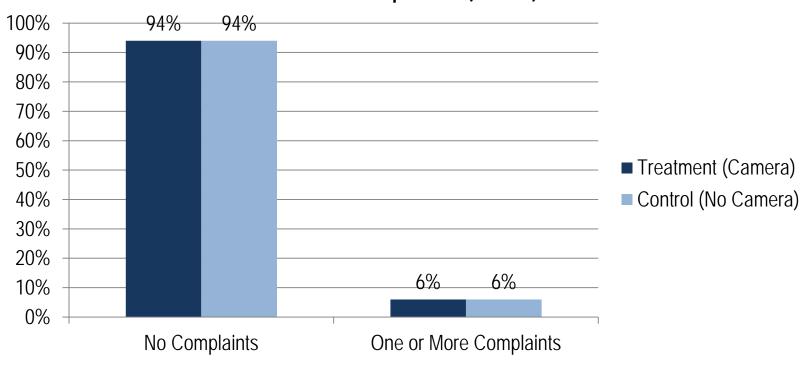
Findings: Citizen Complaints





Citizen Complaints

Citizen Complaints (n=504)



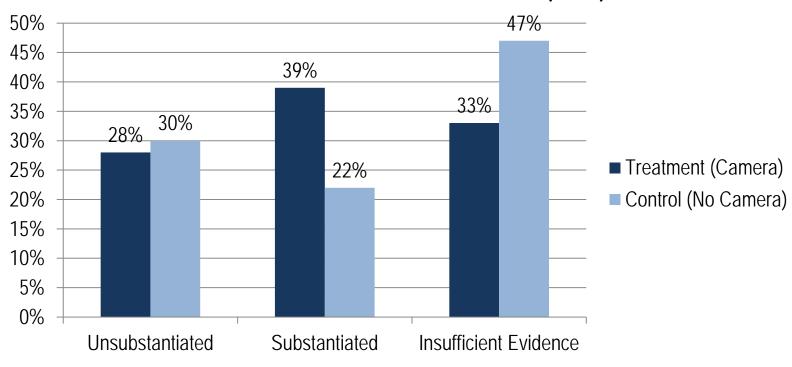
Not significant





Complaints Dispositions

Substantiated vs. Unsubstantiated (n=41)



Not significant





Findings: Proactive Activities





Proactive Activities

	Mean	
# proactive activities		
Control (no camera)	379	
Treatment (camera)	389	

	Coef. (IRR)
Poisson coefficient	0.03(1.03)***

N=504; *** p<.001





Discussion

- BWCs have no immediate impact on use of force (UOF)
 - Indicative of low baseline of UOF incidents
 - UOF has decreased last few years (MPD Annual Reports)
 - BWCs may document existing restraint
- Not enough data yet on citizen complaints
 - But provide more sufficient evidence
 - Complaints declined 75% from 2007-2015 (MPD Annual Reports)
- BWCs increased proactive policing activities
 - Wider acceptance as a policing tool
 - Increased confidence
 - Pressure to perform





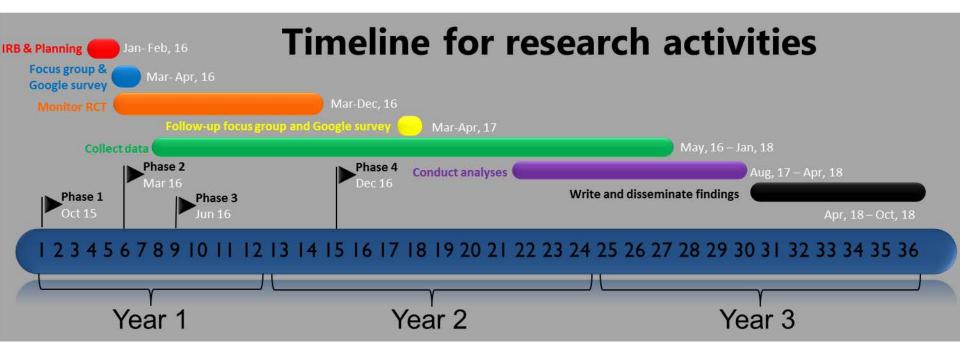
Next Steps for the Evaluation

- QED of department-wide rollout (n=~1,059)
 - Time varying treatment effect; panel model
 - ASC conference, Philadelphia 2017
- Follow-up focus groups, community surveys
- Examine contamination and diffusion of benefits
- Low-, medium-, and high-use officers
 - Camera metadata
- Cost-effectiveness analysis





Evaluation Timeline











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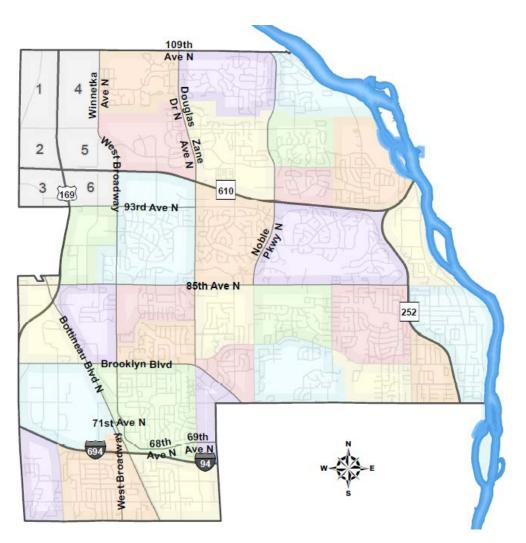
Collaborating with Communities

Brooklyn Park Police Department SPI

Inspector Bill Barritt

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Brooklyn Park



- 6th largest city in MN
- 26.57 square miles
- 78,000 people
- 1 in 4 speak a language other than English
- 52% are non-white
- 20% Immigrant
- Ave. # of police calls per year: 70,349
- 108 sworn officers





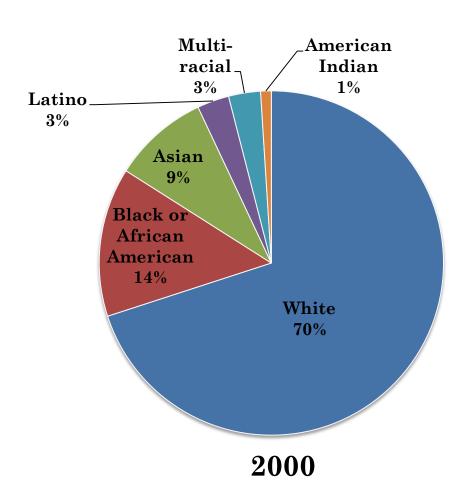


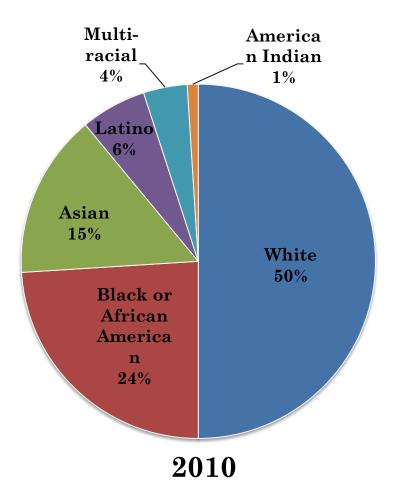
Brooklyn Park and Brooklyn Center have the largest concentrations of Liberians outside the Republic of Liberia. It's estimated that 10 percent of Brooklyn Park's residents are of Liberian descent.





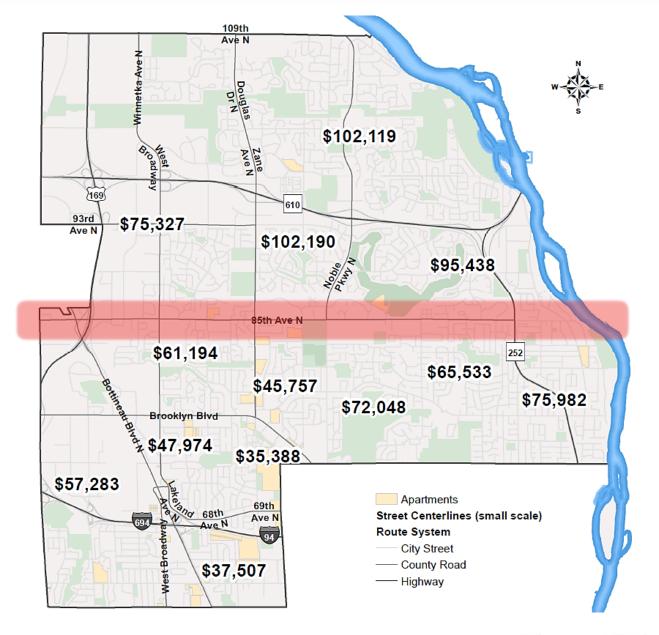
Demographic Changes







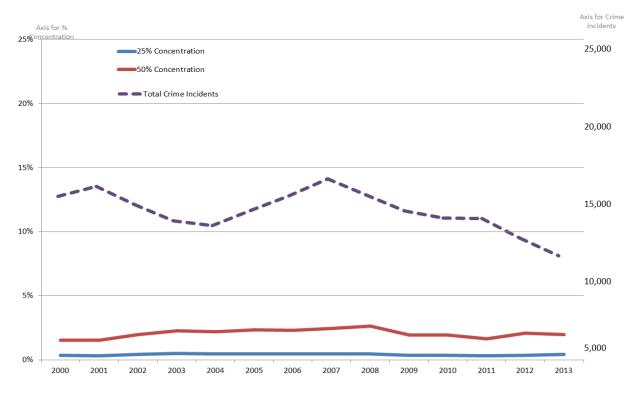








Crime Trend



- New initiatives began around 2007 when crime was at its peak
- During this time, BP's population was diversifying rapidly







Develop and implement programs, initiatives and units to engage and build trust with the rapidly diversifying community...

Department Operations

- Community Oriented Policing Services Unit (COPS)
- Community Response Unit (CRU)
- Crime Prevention Specialists
- School Resource Officers (SRO)
- Community Liaison
- Youth Violence Prevention Initiative (YVPI) /Zanewood Rec Center
- MAC (Multi-cultural Advisory Committee)
- NAP (Neighborhood Action Plan)/ NAB (Neighborhood Advisory Bulletins)
- Brooklyn Park HRC (Human Rights Commission)
- ACT assets coming together to take action





Liberian Women's Kickball







Cops & Kids Fishing

- Began in 2009
- 8th year, in partnership with local business















age.

Communicate.

Engage.











ACT: Project Background

- Initial conversation:
 - Crime prevention at a neighborhood level
 - Between Michael Davis and Professor David Weisburd in 2012
 - At the Harvard Executive Session on Policing and Public Safety.
- Funding through SPI awarded in winter of 2013
- Partnering with Center for Evidence-Based Crime Policy, George Mason University



ACT: The Study

Goal: Develop and test an innovative hot spots policing program that helps patrol officers build *collective efficacy*- "the willingness of individual to intervene on behalf of the common good"- at high crime locations during their discretionary time, which ultimately will reduce crime while helping residents trust and better engage with each other and the police.

Funding for 3 years with 3 phases:

- 1. Planning Phase (14 months)
- 2. **ACT** Intervention Phase (16 months)
- 3. Analyzation and Assessment Phase (10 months)





ACT: Building Collective Efficacy

- Asset Identification- identify assets at the hot spot level
- Coming together- build collaborations between residents to enhance informal social controls, identify neighborhood concerns & develop solutions

Taking action- police & residents to implement solutions & maintain relationships

Asset Coming together Taking action





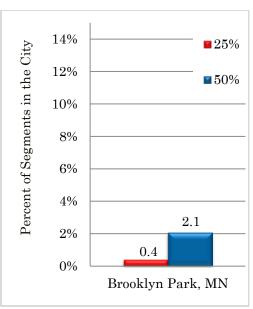


ACT: Why hot spots?

Law of Crime concentration (Dr. Weisburd)

- Research suggests that a substantial proportion of crime tends to concentrate at a small number of micro-places, e.g. single street blocks or apartment complexes
- BP has Around 3100 segments
 - 50% of crime occurs at 2.1% of street segments
 - 25% of crime occurs at .4% of street segments

Crime rates declined citywide but stayed consistent in hot spots.

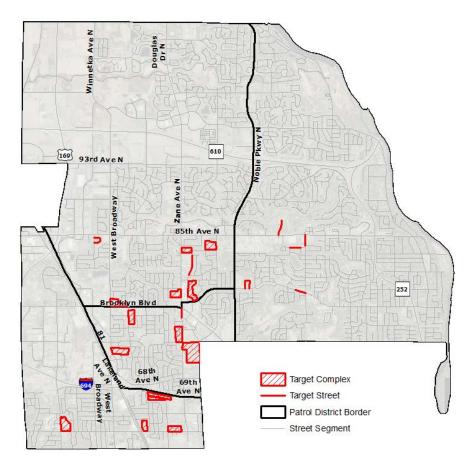






ACT: Implementation

- 42 hotspots identified & randomly allocated into treatment or control groups
 - ACT implemented in 21 treatment locations
 - 21 control groups receive regular police activities
 - Currently 8 months into the ACT implementation & intervention phase



Map depicts 21 treatment areas selected for intervention





84th Avenue Duplexes





- Identified assets /ambassadors
- Multiple successful neighborhood meetings
- Concerns: speeding, parking complaints, loud music
- Resident Action:
 - Created Facebook page to get to know each other
 - Calling officers directly when issues arise
- Police Action
 - Speed Study





Strawberry Commons Condominiums





- 40% Owners and 60% renters
- **Concerns:** board lacks accountability, possible bylaw infractions, and residents fearing retaliation if they report incidents.
- 2 neighborhood meetings held
- Resident Action:
 - create a committee, start a petition to

hold board accountable

- Police Action:
 - extra patrol and support





ACT: Where are we today?



115,200 minutes logged

1920 hours logged

647 hours of resident contact

747 hours of extra hot spot patrols

172 hours of resident meet and greets

153 hours of hot spot foot patrols

140 hours of data collection

21 hours of large community meetings

40 hours of smaller community meetings

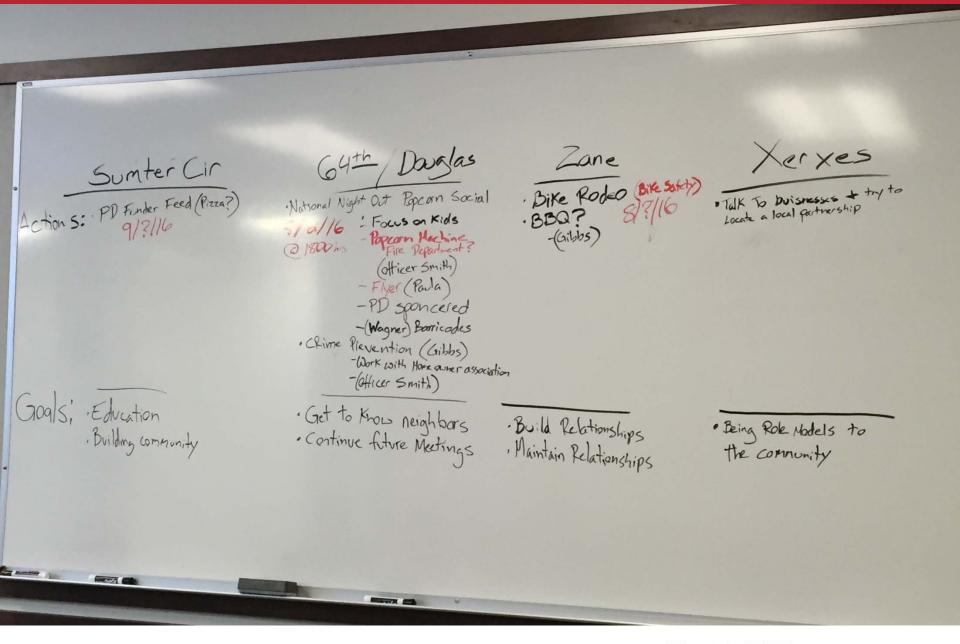


































Thank you!

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Officer Perceptions of Police Response to Mental Illness in Rural Communities

Sue-Ming Yang, Caitlin Kanewske, Charlotte Gill, & Paige St. Clair George Mason University



Academy of Criminal Justice Science, Smart Policing Panel

Project Team

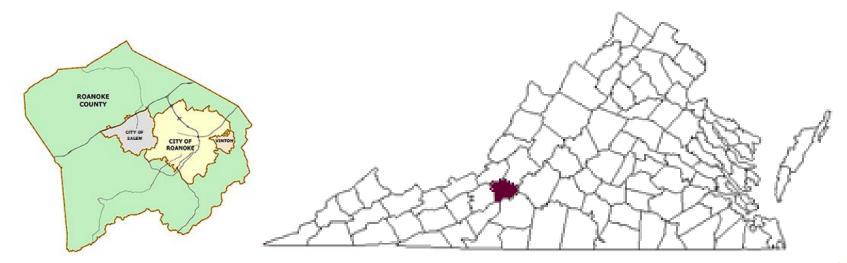
- The Roanoke County Police Department (RCPD)
- Intercept Youth Services
- The Center for Evidence-Based Crime Policy at George Mason University (CEBCP-GMU)





Roanoke County Police Department

- Primary law enforcement agency for County of Roanoke (VA), with concurrent jurisdiction within cities of Salem and Roanoke, and the town of Vinton
- Serving a population of 93,500
- 140 sworn officers (approx. 1.2 officers/1,000 citizens)







Trends in Mental Health-Related Calls

• Between 2010- 2015, RCPD responded to an average of 550 mental health-related calls for service per year.

Count of Call Types by Year

	2010	2011	2012	2013	2014	2015
ECO/TDO	358	391	386	285	286	301
Suicide Threats	85	66	56	32	33	34
Attempt Suicide	52	53	55	37	45	31
1096	28	67	110	136	182	191





Time Spent on Mental Health-Related Calls

- The average time an officer spent on an Emergency Custody Order (ECO) or Temporary Detention Order (TDO) call increased 43% from 2010 to 2015.
- Mental health-related calls for service accounted for approximately 24% of the Use of Force incidents in 2015.

Avg Time Spent on Calls by Year

7 kig Time Openic on Calls by Teal						
	2010	2011	2012	2013	2014	2015
ECO/TDO	3:14:10	3:07:11	3:01:25	3:12:51	4:02:22	4:39:45
Suicide Threats	0:49:48	0:57:51	0:44:54	0:47:20	0:35:21	0:48:59
Suicide Attempt	1:27:48	1:20:51	1:09:32	1:32:56	1:23:57	1:37:27
1096	0:38:20	0:30:39	0:24:31	0:35:42	0:30:15	0:30:39





Concentration of Mental Health-Related Calls

Spatial Concentration

- 26% of the mental health-related calls for service came from only 10 locations.
- Each of these locations had five or more calls in 2014.

Temporal Concentration

- 40% of the calls occurred between 15:00 and 21:00.
- 7% of the total calls occurred on Tuesdays between 14:00 and 19:00.





Police as the First Responders

- Due to the lack of resources, police tend to be the one to handle mental health-related problems in rural areas.
- Depends on the severity of the incident, police tend to handle mental health related calls with:
 - Crisis Intervention Team (CIT)
 - Emergency Custody Order (ECO) or Temporary Detention Order (TDO)
 - Making an arrest
- However, these tools do not really help the individual, their family, or the officers.





The Current Project

- The RCPD SPI develop and implement evidence-based interventions in an experimental context to enhance police response to people with mental illness.
- Establish partnership between RCPD, Intercept Youth Services, and CEBCP-GMU to evaluate the impacts of the program.
- Conduct the baseline survey to understand police perception before implementing the experiment.





Key Questions

- How do RCPD officers perceive mental health problems?
- Are officers satisfied with the current mental health treatment training and resources?
- What can we do to help police enhance the efficacy and efficiency of their efforts to help with an individual's mental health problem?





About the Survey

Purpose

- Understand the issue from a police perspective and provide a baseline for how officers think/feel about the issue.

• Sample Size

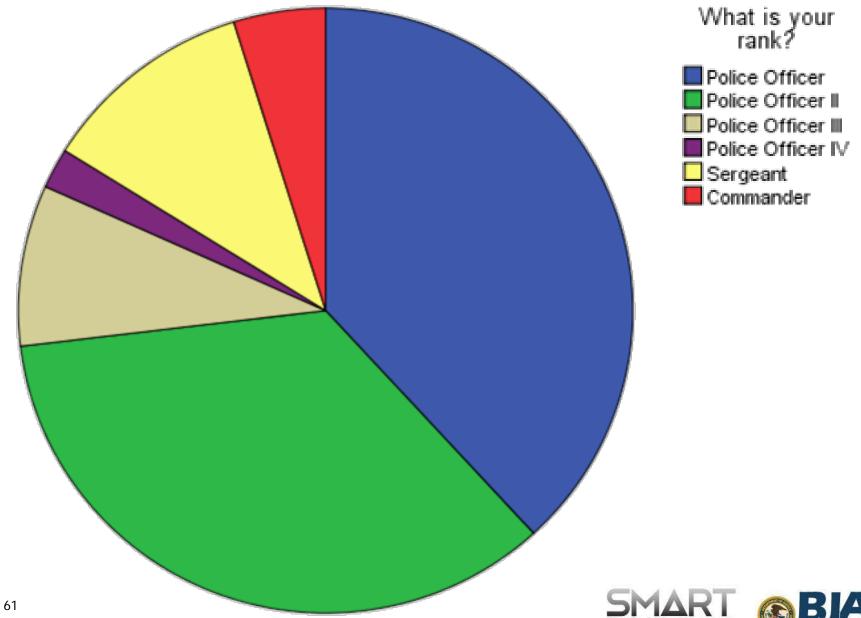
- Collected surveys from 73 respondents from Platoons A, B, and C.
 - Conducted February 24, 2016

Content

- Asked about their experiences of mental health calls, use of force, fear, satisfaction with current options and CIT, and attitudes about working with the mentally ill.









Frequency of encounters with individuals with mental health issues

Everyday	11 (15.1)		
Several times a week	33 (45.2)		
Once a week	15 (20.5)		
Several times a month	8 (11.0)		
Once a month	3 (4.1)		
Once every few months	2(2.7)		
Rarely/never	1 (1.4)		
Total	73 (100)		





Are you satisfied with the current options available to you for resolving calls that involve an individual with mental health issues?

	Frequency	Percentage
No	36	49.3
Yes	37	50.7
Total	73	100.0





Satisfaction by Rank or Tenure

- Breakdown the distribution by rank
 - 57.4% of officers with rank of Police Officer III or lower are satisfied with current options.
 - 9.1% of officers with rank of Police Officer IV or higher are satisfied with current options.
- Look at the distribution by tenure
 - Less than 1 year: 62.5% satisfied
 - Between 1 to 5 years: **56.7**% satisfied
 - Between 5 to 10 years: 50% satisfied
 - More than 10 years: 38.1% satisfied





Reasons for Dissatisfaction

- The time/resources consumed ("significant amount of time"; "sitting 8 hours")
- The deficiency in mental health "system" ("stop making law enforcement be therapist")
- The dissatisfaction with the ECO practice ("anyone can lie and obtain an ECO", ECO as "revolving door")
- The dissatisfaction with CIT training
- The lack of resources ("facilities/services the subject may need are unavailable")





Dissatisfaction with CIT

- While 74% of respondents reported receiving 40 hours or more training in CIT, about 40% of officers believed that the CIT training could be improved:
 - CIT training could be more scenario-based with scenarios that are more realistic and geared toward a policing perspective, specifically officer safety concerns
 - CIT training tends to be taught by counselors, not by law enforcement agents
 - CIT training should include more information on specific mental illnesses/disorders.

Attitudes About Working With The Mentally III

- 87.5% of responding officers strongly agree or agree that treatment can help individuals with mental health issues lead normal lives.
- 80.3% of responding officers strongly agree or agree that family members of individuals suffering from mental health issues lack sufficient information about resources to help themselves and their loved ones.
- 88.7% of responding officers strongly agree or agree that first responders have a duty to help individuals suffering from mental health issues and their families access information and resources.





Summary of Findings

- Issues related to resources/time-consumed (specifically the lengthy ECO process) are consistently the most common complaints across all tenure length groups.
- Issues related to repeat calls for service (i.e., repeat ECOs) also a common complaint across three of four groups (except for officers with less than 1 year).
- Officers with more than 5 years are more likely to mention deficiencies in the overall (i.e. statewide) mental health "system."
- At least one officer in every group (except for officers who have been on force for less than one-year) mentioned dissatisfaction with the over-reliance on police/law enforcement to fill the role of mental health provider/counselor.





Summary of Findings

- Officers with 10 years or more particularly dissatisfied with EOS personnel.
- Overall, officers agree that first responders have a duty to help individuals suffering from mental health issues to access information and resources and they believe that treatment programs could help those people to regain normal lives.









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Vulnerable Network Positions:

Predicting Victimization using Social Network Analysis (SNA)

Andrew M. Fox, Kenneth J. Novak, Joseph McHale

March 2017

This project was supported by Grant No. 2016-WY-BX-K001, awarded by the Bureau of Justice Assistance. The Bureau of Justice Assistance is a component of the Department of Justice's Office of Justice Programs, which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, the Office for Victims of Crime, and the Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking. Points of view or opinions in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice.

Prior SNA Findings

- Shootings are concentrated in small networks of people (Papachristos et al., 2015)
- Networks structure is related to delinquent and criminal behavior (McGloin, Haynie, Morselli).
- Gun violence can be explained by epidemiological processes
 - When someone in your network is shot, your risk increases temporarily (Green et al. 2017)





Current Study

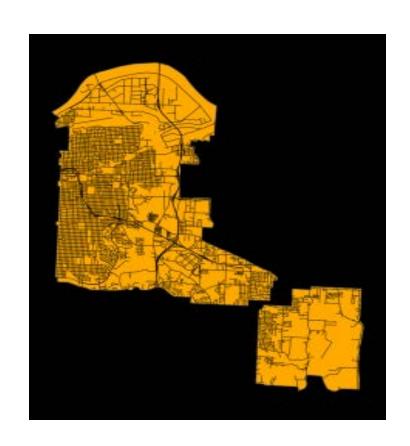
- Based on research and observations, central people in co-arrest networks seemed to be getting shot at a higher rate in Kansas City.
- Set out to formally test whether violent victimization can be predicted by network position.





Setting

- Kansas City, Missouri
- East Patrol Division
- 45.4 square miles
- Population 82,585
- 172 sworn law enforcement officers
- 44 homicides in 2015
- 70,000 calls for service







Data

- All arrests and FIF from 2014
 - Relational data constructed using 2014 data.
 Network characteristics calculated as key independent variables.
- Victimization data from all homicides and aggravated assaults from 2014 and 2015
 - Dependent variable.
- Age, Race, Sex as control variables





Descriptives

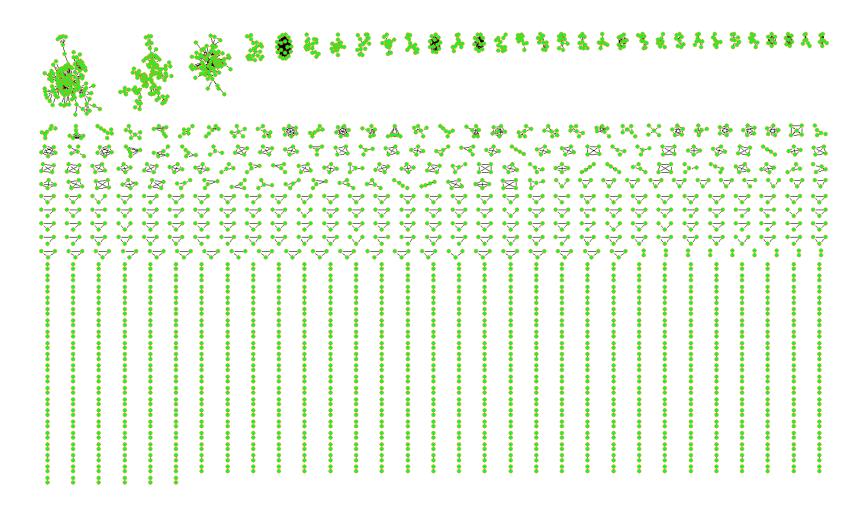
- 2014 Network (no isolates) = 2,828
 - 3,493 ties. Average degree of 2.47
- 345 (12.2%) were victims of an aggravated assault or homicide in 2014 or 2015.

- 54.7 % of network was Black
- 72.8 % of network was Male
- Mean age 35.11 (SD 12.49)





Full Social Network from 2014





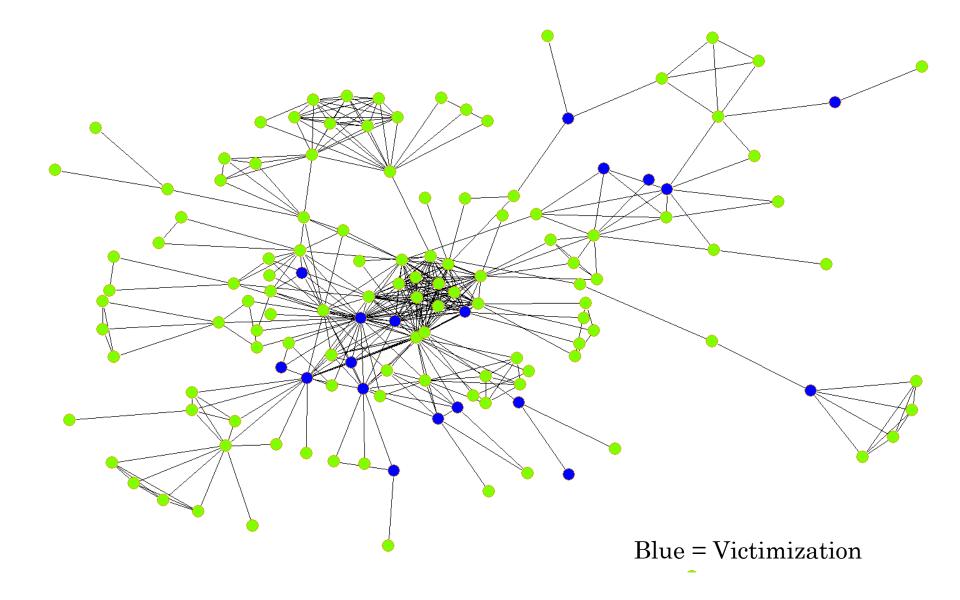


Findings

Table 1: Logistic Regression Predicting 2014 and 2015 Violent Victimization						
	Odds Ratio	Robust SE	p-value			
Top Betwenness						
Centrality	2.91	0.72	0.00	**		
Top Degree Centrality	0.82	0.19	0.42			
Black	0.77	0.13	0.10			
Female	1.19	0.21	0.32			
Age	0.99	0.01	0.41			
N	2,813					
Pseudo R2	0.022					
L(P)L	-644.02					
Robust standard errors f						
component.						
**p<.05						

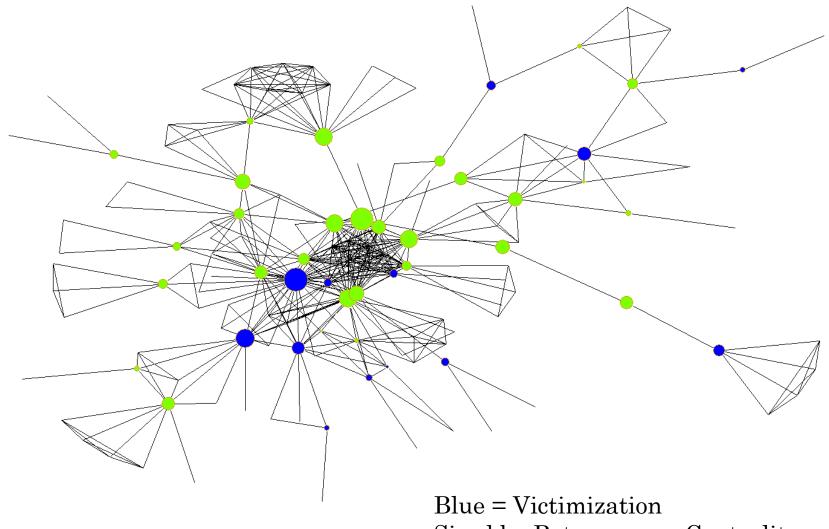


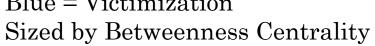
















Discussion – Research Implications

- Those with high betweenness centrality were significantly more likely to be victimized.
- Need to explore the vulnerable positions for increased interventions.





Discussion – Police

- Police can use data they have to inform where they spend their time and resources.
- Implications for effectiveness, efficiency, equity.





Discussion – Organizations

- Example of enlarging SNA's utility.
- Promotes sustainability of innovation.







Questions or Comments?



