AGENDA

THE CENTER FOR EVIDENCE-BASED CRIME POLICY

at

GEORGE MASON UNIVERSITY

presents an

EVIDENCE-BASED POLICING ADVANCED LEADERSHIP WORKSHOP

August 2012

www.cebcp.org

with support from

Bureau of Justice Assistance

Evidence-Based Policing Workshop

August 13, 2012: INNOVATION HALL 103, GEORGE MASON UNIVERSITY

8:30 AM	Registration and check in
9:00 AM	Welcome and introduction to the Workshop.
9:10 AM	The Matrix Demonstration Project Overview with examples from academies and field training. *Cynthia Lum (CEBCP-George Mason University), featuring demonstrations from Alexandria, VA, Police Department Field Training Division and the Baltimore City Police Department Academy*
9:40 AM	Policing places. *Christopher Koper (CEBCP-George Mason University)* The case of places method. *Cpt. Emmett Williams and Ofc. Thomas Neale (Richmond, VA, Police Department) and Sgt. Jeffery Egge (Minneapolis, MN, Police Department)*
10:30 AM	*10 minute break*
10:40 AM	Policing places, continued: Transitioning from place-based experiments to permanent deployment units. *Director Micheal Edwards, Jamie Roush, Sgt. Kelvin Anderson and Sgt. Steven Barriera (Jacksonville Sheriff's Office)*
11:20 AM	Police-led experiments and evaluations: Prospects and challenges. *Retired Chief Constable Peter Neyroud (University of Cambridge, UK) and Sgt. Renée Mitchell (Sacramento Police Department).*
12:00 PM	LUNCH (sponsored by the CEBCP and the Cochrane College for Policy)
1:00 PM	Using research evidence - from management to patrol: Challenges and prospects. Lessons learned from year 1 of the Matrix Demonstration Project. *Cynthia Lum (CEBCP-George Mason University)*
1:15 PM	Leadership roundtable and question and answer session regarding challenges of incorporating research into practice. *Hassan Aden (Alexandria PD), Micheal Edwards (Jacksonville Sheriff's Office), Janeé Harteau (Minneapolis PD), Mike Medaris (BJA's Smart Policing Initiative), Peter Neyroud (University of Cambridge), and Darrel Stephens (Major City Chiefs).*
2:30 PM	*Both workshops will join together in Innovation Hall 103 for the closing Keynote address (please see the main symposium agenda).*

THANK YOU

This free workshop is supported and made possible by George Mason University's Center for Evidence-Based Crime Policy and the U.S. Department of Justice's Office of Justice Programs, Bureau of Justice Assistance.

The speakers and presenters at today's workshop have volunteered their expertise and time, to once again create one of the most unique workshops for police leaders on evidence-based policing. The agencies and personnel that the CEBCP faculty and staff interact with for the Matrix Demonstration Project are committed to providing the access and resources that make police research possible. It is to all of you that we owe our continued success. Thank you especially to:

Alexandria, Virginia, Police Department
The Bureau of Justice Assistance, Department of Justice, Office of Justice Programs
Fairfax County, Virginia, Police Department
Jacksonville, Florida, Sheriff's Office
Minneapolis, Minnesota, Police Department
Sacramento, California, Police Department
Richmond, Virginia, Police Department

Finally, to all of the participants present today: This year, our participation in this workshop has increased by over 70%! It is your continued interest in evidence-based policing that makes our efforts worthwhile. We appreciate your time and welcome you to George Mason University!

The Center for Evidence-Based Crime Policy
Department of Criminology, Law & Society
George Mason University
Director: David Weisburd
Deputy Director: Cynthia Lum
www.cebcp.org

Filming today is provided by Synthesis Multimedia Productions
http://www.synthesismp.com/synthesis-multimedia-productions

TABLE OF CONTENTS

Organizations attending the policing workshop

Academy Investigative Psychology
AdvoCare, Inc.
Albemarle County Police Department
Alexandria Police Department
American University
Arlington County Police Department
BAE Systems
Baltimore City Police Department
Blacks in Law Enforcement of America
California University of Pennsylvania
City of Seattle
CSG Justice Center
Culpeper Police Department
DC Metropolitan Police Department
Department of Homeland Security
Department Of Youth Rehabilitation Services
Development Services Group
Executive Police Training LLC
Fairfax County Police Department
Fredericksburg Police Department
George Mason University
George Mason University - CEBCP
George Mason University Police
Henrico County Police Division
IMPACT International
International Association of Chiefs of Police
Jacksonville Sheriff's Office
Leesburg Police Department
Loudoun County Sheriff's Office
Major Cities Chiefs Association
Manassas City Police Department
Minneapolis Police Department
National African American Drug Policy Coalition
National Association of Criminal Defense Lawyers
Oak Park (IL) Police Department
Pennsylvania State Police
Police Executive Research Forum
Police Foundation
Pretrial Justice Institute
Prince William County Government
Prince William County Police Department
Richmond Police Department
Riley County Police Department
Roger Williams University
Sacramento Police Department
Safe Silver Spring
Spotsylvania County Sheriff's Office
SST, Inc. (ShotSpotter)
Stafford County Sheriff's Office
Temple University
University of Cambridge
University of Maryland
US Government Accountability Office
USDOJ - Bureau for Justice Assistance
USDOJ - National Institute of Justice
USDOJ - Office of Community Oriented Policing Services
USDOJ - Office of Justice Programs
USDOJ - Office of Juvenile Justice and Delinquency Prevention
USDOT - National Highway Traffic Safety Administration
Vera Institute of Justice
Westwood College

PRESENTERS

HASSAN ADEN, Alexandria Police Department. Deputy Chief Hassan Aden serves with the Alexandria Police Department in Virginia, and was appointed Deputy Chief in 2009. He joined the APD in 1987 and has held numerous administrative, investigative and operational assignments at the Department, working with questions such as crime control policies and strategic planning. Deputy Chief Aden is currently assigned as the Patrol Operations Bureau commander. He and his staff are deeply committed to community partnerships aimed at improving the quality of life in areas affected by crime. He is a graduate of American University's Institute for the Study of Public Policy Implementation (ISPPI) from which he earned a Master of Public Administration Certificate in 2007. In December 2009, he graduated from American University's School of Public Affairs earning a Master of Public Administration (MPA) degree. He is a member of the International Association of Chiefs of Police as well as the Police Executive Research Forum (PERF), and has completed the Senior Management Institute at PERF. He also serves as a team leader for the Commission on Accreditation for Law Enforcement Agencies (CALEA).

KELVIN T. ANDERSON, Jacksonville Sheriff's Office. Kelvin T. Anderson is a Sergeant of the Jacksonville, Florida Sheriff's Office (JSO) currently assigned to Operation Safe Streets Problem Solving. In this assignment he leads and teaches his assigned squad different approaches to addressing violent crime in designated hot spots. A 16 year veteran of the JSO, Sergeant Anderson has extensive years as an investigator including serving two years on each of the Alcohol, Tobacco and Firearms (ATF) and Federal Bureau of Investigations (FBI) task forces. Sergeant Anderson also functioned as a tactical operator on JSO's Special Weapons and Tactics (SWAT) team for seven years. Formerly he worked for the Department of Corrections as a Probation and Parole Officer. He is a certified law enforcement instructor and Crime Prevention through Environmental Design (CPTED) Practitioner. Sergeant Anderson holds a Bachelor of Science in Political Science and Public Administration from Florida Agricultural and Mechanical University.

STEVEN BARRIERA, Jacksonville Sheriff's Office. Steven J. Barreira is a Sergeant of the Jacksonville, Florida Sheriff's Office (JSO) currently assigned to Operation Safe Streets Problem Solving. In this assignment he develops and implements innovative problem solving strategies to address violent crime in designated hot spots. An 18 year veteran of the JSO, Sergeant Barreira has extensive experience in the Department of Patrol and Enforcement including serving four years on the Community Oriented Policing Strategy (COPS) unit. He is a certified Crime Prevention Through Environmental Design practitioner and member of the Florida Design Out Crime Association. Sergeant Barreira is a certified firearms instructor and an assessor for the Commission for Florida Law Enforcement Accreditation. Sergeant Barreira holds an Associate in Science in Criminal Justice and is currently completing his Bachelor of Arts in Criminal Justice from St. Leo University. He was selected in 2011 as a member of "Who's Who of American Colleges."

MICHEAL EDWARDS, Jacksonville Sheriff's Office. Micheal Edwards is a 28 year veteran of the Jacksonville Sheriff's Office (JSO) and was appointed to the position of Director in 2003. He has served as Director of the Departments of Personnel and Professional Standards, Investigations and Homeland

Security, and currently Patrol and Enforcement. He joined the Jacksonville Sheriff's Office as a corrections officer in 1983, moving into patrol in 1984. Edwards has served in many different units in the agency, including in patrol, inspections, and the traffic/special enforcement divisions. Director Edwards holds a Master's Degree in Public Administration from Central Michigan University, a Bachelor of Science Degree in Human Services form Thomas Edison State College, an Associate of Science Degree in Criminal Justice from Florida State College at Jacksonville and an Associate of Arts Degree in General Education also from Florida State College at Jacksonville. He is a decorated officer and has received numerous honors including the YMCA Black Achievers Award, 1997, and will be inducted into the CEBCP's Evidence-Based Policing Hall of Fame at its 2012 awards ceremony.

JEFFERY EGGE, Minneapolis Police Department. Sergeant Jeffery Egge is supervisor of the Crime Analysis Unit and coordinator of the Minneapolis Police Department's (MPD) version of COMPSTAT and has been leading the transition towards a more evidence-based focus in the department. Through the use of research and experimentation with place-based future-oriented analysis, the MPD is continuing the hot spots legacy of Sherman and Weisburd in Minneapolis. Jeff was a 2010 Fellow at the Police Executive Research Forum. He has a Master's Degree in Police Leadership and Education from the University of St. Thomas, and a Bachelor's Degree in Organizational Management from Concordia University. Jeff is a 16-year veteran of the MPD and was previously a Manager of Loss Prevention and Regional Investigations Specialist for Dayton-Hudson Corp. (later Target).

JANEÉ HARTEAU, Minneapolis Police Department. Janeé Harteau joined the MPD in February of 1987 and is currently the Assistant Chief of Police, but has been formally nominated to replace outgoing Chief Tim Dolan in January 2013. She has worked her way through the ranks, beginning as a patrol officer in both north and south Minneapolis, a hostage negotiator in SWAT, and a supervisor of the Street, Narcotics, Organized Crime and the Gang Unit as well as Crime Lab and the Licensing Unit. In April of 2006 she was appointed as the Inspector of the First Precinct where she worked to formalize the SafeZone collaborative and served as the first president of its board of directors until July of 2009. Prior to becoming the Assistant Chief in December of 2010, Harteau was the Deputy Chief of the Patrol Bureau where she has been responsible for all Minneapolis Police Department 911 response personnel and the department's emergency services units. Assistant Chief Harteau holds a Bachelor's Degree in Police Science and a Master of Arts in Public Safety Administration; both from St. Mary's University of Minnesota. Currently she trains law enforcement leaders nationally for Northwestern University's Center for Public Safety and is an Assistant Professor at St. Mary's University of Minnesota in the School of Police Science. She is a graduate of the Senior Management Institute of Police in Boston, MA and the Northwestern University Center for Public Safety's Police Staff and Command School where she was the Franklin Kreml Leadership Award winner in 2005.

CHRISTOPHER KOPER, George Mason University. Christopher Koper is an Associate Professor with the Department of Criminology, Law and Society at George Mason University. He is also a senior fellow and co-director of the evidence-based policing research program in Mason's Center for Evidence-Based Crime Policy. Dr. Koper holds a Ph.D. in criminology and criminal justice from the University of Maryland and has worked for several research organizations and universities, including the Police Executive Research Forum (where he served as the Director of Research), the University of Pennsylvania, the Urban Institute, the RAND Corporation, and the Police Foundation. His research on policing includes

studies of hot spots policing, community and problem-oriented policing, strategies to reduce gun violence, law enforcement technology, policing of immigrant communities, hiring and retention, the federal COPS program, and the institutionalization of evidence-based practices. He is the co-developer of the Evidence-Based Policing Matrix and serves as the co-principal investigator of the Matrix Demonstration Project.

CYNTHIA LUM, George Mason University. Dr. Cynthia Lum is the Deputy Director and Associate Professor of the Center for Evidence-Based Crime Policy in the Department of Criminology, Law and Society at George Mason University. She researches primarily in the area of policing and security. Her works in this area have included evaluations of policing interventions for crime prevention effectiveness, examining place-based determinates of street-level police decision-making, understanding the relationship between technology and policing, and assessing airport security efforts by the TSA. With Dr. Christopher Koper and Cody Telep (both of George Mason University) she has developed the Evidence-Based Policing Matrix, a translation tool designed for police practitioners to better institutionalize and utilize research on "what works" in policing into their strategic and tactical portfolio.

MIKE MEDARIS, Bureau of Justice Assistance, Department of Justice. Michael Medaris is Senior Policy Advisor for Law Enforcement within the Department of Justice's Bureau of Justice Assistance and has over 23 years of local and federal law enforcement experience. He currently oversees drug task force training and technical assistance programs and initiatives to improve homicide clearance rates; manages the Department's new Smart Policing Initiative and BJA's Law Enforcement Forecasting Group. He retired from the Washington D.C. Metropolitan Police Department at the rank of Captain to take a position with the Federal Bureau of Investigation as a training instructor. While on the department he was a member of the hostage rescue unit for 14 years and managed department elements responsible for conducting patrol operations and criminal and narcotics investigations. He also served as the original commander of the interagency Washington D.C. Weed and Seed Task Force. Mr. Medaris has received the National Performance Review Hammer award in recognition of his program development activities; the Assistant Attorney General's Award for Excellence for his work on information sharing issues and is a past member of the American Delegation to the Interpol Standing Working Group on Crimes against Minors. He is a graduate of the 161st session of the FBI National Academy.

RENÉE MITCHELL, Sacramento Police Department. Sergeant Renée J. Mitchell has worked for the Sacramento Police Department for the last fourteen years and is currently a Police Sergeant in the Court Liaison Unit. She has a Bachelor of Science in Psychology from the University of California, Davis, a Master of Arts in Counseling Psychology from the University of San Francisco, a Master of Business Administration from the California State University, Sacramento and a Juris Doctorate from the University of the Pacific, McGeorge School of Law, where she was awarded an academic scholarship. She was the 2009/2010 Fulbright Police Research Fellow where she completed research in the area of juvenile gang violence at the London Metropolitan Police Service. She recently ran a department-led randomized control trial in hot spot policing employing the Koper Curve theory with promising results. She is a member of the California Bar Association.

THOMAS NEALE, Richmond City Police Department. Thomas Neale serves as a police officer in the 4th Precinct of the Richmond City Police Department. He is currently assigned as the place-based detective

for the Matrix Demonstration Project Case of Places demonstration. Officer Neale has served for five years in the RPD. He is an alumnus of George Mason University (B.A., Sociology, 2008) and is attending graduate school at Virginia Commonwealth University.

PETER NEYROUD, University of Cambridge, United Kingdom. Peter Neyroud was the Chief Executive of the National Policing Improvement Agency (NPIA) in the United Kingdom until his retirement in December 2010. He was previously Chief Constable of Thames Valley Police from 2002 and Vice-President of the Association of Chief Police Officers (ACPO) with responsibility for the NPIA and the reform of ACPO. In 2011 he was named a Most Excellent Commander of the Order of the British Empire (CBE). He has an Honours Degree in Modern History from Oriel College, Oxford University, an MSc in Professional Studies (Crime and Policing) from Portsmouth University and diplomas in Applied Criminology (University of Cambridge) and Business Excellence. He retired from the police service in December 2010 to move to Cambridge University, where he is doing research on crime harm. His last piece of work in policing was a "fundamental review of Police Leadership and Training" for the Home Secretary, which was published in April 2011. Peter is a member of the CEBCP's Evidence-Based Policing Hall of Fame and was awarded the Distinguished Achievement Award in Evidence-Based Crime Policy from the CEBCP in 2011.

JAMIE ROUSH, Jacksonville Sheriff's Office. Jamie L. Roush is the Crime Analysis Unit Manager for the Jacksonville Sheriff's Office (JSO), the consolidated law enforcement agency for Jacksonville, Florida. In her current assignment she manages three Public Safety/Crime Analyst Supervisors and 16 Public Safety/Crime Analysts. She is responsible for assisting in the development of the strategic goals and objectives of the Unit and properly equipping analysts with tools for success in terms of formal and informal training and technical resources. During her tenure Ms. Roush has also completed tactical, investigative, and administrative analysis in support of a multitude of units within the JSO and external federal, state and local law enforcement partners. She is the North Florida Assistant Program Director for the Orange County Sheriff's Office Crime Analysis Training and Mentoring Program (CAMP) where she assists with and provides training to law enforcement analysts. Ms. Roush is an author of multiple articles on crime analysis and frequent speaker at law enforcement conferences. Ms. Roush holds a Master of Science in Social Science and a Bachelor of Arts in Geography from The Florida State University. Ms. Roush is a member of the International Association of Chiefs of Police (IACP) and International Association of Crime Analysts (IACA). She is also an assessor for the Commission for Florida Law Enforcement Accreditation.

DARREL STEPHENS, Johns Hopkins University and Major City Chiefs Association. Darrel Stephens is currently on the faculty in the Division of Public Safety Leadership at Johns Hopkins University. He also serves as the Executive Director of the Major Cities Chiefs Association. He has served over 40 years as a police officer and at the executive level. He is most recently retired as the Chief of Police for the Charlotte Mecklenburg Police Department, where he served from 1999 to 2008. Prior to his service in Charlotte-Mecklenburg, he served as Chief of Police and City Administrator for the City of St. Petersburg, Florida (1992 – 1999), Executive Director of the Police Executive Research Forum (1986 – 1992), Chief of Police for Newport News, Virginia (1983- 1986), Chief of Police for Largo, Florida (1979 – 1983), Assistant Chief of Police for Lawrence Kansas (1976 – 1979) and rose through the ranks from officer to commander in the Kansas City, Missouri Police Department from 1968 to 1976. Mr. Stephens was

inducted into the Evidence-Based Policing Hall of Fame in 2010 and is the recipient of CEBCP's Distinguished Achievement Award in Evidence-Based Crime Policy.

EMMETT WILLIAMS, Richmond Police Department. Emmett Williams is a captain with the Richmond Police Department, where he has served for 26 years. He currently is the commander of the Major Crimes Division, which oversees all violent crime investigations including homicide, aggravated assault, forensics, youth and family crimes, arson and the fugitive task force units. His law enforcement and supervisory experience include field operations, property crime and violent crime investigations, tactical drug enforcement, and organized crime. He holds a bachelors degree in Criminal Justice from Kaplan University. His areas of interest are violent crime, fear of crime and perceived risk of victimization.

The Evidence-Based Policing Hall of Fame

Nominations can be made at http://gemini.gmu.edu/cebcp/HallofFame.html

2010 INDUCTEES

Deputy Chief Hassan Aden, Alexandria (VA) Police Department
Chief (ret.) James Bueermann, Redlands (CA) Police Department
Commissioner Edward Davis, Boston (MA) Police Department
Chief Dan Flynn, Marietta (GA) Police Department
Assistant Commissioner Peter Martin, Queensland (Australia) Police Service
Chief Constable (ret.) Peter Neyroud, National Policing Improvement Agency (UK)
Commissioner Charles Ramsey, Philadelphia (PA) Police Department
Chief (ret.) Darrel Stephens, Charlotte-Mecklenburg (NC) Police Department

2011 INDUCTEES

Chief (ret.) Frank Gajewski, Jersey City (NJ) Police Department
Sir Denis O'Connor, Her Majesty's Chief Inspector of Constabulary (UK)
Deputy Commissioner Ian Stewart, Queensland (Australia) Police Service
Hubert Williams, President, Police Foundation and Newark (NJ) Police Department (ret.)

2012 INDUCTEES

Chief (ret.) Anthony Bouza, Minneapolis (MN) Police Department
Chief Theron Bowman, Arlington (TX) Police Department
Director Micheal Edwards, Jacksonville (FL) Sheriff's Office
John Kapinos, Fairfax County (VA) Police Department
Acting Assistant Chief Constable Mark Newton, British Transport Police
Jamie Roush, Jacksonville (FL) Sheriff's Office
Chief Rick Tanksley, Oak Park (IL) Police Department

TAB 1 DIVIDER HERE

BACK OF TAB 1 DIVIDER

The Center for Evidence-Based Crime Policy
welcomes you to the

2012 Evidence-Based Policing Leadership Workshop
Translating Research into Daily Police Practice

With support from:

The Bureau of Justice Assistance & George Mason University

Matrix Demonstration Project
Institutionalizing research into practice

Cynthia Lum and Christopher Koper (PIs),
Cody Telep, Julie Hibdon, Julie Grieco (Research Team)
Center for Evidence-Based Crime Policy

Evidence-Based Policing

"Police practices should be based on scientific evidence about what works best."

Lawrence Sherman, 1998

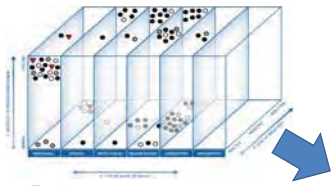
Evidence-Based Policing, cont.

1. Policies and practices reflect crime prevention principles derived from rigorous research.
2. Some decisions include and incorporate knowledge from research and scientific processes.
3. Research and analysis is "a part of the conversation" when police practitioners strategize about crime prevention.

Evidence-Based Policing, cont.

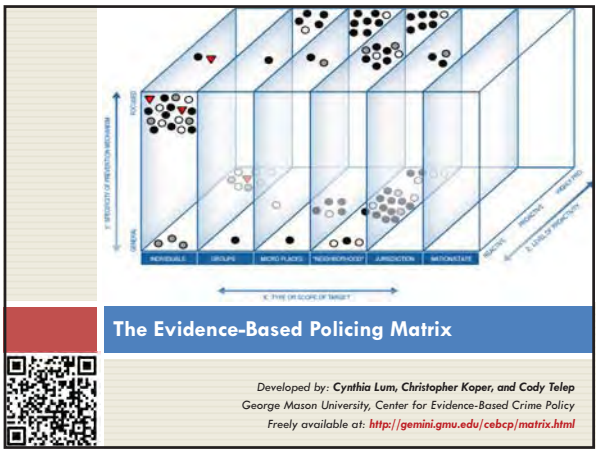
- Research on its own ("supply") cannot achieve evidence-based policing.
- Evidence-based policing is about research USE ("demand").
- In order for supply to meet demand two things are needed:
  - Translating research into practical applications.
  - Institutionalizing its use into regular operations.

Ideas reflect evolution of the Matrix Project



The Matrix

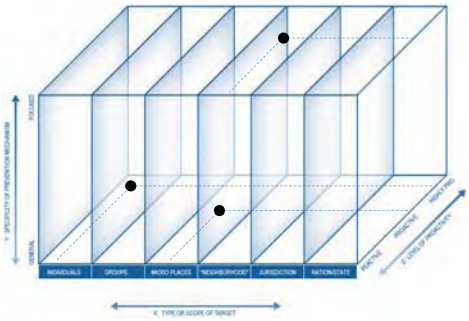
The Matrix Demonstration Project

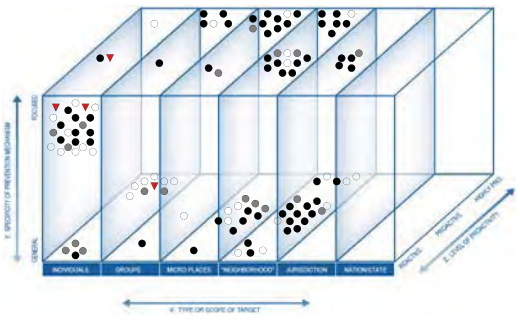


The Evidence-Based Policing Matrix

Developed by: ***Cynthia Lum, Christopher Koper, and Cody Telep***
George Mason University, Center for Evidence-Based Crime Policy
Freely available at: ***http://gemini.gmu.edu/cebcp/matrix.html***

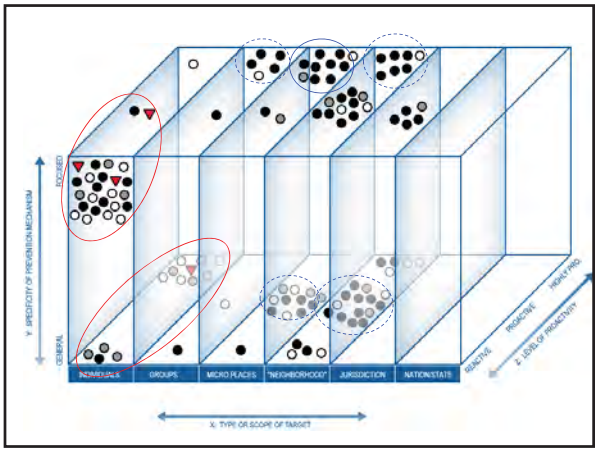
The Evidence-Based Policing Matrix





▼ Significant Backfire ○ Non-Significant Finding ● Mixed Results ● Significant /Effective

THE EVIDENCE-BASED POLICING MATRIX (updated June 2012)



What do we know from this research?

- **78%** of successful interventions are either "proactive" or "highly proactive", rather than reactive.
- **65%** of successful interventions are "focused", or tailored strategies rather than general in nature.
- **67%** of successful interventions studied are those that address problem places (not necessarily people).

Updated June 2012

Officers are more effective when they are proactive, not reactive.

- Heavily relying on responding to calls for service or making arrests will not reduce or prevent crime alone.
  - 40-80% of an officer's time is "non-committed" to calls for service or arrest.
- Proactivity means anticipating crime, disorder and other problems before they happen using crime analysis.
- Proactivity means addressing the cause of a pattern of crimes, not just responding to a single crime.

Officers are more effective when they focus and tailor their actions to problems.

- Understanding the specific problem at hand.
- Different problems have different solutions, tactics, strategies, although problems cluster and are predictable.
- Evaluations and police research can provide ideas about how to respond and assess responses.

Police can be very effective if they focus on places, not just on people.

- Directed patrol at crime hot spots is one of the most strongly supported police interventions.
- Most police strategies (arrest, response to 911) are individual-oriented.
- Officers with a more balanced approach to policing both individual offenders and places can be more effective.

The million dollar question:

"Okay… but HOW do we incorporate these ideas into daily practices, if most policing systems and standard operating procedures are counter to these principles?

THE DEMONSTRATIONS

Institutionalizing knowledge into existing law enforcement practices and systems

Five areas for institutionalizing evidence

1. Professional development: Academy and field training
2. Deployment: Patrol and Investigations
3. Accountability systems: Promotions and assessment
4. Management and leadership: COMPSTAT
5. Planning, research and crime analysis

Guiding Principles of the MDP

1. Each project focuses on creating a permanent change by converting an existing infrastructure or operation.
2. Each project is anchored by good quality research evidence on police practices, but this anchor may not be visible or obvious.
3. Each demonstration will be documented with tangible materials, for other agencies to access.

Two Demonstrations/Examples

Incorporating evidence into academy training

Converting existing field training activities to reflect the evidence

Building foundations: Academy training

Why isn't research evidence about fair and effective policing regularly incorporated into academy training for entry-level law enforcement officers?

Institutionalizing EBP into academies

1. Principles of effective policing must be taught.
2. Must look like other modules.
3. Should be freely available and legitimate.
4. Needs to provide concrete examples for the entry-level officer to be useful.

Building Foundations: Field Training

Why isn't research evidence about fair and effective policing regularly incorporated into field training for entry-level law enforcement officers?

Adjusting activities within field training

- Example 1: Beat checks
- Example 2: Assisting other officers/jurisdictions
- Example 3: Case investigations

Transforming performance measures for field training

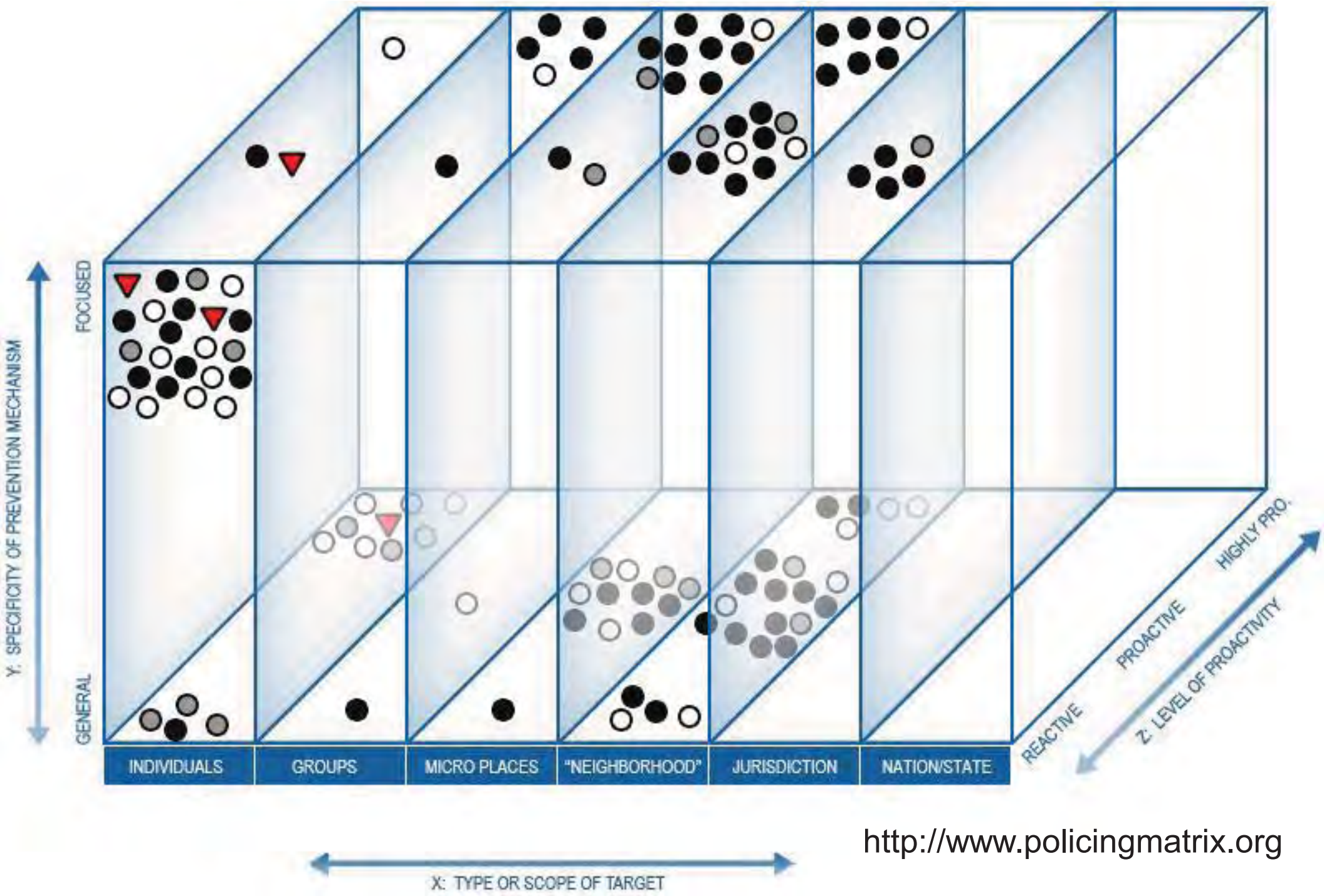
- Example 1: Motor vehicle operation
- Example 2: Orientation and geography
- Example 3: Telecommunication skills

Matrix Demonstration Project

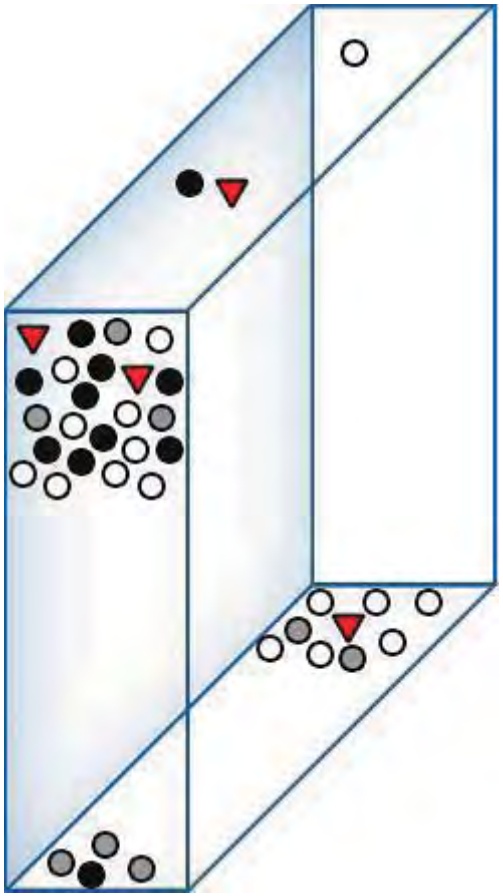
Institutionalizing research into practice

Cynthia Lum and Christopher Koper (PIs),
Cody Telep, Julie Hibdon, Julie Grieco (Research Team)
Center for Evidence-Based Crime Policy

The Evidence-Based Policing Matrix



http://www.policingmatrix.org



Individuals –Interventions which target distinct individuals or certain types of individuals such as violent youths, repeat offenders, sex offenders, or drunk drivers.

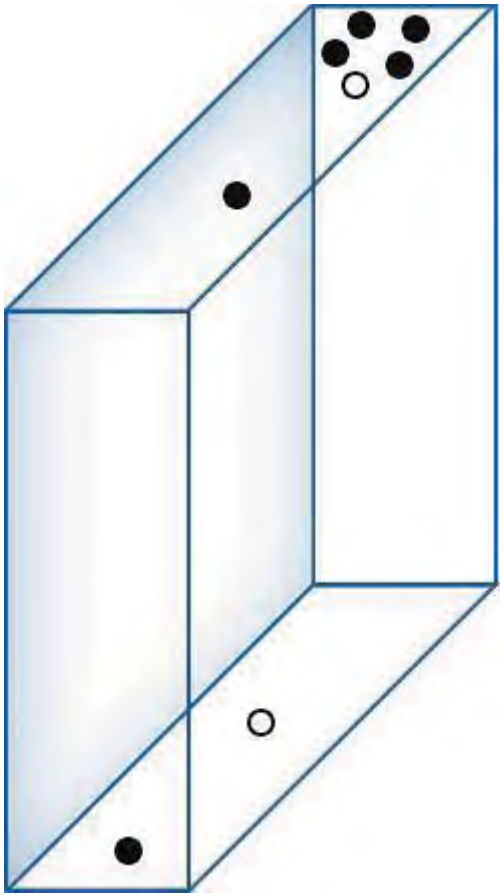
Author (Year)	Intervention	Result	Rigor	Y-Axis	Z-Axis
Abrahamse et al. (1991)	Post-arrest case enhancement of repeat offenders increased odds of arrestees being incarcerated	●	VR	F	R
Berk et al. (1992)	Arrest of spousal abusers reduced recidivism	●	VR	F	R
Casey et al. (2007)	Domestic violence victims receiving home visits have significantly less calls for service than comparison group	●	M	F	R
Cho & Wilke (2010)	Arrest of intimate partner violence perpetrators associated with reduced victimization compared to non-arrest	●	M	G	R
Dunford (1990)	Arrest warrant for domestic violence suspect reduced absent offender recidivism 50%	●	VR	F	R
Jolin et al. (1998)	Domestic violence unit designed to increase arrests and prosecutions of offenders and provide follow-up victim empowerment services associated with decline in victim-reported subsequent violence	●	VR	F	R
Knoxville P.D. (2002)	Police-probation collaborative program participants more likely to successfully complete probation	●	M	F	R
Martin & Sherman (1986)	Targeted offenders in selective apprehension program more likely to be arrested, convicted, and incarcerated	●	R	F	R
Sherman & Berk (1984)	Arrest condition for domestic violence associated with significantly less offender recidivism compared to separation and mediation.	●	R	F	R

Spergel et al. (2002)	Comparison of 258 program juveniles with 96 comparison youth from showed the program youth had arrest levels 18 percent lower than the comparison youth over a 4-year period.	●	M	F	P
Worrall & Gaines (2006)	Police/probation officer partnership for juvenile offenders associated with citywide reductions in assault, burglary, and theft arrests	●	M	F	R
Esbensen (2002)	Students in Gang Resistance Education and Training (G.R.E.A.T.) program were less likely to join gangs in cross-sectional study. The longitudinal study, however, failed to find a programmatic effect.	○	M	G	HP
Friday et al. (2006)	Specialized domestic violence unit reduced the number of suspects who reoffended but did not reduce the number of repeat offenses by those who did reoffend compared to the suspects processed by regular patrol units.	○	M	F	R
Harmon (1993)	Those that receive D.A.R.E. significantly less likely to start using alcohol in year after program; no impact on cigarette or marijuana use	○	M	G	HP
McCold & Wachtel (1998)	Violent offenders in restorative justice program have lower recidivism rates, but this is a selection effect, not a treatment effect; no difference among property offenders	○	VR	G	R
Pate & Hamilton (1992)	Arrest for domestic violence had a deterrent effect for employed offenders, but increased recidivism among unemployed offenders	○	R	F	R
Sherman et al. (1992)	Arrest for domestic violence had deterrent effect for married, employed, white high school graduates, but was criminogenic for unemployed, unmarried, black high school drop outs	○	R	F	R
Sherman et al. (2000)	When compared to court, those receiving restorative justice conference have lower recidivism for violent crime, slightly higher recidivism for drunk driving, and no difference for juvenile shoplifting or property crime	○	VR	G	R

Sherman & Strang (2004)	Restorative justice conference fosters social solidarity compared to courts, leads to more apologies for victims and less desire for revenge; changes in repeat offending vary by crime type	●	VR	G	R
Becker et al. (1992)	Drug Abuse Resistance Education (DARE) had no significant impact on drug use	○	M	G	HP
Clayton et al. (1996)	No significant impact of D.A.R.E. on cigarette, alcohol, or marijuana use one year after and over five year follow up	○	R	G	HP
Davis & Taylor (1997)	Home visits after domestic violence failed to reduce repeat violence; Public education about domestic violence failed to reduce violence	○	VR	F	R
Davis & Maxwell (2002)	Home visits after domestic violence failed to reduce prevalence or frequency of repeat violence	○	VR	F	R
Davis et al. (2007)	No reduction in subsequent abuse for households that receive second responder within 24 hours or after 7 days	○	VR	F	R
Dunford (1992)	Arrest for domestic violence increased offense frequency at 12 months	○	VR	F	R
Ennett et al. (1994)	D.A.R.E. has no significant impact on smoking, alcohol use, or heavy drinking immediately after, 1 year after, and 2 years; after program	○	R	G	HP
Giblin (2002)	Juveniles participating in CAN (police/probation paternship) were more likely to have new technical violations than were juveniles on regular probation	○	VR	F	R
Hirschel et al. (1990)	Arrest for domestic violence increases official recidivism	○	VR	F	R
Perry et al. (2003)	D.A.R.E. has no significant impact on any of the outcome measures (self-reported tobacco, alcohol, and marijuana use; violence, victimization)	○	VR	G	HP
Ridgeway et al. (2011)	Letter to gun buyers informing them about gun laws has no impact on likelihood gun will become crime gun	○	VR	F	HP

Ringwalt et al. (1991)	D.A.R.E has no significant impact on smoking, alcohol use, or use of inhalants	○	R	G	HP
Rose & Hamilton (1970)	Juvenile diversion and supervision program has no impact on juvenile recidivism	○	VR	F	R
Rosenbaum et al. (1994)	D.A.R.E has no significant overall impact on using cigarettes or alcohol	○	R	G	HP
Stover et al. (2010)	Home visit program for domestic violence victims has no significant impact on reported violence	○	M	F	R
Williams-Taylor (2009)	Intensive supervision program for sex offenders has no significant impact on rates of general recidivism, sexual, violent, violent sexual or non-compliance recidivism	○	M	F	R
Davis & Medina-Ariza (2001)	More elderly abuse incidents and calls to police reported in houses that receive home visit and education; those that receive home visits only call the police more, but don't report more abuse	▼	VR	F	P
Hovell et al. (2006)	Those that receive Family Violence Response Team treatment have a 1.7 times greater rate of re-abuse	▼	M	F	R
Klein (1986)	More formal arrest processing increased recidivism	▼	VR	F	R
Sloboda et al. (2009)	Negative program effect for adolescent substance abuse prevention pogram on use of alcohol and cigarettes and no effect for marijuana use	▼	VR	G	HP

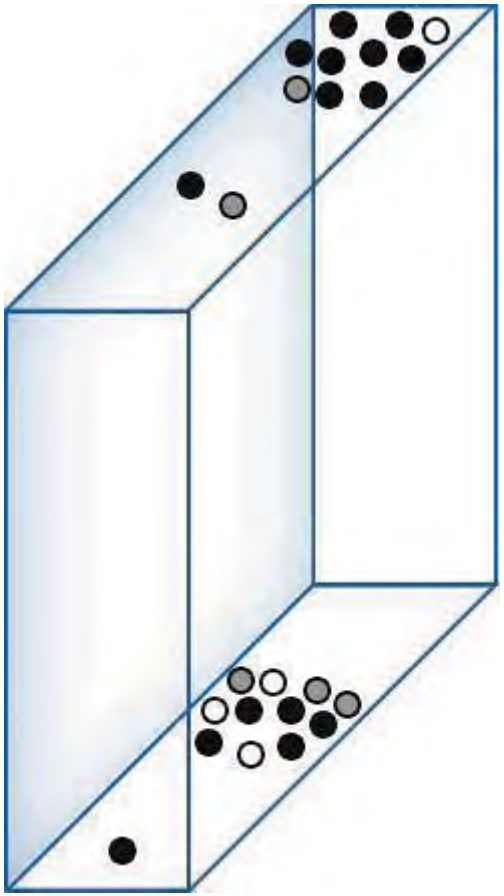
Result: ● = successful intervention; ● = mixed results; ○ = nonsignificant finding; ▼= harmful intervention
Rigor: M = moderately rigorous; R = rigorous; VR = very rigorous
Y-axis: F = focused; G= general
Z-axis: R = reactive, P = proactive, HP = highly proactive



Groups – Interventions which target gangs or other co-offenders (individuals who offend in concert)

Author (Year)	Intervention	Result	Rigor	Y-Axis	Z-Axis
Braga et al. (2001)	Operation Ceasefire was associated with significant reductions in youth homicide victimizations, shots-fired calls for service, and gun assault incidents.	●	M	F	HP
Braga (2008)	Pulling levers intervention associated with significant decline in monthly gun homicide	●	M	F	HP
Braga et al. (2008)	Pulling levers intervention associated with significant decline in monthly gun homicide and gun-related assault	●	M	F	HP
Bynum & Varano (2003)	Aggressive patrol and order maintenance anti-gang initiative associated with substantial reported crime decreases in two target precincts	●	M	G	R
Fritsch et al. (1999)(curfew)	Truancy and curfew enforcement associated with reduction in gang violence	●	M	F	P
McGarrell et al. (2006)	A "lever-pulling" strategy was associated with a 34.3% reduction in the monthly homicide rate	●	M	F	HP
Decker & Curry(2003)	Curfew and gun enforcement anti-gang initiative leads to a very limited significant crime change in target neighborhoods	○	M	F	HP
Fritsch et al. (1999)(saturated patrol)	Undirected, saturated patrol has no impact on crime	○	M	G	P

Result: ● =successful intervention; ◍ = mixed results; ○ = nonsignificant finding; ▼= harmful intervention
Rigor: M = moderately rigorous; R = rigorous; VR = very rigorous
Y-axis: F = focused; G= general
Z-axis: R = reactive, P = proactive, HP = highly proactive



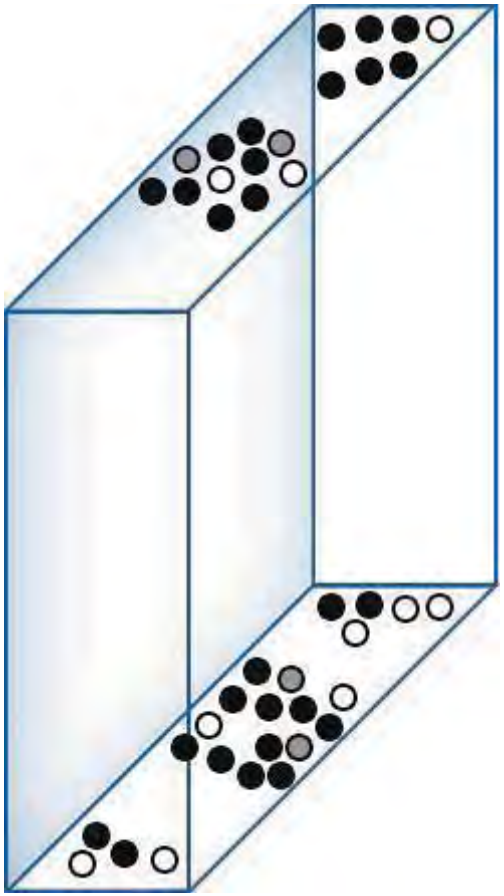
Micro-Places –Interventions which target very small geographic locations such as a block, street segment, alley, intersection, specific address or cluster of addresses.

Author	Intervention	Result	Rigor	Y-Axis	Z-Axis
Baker & Wolfer (2003)	Problem-oriented policing project in a park reduces fear and perceptions of drug use and vandalism	●	M	F	HP
Braga et al. (1999)	Problem-oriented policing in violent crime hot spots leads to reductions in violent and property crime, disorder and drug selling	●	VR	F	HP
Braga & Bond (2008)	Focus on hot spots of crime leads to reductions in crime and disorder calls for service	●	VR	F	P
Chaiken et al. (1975)	Increased police on the New York Subways at night led to reduced crime	●	M	G	P
Di Tella & Schargrodsky (2004)	Blocks that received extra police protection experienced significantly fewer car thefts than the rest of the neighborhoods.	●	R	G	R
Eck & Wartell (1998)	Property managers who have a meeting with police and threat of nuisance abatement report less crime, receiving letter somewhat effective in reducing crime	●	VR	F	HP
Hope (1994)	Case studies of problem-oriented policing and drug-market locations. Forced closure or sale of property reduced drug dealing	●	M	F	HP
Jim et al. (2006)	Community-oriented policing in a retail shopping center led to reduced perception of gang activity and fear of crime	●	M	G	P
Lawton et al. (2005)	Police officers on drug corners in Philadelphia led associated with significant localized intervention impacts for both violent and drug crimes.	●	M	G	P

Mazerolle, Price et al. (2000)	The use of civil remedies and third party policing associated with reduced drug crime, especially in residential locations	●	VR	F	HP
Mazerolle, Ready et al. (2000)	Problem-oriented policing in public housing associated with reductions in property and violent crime.	●	M	F	HP
Ratcliffe et al. (2011)	Foot patrol associated with a significant decrease in crime in hot spots that reach a threshold level of pre-intervention violence	●	VR	G	P
Sherman & Weisburd (1995)	Substantial increases in police patrol associated with reduction in total crime calls and more significant reduction in disorder at high crime hot spots	●	VR	G	P
Taylor et al. (2011)- POP	Problem-oriented policing in hot spots associated with a 33% drop in “street violence” during the 90 days after the intervention	●	VR	F	HP
Weisburd & Green (1995)	Crackdowns on drug hot spots reduced disorder; no effects on violence or property crimet	●	VR	F	HP
Armitage & Monchuk (2011)	Secured by Design (SBD) program to encourage builders to design out crime shows effectiveness in street-level comparisons but not when comparing SBD developments to non-SBD developments	●	M	F	HP
Caplan et al. (2011)	Police monitored CCTV cameras more effective at reducing crime in some sites than others	●	M	G	P
La Vigne et al. (2011)-Baltimore	Police monitored CCTV cameras reduce crime in one Baltimore site, but not the other	●	R	G	P
La Vigne et al. (2011)-Chicago	Police monitored CCTV cameras reduce crime in one Chicago site, but not the other	●	R	G	P
Sherman & Rogan (1995)	Crack house raids reduced crime for about 12 days; crime reductions decayed quickly	●	VR	F	P
Buerger (1994)	Problem-oriented policing in high crime addresses leads difference in calls for service in commercial treatment	○	VR	F	HP

	vs. control addresses, but small decline in residential calls in treatment area				
Lum et al. (2010)	Use of license plate readers mounted on patrol cars in autotheft hot spot areas not associated with declines in auto crime or crime generally in two jurisdictions	○	VR	G	P
Taylor et al. (2011)-Saturation	Saturation/directed patrol in hot spots not associated with a significant decline in crime in the post-intervention period	○	VR	G	P
Weiss & Freels (1996)	Aggressive traffic law enforcement had no impact on robbery or auto theft rates.	○	M	G	P

Result: ● =successful intervention; ● = mixed results; ○ = nonsignificant finding; ▼= harmful intervention
Rigor: M = moderately rigorous; R = rigorous; VR = very rigorous
Y-axis: F = focused; G= general
Z-axis: R = reactive, P = proactive, HP = highly proactive



Communities and Neighborhoods –Interventions which target larger geographic units such as census tracts, police beats or sectors, "communities", or "neighborhoods".

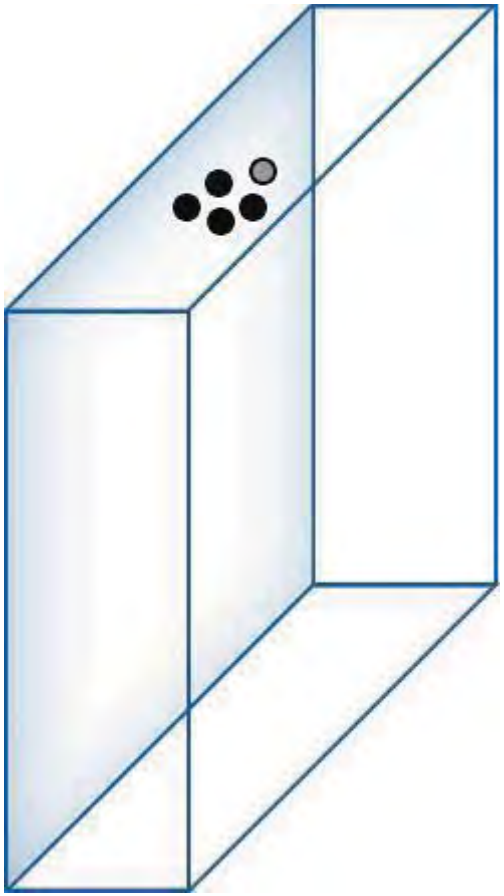
Author	Intervention	Result	Rigor	Y-Axis	Z-Axis
Barthe & Stitt (2011)	Increased patrol presence in an area following an abduction/homicide associated with declines in person and property calls in target area relative to comparison site	●	M	G	R
Berk & MacDonald (2010)	Broken windows approach to deal with homeless encampments associated with meaningful reduction in violent, property, and nuisance crimes	●	M	F	P
Boydstun (1975)	More field interrogations associated with fewer outdoor crimes	●	M	G	P
Caeti (1999)	Beats in which police used hot spots and zero tolerance had greater crime reductions than those in which police used POP and increased visiblity	●	M	G	P
Clapp et al. (2005)	DUI prevention program and increased law enforcement led to decrease in self-reported DUI at the target university, whereas rates at the comparison campus remained stable.	●	M	G	P
Cohen & Ludwig (2003)	Targeted patrol against gun crime reduced shots fired by up to 34% and gun-related assault injuries by up to 71% on days the program was in action	●	M	G	P
Connell et al. (2008)	Officer-initiated community policing program associated with a significant reduction in violent and property crimes in the targeted area, but not in comparable areas in the county	●	M	G	P
Giacomazzi (1995)	Community crime prevention program leads to overall decrease in crime and increase in resident quality of	●	M	F	HP

	life				
Josi et al. (2000)	Larceny and burglary drop in beats with increased traffic stops compared to routine patrol	●	M	F	P
Koper et al. (2010)	Multi-agency partnership focused on enforcement, prosecution, and community improvement associated with reduction in crime and violence	●	R	F	P
Krimmel & Mele (1998)	Targeting stolen vehicle dump sites leads to reduced auto theft	●	M	F	P
Lasley (1996)	Street closures associated with drop in violent crime drops, but not property crime using two year time-series	●	M	F	HP
Laycock (1991)	Burglary declines 62 percent after door-to-door visits to gain community intelligence and increase property marking	●	M	F	HP
Lindsay & McGillis (1986)	Burglary reduced for 18 months after initiation of community policing and neighborhood watch program	●	M	F	HP
Mazerolle et al. (2003)	Beat policing associated with a reduction in overall neighborhood crime rates and a reduction in calls for police service over a long period.	●	M	G	P
Papachristos et al. (2007)	Group of Project Safe Neighborhoods initiatives associated with greater declines in homicide in the treatment neighorborhoods compared to control neighborhoods	●	M	F	HP
Pate & Skogan (1985b)	Program to increase the quantity and quality of police-citizen contacts and to reduce disorder was successful in improving evaluations of police service and in reducing perceived levels of social disorder	●	M	G	P
Press (1971)	Police manpower increased by 40 percent in one precinct and outdoor crimes decreased compared to control precinct	●	M	G	R

Reiss (1985)	More arrests for "soft crimes" associated with a decline in crimes against persons and property in the central business district	●	M	G	P
Sherman et al. (1995)	Directed patrol to increase gun detection leads to significant increase in gun seizures and decline in gun-related crime.	●	M	F	P
Skogan et al. (1995)	After 18 monthly police-community meetings, reductions in some crimes and victimization using some measures but not others	●	M	F	HP
Smith (2001)	92 percent reduction in crime in the target area during a crackdown. Crime reduction persisted in some parts of the neighborhood 6 months later	●	M	G	P
Tita et al. (2003)	Violence declined during and after the pulling levers intervention	●	M	F	P
Trojanowicz (1986)	Foot patrol areas had fewer crimes than control areas	●	M	G	P
Tuffin et al. (2006)	POP program resulted in positive changes in crime, perceptions of antisocial behavior, and feelings of safety after dark.	●	M	G	HP
Weiss & McGarrell (1996)	Focus on vehicle stops led to decrease in reported burglaries and auto vehicle thefts.	●	M	G	P
Wycoff et al. (1985)	Door-to-door police visits associated with reduced victimization	●	M	G	HP
McCabe (2009)	One of two narcotics enforcement initiatives was successful in reducing crime	○	M	F	P
McGarrell et al. (2001)	Directed patrol to focus on suspicious activities and locations, reduced violent gun crime. In contrast, a general deterrence strategy, focused on maximizing vehicle stops, did not have an effect.	○	M	G	P
Nunn et al. (2006)	Covert drug trafficking interdiction associated with an overall crime decline in target area, but an increase in	○	M	F	P

	drug-related calls for service				
Pate & Skogan (1985a)	Proactive disorder arrests associated with significant reductions in total Part I crimes, personal crimes, and burglary.	●	M	G	P
Bennett (1990)	Lower socioeconomic status areas that tended to be higher in crime had less surveillence and less effective neighborhood watch programs	○	M	G	HP
Kelling et al. (1974)	No difference in crime by beat based on the number of police cars assigned to random patrol.	○	M	G	R
Novak et al. (1999)	No decline in burglary or robbery following proactive disorder enforcement	○	M	F	P
Pate et al. (1985)(Houston)	Monthly newsletter with crime data failed to reduce victimizations of recipients	○	VR	G	P
Pate et al. (1985) (Newark)	Monthly newsletter with crime data failed to reduce victimizations of recipients	○	VR	G	P
Pate et al. (1987)	Community block watch has no impact on crime	○	R	G	HP
Police Foundation (1981)	No difference in crime by number of foot patrol officers assigned	○	M	G	R
Sviridoff et al. (1992)	Crackdown on crack market, but no change in violent crime rate	○	M	F	P
Wycoff & Skogan (1993)	No decrease in victimization after increase in police-community meetings in target district	○	M	G	HP
Weisburd et al. (2008)	Risk-focused policing program targeting juvenile risk factors has no influence on self-reported delinquency	○	VR	F	HP

Result: ● =successful intervention; ● = mixed results; ○ = nonsignificant finding; ▼= harmful intervention
Rigor: M = moderately rigorous; R = rigorous; VR = very rigorous
Y-axis: F = focused; G= general
Z-axis: R = reactive, P = proactive, HP = highly proactive



Political Jurisdictions – interventions which target politically distinct, but local jurisdictions. These are jurisdictions within larger geo-political jurisdictions and include cities, counties, parishes, or townships.

Author	Intervention	Result	Rigor	Y-Axis	Z-Axis
Florence et al. (2011)	Information sharing between police and health agencies to improve police deployment strategies associated with substantial and significant reduction in hospital admissions related to violence	●	R	F	P
Malm & Tita (2006)	Green Teams (increased marijuana enforcement) decrease grow operations in target areas without significant displacement to surrounding areas	●	R	F	P
McGarrell et al. (2010)	Project Safe Neighborhoods cities in higher dosage contexts experienced statistically significant, though modest, declines in violent crime	●	R	F	P
Villaveces et al. (2000)	Homicide rates significantly lower on days gun ban/police intervention in effect compared to non-intervention days in 2 Columbian cities	●	R	F	P
Fell et al. (2005)	Increased DUI enforcement lead to declines in drinking-and-driving fatal crashes in two states but not two others	●	R	F	P

Result: ● =successful intervention; ● = mixed results; ○ = nonsignificant finding; ▼= harmful intervention
Rigor: M = moderately rigorous; R = rigorous; VR = very rigorous
Y-axis: F = focused; G= general
Z-axis: R = reactive, P = proactive, HP = highly proactive

Matrix Demonstration Project

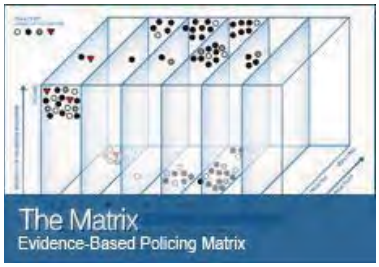
Translating Research into Practice

The Idea

Welcome to the Matrix Demonstration Project (MDP), supported by the Bureau of Justice Assistance. The Matrix Demonstration Project team housed within George Mason University's Center for Evidence-Based Crime Policy is collaborating with multiple police agencies to develop and document illustrations and free tools that police and researchers can use to translate and institutionalize research findings into practice.

The MDP is named after the Evidence-Based Policing Matrix because it embodies the spirit of finding innovative ways of translating promising research into everyday use by law enforcement. Demonstrations vary widely, but follow three important guiding principles that ensure research is incorporated and useful tools are developed. These tools will include free videos, policies and standard operating procedures, academy curricula, and other guides and examples to help agencies find creative ways to involve research into their conversations about crime reduction and internal management.

Agencies are encouraged to try these ideas and tools in their own agencies, or to suggest new demonstrations. Demonstration sites are selected based on a strong commitment to the project and regular interactions with the Matrix team. For more information on how to become a demonstration site please contact Professor Cynthia Lum.



The Evidence-Based Policing Matrix is a research-to-practice translation tool that organizes experimental and quasi-experimental studies in policing visually, allowing agencies to view the field of research, from its generalizations to its particulars.

View the Evidence-Based Policing Matrix
Updated Matrix coming soon.

1. Case of places
2. Transforming field training
3. Evidence-based academy curriculum
4. Receptivity Survey
5. How agencies can conduct their own experiments
6. COMPSTAT and Managerial Meetings: Fostering a learning environment
7. Using the Matrix for Quick Assessments
8. From evaluation to deployments
9. City councils and research evidence

Learn about the Guiding Principles >

CEBCP | 4400 University Drive, MS 6D12, Fairfax, Virginia, 22030 | cebcp@gmu.edu | 703-993-8716

Guiding Principles

Demonstrations on how to institutionalize research and scientific processes into daily policing vary widely. However, each demonstration is guided by three principles:

1. Projects focus on institutionalizing research and analytic processes into the regular practice of policing through a more permanent change in infrastructure or operations. The MDP demonstrations are not ad-hoc deployments or stand-alone evaluations, but demonstrations and examples which show how the processes or outputs of research might be more permanently institutionalized.

2. Each project is anchored by good quality research evidence on police practices. Research anchors can be of many different types, including studies on police interventions, officer discretion, departmental practices and policies, use of force, or other internal or external issues that law enforcement agencies face. Further, the visibility of the research application in each demonstration may vary. Institutionalization of research use may require the research component to be less obvious (albeit still there).

3. Each agency will work with the GMU team to develop a tool or usable example from the demonstration which will be freely available for use by others in the field here at the MDP website. This product will be freely available, and could include, for example, a standard operating procedure, a newly designed report or case form, a different process used in COMPSTAT meetings, a new training module incorporated into academies, or a re-written guide for field training that incorporates research aspects.

Demonstration sites are selected based on a strong commitment to the project and regular interactions with the Matrix team. For more information on how to become a demonstration site please contact the Team Leader, Professor Cynthia Lum at clum@gmu.edu.

1. Case of places
2. Transforming field training
3. Evidence-based academy curriculum
4. COMPSTAT - a learning environment
5. How agencies can conduct their own experiments
6. Information technologies at hot spots
7. Measuring and institutionalizing proactivity
8. From evaluation to deployments
9. City councils and research evidence
Learn about the Guiding Principles >

CEBCP | 4400 University Drive, MS 6D12, Fairfax, Virginia, 22030 | cebcp@gmu.edu | 703-993-8716

J Exp Criminol (2011) 7:3–26
DOI 10.1007/s11292-010-9108-2

The Evidence-Based Policing Matrix

Cynthia Lum · Christopher S. Koper · Cody W. Telep

Published online: 14 September 2010

Abstract The next phase of evidence-based policing requires both scholars and practitioners to move from lists of specific studies about "what works" to using that information strategically. This requires developing generalizations or principles on the nature of effective police strategies and translating the field of police evaluation research into digestible forms that can be used to alter police tactics, strategies, accountability systems, and training. In this article, we present a tool intended for such use: the Evidence-Based Policing Matrix. The Matrix is a consistently updated, research-to-practice translation tool that categorizes and visually bins all experimental and quasi-experimental research on police and crime reduction into intersections between three common dimensions of crime prevention—the nature of the target, the extent to which the strategy is proactive or reactive, and the specificity or generality of the strategy. Our mapping and visualization of 97 police evaluation studies conducted through December 31, 2009, indicate that proactive, place-based, and specific policing approaches appear much more promising in reducing crime than individual-based, reactive, and general ones. We conclude by discussing how the Matrix can be used to guide future research and facilitate the adoption of evidence-based policing.

Keywords Evidence-based policing · Effectiveness · Matrix · Evaluation · Experiments · Hot spots policing

C. Lum (✉) · C. W. Telep
Center for Evidence-Based Crime Policy, Department of Criminology, Law and Society, George Mason University, 4400 University Dr. MS 6D3, Fairfax, VA 22030, USA
e-mail: clum@gmu.edu

C. S. Koper
Police Executive Research Forum, 1120 Connecticut Ave., N.W. Suite 930, Washington, DC 20036, USA

Introduction

Following the work of the President's Commission on Law Enforcement and the Administration of Justice (1967), researchers have produced a large body of scholarship on a wide range of policing topics. This body of literature, recently reviewed by a special committee of the National Research Council (NRC) (2004), has covered numerous issues, including police organization, management, strategies, personnel, discretion, accountability, and patrol practices, to mention only a few. In recent years, there has been a growing interest in synthesizing lessons from this body of research, particularly with respect to police effectiveness in controlling crime. Prominent reviews of research on this topic have produced conclusions about the effectiveness of several specific policing interventions (e.g., hot spots policing) as well as some broad overviews about the utility of general approaches (e.g., community-oriented policing, crackdowns, and problem solving).

To date, however, there have been few attempts to develop generalizations or principles about the nature of effective police strategies or to quantify differences in the effectiveness of broad categories of police strategies. For example, are place-based strategies more or less effective than offender-based strategies? Are there additional distinctions that we can make regarding the relative success of strategies targeting particular types of places and people? At the same time, what characteristics are common to successful strategies such as hot spots policing and "pulling levers" against gang violence? Further, to what degree are strategies more effective when they are proactive and focused—two qualities that are generally thought to enhance the efficacy of police interventions? How do these strategic dimensions interact to influence police effectiveness? Finally, how might these insights guide the development and/or selection of police strategies across different problems and contexts? Police scholars have not often made such generalizations, which may be one reason that police research has arguably had relatively little impact on the practice of policing (Bayley 1998; Lum 2009).

In this paper, we attempt to extend and refine generalizations about effective police crime prevention strategies in three ways. First, we compile and analyze the most comprehensive collection to date of methodologically rigorous evaluation studies in policing. In total, this collection includes 97 experimental and quasi-experimental evaluations conducted through the end of 2009.[1] Second, we create a unique classification system for each study based on three very common dimensions of crime prevention strategies: the nature and type of target, the degree to which the strategy is reactive or proactive, and the strategy's level of focus. We then "map" these 97 studies into a three-dimensional matrix—which we refer to as the "Evidence-Based Policing Matrix" (from here on, "the Matrix")—that illustrates the distribution of evaluations and effective practices along these three dimensions. Third, we conduct quantitative comparisons of outcomes across groups of studies classified along our strategic dimensions.

This categorization and visualization of evaluation studies, coupled with our quantitative analyses of outcomes, reveals a number of insights into the commonalities of effective police strategies that are not revealed as conspicuously

[1] Our online tool allows us to update this collection every year.

from other reviews. In sum, we find that police strategies are more effective when they are place-based, proactive, and focused. Quantitatively, the most notable contrast is that between offender-based and place-based approaches; while a range of general, focused, and proactive strategies have been effective when targeted on places, results have been much more mixed for evaluations of offender-based strategies irrespective of the extent to which they are focused or proactive. Conclusions about the effectiveness of placed-based, proactive strategies—and particularly the relative effectiveness of targeting different types of places (like neighborhoods and smaller "micro places")—must be tempered to some degree based on the strength of the research designs used in place-based studies. However, this finding is compelling given that many police strategies tend to gravitate toward offender-based, reactive approaches.

We conclude by discussing how our Matrix might be used to guide the formulation and selection of strategies in policing as well as the development of an agenda for future policing research (our discussion complements Lum's (2009) *Ideas in American Policing* lecture on how the Matrix can be used by practitioners for purposes of assessment, training, deployment, and management). We also consider how the Matrix can be used as a practice-oriented research translation tool that may better facilitate the adoption of evidence-based policing and evidence-based funding.

Synthesizing research evidence for use in practice

In 1998, Lawrence Sherman advocated for "evidence-based policing," arguing that "police practices should be based on scientific evidence about what works best" (Sherman 1998: 2). Like other police researchers and innovative police chiefs at the time, Sherman believed that information from systematic or scientific research, as well as rigorous crime analysis, should be regularly used and generated by the police to make both strategic and tactical decisions. At the core of this belief are a number of tenets: that science can be embedded into practice; that evaluations must be believable, valid, and useful to policing; and that there is some mechanism by which such evaluation findings can be translated into everyday decision making.

As interest in evidence-based crime policy has grown, police scholars have made a number of efforts to facilitate its adoption through syntheses of research on police and crime reduction, with an emphasis on research of higher methodological quality. The most recent and influential of these efforts have come from three sources.[2] The first was the 1997 University of Maryland report to Congress, conducted by Sherman and his colleagues on "What Works, What Doesn't, and What's Promising" in crime prevention (a project to which the first author of this article contributed). This was later updated in a 2002 volume, *Evidence-Based Crime Prevention* (Sherman et al. 2002). Sherman and his colleagues reviewed over 600 studies on a wide range of crime prevention programs and graded each study according to a

[2] Earlier reviews of police research included Clarke and Hough's (1980) compilation of papers on police effectiveness, a series of reviews by Sherman (1983, 1986, 1990, 1992), and a special issue of *Crime and Justice: A Review of Research* (Tonry and Morris 1992).

"Scientific Methods Scale" (Farrington et al. 2002: 18). They judged programs as working if they were supported by at least two studies of high methodological quality (i.e., experiments and rigorous quasi-experiments) and the preponderance of all remaining studies. They judged programs as promising if they were supported by at least one rigorous study and the preponderance of less rigorous studies. Programs were categorized as not working if there were at least two methodologically rigorous studies showing ineffectiveness and a preponderance of evidence showing ineffectiveness in other studies. Sherman et al.'s contention was that more scientifically rigorous studies should be given more weight in guiding practice; consequently, these studies were emphasized in recommendations about "what works" in policing and other criminal justice arenas.

The second set of efforts has been promoted by the Campbell Collaboration, specifically its Crime and Justice Coordinating Group, which sponsors systematic reviews of research across multiple areas of criminal justice (see Farrington and Petrosino 2001). The collaboration was established in 2000, mirroring efforts of the Cochrane Collaboration, which examines evaluations in the medical arena. Campbell reviews, which have included both narrative reviews and meta-analyses, focus on high-quality experimental and quasi-experimental studies. Like Cochrane reviews, Campbell reviews also center on specific interventions within a field. For example, systematic reviews of law enforcement strategies have examined hot spots policing (Braga 2007), problem-oriented policing (Weisburd et al. 2008b), neighborhood watch (Bennett et al. 2008), suppression of gun carrying (Koper and Mayo-Wilson 2006), counter-terrorism measures (Lum et al. 2006), drug enforcement (Mazerolle et al. 2007), and second responder programs for family abuse (Davis et al. 2008).

The third was a recent report by the National Research Council (NRC) on *Fairness and Effectiveness in Policing* (NRC 2004). For this report, the NRC's Committee to Review Research on Police Policy and Practices, chaired by Wesley Skogan and Kathleen Frydl, brought together a number of senior police scholars[3] to assess the state of police research in a range of areas covering crime prevention effectiveness as well as organizational and cultural dimensions of policing. In terms of assessing research on the "effectiveness of police activities in reducing crime, disorder and fear" (Chapter 6 of the report, which later became Weisburd and Eck 2004), the committee issued strong conclusions about specific policing strategies (e.g., hot spots policing) and also provided, as discussed shortly, a conceptual framework highlighting some dimensions of police strategies that are associated with effectiveness.

In total, these efforts have produced a number of recommendations and conclusions about police crime prevention strategies. Four key points noted by the NRC (2004: 246–247; see also Weisburd and Eck 2004), which have also been echoed in other key reviews, are that: (1) the standard model of policing that emphasizes random patrol, rapid response to calls for service, follow-up investigations by detectives, and unfocused enforcement efforts has not been effective in

[3] The committee included Wesley Skogan, David H. Bayley, Lawrence Bobo, Ruth Davis, John Eck, David A. Klinger, Janet Lauritsen, Tracey Maclin, Stephen D. Mastrofski, Tracey L. Meares, Mark H. Moore, Ruth Peterson, Elaine B. Sharp, Lawrence Sherman, Samuel Walker, David Weisburd, and Robert Worden.

reducing crime (see also Sherman 1997; Sherman and Eck 2002); (2) some of the strategies falling under the umbrella of community policing have been effective in reducing crime, disorder, or fear of crime, while others have not (see also Bennett et al. 2008; Sherman 1997; Sherman and Eck 2002); (3) police strategies that are more focused and tailored to specific types of crimes, criminals, and places are more effective (see also Braga 2007; Koper and Mayo-Wilson 2006; Mazerolle et al. 2007; Weisburd et al. 2008a, b); and (4) problem-oriented policing, a strategy involving systematic analysis of crime and disorder problems and the development of tailored solutions (Goldstein 1979), is effective (see also Weisburd et al. 2008a, b, 2010). Among focused policing strategies, hot spots policing—i.e., patrol, problem-solving, and/or other interventions focused on small areas or specific places of crime concentration—has proven particularly effective in several rigorous outcome interventions (Braga 2007). In the judgment of NRC, the research on hot spots policing constitutes the "...strongest collective evidence of police effectiveness that is now available" (NRC 2004: 250). Strategies judged as ineffective include, among others, arrests of juveniles for minor offenses, community policing without a clear focus on risk factors, and arresting unemployed suspects in misdemeanor domestic violence cases (NRC 2004; Sherman 1997).

Notwithstanding these advancements, there are still gaps in both our knowledge about police crime prevention efforts and how such knowledge can or should inform the implementation of effective strategies. Many police crime prevention strategies have yet to be evaluated rigorously. Ambiguities also remain in the existing evidence, in particular, the question of *why* some types of strategies tend to work better. With respect to hot spots policing, for example, it is not clear what types of strategies—directed patrol, situational crime prevention, nuisance abatement, or other forms of problem solving—work best for policing hot spots generally or for policing particular types of hot spots. And while hot spots policing appears effective in its own right, is it more effective than strategies focused on individual offenders, problematic groups, or larger places like neighborhoods? If so, can we quantify those differences? In other words, how does the likelihood of a successful outcome compare across these types of interventions? And most important to practitioners, how can we move beyond lists of effective and ineffective strategies evaluated in isolation in order to draw generalizations about effective policing approaches and apply those generalizations across different jurisdictions, settings, policing units, and crime types?

As these questions suggest, deriving more strategic principles from existing police research may help to better translate the research reflected in these past reviews. Weisburd and Eck's (2004) recent work for the NRC reflects the start of such an effort. Building on Sherman and Eck's review (2002), Weisburd and Eck developed a two-dimensional typology of police practices. One dimension, the *diversity of approaches*, represents the content of the practices employed. Strategies that rely primarily on traditional law enforcement are low on this dimension, while strategies involving multi-faceted, multi-agency enforcement and prevention efforts, for example, rank more highly. The other dimension, *level of focus*, represents the extent to which police focus or target their efforts. Strategies that are more general and applied uniformly across places or offenders would be ranked low on this dimension (Weisburd and Eck 2004: 45). Weisburd and Eck argue that strategies with a high level of focus (e.g., hot spots and problem-oriented policing) are

particularly effective, while those that are less focused (e.g., reactive patrol, community policing) are not promising for reducing crime and disorder.

Weisburd and Eck's synthesis reflects an important step towards identifying strategic commonalities of evaluated interventions. However, we need more specific and wider-ranging generalizations from the literature that coincide with the organizational structure and vernacular of policing if the utility of the evidence is to be made more obvious. Indeed, although existing research syntheses have facilitated the adoption of evidence-based policing to some extent by focusing on specific tactics and strategies, research has generally had no more than a modest impact on police practices (Bayley 1998). Furthermore, U.S. police agencies and their international counterparts are well known for *not* using evidence-based practices in everyday patrol and investigations. The best example of this is the general failure of police agencies to feature place-based strategies—i.e., hot spots policing, despite the strong evidence of its efficacy and the spatial distribution of crime (NRC 2004; Weisburd 2008; Weisburd et al. 2004).[4] Police also continue to make widespread use of other strategies that researchers consider ineffective, such as the DARE program (Drug Abuse Resistance Education), reactive arrests, rapid response to 911 calls, and gun buybacks.

Many of the causes for this are organizational, related to the stubborn and slow-changing nature of police culture, tradition, and practices (Bayley 1994; Mastrofski 1999; O'Neill et al. 2007; Sherman 1984, 1998). Yet as Lum (2009) asserts, the next step in moving toward evidence-based policing is to build on existing evidence, systematic reviews, and research infrastructures to create translation tools for conveying that evidence to police practitioners. Translation tools highlighting general principles of police effectiveness that can be applied across a range of conditions and problems may be more useful to practitioners than lists of specific strategies that are effective or ineffective. For researchers, such translation tools may also illuminate useful generalizations about why particular prevention efforts are valuable and what areas of research are needed. Toward this end, we created the Evidence-Based Policing Matrix, an online translation tool, from which we attempt to derive more general principles about the types of police interventions that work through a unique categorization and "binning" of all available experimental and quasi-experimental police evaluation research studies. Such categorization allows us to glean new insights from the breadth of experimental and quasi-experimental literature about why certain strategies may work better than others, and what areas of policing present high demand for more information.

The Evidence-Based Policing Matrix

The Matrix originally emerged from work by Lum and Koper (forthcoming[5]), who initially conceptualized it to discuss how crime prevention might be applied to

[4] Although many agencies claim to be doing hot spots policing (Police Executive Research Forum 2008; Weisburd and Lum 2005), much of what they term hot spots policing appears to be consistent with more traditional beat- and neighborhood-based strategies (Koper 2008).

[5] This book chapter was accepted for publication in 2008 by the editors, but the main volume has been delayed.

counterterrorism. Inspired by Rosenberg and Knox's (2005) three-dimensional grid for conceptualizing childhood well-being and youth violence prevention, they created a Crime Prevention Matrix to map evaluated criminal justice interventions according to their common strategic and tactical characteristics. They reasoned that mapping these interventions into the Matrix according to shared dimensions might reveal clusters of positive evaluations in intersecting dimensions. In turn, these clusters might illustrate general characteristics of effective programs that might not be apparent from systematic reviews or meta-analyses of particular interventions or from narrative reviews of wide-ranging criminal justice interventions. Such three-dimensional mapping, in turn, could be useful in developing and selecting interventions (in the case of that discussion, counterterrorism interventions) that might prove more fruitful in terms of preventative results.

With this conceptualization as a base, we then used police evaluation research to further refine the Matrix, which we display in Fig. 1. We also invite readers to visit our online interactive version of the Matrix.[6] The Matrix is defined by three dimensions that can be applied to all evaluation research: the target of the intervention (X-axis), the level of focus or specificity of the prevention mechanisms (Y-axis), and a reactive to highly proactive continuum (Z-axis) indicating the level of proactivity of the intervention. We label this figure the "Crime Prevention Matrix" to indicate that it can be used for all types of interventions; one could imagine, in addition to an Evidence-Based Policing Matrix, that it could also be used as a corrections and treatment Matrix, a juvenile justice Matrix, or even Matrices for court practices and sentencing, perhaps with different dimensional categories.

The creation of the three dimensions and their categories was done purposefully and empirically, and additional matrices should also take this approach. First, we sought to use the most common dimensions of police crime prevention efforts, as identified from research as well as the authors' extensive experiences working with and in police agencies, to ensure that police-recognized vernacular would be employed.[7] While the literature provided us with initial guidance on the three dimensions, we also examined all of the studies we collected (using methods described below) to see if they could be described by each of the three dimensions, a process that also helped us determine categories within the dimensions.

Target of the intervention

For the X-axis, we use the type and scope of the target of an intervention, which indicates who or what is being targeted. Targets of policing interventions may range from individuals to larger social aggregations of individuals and the smaller and larger spaces they occupy, up to the jurisdiction, nation, or even global level. These are the most common targets for which police agencies organize and discuss their strategies. The "Individual" slab would include interventions that intend to deter

[6] The Matrix is available online at http://gemini.gmu.edu/cebcp/matrix.html.

[7] We drew on contemporary and foundational research describing the range of police activities, including the special *Crime and Justice: A Review of Research* volume on policing (Tonry and Morris 1992) and, in particular, Reiss's (1992) description of police organization, as well as Sherman's (1995) review of the police role in *Crime* (Wilson and Petersilia 1995). More recent volumes were also consulted, such as Weisburd and Braga (2006), as well as the systematic reviews and police literature reviews mentioned above.

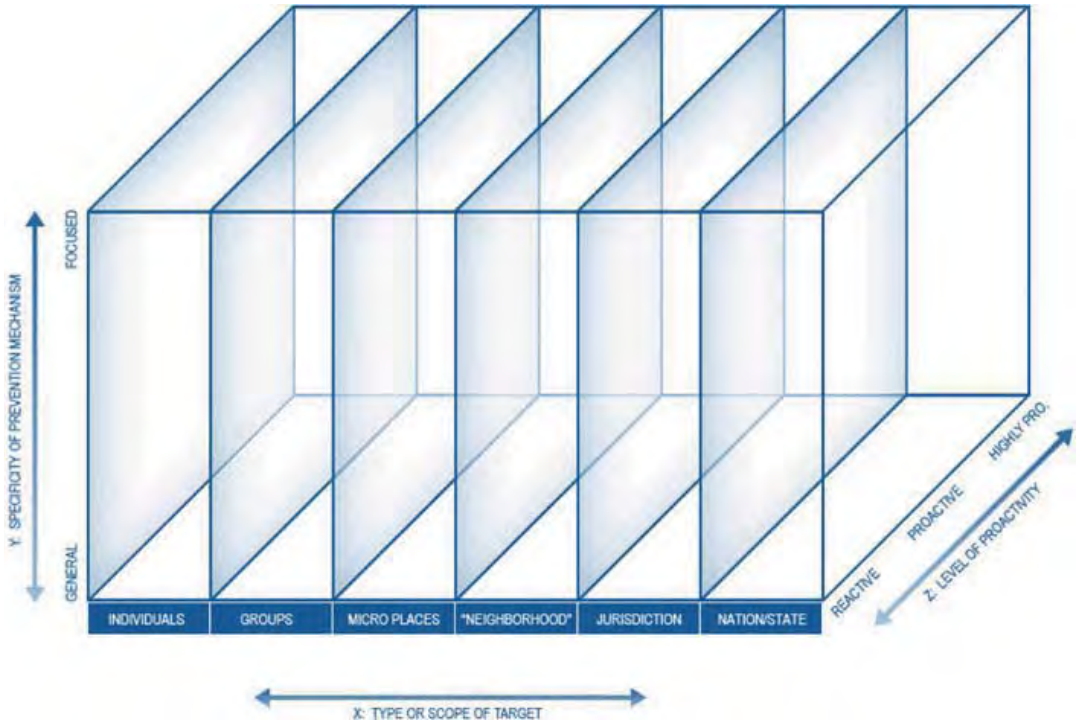


Fig. 1 The Crime Prevention Matrix

individuals generally or that target specific categories of persons, such as repeat offenders (e.g., Martin and Sherman 1986), potential juvenile drug users (e.g., Rosenbaum et al. 1994), or those who commit domestic/intimate partner violence (e.g., Sherman and Berk 1984). Strategies that focus on people offending in tandem, such as gangs or co-offenders, would be categorized into the "Groups" slab (e.g., pulling levers interventions to combat gang violence—e.g., Braga et al. 2001).

Next, we move toward larger social aggregations—places. Places can be described by size, from smaller or "micro" places, to larger geographic units. Micro-place interventions target very specific geographic locations such as a block, street segment, address, or cluster of blocks (see Eck and Weisburd 1995; Weisburd 2002; Weisburd et al. 2009). Interventions such as hot spot policing (e.g., Sherman and Weisburd 1995), problem-oriented policing focused on drug markets (e.g., Weisburd and Green 1995), and the use of civil remedies at problem addresses (e.g., Mazerolle et al. 2000), are common micro-place-based interventions. Larger and more amorphous places can include neighborhoods, census tracts, communities, and police boundaries (beats, sectors, districts) within a jurisdiction. Programs such as neighborhood watch (e.g., Bennett 1990), community policing, problem solving (e.g., Skogan et al. 1995), and foot patrol (e.g., Trojanowicz 1986) are often implemented in these types of areas.

While the vast majority of police agencies in the United States are confined by municipal boundaries, interventions can be city-, county-, or parish-wide, or even span across regions and states. These interventions are often much more general in nature. Studies of such interventions could include, for example, evaluating police enforcement of a city-wide ban on gun carrying (e.g. Villaveces et al. 2000) or studying the effects of a new jurisdiction-wide arrest policy. An even larger geographic aggregation is the nation/state, which is a politically distinct geopolitical area with laws and a criminal justice system that often determine sentencing and

corrections of offenders. For example, mandatory sentencing schemes or state laws prohibiting certain types of gun purchases might be classified here. Conceivably, one might evaluate efforts by federal law enforcement agencies or homeland security efforts intended to protect the nation at large.

Level of focus

The Y-axis represents a second common dimension by which crime prevention strategies are often classified—the level of specificity of an intervention and its goals, from general to focused (Weisburd and Eck 2004). Characterizing crime prevention tactics on their degree of specificity is common and has been discussed by a number of scholars (e.g., Erickson and Gibbs 1975; Sherman and Berk 1984; Stafford and Warr 1993). Theoretically, this axis should be viewed as a continuum, since many tactics share both general and specific deterrent goals (see Sherman 1990), and divisions can be murky. But for simplicity, we characterize studies as "general" or "focused," noting that the level of specificity of an intervention is an empirical matter. Tactics that are more general in their prevention mechanisms may include increasing patrol presence in a neighborhood (e.g., Kelling et al. 1974), zero tolerance, and crackdown approaches that are not specifically focused (e.g., Reiss 1985; Smith 2001), or DARE programs given to all seventh-grade students (e.g., Rosenbaum et al. 1994). Even hot spot policing interventions might be considered "general" (despite their focus on a specific place), if police are simply increasing patrol presence at hot spots and not targeting any person or group or carrying out a special operation or problem-solving scheme to reduce a certain type of crime (e.g., Sherman and Weisburd 1995).

Crime prevention interventions become more focused when they are tailored to specific types of problems or involve more tailored prevention tactics. These might involve, as Weisburd and Eck (2004) describe, the coordination of multiple agencies that handle different aspects of a particular problem, and they target specific mechanisms that produce crime. Specific programs might include using nuisance abatement laws to reduce drug dealing on a street block (e.g., Mazerolle et al. 2000); using specific prosecution schemes against those who are caught selling drugs and armed with a weapon (e.g., Abrahamse et al. 1991); employing the "pulling levers" approach against gang activity, which involves a combination of specific deterrence-related interventions (see Braga et al. 2001, 2008; McGarrell et al. 2006); or targeting specific risk factors for juvenile crime (e.g. Weisburd et al. 2008a). Hot spot policing might be more specific when a particular program is applied—for example, a hot spot approach specifically targeting stolen cars by running license plates along a quarter-mile stretch of a high-risk road (Taylor et al. 2010).

Reactivity and proactivity

Finally, the Z-axis represents the level of reactivity or proactivity that an intervention exhibits. We categorize an intervention along this dimension using a three-point scale that reflects both the timing with which a program is implemented relative to a criminal event and also the time horizon for the program's effects (e.g., long- versus short-term). In the mostly reactive realm of this scale are interventions that "strengthen the reaction" of the police and target the crime after or while it is occurring. Often, these are considered

"traditional" approaches to policing and include mainstays such as reactive arrests, follow-up investigations, and other tactics that target crimes and suspects after the fact. Common examples are mandatory arrests for domestic violence (see Sherman and Berk 1984), repeat offender targeting (see Martin and Sherman 1986), second responder programs for family abuse (Davis et al. 2007), or even zero tolerance if it is just reducing the discretion to arrest across a city. We also include random "preventive" beat patrol (whether in a vehicle or on foot) in this categorization (see Kelling et al. 1974), since assigning an officer to a beat has the intention of deterrence but is done primarily to ensure that all areas are covered for quick response to calls for service.

The proactive to highly proactive categorizations reflect those interventions that use analysis of previous incidents to prevent future crimes. Proactive strategies include interventions to reduce a recent crime flare up or to deter a crime most likely to happen tomorrow, such as crackdowns on particular high-crime areas (e.g., Lawton et al. 2005; Sherman and Weisburd 1995). Proactive strategies have a temporal aspect that is immediate and short-lived. Highly proactive strategies, in contrast, focus on early risk factors and long-term prevention. Such programs include gang-resistance education programs (e.g., Esbensen 2002), drug resistance programs (e.g., DARE), some problem-oriented policing interventions (e.g., Braga et al. 1999; Mazerolle et al. 2000), and after-school programs for juveniles.

Dimensional overlap and flexibility

The categories within each dimension are meant to be flexible and fluid, and there may be overlap between dimensions. For example, it is possible that individual-based interventions are more “specific” by the nature of the type of target, but this is not always the case. General deterrent strategies commonly focus on individuals but are general in nature. Similarly, micro-place strategies might also be viewed as more specific, given that the targets themselves were smaller units of larger aggregates. To overcome this issue, we defined specificity to mean the specificity of the mechanism of the intervention rather than the target. So, for example, hot spot patrol at a micro-place (e.g., a street block or corner) is not considered a focused intervention unless the activities the police conducted at those locations, or the problem specified, were more defined than deterrent patrol. Examples might include officers initiating nuisance abatement proceedings for a problem place or setting up a roadblock to find drunk drivers. Overall, given past literature and our studies, we felt these to be the most common ways that interventions in policing (and crime prevention more generally) could be described.[8] By placing rigorous research studies into the Matrix according to how these dimensions describe them, we might then begin to see clustering of studies at certain intersecting dimensions, giving us a better understanding of the general characteristics of tactics that seem more promising.

[8] Indeed, there are other dimensions that could be used. For example, law and society scholars might be interested in a “constitutionality” continuum, which provides a measure of high- and low-constitutionality controversy. A “Herbert Packer” continuum might be added (see Packer 1964), which could be characterized as a continuum between individual rights and community rights/crime control. Mastrofski might add a “legitimacy” continuum (see Mastrofski 1999), which ranks interventions according to how much they might challenge the legitimacy of an agency (see also Tyler 2004). However, for our purposes here, these three dimensions represent the most commonly shared descriptives for policing.

Data and methods for placing studies into the Matrix

Study inclusion criteria and search method

To map evaluations of police interventions into the Matrix, we used two criteria, one methodological and the other outcome-based. In terms of methodological requirements, we only included studies that were at least moderately scientifically rigorous—specifically, randomized controlled experiments or quasi-experiments using matched comparison groups or multivariate controls. To assess methodological rigor, we were guided by the Scientific Methods Scale (SMS) designed by Sherman et al. for the University of Maryland's "What Works" report (discussed earlier) and updated in Sherman et al. (2002). In the Maryland Report, studies were assigned a value ranging from 1 to 5 based on the rigor of the evaluation methods used. For the Matrix, we only included policing studies that received an SMS score of 3 or higher. A score of "3," which we label as "moderately" rigorous, corresponds to studies having a "separate comparison group present but non-randomly constituted; extensive information provided on pre-treatment equivalence of groups; [and] obvious group differences on important variables."[9] For our purposes, we included studies only if the comparison group was the same type of unit as the intervention group (e.g., a police beat if the target area is a police beat). Additionally, the study had to meet at least one of the following criteria: (1) comparison group was well-matched, (2) use of multivariate controls, or (3) use of rigorous time series analysis.

Generally, Farrington and colleagues (2002) describe a score of "4" as studies with "separate comparison group present; extensive information provided on pre-treatment equivalence of groups; [and] only minor group differences evident." For policing studies in particular, Sherman and Eck (2002: 301) elaborate a "4" as "before-and-after large sample comparisons of treated and untreated groups." Thus, a non-randomized study with 20 treatment police beats and 20 comparison beats would be a 4 on the SMS scale, while an intervention in just one beat with a comparison beat would be scored a 3. We were guided by both of these definitions, but all studies that we coded as 4s were non-randomized individual-based studies with carefully matched comparison groups or place-based studies with multiple treatment places and multiple comparison places. We term these studies rigorous. Finally, a "5" was considered highly rigorous and included randomized experiments in which differences between groups were not greater than expected by chance, and the units for random assignment matched the units of analysis.

Our decision to include studies with moderate methodological rigor was for practical reasons. The goal of the Matrix is to serve as a translation tool for police to use scientific evidence to guide practice. While compromising on rigor is certainly never a goal in scientific analysis, the general knowledge gleaned from moderately rigorous studies may be valuable to police in generating tactics of at least reasonable effect. However, recognizing this, we also provide Matrix mappings in which these studies are excluded as a comparison between areas of the Matrix we are more

[9] See the "Code Book for Methodological Rigor and Effect Size Computation" at the end of the Appendix of the Maryland Report for these descriptions.

certain about (in terms of outcome effectiveness). Additionally, for those studies that appeared in Sherman and colleagues' (1997, 2002) reviews, we were initially guided by the score given. We then reassessed the score if we found disagreement based on our review of the full text of the study. Then, we conducted our own assessment of the scientific rigor of studies published between Sherman and colleagues' (2002) review and December 2009 in order to create the most updated review of police evaluations.[10]

In addition to the methodological cutoff, we also set criteria that studies had to focus on interventions that were primarily police interventions (even though other agencies might be involved) and had to include crime or disorder as a measured outcome. Excluded studies, for instance, include community crime prevention programs that used police consultation at the outset but involved little or no police involvement in the actual program (e.g., Rosenbaum et al. 1986). We also excluded studies that only measured fear of crime as an outcome. While we do not think fear of crime is unimportant for police to focus on, we wanted to include only interventions that had some type of crime, disorder, or victimization measure in order to generate a Matrix that could be most useful for police in reducing crime. However, one could imagine additional Matrices that focus on other outcomes important in policing, such as fear of crime or police legitimacy.

To find these studies, we began with existing reviews of police literature, including the Maryland report and its update, existing systematic reviews on policing, and the NRC (2004) report. We also searched numerous library databases and as well as the websites of several professional and government organizations.[11] We located 97 studies published as of December 31, 2009, that met the methodological and substantive criteria for inclusion. Sixty-two studies (64%) were of moderate quality, 12 (12%) were rigorous, and 23 (24%) were randomized controlled experiments.

Mapping studies into the Matrix

We mapped the selected studies into the Matrix along the three dimensions using a consensus strategy. Each study was initially coded separately by two of the three authors.[12] If the reviewers did not code the study consistently, the remaining author would also code the study, followed by group discussion to reach consensus. We encourage readers to view the Matrix, located online at http://gemini.gmu.edu/cebcp/matrix.html. This online interactive tool allows both researchers and practitioners to freely access and view the entire field of quasi-experimental and experimental policing research, including how these studies were coded and mapped into the Matrix. This transparency also allows for further suggestions about including studies we may have missed, or for authors to suggest alternatives about study coding or mapping. The Evidence-Based Policing Matrix is displayed in its entirety in Fig. 2. This visual mapping of the Matrix is not meant to be precise; dots are spread out only to aid with

[10] The Matrix will be updated yearly with new studies that fit these qualifications. The entire coding of each study is available with the Matrix tool to maximize both transparency and discussion about study placement.

[11] These databases included Criminological Abstracts, Criminal Justice Periodicals, Criminal Justice Periodical Index, National Criminal Justice Research Service, Dissertation Abstracts, and Google Scholar. We consulted publications from NIJ, the Police Foundation, the Police Executive Research Forum, the Office of Community Oriented Policing Services, and the Center for Problem-Oriented Policing. We plan to re-search these databases on a regular basis to update the Matrix with new studies.

[12] The studies were divided equally so that each author initially coded two-thirds of the studies.

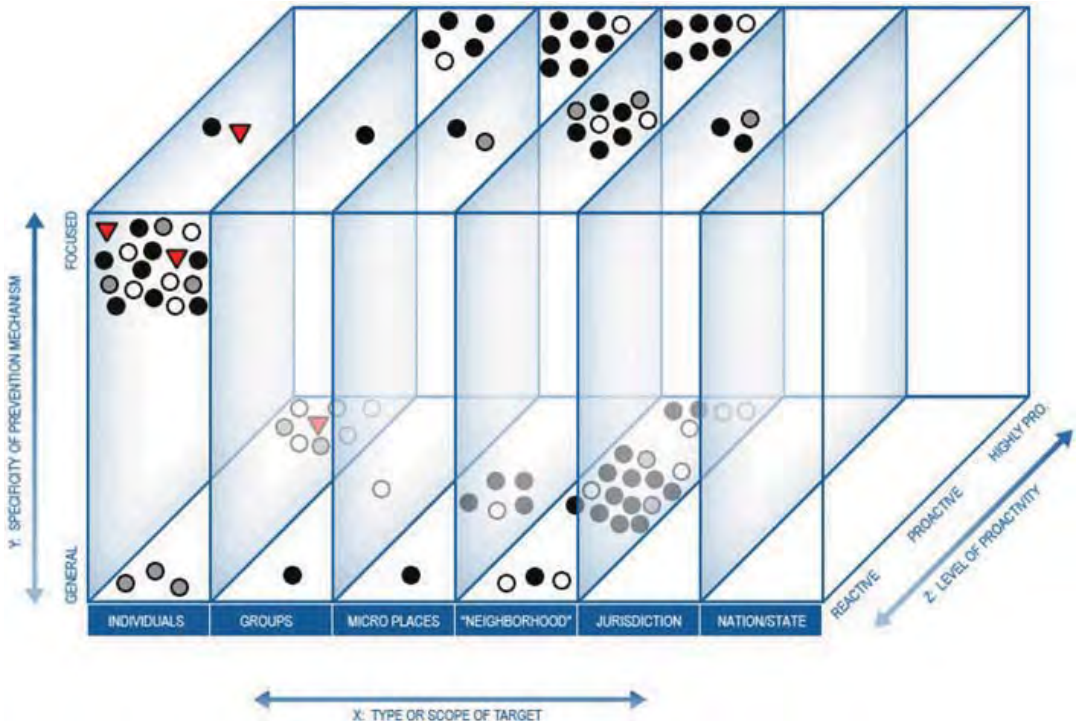


Fig. 2 The matrix mapped with 97 police intervention studies

visual presentation and are not statements about the relative proactivity or specificity of an intervention.

Additionally, we also present shape and color codes for each study to indicate the direction and statistical significance of the findings of the study. The codes are:

- ▼ *Statistically significant backfire effect* (upside-down triangle)[13] – indicates the outcome of the study was statistically significant, but in the opposite direction of the hypothesis. This would be considered a "harmful" intervention (see Weisburd et al. 2001), where an intervention significantly increased offending in some individuals or crime in some areas.
- ○ *Non-significant effect* (white dot) – indicates the intervention did not lead to any statistically significant effect. Although some might interpret colloquially that the intervention "did not work," Weisburd et al. (2003a) point out that such terminology is inaccurate. Statistical insignificance only states that, for this particular study, we cannot conclude that the null hypothesis of "no difference" is false.
- ◯ *Mixed effects* (gray dot) – indicates there were multiple primary outcomes in the study, at least one of which showed positive effects and at least one of which showed non-significant or backfire effects. Mixed effects might also include studies in which outcomes were only positive for a certain subgroup of targeted offenders or places. Although many studies have both significant and non-significant findings, we coded a study as having mixed results only when the authors emphasized the mixed nature of the findings. Examples might include arrest for domestic violence deterring employed but not unemployed suspects

[13] This symbol appears red in color on the website.

(see Sherman et al. 1992); restorative justice reducing recidivism for violent crime but not property crime (see Sherman et al. 2000); or crack house raids reducing crime but only for a 12-day period (see Sherman and Rogan 1995).

- *Significant effects* (black dot) – indicates that the intervention led to a statistically significant effect in reducing crime or criminality. Mapping the studies in this way allows the viewer to obtain five pieces of information about an intervention in a single visualization. The first four come from the single symbol itself: the intervention's target, specificity, proactivity, and effectiveness. However, the Matrix is interesting not simply because of its display of single studies or these four characteristics. The fifth piece of information results from the relative position of dots to each other, resulting in clusters of evaluated interventions at intersecting dimensions.

Results

Visual patterns

The clustering of studies that materializes from this mapping is a powerful visual. In particular, clustering of effective studies, or *realms of effectiveness,* circled in Fig. 3, facilitates generalization (and thus, translation) from the wide range of diverse policing research to the three-dimensional description of that realm. For example, four of the five realms of effectiveness involve interventions that are at least moderately proactive and/or that focus on places. In terms of interventions that target micro-places, those with greater focus and proactivity tend to fare well, although a

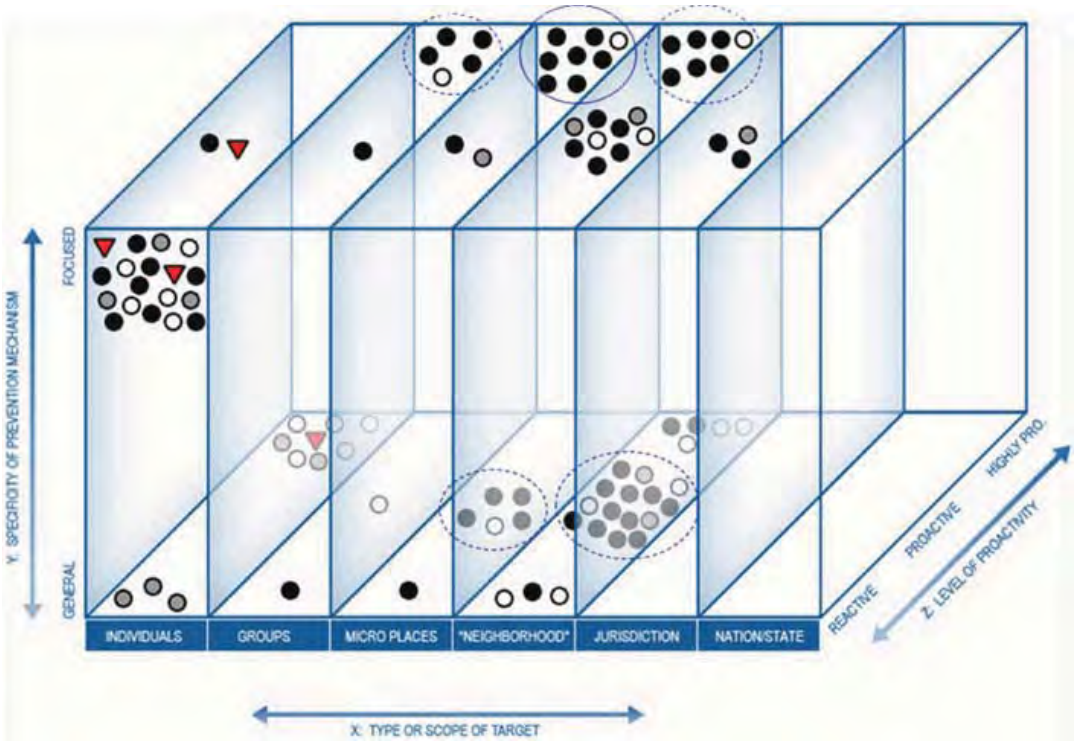


Fig. 3 Realms of effectiveness

small realm of effectiveness is also found in more general, proactive intersections (e.g., general hot spot deterrent patrols).

While there is also much evidence that has been generated at the neighborhood level, as will be discussed below, the majority of these studies are of only moderate methodological quality compared to those in the micro-place slab. The overall weaker scientific strength of studies in this cluster is denoted by a broken-lined circle in Fig. 3. Effective studies in this realm focus on a variety of police tactics, ranging from more general community policing (e.g., Connell et al. 2008) and order maintenance strategies (e.g., Reiss 1985) to more focused strategies, such as door-to-door visits to gain intelligence and increase property marking (Laycock 1991) and using street closures to reduce gang crime (Lasley 1996). This broad range of interventions more generally reflects the typical organization of police agencies into precincts or beats, making it logical that many interventions would correspond to the "Neighborhood" realm. A further realm of effectiveness emerged in the Group slab, although we know much less about these interventions than about interventions targeting individuals. The research that does exist seems to indicate that highly proactive and specific tactics such as the "pulling levers" approach (see Braga et al. 2008; Kennedy 2009) are promising.

The Matrix also shows us what single studies do not. For example, notice the first "slab" of studies mapped in the "Individuals" area. This grouping indicates to police agencies that when they use strategies focused on individuals, the evidence often shows mixed, non-significant, and sometimes backfiring results. The Matrix also shows that many of these individual-based strategies are reactive—a quality that has been recognized by both police practitioners and researchers as being less effective in fighting crime. About half of these studies focus on responses to domestic violence (either arrest or second responder programs), and while some of these studies show significant positive results (e.g., Sherman and Berk 1984), the evidence on police responses to domestic violence is overall quite mixed, with 2 of these 12 studies showing mixed results, 4 showing non-significant results, and 2 finding backfire effects. Even those individual approaches that are more proactive show mixed or ineffective results (DARE is one example). Although there are some studies in this slab that point to beneficial results (particularly when interventions are more focused), this particular region of the Matrix generally suggests that targeting individuals may be less effective than focusing on other types of targets. However, these realms are where the vast majority of police activity occurs (e.g., response to 911 and reactive arrests, investigations, and offender targeting).

Statistical comparisons across dimensions

To better quantify patterns in this visualization, we provide both descriptive and bivariate statistics. Table 1 shows the breakdown of the studies by dimension, outcome, and methodological rigor. While many policing evaluation studies examined individual-based interventions (32.0%), neighborhood-based studies constitute the largest group (40.2%). Slightly more than half of the studies (56.7%) examined focused interventions, and over 70% evaluated interventions that were at least moderately proactive. This place-based, focused, and proactive bias within the more rigorous evaluation literature in policing is not coincidental, nor does it reflect the reality of police practice, which we know is remarkably individual-based, reactive, and general in nature. Rather, these overall tendencies in the research reflect the

Table 1 Frequencies for characteristics of the 97 studies by dimensions

X-axis (Target)	*n*	%	**Outcome**	*n*	%
Individuals	31	32.0	Mixed results	14	14.4
Groups	8	8.2	Non-significant results	24	24.7
Micro-places	16	16.5	Significant backfire	4	4.1
Neighborhoods	39	40.2	Significant success	55	56.7
Jurisdictions	3	3.1	Total	97	100.0
Total	97	100.0			
Y-axis (Specificity/focus)	*n*	%	**Methodological rigor**	*n*	%
General	42	43.3	Moderately rigorous ("3")	62	63.9
Focused	55	56.7	Rigorous ("4")	12	12.4
Total	97	100.0	Randomized experiment ("5")	23	23.7
			Total	97	100.0
Z-axis (Proactivity)	*n*	%			
Mostly reactive	26	26.8			
Proactive	38	39.2			
Highly proactive	33	34.0			
Total	97	100.0			

innovations of scholars and police practitioners who have tried to push the field forward through these evaluations.

The dominance of moderately rigorous and also successful studies in the Matrix deserves some attention so that statistically significant findings are not over-emphasized. In particular, the cross-tabulation in Table 2 shows the distribution of studies by SMS method score (3, 4, or 5) and whether the studied evidence clearly indicated a statistically significant successful outcome. A significant relationship emerges, indicating that as studies become more methodologically rigorous, they are less likely to show clear significant success. This provides specific and updated support from the policing literature for Weisburd et al's (2001) finding that, as studies increase in methodological rigor, they are less likely to find positive results.

This tendency becomes even more visually obvious when comparing mappings of moderately rigorous studies of SMS=3 (Fig. 4a) versus more rigorous quasi-experimental and experimental designs of SMS=4 or 5 (Fig. 4b). Notice that many

Table 2 Cross-tabulation of SMS method score versus study results

	SMS method score		
	3	4	5
Sig. success	43 (69.4%)	4 (33.3%)	8 (34.8%)
Any other result	19 (30.6%)	8 (66.7%)	15 (65.2%)
Column total	62 (100%)	12 (100%)	23 (100%)

$\chi^2 = 11.213$, $p = .004$

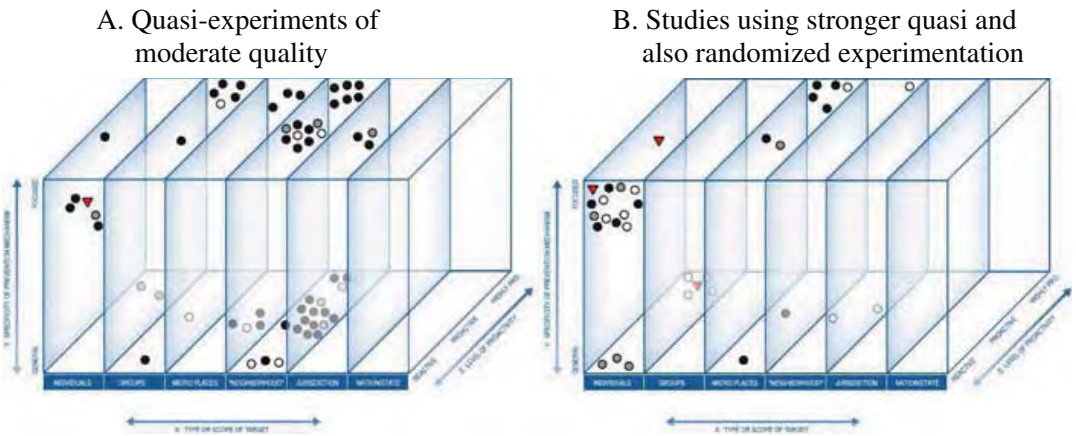


Fig. 4 Comparisons of studies in the Matrix of moderate and strong methods. **a** Quasi-experiments of moderate quality. **b** Studies using stronger quasi and also randomized experimentation

studies that showed statistically significant positive outcomes (especially in the neighborhood slab) disappear when a stronger methodological cutoff point is employed. Also visually striking is that more interventions targeting individuals appear in Fig. 4b. This indicates that we know with fairly good certainty that individual-level, reactive strategies in policing do not produce clearly positive results.

But what might be said of intersecting dimensions and the likelihood that studies of a certain method, outcome, or type might fall into them? In Table 3, we present cross-tabulations examining the relationship between each of our three axes and study results. We have dichotomized each variable to better display the overall trends in our data. For the X-axis, we collapsed the individual and group categories into one "person-based" category and combined the micro-place and neighborhood categories into one "place-based" category. (The three jurisdiction-level studies were excluded from this analysis.) For results, we again examine whether a study resulted in a statistically significant success or not.

The cross-tabulation shows a highly significant difference in results between the two X-axis general categories represented in the Matrix—person versus place-based. More than two-thirds (69.1%) of place-based studies showed significant crime and disorder reductions in contrast to 38.5% of person-based interventions, a relative difference of 79% (χ^2=8.705, p<.01). This reinforces quantitatively our finding that realms of effectiveness were generally found in the place-based slabs of the Matrix.[14] In examining the Y-axis, focused interventions are 34% more likely to find a statistically significant effect than general interventions (63.6 to 47.6%), although this finding is not statistically significant (χ^2=2.489, p>.10). This lends support to Weisburd and Eck's (2004) contention that focused interventions are more effective in reducing crime and disorder. Finally, we combined the proactive and highly proactive Z-axis categories to compare proactive to reactive studies. The cross tabulation shows a marginally significant difference between the two categories, with proactive interventions being 47% more likely to reduce crime (62.0 to 42.3%;χ^2=2.997, p<.10).

[14] Removing the neighborhood-based studies, which are generally weaker methodologically, would further strengthen the basis for this generalization.

Table 3 Cross tabulations of X, Y, and Z axes versus study results

	X-axis		Y-axis		Z-axis	
	Person-based	Place-based	General	Focused	Reactive	Proactive
Sig. success	15 (38.5%)	38 (69.1%)	20 (47.6%)	35 (63.6%)	11 (42.3%)	44 (62.0%)
Any other result	24 (61.5%)	17 (30.9%)	22 (52.4%)	20 (36.4%)	15 (57.7%)	27 (38.0%)
Column total	39 (100%)	55 (100%)	42 (100%)	55 (100%)	26 (100%)	71 (100%)

χ^2 X-axis=8.705; p=.003

χ^2 Y-axis=2.489; p=.115

χ^2 Z-axis=2.997; p=.083

Using the Matrix to advance evidence-based research, practice, and funding

In general, these results demonstrate quantitatively the relevance of the realms of effectiveness we identified in Fig. 3. Proactive, focused, place-based interventions are more likely to reduce crime and disorder than strategies concentrating on individuals, or those that are reactive and/or general in nature. And, when only looking at the highest-quality studies, this finding is even more pronounced. Among place-based strategies, interventions targeting micro-places appear to be particularly effective based on the highest quality evidence. The visualization of effective interventions at these intersecting dimensions helps illuminate why some interventions are more effective than others by revealing broad patterns in the characteristics, or strategic dimensions, of successful interventions. This study provides a first attempt to identify and quantify the strength of these realms and to provide researchers and police with statements about "what works" at a level of generalization higher than that of programmatic assessments.

We organized the research in this way because of our interest in developing a translation tool that would make the field of police evaluation research meaningful to practitioners. Hence, we did not restrict ourselves to selecting only those studies that involved randomized controlled experiments, although we do include in our tool the ability to examine only those studies that use more highly rigorous evaluation methods. We also recognize criticisms of vote counting in research syntheses (e.g., Wilson 2001) and do not suggest that a count of studies in a particular area of the Matrix provides definitive conclusions about "what works" in policing. Rather, this approach allows us to develop some initial generalizations about the state of policing research and the types of strategies that appear most effective. At the same time, it presents the research in a way that is more accessible and translatable for both researchers and practitioners. In future work, researchers might apply meta-analytic techniques to quantify effects from strategies falling into different areas of the Matrix more precisely. Researchers might also create similar matrices for studies assessing different types of policing outcomes (e.g., police legitimacy, use of force, discretion).

Through this generalization, the results of our Matrix, as well as the tool itself, have numerous implications for research and practice. Most obviously, the results can guide police agencies in the assessment and selection of strategies. As one example, we can consider how the Matrix might inform the development and

application of strategies to combat auto theft. While an agency might use traditional method—such as lookout lists of recently stolen vehicles, general patrol and random license plate checks, reactive investigation of auto thefts, and/or the use of decoy vehicles—the Matrix suggests approaches that are more fruitful. Given the evidence for the efficacy of place-based approaches to policing, an agency might direct its crime analysts to identify micro-hot spots of stolen and recovered vehicles. The agency might then focus directed patrol and the use of license plate reader devices on these hot spots (e.g., Taylor et al. 2010). Or, if agencies wish to address violent co-offenders or gangs, a general, more reactive policing approach may be less effective than examples found in the more highly proactive, specific portion of the Matrix. And yet another example: police leadership that wishes to transition its first and second line supervisors toward a more evidence-based approach might incorporate the Matrix into its promotions process. After training a force on "what works" and also in using the Matrix, supervisors' tactical portfolios might be mapped within the Matrix to determine the alignment of that portfolio with the evidence. A similar exercise could be carried out to assess a unit, a police chief, an agency more generally, or even for any one of these entities to assess themselves. Lum (2009) and the Matrix web site outline in detail how agencies might use the Matrix to inform primary sectors of policing, including (1) tactical and strategic development of crime reduction interventions in different units; (2) promotions, assessment, and accountability systems; (3) managerial and leadership arenas such as Compstat; (4) recruit training and in-service; and (5) crime analysis, research, and planning.

In addition, the Matrix can provide guidance to practitioners, researchers, and funders of research as to what types of evaluations are needed and useful. First, it enables us to see where researchers have amassed the most and the highest-quality evidence in terms of programmatic dimensions that are meaningful to practitioners. For example, the policing of gangs is a high-priority issue for police, yet very little strong evaluation research exists in the "groups" slab of the Matrix to meet this demand for evaluation. Second, it facilitates strategic assessment of approaches that are central to current innovations and police reform. The significant differences between the effectiveness of strategies along the key dimensions of the Matrix (e.g., place-based versus individual-based approaches) highlight the potential efficacy of different strategies and point to areas where research can make the most impact. Further, by illustrating the interactions between key strategic dimensions of police interventions, the Matrix can reveal more about the types of focused or proactive approaches that work best and the types of targets for which they are most beneficial. In turn, these intersecting dimensions can provide the skeletal base for the creation of strategies at various levels of policing.

Additionally, organizational tools like the Matrix can also be used as a "common ground" for conversations between researchers, police practitioners, and funding agencies when collaborating to evaluate, study, and ultimately reduce crime. In many ways, the Matrix builds on officer "experience" by connecting to officers with familiar vernacular. For example, a police agency may be interested in testing certain types of interventions, such as crackdowns on gangs or illegal gun carrying. The researcher, however, may be interested in improving the quantity of high-quality evaluations in the proactive place-based regions of the Matrix, or in conducting more rigorous experiments of neighborhood-level policing. In this scenario, the Matrix

could be used to elicit discussion and negotiation between the researcher and the police agency in a way that keeps the agency grounded in evidence-based regions but that does not divorce the police researcher from the real needs of the police agency. Solutions might thus include a quasi-experimental study testing pulling-levers approaches in multiple gang territories, or perhaps a randomized repeated measures study of crackdowns on gun carrying in high-risk patrol beats.

Further, agencies funding research and/or programs—such the National Institute of Justice, the Bureau of Justice Assistance, and the Office of Community Oriented Policing Services (COPS)—could potentially use tools like the Matrix to fund high-quality research and interventions in strategic ways that facilitate evidence-based practice. Such agencies might give priority, for example, to "low-risk" funding that would support increasing the quality of programs and research in intersections and realms of the Matrix where studies have already shown promising results. "Medium risk" funding might support research in areas of the Matrix where there has been little or no research but that are closer to more promising realms. For example, studies of group interventions that are only moderately proactive or that focus on known groups of offenders may fit here. Finally, "high risk" programs and research would fall within domains of the Matrix that have shown little promise or even backfire effects. In this way, our Matrix and similar tools could be used to facilitate evidence-based *funding* as well as evidence-based practice.

Finally, while speculative, we believe that this visualization of the research evidence may serve as a particularly effective tool with which to translate research for practitioners and other non-technical audiences, a goal that cannot be divorced from the intensions of evaluation. Scholarly assessments of research, both narrative and quantitative, are no doubt important and essential, but visualization and, further, experiential application of that visualization can be key approaches to learning, as education researchers have discovered (Clark et al. 2005; Mayer 2003). The Matrix also addresses key dimensions of knowledge utilization identified in literature on scientific dissemination (National Center for the Dissemination of Disability Research 1996; Nutley et al. 2007). More specifically, research is more likely to be used in practice when it is timely, accessible, and user-friendly, and when it is packaged attractively, all of which the Matrix accomplishes.

Of course, the Matrix is far from being the cure-all to institutionalizing scientific research and evidence into police practice. But, efforts like this may represent the "next step" in translating scientific evidence into practice and institutionalizing evidence-based policing. Indeed, there are major and well-known cultural, ideological, political, financial, and practical barriers in policing that regularly block change, science, innovation, new ideas, evidence, and systematic information at every turn (Lum 2009; Sherman 1984, 1998; Weisburd et al. 2003b; Willis et al. 2007). Incorporating evidence into practice requires not only building upon the already-existing infrastructure for evidence-based approaches, but also creating a stronger capacity in agencies to implement effective interventions and to maintain the practice of evidence-based policing. Practical changes must occur within police agencies for evidence-based policing to be used, including drastically increasing the number and skill sets of crime analysts and more freely interacting with academic and evaluation researchers. At the same time, researchers can perhaps facilitate these changes through scientific assessment and translation of the sort that we have presented here.

References

Abrahamse, A. F., Ebener, P. A., Greenwood, P. W., Fitzgerald, N., & Kosin, T. E. (1991). An experimental evaluation of the Phoenix repeat offender program. *Justice Quarterly, 8*, 141–168.

Bayley, D. H. (1994). *Police for the future*. New York: Oxford University Press.

Bayley, D. H. (1998). *Policing in America: Assessments and prospects. Ideas in American Policing*. Washington, DC: Police Foundation.

Bennett, T. (1990). *Evaluating neighborhood watch*. Basingstoke: Gower.

Bennett, T., Holloway, K., & Farrington, D. (2008). The effectiveness of neighborhood watch. Campbell Collaboration systematic review final report. Retrieved 4 June 2010 from: http://campbellcollaboration.org/lib/download/248/.

Braga, A. A. (2007). *Effect of hot spots policing on crime*. Campbell Collaboration systematic review final report. Retrieved 4 June 2010 from: http://campbellcollaboration.org/lib/download/118/.

Braga, A. A., Weisburd, D. L., Waring, E. J., Mazerolle, L. G., Spelman, W., & Gajewski, F. (1999). Problem-oriented policing in violent crime places: a randomized controlled experiment. *Criminology, 37*(3), 541–580.

Braga, A. A., Kennedy, D. M., Waring, E. J., & Piehl, A. M. (2001). Problem-oriented policing, deterrence, and youth violence: an evaluation of Boston's Operation Ceasefire. *Journal of Research in Crime and Delinquency, 38*(3), 195–225.

Braga, A. A., Pierce, G. L., McDevitt, J., Bond, B. J., & Cronin, S. (2008). The strategic prevention of gun violence among gang-involved offenders. *Justice Quarterly, 25*, 132–162.

Clark, R. C., Nguyen, F., & Sweller, F. (2005). *Efficiency in learning: Evidence-based guidelines to manage cognitive load*. Hoboken: Wiley.

Clarke, R. V. G., & Hough, J. M. (1980). *The effectiveness of policing*. Farnborough: Gower.

Connell, N. M., Miggans, K., & McGloin, J. M. (2008). Can a community policing initiative reduce serious crime? *Police Quarterly, 11*, 127–150.

Davis, R. C., Weisburd, D., & Hamilton, E. (2007). *Preventing repeat incidents of family abuse: A randomized field trial of a second responder program in Redlands, CA*. Washington, DC: National Institute of Justice, U.S. Department of Justice.

Davis, R. C., Weisburd, D., & Taylor, B. (2008). Effects of second responder programs on repeat incidents of family abuse. Campbell Collaboration systematic review final report. Retrieved 4 June 2010 from: http://campbellcollaboration.org/lib/download/233/.

Eck, J., & Weisburd, D. (Eds.). (1995). *Crime and place*. Monsey: Criminal Justice Press/ Willow Tree Press.

Erickson, M., & Gibbs, J. (1975). Specific versus general properties of legal punishments and deterrence. *Social Science Quarterly, 56*, 390–397.

Esbensen, F.-A. (2002). *National evaluation of the Gang Resistance Education and Training (G.R.E.A.T.) program. Final report*. Washington, DC: National Institute of Justice, U.S. Department of Justice.

Farrington, D. P., & Petrosino, A. (2001). The Campbell Collaboration Crime and Justice Group. *The Annals of the American Academy of Political and Social Science, 578*, 35–49.

Farrington, D. P., Gottfredson, D., Sherman, L., & Welsh, B. (2002). The Maryland scientific methods scale. In L. W. Sherman, D. P. Farrington, B. Welsh, & D. MacKenzie (Eds.), *Evidence-based crime prevention* (pp. 13–21). New York: Routledge.

Goldstein, H. (1979). Improving policing: a problem-oriented approach. *Crime & Delinquency, 25*(2), 236–258.

Kelling, G. L., Pate, A. M., Dieckman, D., & Brown, C. (1974). *The Kansas City preventive patrol experiment: Technical report*. Washington, DC: Police Foundation.

Kennedy, D. M. (2009). *Deterrence and crime prevention: Reconsidering the prospect of sanction*. New York: Routledge.

Koper, C. (2008). The varieties and effectiveness of hot spots policing: Results from a national survey of police agencies and a re-assessment of prior research. Paper presented November 14 at the American Society of Criminology meeting, St. Louis, MO.

Koper, C. S., & Mayo-Wilson, E. (2006). Police crackdowns on illegal gun carrying: a systematic review of their impact on gun crime. *Journal of Experimental Criminology, 2*(2), 227–261.

Lawton, B. A., Taylor, R. B., & Luongo, A. J. (2005). Police officers on drug corners in Philadelphia, drug crime, and violent crime: intended, diffusion, and displacement impacts. *Justice Quarterly, 22*(4), 427–451.

Lasley, J. (1996). *"Designing out" gang homicides and street assaults*. Washington, DC: National Institute of Justice, U.S. Department of Justice.

Laycock, G. (1991). Operation identification, or the power of publicity? *Security Journal, 2*, 67–72.
Lum, C. (2009). *Translating police research into practice. Ideas in American Policing*. Washington, DC: Police Foundation.
Lum, C. and Koper, C. (Forthcoming, accepted for publication in 2008). Is crime prevention relevant to counter-terrorism? In B. Forst, J. Greene, & J. Lynch (Eds.), *Criminologists on terrorism and homeland security*. New York: Cambridge University Press.
Lum, C., Kennedy, L. W., & Sherley, A. J. (2006). The effectiveness of counter-terrorism strategies. Campbell Collaboration systematic review final report. Retrieved 4 June 2010 from: http://campbellcollaboration.org/lib/download/53/.
Martin, S., & Sherman, L. W. (1986). Selective apprehension: a police strategy for repeat offenders. *Criminology, 24*, 155–172.
Mastrofski, S. D. (1999). *Policing for people. Ideas in American Policing*. Washington, DC: Police Foundation.
Mayer, R. E. (2003). The promise of multimedia learning: using the same instructional design methods across different media. *Learning and Instruction, 13*(2), 125–139.
Mazerolle, L. G., Price, J. F., & Roehl, J. (2000). Civil remedies and drug control: a randomized field trial in Oakland, CA. *Evaluation Review, 24*(2), 212–241.
Mazerolle, L., Soole, D. W., & Rombouts, S. (2007). Street-level drug law enforcement: A meta- analytic review. Campbell Collaboration systematic review final report. Retrieved 4 June 2010 from: http://campbellcollaboration.org/lib/download/123/.
McGarrell, E. F., Chermak, S., & Wilson, J. M. (2006). Reducing homicide through a "lever- pulling" strategy. *Justice Quarterly, 23*(2), 214–231.
National Center for the Dissemination of Disability Research. (1996). *A review of the literature on dissemination and knowledge utilization*. Austin, TX: Southwest Educational Development Laboratory.
National Research Council (NRC). (2004). Fairness and effectiveness in policing: The evidence. Committee to Review Research on Police Policy and Practices. In W. Skogan & K. Frydl (Eds.), *Committee on Law and Justice, Division of Behavioral and Social Sciences and Education*. Washington, DC: The National Academies Press.
Nutley, S. M., Walter, I., & Davies, H. T. O. (2007). *Using evidence: How research can inform public services*. Bristol: The Policy Press.
O'Neill, M., Marks, M., & Singh, A.-M. (Eds.). (2007). *Police occupational culture: New debates and directions*. Amsterdam: Elsevier JAI Press.
Packer, H. L. (1964). Two models of the criminal process. *University of Pennsylvania Law Review, 113*(1), 1–68.
Police Executive Research Forum. (2008). *Violent crime in America: What we know about hot spots enforcement. Critical Issues in Policing Series*. Washington, DC: Author.
President's Commission on Law Enforcement and the Administration of Justice. (1967). *Task force report: The police*. Washington, DC: U.S. Government Printing Office.
Reiss, A. J. (1985). *Policing a city's central district: The Oakland story*. Washington, DC: National Institute of Justice, U.S. Department of Justice.
Reiss, A. J., Jr. (1992). Police organization in the twentieth century. In M. Tonry & N. Morris (Eds.), *Crime and justice: A review of research* ((pp, Vol. 15, pp. 51–97). Chicago: University of Chicago Press.
Rosenbaum, D. P., Lewis, D., & Grant, J. (1986). Neighborhood-based crime prevention: Assessing the efficacy of community organizing in Chicago. In D. P. Rosenbaum (Ed.), *Community crime prevention: does it work?* Beverly Hills: Sage.
Rosenbaum, D. P., Flewelling, R. L., Bailey, S. L., Ringwalt, C. L., & Wilkinson, D. L. (1994). Cops in the classroom: A longitudinal evaluation of Drug Abuse Resistance Education (DARE). *Journal of Research in Crime & Delinquency, 31*(1), 3–31.
Rosenberg, M., & Knox, L. M. (2005). The matrix comes to youth violence prevention: a strengths-based, ecologic, and developmental framework. *American Journal of Preventative Medicine, 29*(5), 185–190.
Sherman, L. W. (1983). Patrol strategies for police. In J. Q. Wilson (Ed.), *Crime and public policy* (pp. 145–163). San Francisco: ICS Press/Transaction Books.
Sherman, L. W. (1984). Experiments in police discretion: scientific boon or dangerous knowledge? *Law and Contemporary Problems, 47*, 61–81.
Sherman, L. W. (1986). Policing communities: what works? In M. Tonry & N. Morris (Eds.), *Crime and justice: A review of research* ((pp, Vol. 8, pp. 343–386). Chicago: University of Chicago Press.

Sherman, L. W. (1990). Police crackdowns: Initial and residual deterrence. In M. Tonry & N. Morris (Eds.), *Crime and justice: A review of research* ((pp, Vol. 12, pp. 1–48). Chicago: University of Chicago Press.

Sherman, L. W. (1992). Attacking crime: Police and crime control. In M. Tonry & N. Morris (Eds.), *Crime and justice: A review of research, vol. 15* (pp. 159–230). Chicago: University of Chicago Press.

Sherman, L. W. (1995). The police. In J. Q. Wilson & J. Petersilia (Eds.), *Crime* (pp. 327–348). San Francisco: ICS Press.

Sherman, L. W. (1997). Policing for crime prevention. In L. W. Sherman, D. Gottfredson, D. MacKenzie, J. Eck, P. Reuter, & S. Bushway (Eds.), *Preventing crime: What works, what doesn't, what's promising*. Washington, DC: National Institute of Justice, U.S. Department of Justice.

Sherman, L. W. (1998). *Evidence-based policing. Ideas in American Policing*. Washington, DC: Police Foundation.

Sherman, L. W., & Berk, R. A. (1984). The specific deterrent effects of arrest for domestic assault. *American Sociological Review, 49*, 261–272.

Sherman, L. W., & Rogan, D. P. (1995). Deterrent effects of police raids on crack houses: a randomized controlled experiment. *Justice Quarterly, 12*, 755–782.

Sherman, L. W., & Weisburd, D. (1995). General deterrent effects of police patrol in crime hot spots: a randomized controlled trial. *Justice Quarterly, 12*, 625–648.

Sherman, L. W., & Eck, J. E. (2002). Policing for crime prevention. In L. W. Sherman, D. P. Farrington, B. C. Welsh, & D. L. MacKenzie (Eds.), *Evidence-based crime prevention* (pp. 295–329). New York: Routledge.

Sherman, L. W., Schmidt, J. D., Rogan, D. P., Gartin, P. R., Cohn, E. G., Collins, D. J., et al. (1992). The variable effects of arrest on criminal careers: the Milwaukee domestic violence experiment. *Journal of Criminal Law and Criminology, 83*, 137–169.

Sherman, L., Gottfredson, D., MacKenzie, D., Eck, J., Reuter, P., & Bushway, S. (1997). *Preventing crime: What works, what doesn't, what's promising*. Washington, DC: National Institute of Justice, U. S. Department of Justice.

Sherman, L. W., Strang, H., & Woods, D. J. (2000). *Recidivism patterns in the Canberra Reintegrative Shaming Experiments (RISE)*. Canberra: Center for Restorative Justice, Australian National University.

Sherman, L. W., Farrington, D. P., Welsh, B. C., & MacKenzie, D. L. (Eds.). (2002). *Evidence- based crime prevention*. New York: Routledge.

Skogan, W., Hartnett, S. M., et al. (1995). *Community policing in Chicago, year two*. Chicago: Criminal Justice Information Authority.

Smith, M. R. (2001). Police-led crackdowns and cleanups: an evaluation of a crime control initiative in Richmond, Virginia. *Crime and Delinquency, 47*, 60–83.

Stafford, M., & Warr, M. (1993). A reconceptualization of general and specific deterrence. *Journal of Research in Crime and Delinquency, 30*(2), 123–135.

Taylor, B., Koper, C. S., & Woods, D. (2010). *Combating auto theft in Arizona: A randomized experiment with license plate recognition technology*. Washington, D.C.: Police Executive Research Forum.

Tonry, M., & Morris, N. (Eds.). (1992). *Crime and justice: A review of research, vol. 15*. Chicago: University of Chicago Press.

Trojanowicz, R. (1986). Evaluating a neighborhood foot patrol program: The Flint, Michigan project. In D. P. Rosenbaum (Ed.), *Community crime prevention: Does it work?* (pp. 157–178). Beverly Hills: Sage.

Tyler, T. R. (2004). Enhancing police legitimacy. *The Annals of the American Academy of Political and Social Science, 593*, 84–99.

Villaveces, A., Cummings, P., Espetia, V. E., Koepsell, T., McKnight, B., & Kellermann, A. L. (2000). Effect of a ban on carrying firearms on homicide rates in 2 Columbian cities. *Journal of the American Medical Association, 283*(9), 1205–1209.

Weisburd, D. (2002). From criminals to criminal contexts: reorienting criminal justice research and policy. *Advances in Criminological Theory, 10*, 197–216.

Weisburd, D. (2008). *Place-based policing. Ideas in American Policing*. Washington, DC: Police Foundation.

Weisburd, D., & Green, L. (1995). Policing drug hot spots: the Jersey City drug market analysis experiment. *Justice Quarterly, 12*, 711–736.

Weisburd, D., & Eck, J. E. (2004). What can police do to reduce crime, disorder and fear? *The Annals of the American Academy of Political and Social Science, 593*, 42–65.

Weisburd, D., & Lum, C. (2005). The diffusion of computerized crime mapping in policing: linking research and practice. *Police Practice and Research: An International Journal, 6*, 419–434.
Weisburd, D., & Braga, A. A. (Eds.). (2006). *Police innovation: Contrasting perspectives*. New York: Cambridge University Press.
Weisburd, D., Lum, C., & Petrosino, A. (2001). Does research design affect study outcomes? *The Annals of the American Academy of Political and Social Science, 578*, 50–70.
Weisburd, D., Lum, C., & Yang, S.-M. (2003a). When can we conclude that treatments or programs "don't work. *The Annals of the American Academy of Political and Social Science, 587*, 31–48.
Weisburd, D., Mastrofski, S. D., McNally, A. M., Greenspan, R., & Willis, J. J. (2003b). Reforming to preserve: compstat and strategic problem solving in American policing. *Criminology and Public Policy, 2*, 421–456.
Weisburd, D., Bushway, S., Lum, C., & Yang, S. (2004). Trajectories of crime at places: a longitudinal study of street sements in the city of Seattle. *Criminology, 42*(2), 283–322.
Weisburd, D., Telep, C. W., Hinkle, J. C., & Eck, J. E. (2008a). Effects of problem-oriented policing on crime and disorder. Campbell Collaboration systematic review final report. Retrieved 4 June 2010 from: http://campbellcollaboration.org/lib/download/228/.
Weisburd, D., Morris, N., & Ready, J. (2008b). Risk-focused policing at places: an experimental evaluation. *Justice Quarterly, 25*(1), 163–200.
Weisburd, D., Bernasco, W., & Bruinsma, G. (Eds.). (2009). *Putting crime in its place: Units of analysis in geographic criminology.* New York: Springer.
Weisburd, D., Telep, C. W., Hinkle, J. C., & Eck, J. E. (2010). Is problem-oriented policing effective in reducing crime and disorder? Findings from a Campbell systematic review. *Criminology & Public Policy, 9*, 139–172.
Willis, J. J., Mastrofski, S. D., & Weisburd, D. (2007). Making sense of COMPSTAT: a theory- based analysis of change in three police departments. *Law & Society Review, 42*, 147–188.
Wilson, D. B. (2001). Meta-analytic methods for criminology. *The Annals of the American Academy of Political and Social Science, 578*, 71–89.
Wilson, J. Q., & Petersilia, J. (Eds.). (1995). *Crime*. San Francisco: ICS Press.

Cynthia Lum, Ph.D. is an Assistant Professor at George Mason University, Department of Criminology, Law and Society, and is also Deputy Director of its Center for Evidence-Based Crime Policy. Dr. Lum conducts research in the areas of policing, evidence-based crime policy, evaluation research and methods, democratization and justice systems, crime and place, and counterterrorism.

Christopher S. Koper, Ph.D. is the Director of Research at the Police Executive Research Forum, a non-profit research, technical assistance, and police membership organization based in Washington, DC. He is also a research associate of the Center for Evidence-Based Crime Policy at George Mason University. His work has spanned issues in policing, firearms, federal crime policies, juvenile delinquency, research methods, and white collar crime.

Cody W. Telep, M.A. is a doctoral student and Presidential Scholar in the Department of Criminology, Law and Society at George Mason University. He works as a research assistant for the Center for Evidence-Based Crime Policy. He received an MA from the Department of Criminology and Criminal Justice at the University of Maryland in 2008. His research interests include innovations in policing, police education, and evidence-based policy. His recent work includes a Campbell Collaboration systematic review on the effectiveness of problem-oriented policing.

TAB 2 DIVIDER HERE

BACK OF TAB 2 DIVIDER

Incorporating Research Evidence into Academy Training

Police academy curricula primarily focus on preparing officers for the daily tasks of policing, including writing reports, responding to calls for service, making arrests, and submitting evidence. Academies also emphasize training on use of force and the development of driving and other physical fitness skills. Because of these emphases, academies tend to reinforce the reactive and procedural nature of traditional policing. Yet, many crime prevention and organizational reforms and innovations in policing go beyond a reactive, procedural approach. For example, problem-solving, proactive targeting of crime patterns or repeat offenders, and the promotion of respectful and fair interactions with citizens all require knowledge and technical expertise that extend beyond this initial training. And officers are not likely to receive training in such matters outside the academy, as field training and daily police work also tend to revolve around procedural and reactive practices.

Incorporating lessons from research—i.e., evidence-based policing—into academy curricula therefore is important and timely. At the same time, doing so poses a number of challenges. This specialized information may not be well-known among academy instructors, and academies have limited budgets for hiring outside experts to teach and develop curricula for these subjects. For this demonstration, the MDP team is working with a police academy to develop video-based learning modules on evidence-based policing, with attached workbooks and quizzes that other academies can freely access and use. Such modules, whether on problem-oriented policing, hot spots policing, or legitimacy policing, will incorporate research knowledge, and provide a readily usable teaching resource for academy instructors.

Tools and Links

- Evidence-Based Policing 101 - The Basics (coming soon)
- Video Module 2 (coming soon)
- Video Module 3 (coming soon)
- Learning Objectives (coming soon)
- Study Guides & Performance Assessments (coming soon)

Link to Field Training Demonstration

Matrix Demonstration Project Team:

PI: Cynthia Lum

CoPI: Christopher Koper

CEBCP | 4400 University Drive, MS 6D12, Fairfax, Virginia, 22030 | cebcp@gmu.edu | 703-993-8716

Infusing Knowledge from Research into Field Training

One area of policing where research knowledge could be incorporated into police practice is during field training. Field training is where officers experience, observe, and apply knowledge and skills that they acquired in the academy to practical tasks. It also is the environment in which their initial impressions about good quality police work are formed, where proactive habits might be developed, and where positive attitudes towards problem-solving and assessment could be inculcated.

Toward these goals, this demonstration focuses on how principles from what we know about effective and fair policing might be incorporated into existing process, forms, and activities in a typical field training environment. Working with existing field training processes in an agency, we focus on four types of adjustments:

1. Revisions to the performance grading sheet that field training officers complete to incorporate more principles from knowledge about policing. For example, grading officers on their geographic orientation (how well they know the streets and buildings in their district) might also include grading officers on how well they know the locations of crime concentrations within their beats (reflecting research on hot spots). Or, officers might be graded on what they say to arrestees rather than only on how they arrest an individual (reflecting research on procedural justice). Another example might be grading officers on what they do in-between calls for service, rather than only how they respond to calls for service.

2. Amendments to actual tasks required of each trainee. For example, traditional "beat checks" can incorporate ideas from hot spots and problem-oriented policing research. Or, lessons on making arrests can also incorporate research notions such as targeting repeat offenders or focused deterrence strategies like pulling levers. When addressing the community, CPTED (crime prevention through environmental design) might be used. Traditional policing tasks might also be combined with engaging the information technology to assist with these tasks in more proactive ways.

3. Developing new activities for trainees to provide opportunities to practice the SARA problem-solving model, or that require tangible actions related to a research finding (like foot patrol in hot spots).

4. Modifications to the overall goals, objectives, written lessons and standard operating procedures that trainees must read during their field training. This may mean including language that reflects evidence-based policing, including proactivity, problem-solving, procedural justice, and intelligence-driven approaches, or including one-page summaries of knowledge about certain types of incidents or police interventions (domestic violence, drug market interventions, field and traffic stops, etc.).

Tools and Links

- Performance Measures Sample (coming soon)
- Task Ideas (coming soon)
- Objectives Adjustments (coming soon)
- Problem solving activity (coming soon)
- Knowledge 1 Pagers (coming soon)

Matrix Demonstration Project Team:

PI: Cynthia Lum

CoPI: Christopher Koper

ADJUSTING EXISTING FIELD TRAINING ACTIVITIES AND STEPS TO BETTER REFLECT EVIDENCE (SOME PRELIMINARY IDEAS)

Below are commonly listed items in many agencies' field training guides/workbooks that describe specific types of incidents and activities for which officers must demonstrate competency during field training. Such workbooks might come in different forms, but usually include standard operating procedures for each activity or incident as a guide for officers to use. Officers are assessed based on these standards. In this demonstration, we are working with one agency to unpack the various requirements and components of their field training guide (Column A) to see how activities might be adjusted or supplemented to include more concepts to reflect research findings on effective and fair strategies (Column B). This list reflects preliminary ideas and is not all-inclusive. The MDP team welcomes comments.

	(A) Activities for which officers in field training must show competency.	**(B) Additions or adjustments to these requirements that incorporate knowledge and skills that reflect what we know are effective skills to reduce and prevent crime.**
Accident Investigation	Incorporates operational procedures for traffic crash investigations and traffic enforcement.	Learn how crime analysis can identify problem intersections and roadways; conduct SARA analysis or even CPTED of hot spots of traffic or pedestrian accidents.
Adult Arrests	Incorporates operational and legal procedures for arrests, prisoner transport, public intoxication, and writs/warrant service.	Add information and research findings on how officer treatment of suspect during an arrest may be connected to the arrestee's later recidivism. Or, could assess officers on ability to address repeat offending and use arrests strategically for focused deterrence initiatives like Ceasefire or pulling levers. Positive performance might be measured by the *reduction* in arrests, if met with a reduction in crimes and calls for service, or by the diversion of an individual from being arrested (for example, some juveniles who might benefit more from diversion than arrest)
Alarms and Building Searches	Operational procedures for vehicle/foot patrol, checking the premises, reporting requirements, and clearing alarm calls.	For repetitive alarm problems, workbooks might incorporate additional guidance on basic problem-solving skills to reduce repeat alarm calls.

	(A) Activities for which officers in field training must show competency.	(B) Additions or adjustments to these requirements that incorporate knowledge and skills that reflect what we know are effective skills to reduce and prevent crime.
Assisting Other Agencies	Procedures in assisting other agencies during vehicle pursuit, metro transit issues, or incident commands. Includes but is not limited to working with child protective services, social services, and juvenile intake.	Lessons could also include exercises in dealing with crime problems that straddle borders (i.e., beats, sector, jurisdiction borders), and working with non-police entities to reduce problems at places. Officers might be assessed on their ability to connect problems from one system (metro) with crime problems outside of that system (e.g., burglary in residential areas nearby).
Beat Checks or Random Patrol	Operational procedures for formal and informal beat checks, as well as proper response to beat checks. Officers should review mobile databases daily and complete checks as many times as possible throughout the shift.	Learning about where hot spots are located from crime analysts. Could transition from beat checks to hot spots policing and proactive problem solving approaches in-between calls for service. May apply Koper Curve principle of 15 minute stops at hot spots between calls. Include lessons about the concentration of crime, where it concentrates, and how to effectively conduct hot spot policing in-between calls for service. Officers would also learn that even in high-crime places, 40-80% of time is not spent in a call for service or on an arrest.
Case Jackets	Required for any offense/incident report, felony arrest, serious crime even with no arrest, and any narcotics or dangerous drug cases. Includes departmental procedures of proper documentation.	
Criminal Investigation	Operational procedures to investigate a crime, as well as responsibilities for crime scene control. Specific procedures for the investigation of burglary, robbery, and white collar offenses.	Officers may balance lessons about criminal investigation of an *individual* with criminal investigation of a *place* or problem. Officers might attempt a mini case of place activity. See Case of Places demonstration at http://gemini.gmu.edu/cebcp/MatrixDemo/CaseOfPlaces.html . Also learn about solvability factors and procedures which lead to successful investigations.

	(A) Activities for which officers in field training must show competency.	(B) Additions or adjustments to these requirements that incorporate knowledge and skills that reflect what we know are effective skills to reduce and prevent crime.
Death Investigation	Departmental procedures and officer responsibilities in death cases with regard to field reporting, serious incident notification, criminal investigations, and investigation of deadly force and in-custody deaths.	
Destruction of Property	Incorporates department procedures for field reporting as well as criminal investigations related to destruction of property. Also consists of items to include in written report.	Crimes that happen frequently, especially when related to property, may present good opportunities for problem-solving exercises (for example, using a CPTED or POP exercise to address the root of this problem). Learn about links between physical and social disorder and crime, and order maintenance/quality of life policing.
Domestic Violence	Departmental procedures include waiting for possible backup to arrive, determining what happened, determining if probable cause exists and making an arrest if it does, and providing victim services to the remaining parties.	Add to the SOPs more information that reflects 30 years of research on the effectiveness of arrest and other responses to domestic violence. For example, research has indicated how an officer treats an offender or victim may reduce revictimization and recidivism.
Drug and Vice Offenses	Responsibilities include the detection, arrest, and prosecution of individuals engaged in the illegal use and sale of controlled substances, illegal gambling, prostitution, pornography, and alcohol violations.	More information about what we know works/doesn't work in policing drugs, alcohol, etc., including POP guides or quick reviews of the research (e.g., Mazerolle's review on what works in street level drug enforcement). Officers might also try smaller-scale activities that reflect principles from Drug Market Initiatives (see http://www.dmimsu.com/). Work with analysts, detectives and specialized units to identify drug corners and actors associated with those corners.

	(A) Activities for which officers in field training must show competency.	(B) Additions or adjustments to these requirements that incorporate knowledge and skills that reflect what we know are effective skills to reduce and prevent crime.
DUI Enforcement	Departmental procedures for identifying DUI offenders, approaching accidents or traffic stops, administering sobriety tests, and impounding vehicles.	Could use this as an opportunity for a SARA/POP exercise, especially if the jurisdiction has problem areas of DUI. Officers might identify underlying causes of DUI, map hot spots, and work on more targeted proactive enforcement activities. Officers may also be assessed on their knowledge about different approaches to proactive enforcement activities.
Juvenile Procedures	Operational procedures for juveniles taken into custody, as well as procedures for status offenses and serious habitual offender comprehensive action program	Traditional approaches emphasize proper procedures for juvenile arrest. Other skills that could be learned that reflect research might be juvenile diversion, reducing the potential for juvenile problems before they occur, learning when curfews work, and working with place-managers to provide more guardianship of hang-outs. Further information about juvenile justice, recidivism, and victimization might be provided for officers to understand this type of offending better.
Missing Persons	Departmental procedures outlining the incident report to be completed for missing persons.	
Motor Vehicle Code	Incorporates department procedures for traffic offenses; including felony offenses, misdemeanor offenses, driver's license suspension or revocation, registration, reckless driving, signs and signals, lane usage, right-of-way, equipment, accidents, miscellaneous offenses, and speeding.	Learn about proactive but constitutional ways of using pre-text traffic stops, or learn about the connection between traffic and crime. Could incorporate one-pagers concerning what we know about different types of strategies that use traffic stops to reduce crime, or even information sensitizing officers about the problem of racial profiling in traffic enforcement. Officers might show competency in not only applying the motor vehicle code, but also competency in where they choose to carry out traffic enforcement. Officers might also learn other technologies to assist with traffic enforcement, including LPR. Finally, officers might learn about procedural justice and fairness in conducting traffic stops.

	(A) Activities for which officers in field training must show competency.	(B) Additions or adjustments to these requirements that incorporate knowledge and skills that reflect what we know are effective skills to reduce and prevent crime.
Motorist Assistance	Departmental procedures include assisting with vehicle lockouts, requesting a wrecker or tow truck for impounded vehicles, and arranging for alternate transportation.	
Problem identifi-cation	[Not included in this recruit officer training manual.]	Interestingly, problem-identification (either proactively, or from existing calls for service) is not a competency included in field training guides and workbooks in many agencies. Problem identification is a more proactive approach to dealing with crime, and its exclusion reflects a common focus on reactive, individual approaches.
Property and Evidence	Operational procedures involve the separate packaging of guns, money, drugs, and items to be sent for lab analysis. Also includes instruction on special packages, dangerous property, and heat sealed bags procedures.	
Response to Crimes in Progress	Response procedures for emergency vehicle operations as well as communication with the dispatcher.	
Vehicle Impounds	Incorporates department procedures for parking enforcement, impound procedures, Lojack tracking, and combating auto-theft.	Instructional material regarding using license plate recognition, auto and auto theft, as well as a possible POP guide. Include information or tips about the detection of stolen vehicles and prevention of vehicle theft. Could also include learning about hot spots of auto theft and recovery, types of automobiles most often stolen, and ways of detecting stolen autos.

	(A) Activities for which officers in field training must show competency.	(B) Additions or adjustments to these requirements that incorporate knowledge and skills that reflect what we know are effective skills to reduce and prevent crime.
Your agency items here Your agency might have other items that it grades officers on in field training. List them here.	Summarize what this requirement is, what information the officer is required to read, and how the officer is assessed (what is he or she required to do to show competency in this area).	Likely, Column A will include procedural requirements and assessments (process of making an arrest, submitting evidence, writing a particular report, responding accurately and according to SOPs). Given principles of effective crime control (for example, as found in the Matrix), or given principles of more proactive processes (for example, SARA, CPTED, etc.), how can this item be adjusted, so that an officer in field training can obtain a more balanced field training experience in both procedural and research knowledge about policing?

ASSESSING RECRUIT OFFICER'S PROGRESSION AND PERFORMANCE (SOME PRELIMINARY IDEAS)

Listed below are typical performance measures that might be used to assess officers during field training. Normally, officers are assessed on these performance measures repeatedly throughout their 16-20 weeks of field training. In this demonstration, we provide examples of how a performance measure might be adjusted in later portions of field training to reflect a "scaffolding" approach to the field training curriculum *and* to reflect research knowledge about policing. Building skills and making them progressively more complex might enhance the development of an officer's problem-solving, prevention, and crime control skills. This list reflects preliminary ideas and is not all-inclusive. The MDP team welcomes comments.

Performance Measure	Original Description	Adjustments to Performance Measure, After the Initial Competency is Obtained
Motor Vehicle Operation	Evaluate recruit officer's competence to operate police motor vehicle during general and emergency situations.	Evaluate the officer's knowledge on information regarding police pursuits or vehicle accidents – specifically, what research has shown about reducing officer and civilian fatalities. Or, evaluate the officer's competence on the strategic use of MV for crime prevention (for example, doing prominent surveillance or slow roaming in a hot spot). Or, evaluate the officer's competence on knowing how to use a mix of MV and foot patrol to enhance citizen interaction (teaching the officer not to overly rely on the vehicle).
Orientation and Geography	Evaluate recruit officer's competence to expeditiously respond to locations while operating a police motor vehicle during general patrol and emergency situations.	Assess recruits on knowing WHERE crime is most often located and how to access computerized crime maps from crime analysis or the RMS. Don't just assess recruits on knowing street layouts and where THEY are located at a given time. Could also assess recruits on their knowledge of WHY crime occurs at certain places. What attracts crime to those locations?
Written Communication	Evaluate recruit officer's competence to select and utilize appropriate departmental forms and prepare reports that	Officers may be assessed on filling out other types of forms that facilitate proactive approaches to policing. These might be related to Case of Places, CPTED, or SARA analyses. Officers may be evaluated on the use of specialized forms (e.g., trespass or drunk in public enforcement orders), forms related to nuisance abatement, or other special forms that facilitate problem solving and

Performance Measure	Original Description	Adjustments to Performance Measure, After the Initial Competency is Obtained
	accurately represent the situation in a timely, comprehensive, and logically organized manner.	proactive approaches (e.g., field contact cards). Agencies might also want to add a performance measure that evaluates an officer's ability to identify and access other sources of written information that might assist them in their duties (for example, crime analysis, crime prevention or research information).
Field Performance	Evaluate recruit officer's ability to recognize, analyze, and take action upon law enforcement related activities and situations.	Evaluate recruit officer's ability not only to respond to calls for service, but to proactively reduce crime opportunities before they turn into crimes. Officers might be assessed on their ability to: conduct targeted, proactive patrol activities; identify problems and seek innovative and proactive solutions; utilize crime analysis, information technologies, and other resources; and connect separate crime incidents to each other. Evaluate an officer's ability to utilize knowledge about what works in crime prevention, not just how well that officer responds to calls for service via SOPs.
Telecommuni-cation skills	Evaluate recruit officer's ability to effectively utilize law enforcement communications equipment (radio, telephone, computer) and follow established protocols.	Evaluate an officer's ability to learn and be comfortable with other forms of technologies – RMS, CAD, crime analysis, LPR, etc., with assessment focusing on how the officer utilizes these sources of information to enhance proactive and reactive operations (for example, using information systems to review prior problems at a location when responding to calls or when conducting proactive activities).
Criminal law and ordinances	Evaluate recruit officer's knowledge of and ability to utilize substantive and procedural criminal law in field situations.	Evaluate recruit officer's knowledge of and ability to utilize knowledge about crime control, prevention, and fair policing that is found in various free resources. This may include information on crime prevention as well as information on topics like officer stress, use of force, officer safety, biased policing, community relations, problem-solving, leadership, etc. Given that the vast majority of an officer's shift is spent in situations for which the law does NOT provide clear guidance, other information is needed.

Performance Measure	Original Description	Adjustments to Performance Measure, After the Initial Competency is Obtained
Department policies and procedures	Evaluate recruit officer's ability to demonstrate knowledge of the department's policies, procedures, SOPs and acceptable past practices and apply them.	The department's policies, procedures, SOPS, and acceptable practices can include new information about how police can act to be more fair, legitimate and effective as described above. This is also a good opportunity for the recruit to learn and be assessed on current innovations in the department that may be well known at the managerial level but less well known at the patrol level. This may be a good opportunity for the recruit to understand how patrol operations are viewed at the strategic, command level.
Traffic enforcement	Evaluate recruit officer's ability to perform traffic enforcement and accident investigations.	Recruit officers may be evaluated on how traffic enforcement is used proactively to reduce crime. Officers may also be assessed on their ability to do basic hot spot, traffic, or problem- analyses related to traffic - where are the accidents/speeding/DUIs occurring, and why?
Relationships	Evaluate recruit officer's interaction with individuals in the community and persons within the department.	Officers might be assessed on knowledge about WHY respectful interactions are essential to police legitimacy and crime control effectiveness. Officers might be required to read further information about issues related to police legitimacy, biased policing, community policing, and perceptions of police by minority communities. Officers might also be assessed on the relationships they establish for proactive and preventive policing approaches (for example, establishing relationships with an apartment or business manager related to problems at a particular location).

TAB 3 DIVIDER HERE

BACK OF TAB 3 DIVIDER

Policing Places

Christopher Koper
George Mason University

Evidence-Based Policing Workshop
Center for Evidence-Based Crime Policy
August 2012

Department of Criminology, Law and Society
George Mason University

Crime Concentration and "Hot Spots"

- Half of crime occurs at 5% or less of street blocks and addresses

(e.g., Sherman et al., 1989; Weisburd et al., 2004)

Hot Spot Places

- Offenders, targets, absence of guardianship converge
- Places with facilities and features putting them at higher risk
- Examples: bars, convenience stores, parks, bus depots, apartment buildings, adult businesses, shopping centers, etc.

Advantages to Focusing on Hot Spots

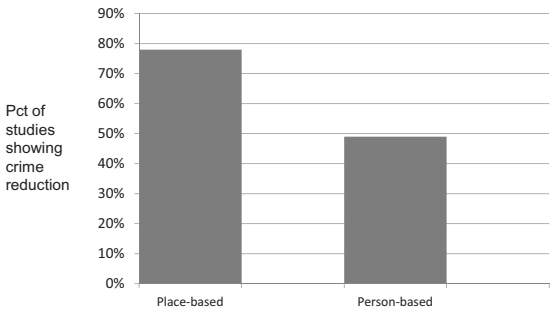
- Concentrate on places where crime is most likely
- Generate more visible presence and greater perceptual effects
- Easier to change conditions that contribute to crime
  - Situational crime prevention
  - Working with place managers or "guardians"

Studies Indicate Hot Spots Policing Reduces Crime

- 24 hot spots studies as of 2010
  - Strategies have included directed patrol, crackdowns, situational crime prevention, civil remedies, other problem-solving
  - 83% show crime reductions
  - No or limited displacement
    - Some diffusion of benefits to nearby areas

Source: Evidence-Based Policing Matrix

Place-Based Strategies are More Successful than Strategies Targeting People



Institutionalizing Hot Spots Policing:
"Case of Places"

Case of Places

Cpt. Emmett Williams & Ofc. Thomas Neale
Richmond City Police Department

For more information on the case of places, see the Lum and Koper Matrix Demonstration Project (http://gemini.gmu.edu/cebcp/MatrixDemo.html)

Investigating places, not just people

Finding Place-Based Equivalents

Traditional Case Folders	Case of Places
Initial report	
Supplements	
Victim information	?
Suspect information	
Witness Information	
Warrants and arrest information	

Items Submitted to the Commonwealth Attorneys Office

Defendant **Offense #:**

Case Officers Name **Code #**

For Applicable Items - Case Officers Shall Check and Initial Beside Each Box Marked

Section 1: Circumstances of Event

		INV	C/A			INV	C/A
IBR Report:	☐	___	___	Death Report:	☐	___	___
Supplement Report:	☐	___	___	Incident Report:	☐	___	___
Crime Scene Log:	☐	___	___	Domestic Assault Report:	☐	___	___

Section 2: Victim

Victim History Form:	☐	___	___	Arrest Record:	☐	___	___
Previous Police Contacts:	☐	___	___	Photograph:	☐	___	___

Section 3: Suspect

Suspect History Form:	☐	___	___	Arrest Record:	☐	___	___
Arrest Warrants:	☐	___	___	Arrest Sheets CCRE :	☐	___	___
Search Warrant/Affidavit:	☐	___	___	Permission to Search:	☐	___	___
Rights Waiver Form:	☐	___	___	Suspect Statement:	☐	___	___
Property Voucher:	☐	___	___	Property Receipts:	☐	___	___

Section 4: Forensics

Forensics Synopsis Sheet:	☐	___	___	Crime Scene Video/Stills:	☐	___	___
Medical Examiner's Report:	☐	___	___	Lab Analysis Requests:	☐	___	___
Circle Prelim. Or Final	P	F					
Drug Analysis Requests:	☐	___	___	Property Voucher	☐	___	___
Crime Scene Search Form:	☐	___	___	Aerial Photographs:	☐	___	___
Crime Scene Diagram:	☐	___	___				

Section 5: Witnesses

Witness Subpoena Form:	☐	___	___	Witness Statements:	☐	___	___
Arrest Records of Witness:	☐	___	___	PD-67: (Court Conflicts)	☐	___	___

Section 6: Miscellaneous Information

Officer Notes:	☐	___	___	PD-66 (Arrest Synopsis)	☐	___	___
Entry request NCIC – VCIN	☐	___	___	911 Tapes:	☐	___	___
Interview Video (qty) 0	☐	___	___	Audio Tapes (qty) 0	☐	___	___
Transcript (pages) 0	☐	___	___	Other Court Documents	☐	___	___
Other items submitted	☐	___	___	_____			

Supervisor Reviewing File (Print and Sign Name)		Date:	Time:
Employee Delivering Items to C.A: (Print and Sign Name)		Date:	Time:
C.A. Receiving Items: (Print and Sign Name)		Date:	Time:

Distribution: Original –After signatures received remains in the case folder
Copy- After signatures received, returned to Case Officer
Copy- Retained by Case Officer without C/A signatures until signed copy returned

CASE OF PLACE COVER REPORT

1. Case Number	
2. Specific geographic location (please include printed map)	
3. Describe location (i.e., school, residential, business, mixed, etc. be specific)	
4. Date case is opened	
5. Date case is closed	
6. Detective(s) assigned	
7. Supervisor assigned	
8. Problem(s) at this place	

SECTION A: CRIME HISTORY OF THE PLACE

SECTION A1: HOW DID THIS PLACE COME TO THE ATTENTION OF THE POLICE? *Be specific, noting whether the source was the community, the police, management meetings, or another source.*

SECTION A2: CRIMINAL HISTORY TRENDS FOR THIS PLACE. *Crime analysis units may be useful in providing this information. Please attach documents as supplements to this form.*

1. Reported crime incidents at this place 1-5 years[1]	Describe briefly here and attach crime analysis information as supplements
2. Arrest history for 1-5 years (amt and type)	Describe briefly here and attach crime analysis information as supplements
3. Calls for service for 1-5 years (amt and type)	Describe briefly here and attach crime analysis information as supplements
4. Immediate crime incident history of this place (past 30 days)	Describe briefly here and attach crime analysis information as supplements
5. Immediate arrest history of this place (past 30 days)	Describe briefly here and attach crime analysis information as supplements
6. Immediate calls for service history of this place (past 30 days)	Describe briefly here and attach crime analysis information as supplements
7. Other crime history of this place (gangs, juveniles, probationers).	Describe briefly here and attach crime analysis information as supplements

SECTION A3: EXISTING COMMUNITY INFORMATION ABOUT THIS PLACE. *Please attach any documents as supplements to this form. Proactive information gathering from officers, community members and other sources are conducted in sections B-D. This is just existing historical information about this place.*

From officers	
From community members	
From other sources (census, city data, etc.)	

[1] "1-5 years" is only a suggestions. The goal is for agencies to consider examining the historic trends of crime at this place.

SECTION A4: KNOWN CITY RECORDS OR COMPLAINTS ABOUT THIS PLACE. *Please attach any documents as supplements to this form.*

SECTION A5: INITIAL SURVEILLANCE ABOUT THIS PLACE.

1. Date of preliminary surveillance	
2. Surveillance conducted by	
3. Is Surveillance consistent with historical trends described above?	
4. Write a general narrative describing the nature of this location given the surveillance and analysis collected.	

SECTION B: PLACE-BASED SUSPECTS

SECTION B1: SUSPICIOUS PEOPLE AT THIS PLACE

1. Active/known offenders or arrestees	List names and attach supplemental information about individuals, arrest records, and types of crimes, whereabouts
2. Probationers/parolees	List names and attach supplemental information about individuals, arrest records, and types of crimes, whereabouts
3. Field interviews (past and present)	List here and attach forms as supplements
4. Gangs and groups	List here and attach forms as supplements
5. Vagrants, homeless, mentally ill, drunk in public	List here and attach forms as supplements
6. Truants, juvenile delinquents	List here and attach forms as supplements

SECTION B2: SPECIFIC PROBLEM LOCATIONS AT THIS PLACE

1. Problem residential or business addresses	List here, and provide information as supplements
2. Other problem locations (such as a bus stop, park, corner, alley, or lot)	List here, and provide information as supplements

SECTION B3: ENVIRONMENTAL "SUSPECT" - PROBLEM CONDITIONS AT THIS PLACE. *List environmental suspects such as poor lighting, graffiti, trash, abandonment, overgrown lots, abandon cars, other social and physical disorders, vulnerable spots. Attach information and photographs as supplements.*

SECTION C: VICTIMS AND PLACE-BASED TARGETS OF CRIME

SECTION C1: VICTIMS (PEOPLE)

1. General profile of types of people who are victimized	
2. Repeat victims	List names and locations and attach supplemental information

SECTION C2: VICTIMS (PROPERTY)

1. General profile of types of property being victimized	
2. Properties repeatedly victimized	List locations and attach supplemental information

SECTION C3. SUMMARIZE THE BROADER HARM OR IMPACT OF THE PROBLEM ON THE COMMUNITY.

Describe additional ways crime has impacted this community - be specific. Fear? Quality of life? Abandonment? Lack of investment or involvement? More crime?

SECTION D: GUARDIANS AND POTENTIAL FOR PREVENTION AND DETERRENCE

SECTION D1: NON-POLICE, INFORMAL GUARDIANS. *Identify and describe nature of these guardians and the types and levels of guardianship they provide. Examples include business and civic leaders, apartment and business managers, citizens, neighborhood watch groups, etc.*

SECTION D2: FORMAL POLICE/GOVERNMENT GUARDIANS. *Identify and describe nature of these guardians and the types and levels of guardianship they provide. Examples include the police, probation officers, school teachers, social services, private security, code enforcers.*

SECTION D3: TECHNOLOGY AND PHYSICAL FEATURES TO PREVENT CRIME. *List other technology and physical features, including CCTV, fences, locks, signage, gates, etc. used to prevent crime.*

SECTION E: THE INTERVENTION

SECTION E1. PAST SIGNIFICANT POLICE AND COMMUNITY EFFORTS/ INTERVENTIONS AT THIS PLACE.

Identify past interventions at the place and their impacts if known.

1. Police Operations	Describe operation and impacts, as well as who led operation
2. Community Efforts	Describe operation and impacts, as well as who led operation

SECTION E2: REVIEW/FIND INFORMATION OR RESEARCH ABOUT WHAT MAY WORK FOR THIS PROBLEM

Checked?	SOURCE
Y N	Evidence-Based Policing Matrix www.policingmatrix.org
Y N	POP CENTER guides http://www.popcenter.org/guides/
Y N	COPS OFFICE http://www.cops.usdoj.gov
Y N	Campbell Collaboration Crime and Justice Coordinating Group http://www.campbellcollaboration.org/reviews_crime_justice/index.php
Y N	Office of Justice Programs CRIMESOLUTIONS.GOV http://crimesolutions.gov
Y N	Subject matter experts on the eConsortium by area of expertise http://gmuconsortium.org/
Y N	Ideas from Smart Policing Initiative http://www.smartpolicinginitiative.com/

Which sources apply and what information is useful?

SECTION E3: DESCRIBE THE PLAN FOR THE INTERVENTION(S).

Utilizing information collected on problems and victims, as well as potentially effective interventions, describe in detail the plan for intervention here.

1. Police actions	List the step by step plan of action the police will take based on the information collected in Sections A-E.
2. Non-police guardians	Role for non-police guardians (as described in Section D) if applicable. Describe here.
3. Community members	Role for community members (as described in Section D) if applicable. Describe here.
4. Other formal guardians	Role for other formal guardians (as described in Section D) if applicable. Describe here.
5. Other actions related to physical environment	Describe in detail.

SECTION E4. DOCUMENT INTERVENTION AND RESULTS POST-INTERVENTION, AND PLANS FOR FOLLOW-UP AND MAINTENANCE. *Describe the actual intervention, its implementation, and results based on post-intervention follow up and de-briefing. Attach crime analysis before-after information if available, or after-action reports. Document plans for follow-up and maintenance.*

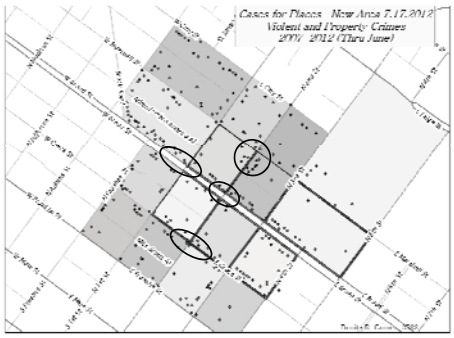
CASE OF PLACE SUMMARY CHECKLIST

MAJOR SECTION	Sub-Section	Done?
CASE OF PLACE COVER REPORT		☐
SECTION A: CRIME HISTORY OF THE PLACE	A1: How issue came to the police	☐
	A2(1-3): Long term history from crime analysis	☐
	A2(4-7): Short term history from crime analysis	☐
	A3: Existing community information about place	☐
	A4: Known complaints/city records	☐
	A5: Initial surveillance collected	☐
SECTION B: PLACE-BASED SUSPECTS	B1(1): Info collected on active/known offenders	☐
	B1(2):Info collected on probations/parolees	☐
	B1(3):Field interviews	☐
	B1(4): Gangs and groups	☐
	B1(5): Vagrants, homeless, mentally ill, drunk	☐
	B1(6): Truants/Juveniles	☐
	B2(1): Info collected on problem addresses	☐
	B2(2): Info collected on problem locations	☐
	B3: Info collected on environmental "suspect"	☐
SECTION C: VICTIMS AND PLACE TARGETS	C1(1): Profile of types of victims (people)	☐
	C1(2): Specific info on repeat persons victims	☐
	C2(1): Profile of types of victims (property)	☐
	C2(2): Specific info on repeat property victims	☐
	C3: Summarize broader harm/impact of problem	☐
SECTION D: GUARDIANS	D1: Non-police, informal guardians identified	☐
	D2: Formal police/government guardians ID'd	☐
	D3: Technology/physical features identified	☐
SECTION E: THE INTERVENTION	E1: Document past efforts of police/community	☐
	E2: Review existing info about "what works"	☐
	E3: Detail plan of action	☐
	E4: Document intervention and results	☐

An Example of a Case of Place in Richmond, Virginia

Place-Detective Officer Thomas Neale

Initial Investigation – Smaller Spots



Some initial challenges

- Challenges
  - Selling old ideas as a new approach to officers
  - Truly seeing beyond the individual offender
  - Understanding how focusing on a place can be more productive
  - Determining how to include community establishments, which are in some cases the source of problems
- Needs
  - Accurate statistics from crime analysis
  - Greater focus on "micro-places"
  - "Baby steps"; time constraint limits completeness and productivity

Initial Findings: Items for the Case of Place Folder

- "Criminal History"
- "Suspects"
- "Victims"
- "Guardians"

Case of Places

A number of studies have found that the majority of crime is geographically concentrated at very small locations. Some studies suggest that as much as 50% of all crime in a city occurs at just 3-5% of addresses and street blocks . Additionally, the research finds that these concentrations are stable over time and that they occur in different areas throughout the city. Numerous studies have illustrated the utility of focusing police patrol and other interventions on these locations. Problem-solving approaches can be particularly effective when applied to hot spots.

Following from this strong body of research, the Case of Places Matrix Demonstration is a new strategy that focuses investigative and detective activities on high-crime places as the investigative unit of analysis, as opposed to persons. To better institutionalize the use of place-based approaches in investigations, the MDP team is working with police agencies to develop case folders on problem places. This involves converting traditional elements of investigative case folders to place-based equivalents. For example, a "suspect" in a traditional detective's case folder is a person. For a case of place, the "suspect" might be a group of people, a building, a business, or a something in the physical environment. Thorough investigations of places--in the same way that detectives thoroughly investigate persons--might facilitate a better orientation to place-based policing, a crime prevention concept strongly supported by research. It will also support place-based policing by facilitating efforts to track the history of crime problems, actors, and police actions at hot spots.

Tools and Links

- Case of Places Form
- Case of Places Guide
- Case of Places Checklist
- Place Based References

Matrix Demonstration Project Team:

PI: Cynthia Lum

CoPI: Christopher Koper

CEBCP | 4400 University Drive, MS 6D12, Fairfax, Virginia, 22030 | cebcp@gmu.edu | 703-993-8716

CASE OF PLACES GUIDE

Note: this guide is to compliment the "Case of Places Form" and "Case of Places Checklist" located at the MDP Website
http://gemini.gmu.edu/cebcp/MatrixDemo/CaseOfPlaces.html

Case of Places Form Item	Description/Explanation
SECTION A: CRIME HISTORY OF THE PLACE	This is equivalent to the "crime incident" in a traditional investigation. The "problem" is what opens the case folder for a detective and initiates an investigation.
SECTION A1: HOW DID THIS PLACE COME TO THE ATTENTION OF THE POLICE? Examples: • Crime analysis unit information/intelligence • Community concerns • Officers, detectives supervisors who work that area • COMPSTAT and other managerial meetings	Traditionally, investigations are instigated by a single crime brought to the attention of the police by or for a victim. In the investigation of a place, cases can arise from multiple sources. Also, problems causing the crime may not necessarily be obvious to the police. A community in a high crime neighborhood may see physical and social disorders (trash, health hazards, empty buildings, loitering, noise) as its main problems.
SECTION A2: CRIMINAL HISTORY TRENDS FOR THIS PLACE. Sources of information may include RMS, CAD, crime analysis, and other data sources. Information collected might include: • Long term (1-5 yrs) trends of incidents, arrests, calls for service • Recent (past 30 days) trends of incidents, arrests, calls for service • Known problems at this place (gangs, juveniles, probationers) • Determine how long this location has been a problem	In most investigations, investigators are asked to research the suspect's history, which is often the criminal (or victim) history of a single person, or perhaps a group of people. In that background check, the suspect arrest record and incident/supplemental reports are often included. For the investigation of places, building the "rap sheet" of a place is essential, which includes the collection of information on past calls for service, past incidents, past arrests, and other information that can help establish the problem(s) at that location. Determine whether this is a location that officers, residents, and police command meetings view as a regular problem and how long the problem has persisted.
SECTION A3: EXISTING COMMUNITY AND PLACE-BASED INFORMATION ABOUT THIS PLACE. Sources can include: • Supervisor/Department liaison who attends community group meetings • Officers who regularly work in and patrol the location • Community groups and other sources of existing information	Often, police may only speak informally to community members about their understanding of places. Community groups, however, may collect information about their communities on a regular basis, providing a valuable historical perspective. Officers working in an area may also possess knowledge about the context and history of the location. More data collection in this area is addressed in section B-D below.

Case of Places Form Item	Description/Explanation
SECTION A4: KNOWN CITY RECORDS OR COMPLAINTS ABOUT THIS PLACE. Record any city records or complaints about this location from non-police, non-community sources (for example, code and ordinance violations).	In traditional investigations, detectives sometimes reach out to other agencies, like the USPS, electric companies, ICE, the school systems etc. This activity in Section A4 is similar in that detectives of places are accessing additional information about the problems of the place from the city government. For clubs, for example, this might include whether liquor licenses have been revoked or how outside promoters are booking this location for parties.
SECTION A5: INITIAL SURVEILLANCE ABOUT THIS PLACE. A brief initial surveillance of the location to match with crime history incident above.	This activity is similar to either covert or overt surveillance of a suspect. The purpose is to document routines and activities that may not be gleaned from the information sources above. The detective writes a short narrative about the place, which is similar to the initial narrative written in a crime incident report, describing some preliminary information found.

Extra notes about Section A:

1. The detective may consider including a map of the small area that includes recent crimes, hot street segments, schools and other important buildings, and maps that include geographic information (rivers, environmental barriers, etc.).

2. For some sub-sections (A1, A2, A3, …), the investigator may have a number of supplemental forms and pieces of information to add to the case folder. We encourage place-detectives to utilize their agencies' investigative case management system, supplemental forms, and other relevant forms to build continuity with existing systems within the agency.

Case of Places Form Item	Description/Explanation
SECTION B: PLACE-BASED SUSPECTS Who, or what, is causing or committing the crimes at these places? Could be persons, things, specific aspects of places (environmental or otherwise), community dynamics, groups of people, etc.	In traditional investigations of persons, information is collected on a specific individual or individuals suspected of committing the crime. But in a case of a place, multiple individuals might be the cause of this hot spot of crime, OR suspects may not even be persons - a business or abandoned property may be the "suspect". For example, at a high-accident intersection - the "suspect" might be a bunch of bushes that blocks visibility of on-coming cars in the cross street.
SECTION B1: SUSPICIOUS PEOPLE AT THIS PLACE. This can include: • Active/known offenders or arrestees • Probationers/parolees, pretrial supervisees • Individuals recorded by field interviews (past and present) • Gangs, groups, or co-offenders • Vagrants, homeless, mentally ill, drunk in public • Truants, juvenile delinquents	In traditional investigations, detectives often interview all suspected persons in the case to try to determine their involvement in the investigated crime. For places, the "suspect" may be specific people identified through crime analysis and data systems, or, it might be groups or categories of people identified through surveillance or community interviews above. These also can include people buying/selling drugs on the street, groups of teenagers hanging out, people drunk and in the street/in public, people smoking marijuana in public, loud or unruly residents, vagrants/homeless people, truant juveniles, or gangs.
SECTION B2: SPECIFIC PROBLEM LOCATIONS WITHIN THIS PLACE. These may include: • Repeat problem houses or addresses • Businesses with repeat issues • Transit locations: bus stop, metro station, bus terminal • Other locations that are suspect, such as parks, corners, alleys, lots, school	Again, the term "suspect" in a case of place is broad and extends beyond traditional definitions of a suspect. In a case of place, the suspect, or reason behind the problems at a place, can be a non-person such as a specific location, address or area. These types of locations are often referred to as crime attractors or crime generators; they are physical elements in the environment that attract or generate crime, or places that provide opportunities for crime to thrive.
SECTION B3: ENVIRONMENTAL "SUSPECT" - PROBLEM CONDITIONS AT THIS PLACE. These may include: poor lighting, graffiti, trash, abandonment, overgrown lots, abandon cars, other social and physical disorders, or vulnerable spots.	In addition to suspect buildings, addresses, and locations, other suspects could be environmental, and may include poor lighting, graffiti, trash, abandonment, overgrown lots, abandoned cars, other social and physical disorders, and vulnerable spots where an offender could surprise and trap a victim.

Case of Places Form Item	Description/Explanation
SECTION C: VICTIMS AND PLACE-BASED TARGETS OF CRIME	In a traditional investigation, a victim can be an individual person, a piece of property, or, no victim may be implicated (drug crimes, for example). Similarly, in a case of a place, the victim can be people, property, or an intangible victim (like the "quality of life" or "social cohesion and efficacy").
SECTION C1: VICTIMS (PEOPLE) Includes general profile of victims. Are specific victims identified? Any repeat victims of crimes at this place?	A person-based victim in a case of place can include a single person, groups of persons, or the entire community. Detectives may need to access data sources to obtain a list of victims of recent crimes at this location, or repeat victims. Further, there may be a more general "type" of victims at this place, which may include schoolchildren, the elderly, visitors at a mall, the homeless, people who park their cars here, tourists, people coming out of the bar, etc.
SECTION C2: VICTIMS (PROPERTY) Identify and document (including pictures) all property based victims at this place.	This is akin to property that might be victimized in traditional investigations, but in a case of place, this property is not necessarily attributed to an individual victim. Rather, "property" is established as a victim in and of itself. For example, a property victim might include a wall that continues to be written upon (graffiti), a park in which drug dealing is pervasive, or a building that is damaged by delinquents.
SECTION C3. SUMMARIZE THE BROADER HARM OR IMPACT OF THE PROBLEM ON THE COMMUNITY. Be specific in how you came to this conclusion (perhaps through your discussions above with victims, suspects, or community members).	For this item, the place-detective should identify additional harms from the problem on both the residents at that location and the community at large. For example, how has crime impacted this community? Does crime cause fear? Deterioration of the neighborhood's quality of life? Housing abandonment or residential flight? Lack of investment or involvement? More crime?

Case of Places Form Item	Description/Explanation
SECTION D: GUARDIANS AND POTENTIAL FOR PREVENTION AND DETERRENCE	There is little equivalent to guardianship in traditional investigations. Guardians refer to individuals, groups, or physical features that have the potential to deter or handle the problem(s) at the place. This step also helps to identify people that could be involved in the intervention for the problem at the place.
SECTION D1: NON-POLICE AND INFORMAL GUARDIANS. Given information collected above (you may need to canvas again), describe place managers, community guardians, business and civic leaders, and other guardians for this place. Focus on identifying: • Who the guardians are (neighbors, parents, clergy, etc.? • When they are there (amount of presence) • When they are not there (amount of absence at the place).	In traditional case investigations, detectives often rely on informants, police contacts, and witnesses to help with the investigation. This action is a modified version of that approach for the case of place investigation. One way to identify non-police guardians is by identifying repeat callers (keeping information sensitive) about problems at that place. This can include residents or business owners, community watch members, etc. Another way to identify guardians is to determine who might be around during peak crime hours or days of the week. Guardians may also include people who can exercise informal control over problem people at the location.
SECTION D2: FORMAL POLICE/GOVERNMENT GUARDIANS. Given information collected above, identify and speak to police and other formal guardians at this place. Examples include: Police officers; Private security officers; City mangers; Council people; Code enforcers, Probation officers, Principals and teachers, Clergy, Social workers, Housing managers.	This is preparing for the formal intervention below. These are NOT business owners, but those with some formalized role in social control to determine levels of guardianship at the location. Focus on the extent to which formal guardianship is present. Identify the weaknesses in the time/type of guardianship. Agencies might examine how many officers are actually assigned to that specific place, and how often officers are present at that location (using historic AVL data, for example).
SECTION D3: TECHNOLOGY AND PHYSICAL FEATURES TO PREVENT CRIME. These include CCTV, fences, locks, signage, gates, etc.	Photograph and document these to determine the extent of these non-person guardians at this place.

Case of Places Form Item	Description/Explanation
SECTION E: THE INTERVENTION *Interventions should be derived by a working group consisting of key stakeholders in the case of place, including the place-detective, crime analysis, supervisors, and members of the community.*	In a traditional investigation, this would be considered the arrest of a suspect or perhaps the implementation of a search and seizure warrant. However, the "arrest" of a place might be a more comprehensive approach to tackling the wider problems as described in Sections A-D and can include a variety of actions.
SECTION E1. PAST SIGNIFICANT POLICE OF COMMUNITY EFFORTS/ INTERVENTIONS AT THIS PLACE. Identify all past interventions at the place, conducted by the police AND the community. Try to be as specific as possible. Identify their impacts if known.	This step is necessary so that officers can identify what the police and others have done in the past at that location, and what has worked and not worked. This is useful in that it can help recycle useful interventions or bypass those that were not as successful. This will also help generate discussions in COMPSTAT meetings about the potential of past interventions, and bring the agency together to assess whether past interventions have been useful.
SECTION E2: REVIEW EVIDENCE ABOUT WHAT MAY WORK FOR THIS PROBLEM. An evidence-based approach to problem places means that the department has to look outside its immediate experience and resources to learn about potentially effective interventions for the problem they have. Possible resources include: The Evidence-Based Policing Matrix POP CENTER guides COPS OFFICE Office of Justice Programs CRIMESOLUTIONS.GOV Campbell Collaboration Crime and Justice Coordinating Group Subject matter experts on the eConsortium by area of expertise Projects at the Smart Policing Initiative (BJA) website	The **Matrix** contains information on effective, evidence-based approaches for policing. Place-based approaches are located in the "Micro-Place" and "Neighborhood" slabs. www.policingmatrix.org The **POP guides** contain information on different policing strategies for very specific problems. http://www.popcenter.org/guides/ The **COPS Office** provides information on different community-oriented policing approaches. http://www.cops.usdoj.gov The Office of Justice Programs **CrimeSolutions.gov** is geared to inform policy makers and practitioners on what works in different areas of the criminal justice system. http://crimesolutions.gov The **Campbell Crime and Justice Group** provides reviews of different criminal justice strategies, interventions, and programs. http://www.campbellcollaboration.org/reviews_crime_justice/index.php **eConsortium** of subject matter experts at universities: http://gmuconsortium.org/ **Smart Policing Initiative** http://www.smartpolicinginitiative.com/

Case of Places Form Item	Description/Explanation
SECTION E3: DESCRIBE THE PROPOSED INTERVENTION(S). Describe the outcome measures sought for the intervention for this place and the plan for assessing the effectiveness of the intervention.	Investigators should think of this as planning for the arrest of a serious violent offender. A proper plan of action must be in place in order for things to go smoothly. Or, this can be similar to a search and seizure warrant, which essentially is a documentation of what will be taken, how and why. This step is necessary so that the intervention can be properly documented, evaluated and repeated if effective. Detectives should identify what might be considered a successful "arrest" of the problem of the place. This should not simply be the carrying out of the intervention (the "arrest") but another meaningful outcome (like crime reduction).
SECTION E4. Document the intervention, results, and plans for follow-up and maintenance.	Here, the unit may also document whether the intervention was replicated in another case of place, so that institutional knowledge can be developed on this type of place-based tactic.

Minneapolis Police Department

Efforts to Institutionalize Evidence Based Practices with a Case of Places focus

Metro/State news
Marketplace section begins on page 7B

Star Tribune
Saturday
May 28/1988

Minneapolis police focus on 'Hot Spots'

Plan concentrates on troubled areas

By Dennis J. McGrath
Staff Writer

The Minneapolis Police Department will start a program later this year intended to cool down some of the city's high-crime "hot spots."

By saturating 100 troublesome locations, police officials hope the yearlong Hot Spots crime effort will cut the citywide crime rate. It also will test the question of whether police presence in specific high-crime areas prevents crime or merely displaces it.

"There's a notion cops have that if you suppress crime here, it's going to pop up over there," said Deputy Police Chief David Dobrotka. "I don't think that's true. I think some of it can be prevented."

The Minneapolis City Council Friday approved the program, which will be funded with a $501,000 federal grant and $100,000 from city funds and private foundations.

In giving unanimous support for the program, council members said it another example of how the pol... department is becoming more innovative.

"It's smart police work and it's a get-...gh" program, said Council ...e Carol Johnson, DFL-13th ...

... is based on recent studies of Minneapolis crime reports showing that an inordinate number of police calls come from a small number of addresses.

In 1986, for example, 64 percent of all 911 calls in the city were from 5 percent of all the addresses. In addition, all of the rapes, 80 percent of all robberies and 65 percent of all auto thefts that year occurred at 1 percent

Crime continued on page 11B

'Hot spots' cool off when a cop is nearby

By Mark Brunswick
Staff Writer

A new study done in Minneapolis showed that parking manned police cars in crime-prone areas was more effective in reducing calls than having officers patrol.

The study also tends to disprove that presence in an area has no ... a long-held notion ...

said the results could determine how police patrol power is distributed for cities nationwide and whether departments need additional officers.

Preliminary results, showing that police calls were reduced by 13 ... for experimental hot spots, ... nounced Tuesday to city ... Some took the data as a ... increasing the patrol numbers in the department; others regarded the study as a tool for using existing resources more efficiently.

... results did not prove ... deters crime.

Criminologist has made Minneapolis a leading crime lab

By Dennis J. McGrath
Staff Writer

Since Tony Bouza became police chief in 1980, Minneapolis has become one of the leading laboratories for crime-fighting experiments.

... neapolis Police Department.

Bouza, who considers himself Sherman's mentor, calls him the best criminologist in America. Unli... emphasis of the more ... James Q. Wilson ...

StarTribune

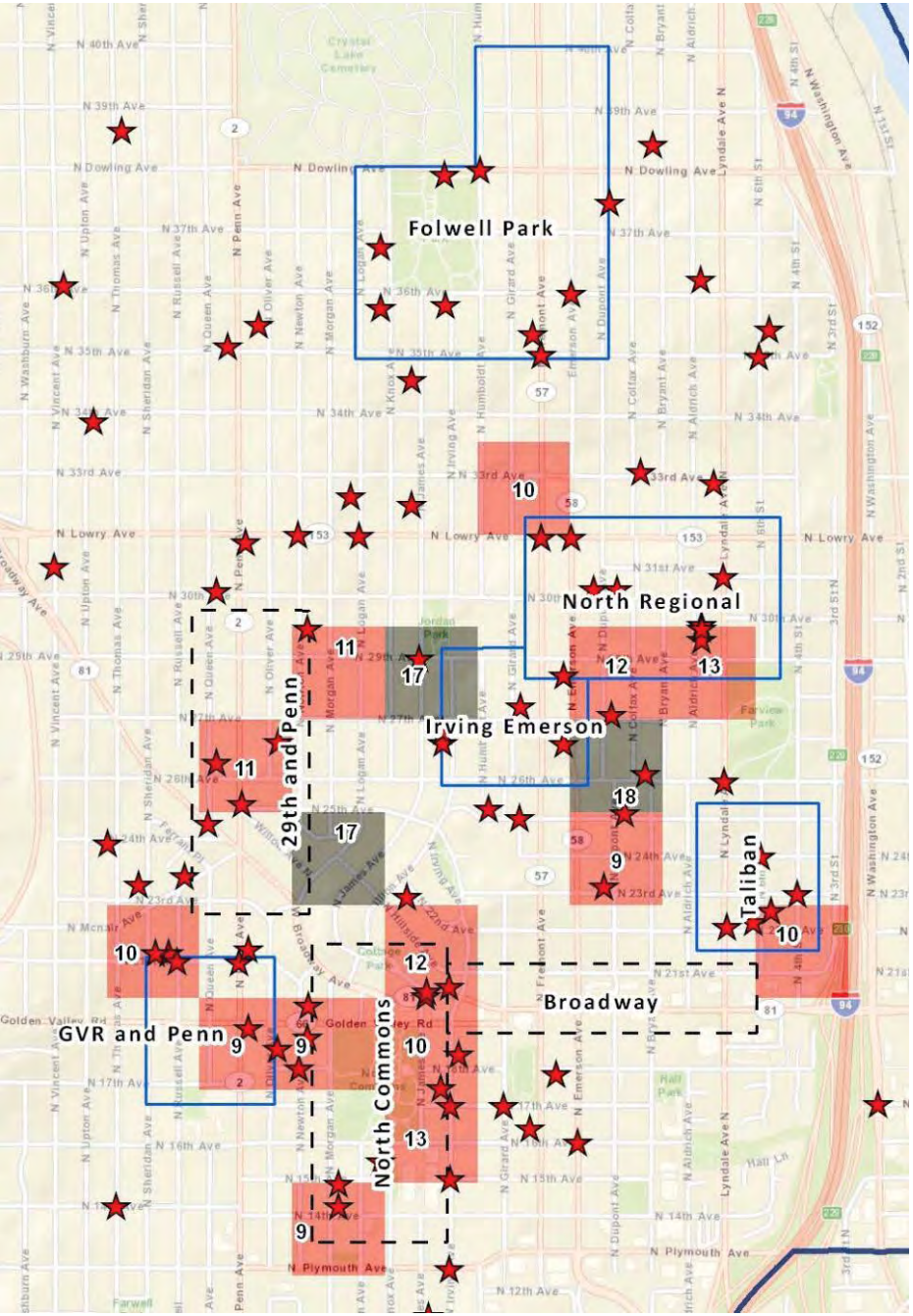
Winter's worst job
And you think YOU'RE cold

the NEXT crime

Minneapolis police are part of a national movement that is producing revolutionary results in predicting criminal behavior.

Abortion foes ...

Why is it useful to focus on place?



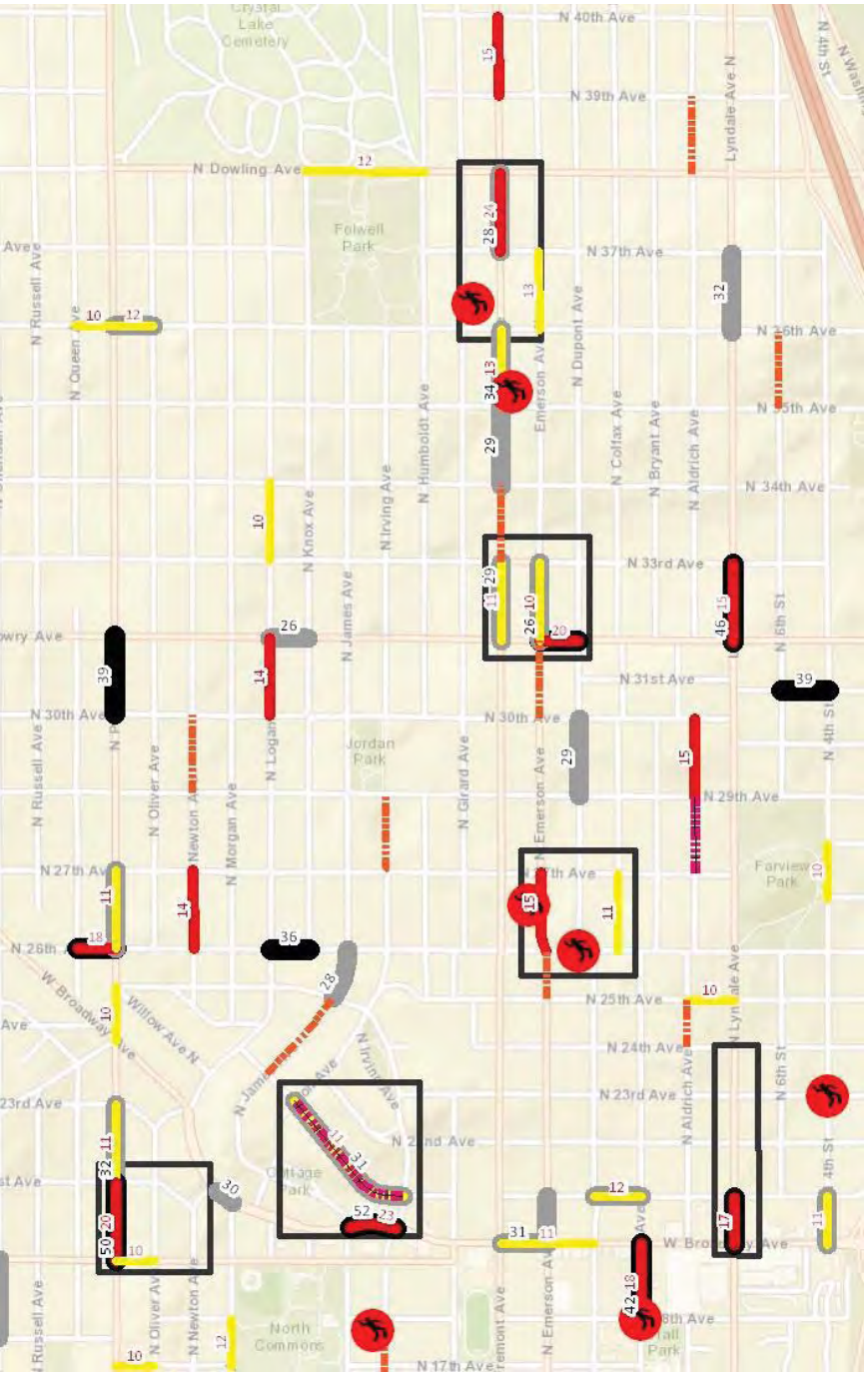
- 130 Police officers assigned

In 2011:

  - 12 Homicides
  - 86 Rapes
  - 426 Robberies
  - 261 Domestic Agg Assaults
  - 324 Agg Aslts (non Domes)
  - 1642 Burglaries
  - 1553 Larcenies
  - 12,125 Arrests
  - 60,300 Calls for Service

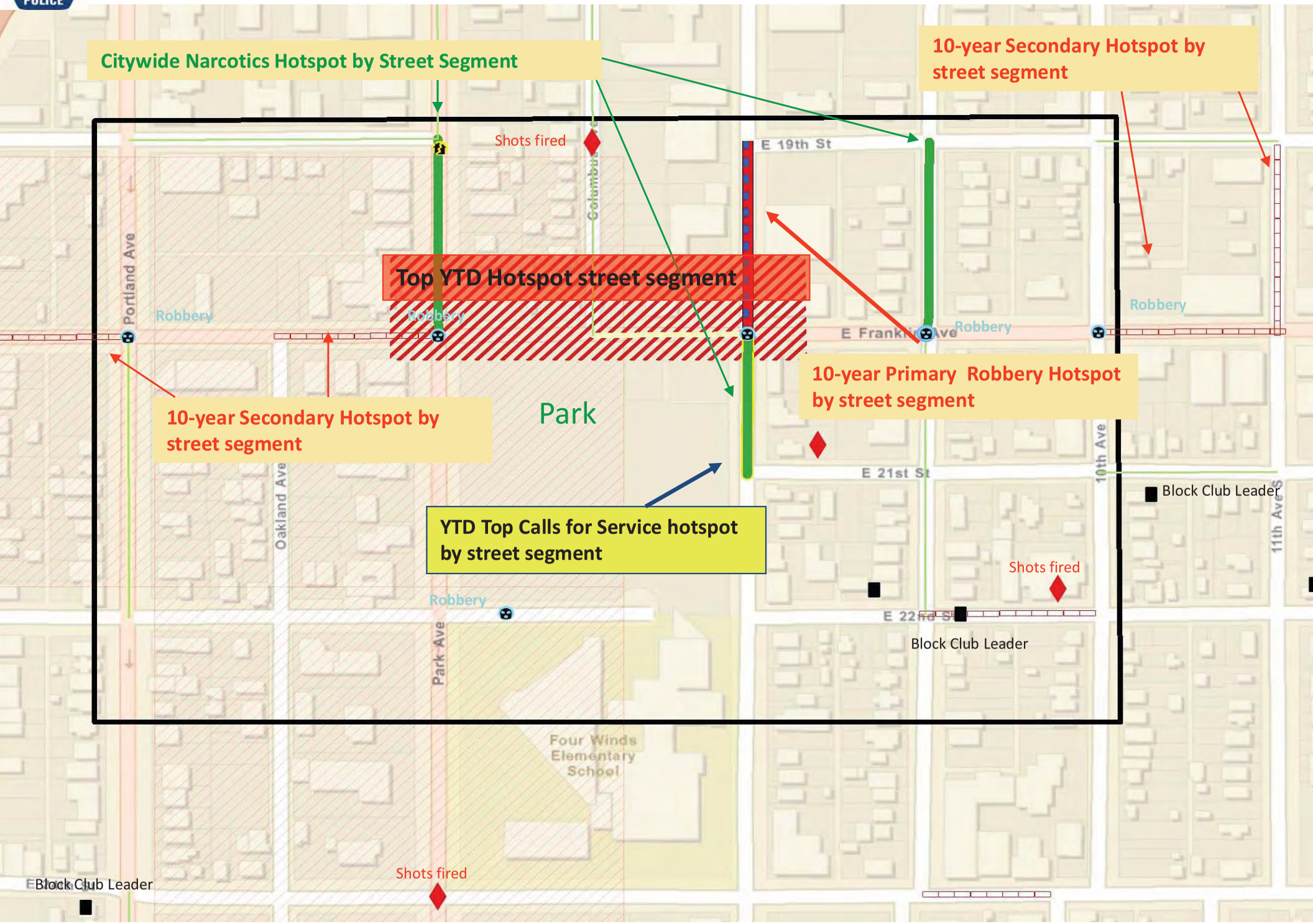
- Precinct 4: 1,071 identified active gang associations

Hot Spots of Gun Crime in Minneapolis

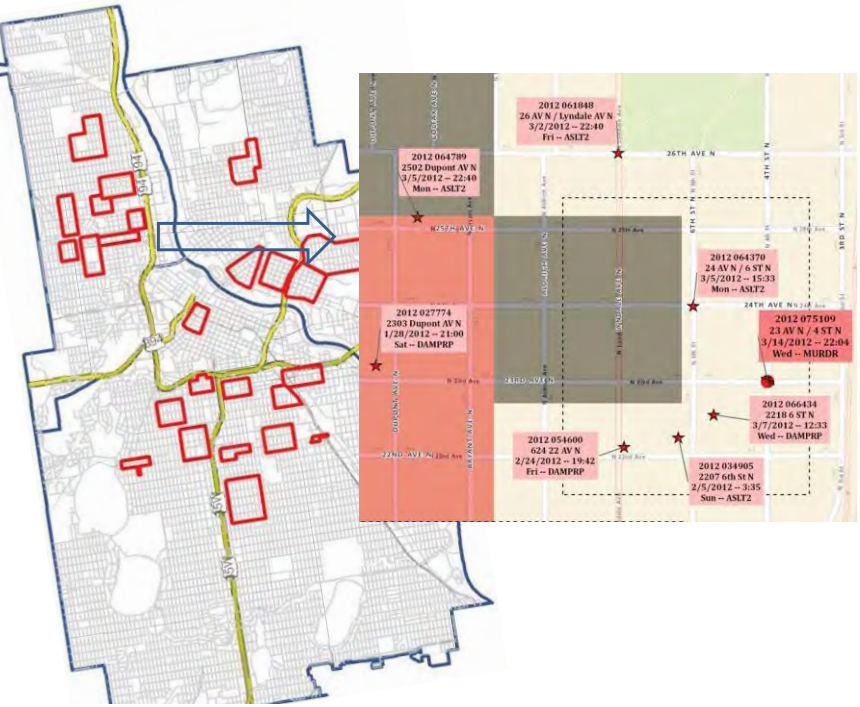


- Hot Spots are consistent and concentrated
- Traditional, intuitive, and reactive tactics not effective
- Goal: To leverage and optimize relationships with community and non-law enforcement entities.

Street segment test of Peavey Park Hot Spot- July 2011



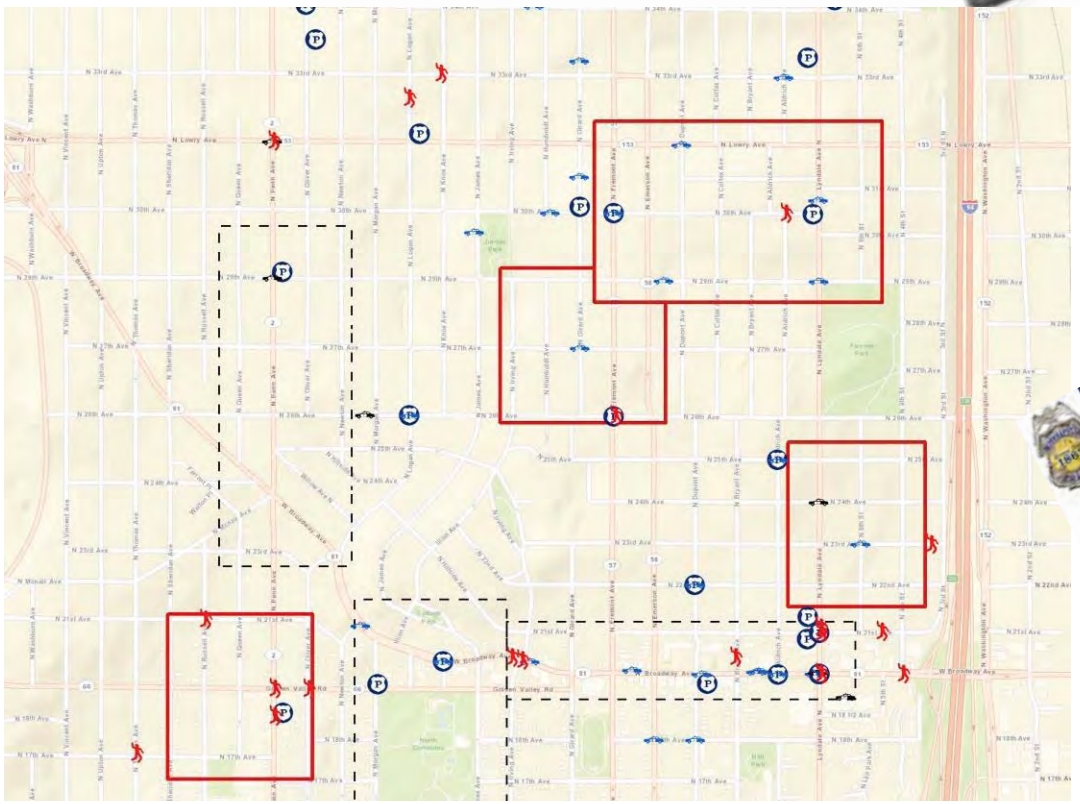
Case of Places

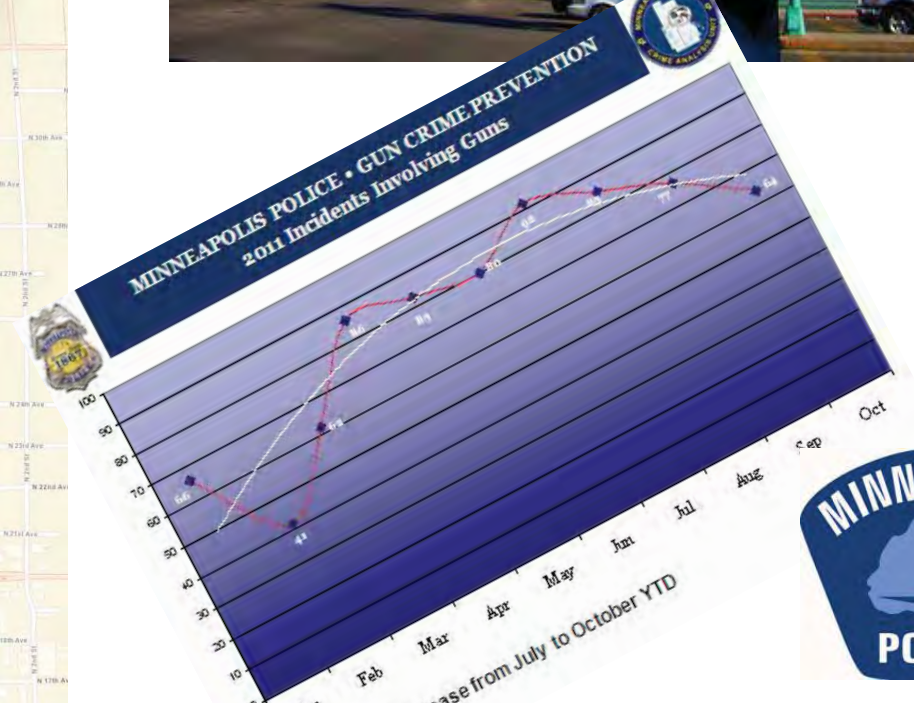


- Original, holistic, and progressive data driven
- Challenges long standing paradigms of intuition-based reactive policing
- Focused on gun crime hot spots on the Minneapolis Northside
- We cannot arrest our way out of the problem
- In the last ten years, 5% of the street segments equal 50% of the gun crimes

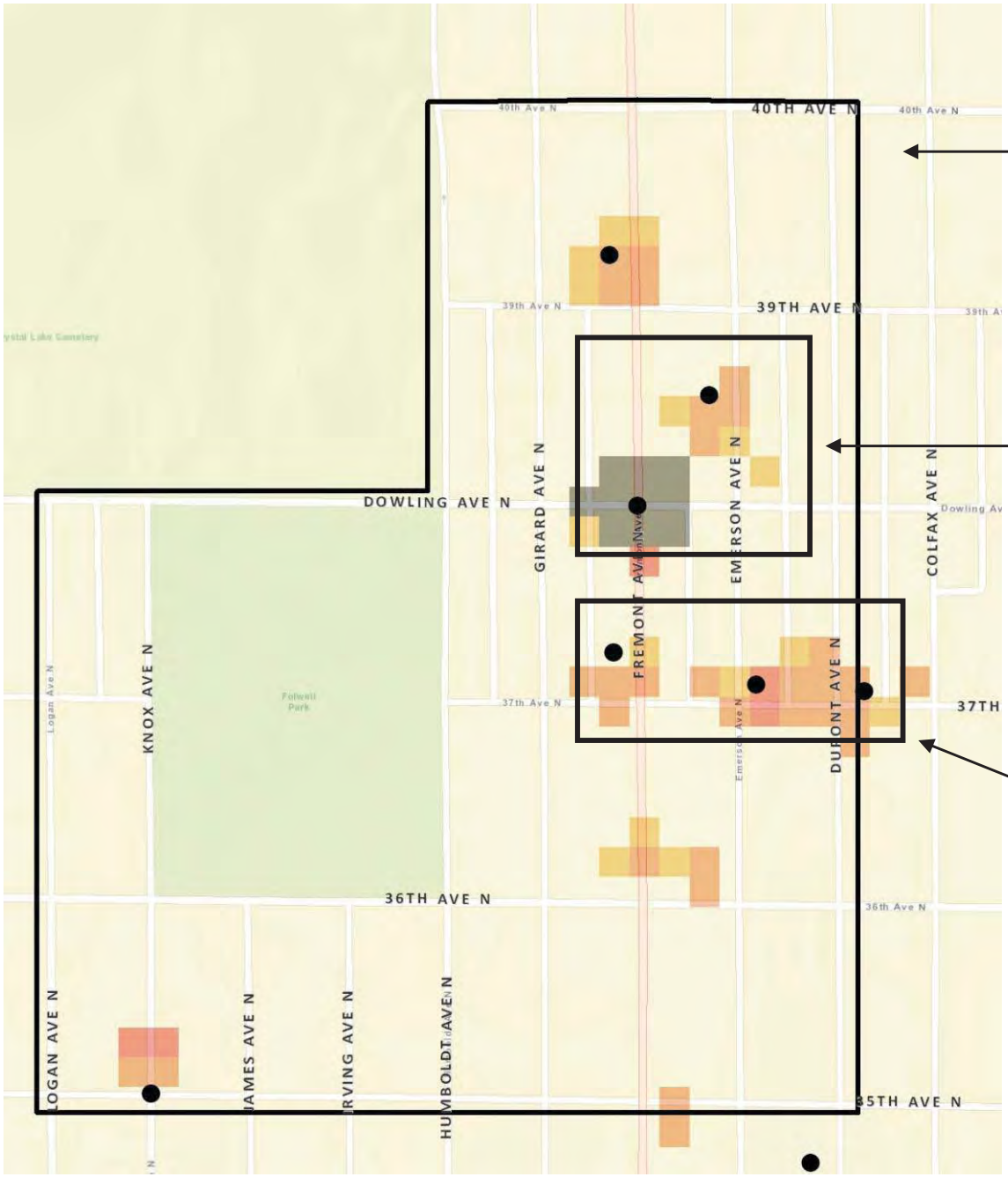
Integrating Crime Analysis into the MPD Mission

Prioritizing a Focused and Proactive Gun Crime Strategy





MINNEAPOLIS POLICE • FOURTH PRECINCT
Folwell Hot Spot – Gun Crime Breakdown 2011



2011 CFS Events:
ShotSpotter: 11 Shootings: 9
Sounds of Shots Fired: 144 Person With a Gun: 37
2011 CAPRS:
Guns Used: 27 People Shot: 17
Violent Crime: 41

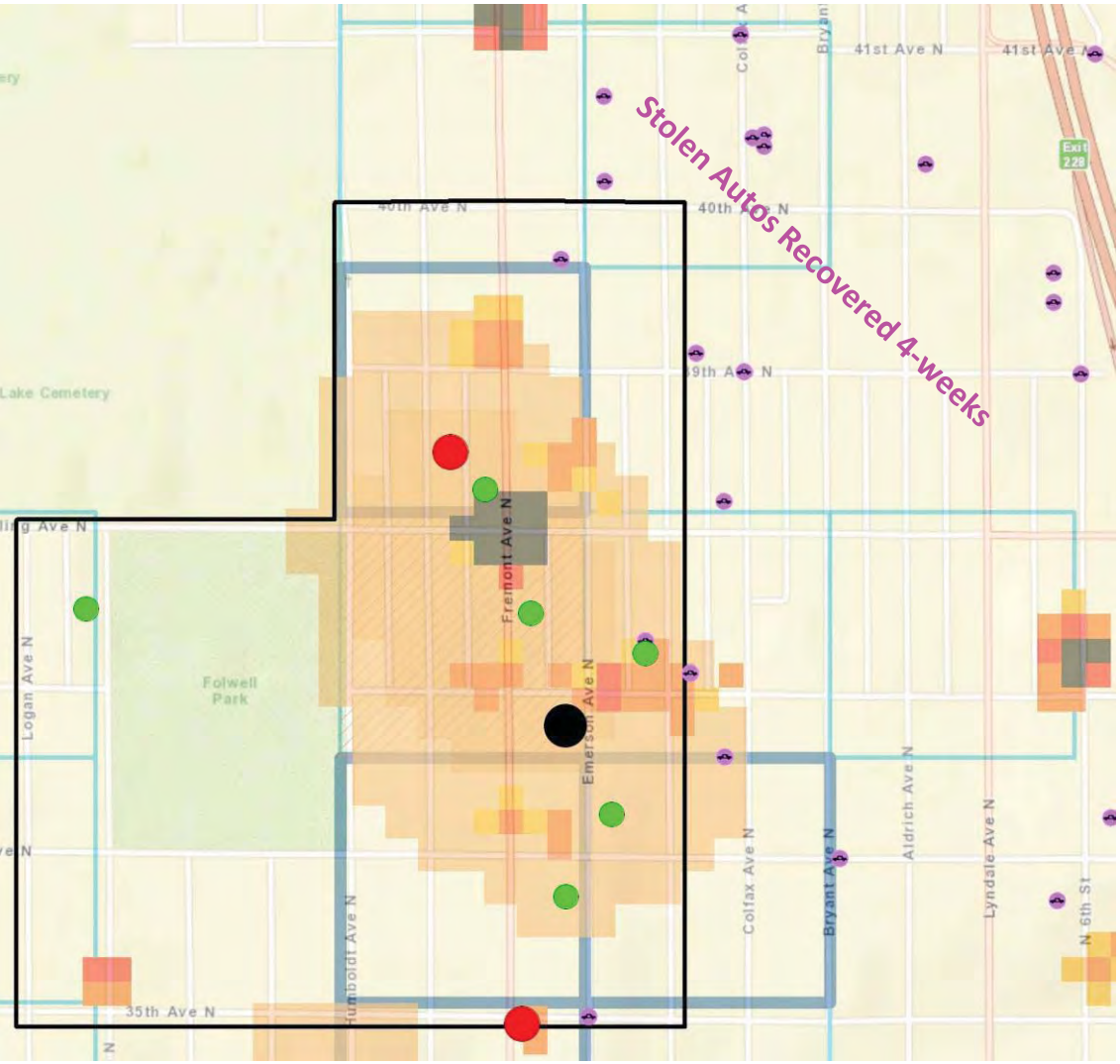
2011 CFS Events:
ShotSpotter: 1 Shootings: 2
Sounds of Shots Fired: 19 Person With a Gun: 8
2011 CAPRS:
Guns Used: 6 People Shot: 4
Violent Crime: 8 (1 Homicide)

2011 CFS Events:
ShotSpotter: 0 Shootings: 4
Sounds of Shots Fired: 9 Person With a Gun: 1
2011 CAPRS:
Guns Used: 5 People Shot: 3
Violent Crime: 6

2011 People with Gun Shot Wounds
2011 Gun Crime Hot Spots

RH 1/13/12

MINNEAPOLIS POLICE • FOURTH PRECINCT
2011 Burglary, Auto Theft and Gun Crime - Prevention



2011 Gun Crime Hot Spots

Folwell Hot Spot

= 4 Wk Burg hotspot

Recovered Vehicle

2011 Burglary Incidents

2 Burglaries

3 Burglaries

4 Burglaries

Folwell Park Hot Spot has a high probability and risk for ongoing gun crime, burglaries and recoveries of stolen autos.

Overall Top Days: Friday then Tues & Wed

Overall Top Times: 0800, 1200 to 1400hrs

Individual Day top time breakdown:

M = 1700/T & W = 1300-1400/Th = 0700-0800

F = 1200/Sat = 1100

Repeat addresses (2 or more):

(4) 36XX Emerson Av N: Vacant/Copper (Tornado)

(3) 34XX Fremont Av N: Salon equip, Clothes

(3) 38XX Girard Av N: Going after gaming systems

(2) 35XX Emerson Av N: Electronics, clothes (Tornado)

(2) 36XX Emerson Av N: Garage (bike/tools)

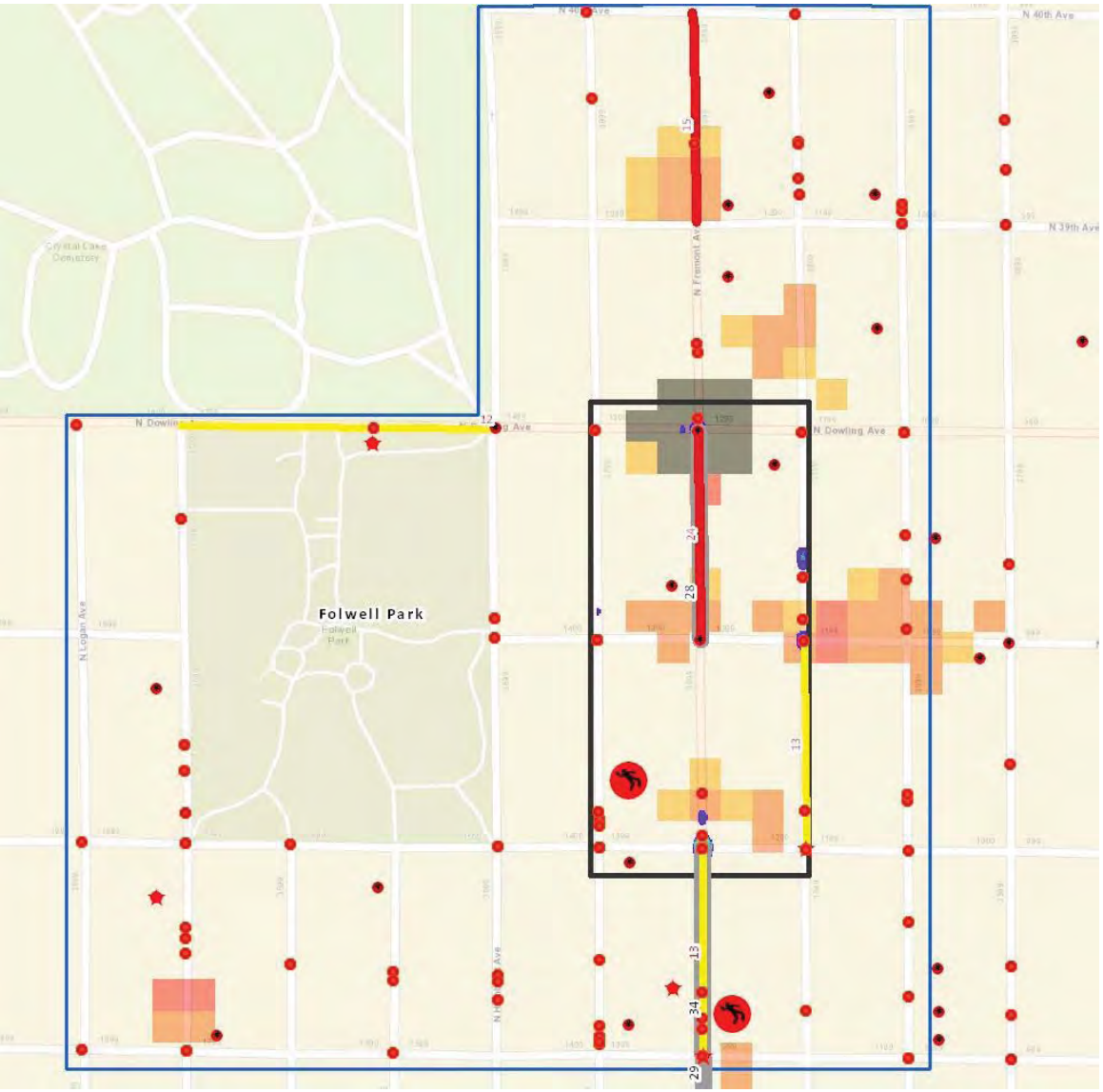
2) 37XX Dupont Av N:

(2) 37XX Fremont Av N Vacant (condemned)/Copper

(2) 37XX Knox Av N: Electronics, Foreign Coins, Jewelry,

(2) 38XX Fremont Av N: 0 loss (1 attempt)

MINNEAPOLIS POLICE ~ FOURTH PRECINCT
Fremont Corridor



In the last 10 years, 445 Robberies have occurred in this area:

- **Peak time Robberies occur is between 20:00-22:00**
- **Peak month is July closely followed by Sept.**
- **Peak days are Saturdays and Sundays**

2011 Gun Crime Hot Spot By 100x 100 Grid

YTD Guns Used

2000-2010 Gun Crime Street Segment

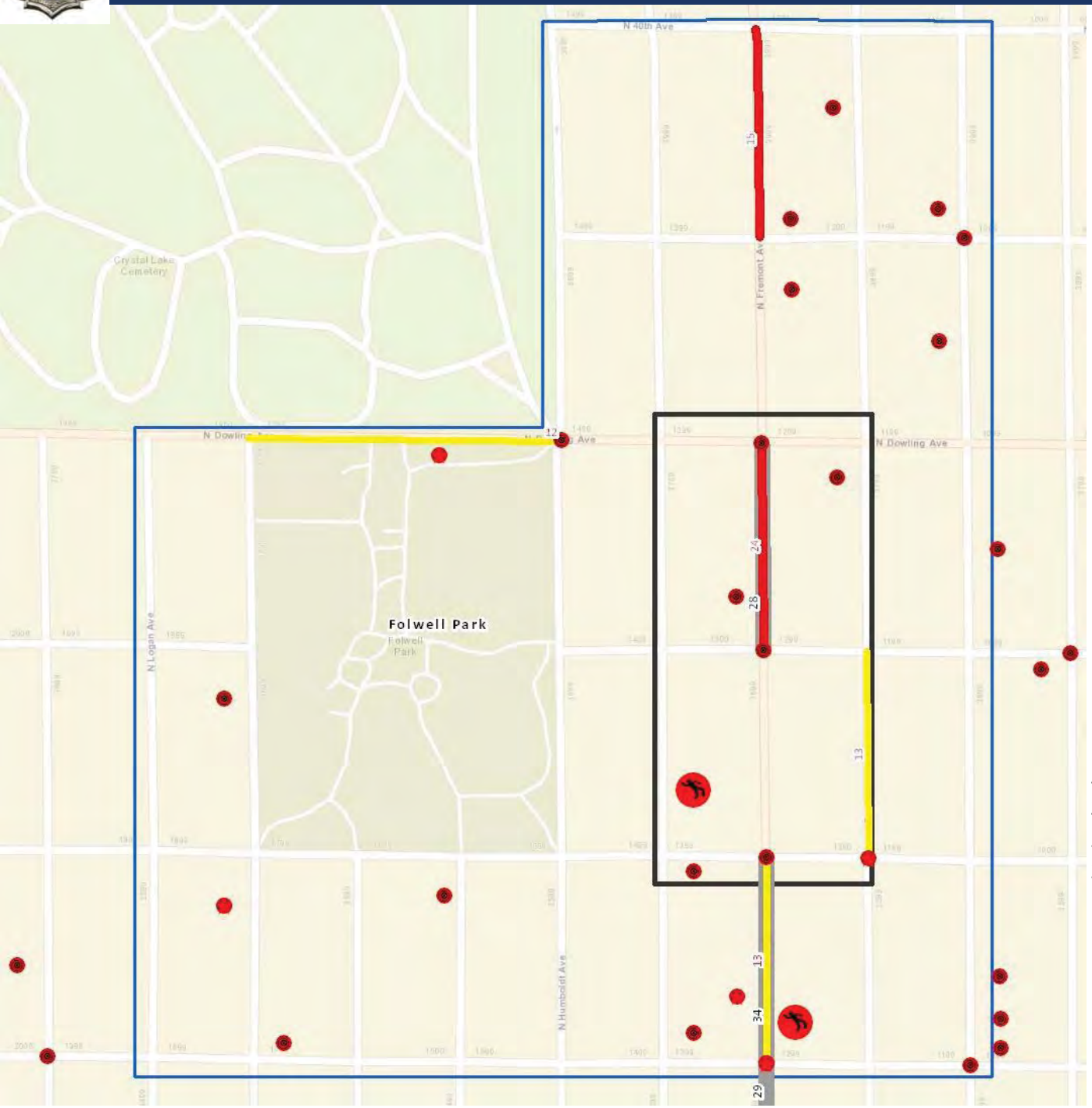
2007-2011 Gun Crime Street Segment

- **25 Robberies at Midyear**
- **10 Non-Domestic Agg. ASLT at Midy**
- **489 Total arrests**
- **468 Traffic Stops,**

Concentrations of Robberies in the continue to occur around Peavey Park in 2012, 2011, and over the last 10 years.

DEVELOPING A CRIMINAL HISTORY OF THE PLACE

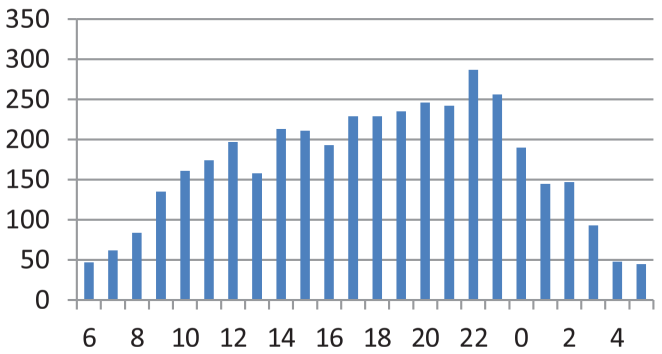
Folwell Hot Spot: *Fremont @36th To Dowling along Emerson*



Top Police Calls

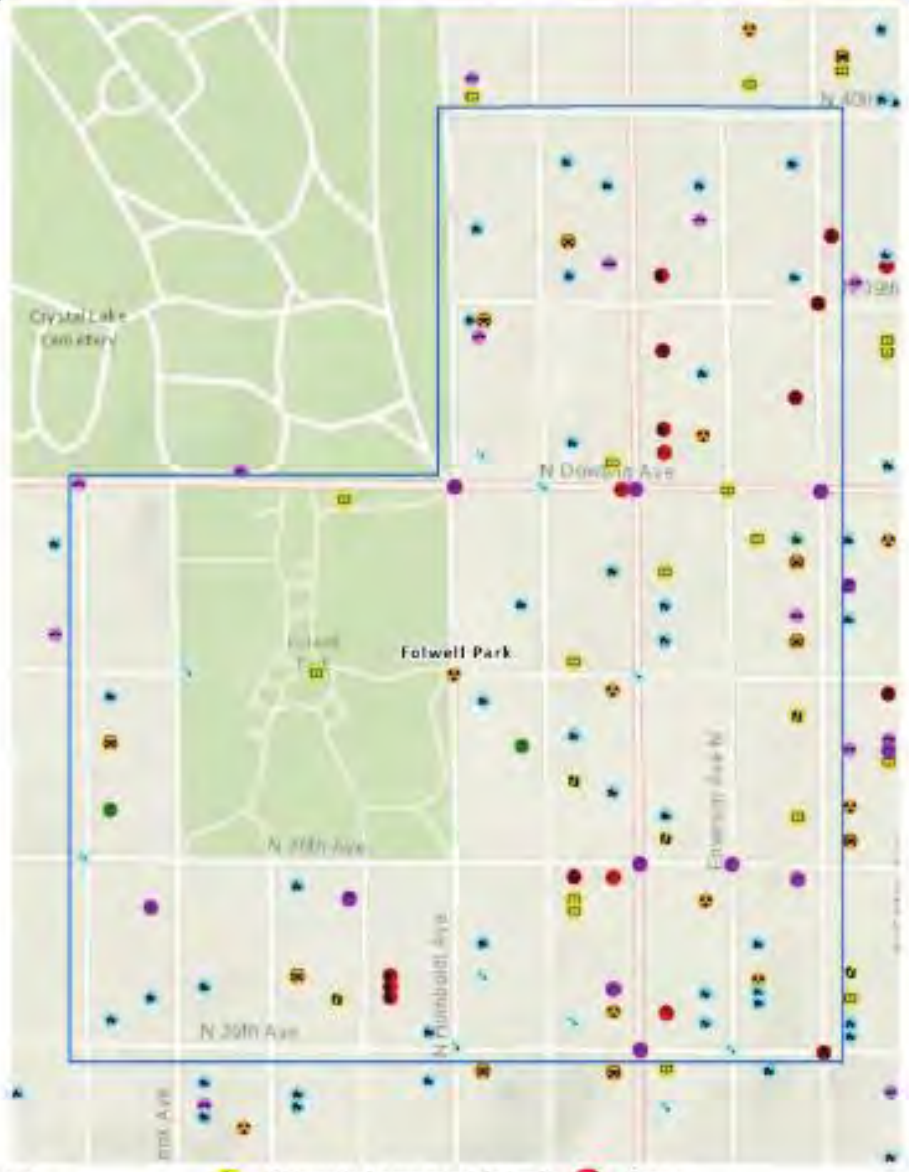
1. Domestic Assault
2. Disturbance
3. Shots Fired
4. Unknown trouble
5. Fighting
6. Loud Music
7. Check the welfare
8. Burglary

Calls for Service by Time of Day



MINNEAPOLIS POLICE ~ FOURTH PRECINCT

Folwell Park Hot Spot – Mid -Year



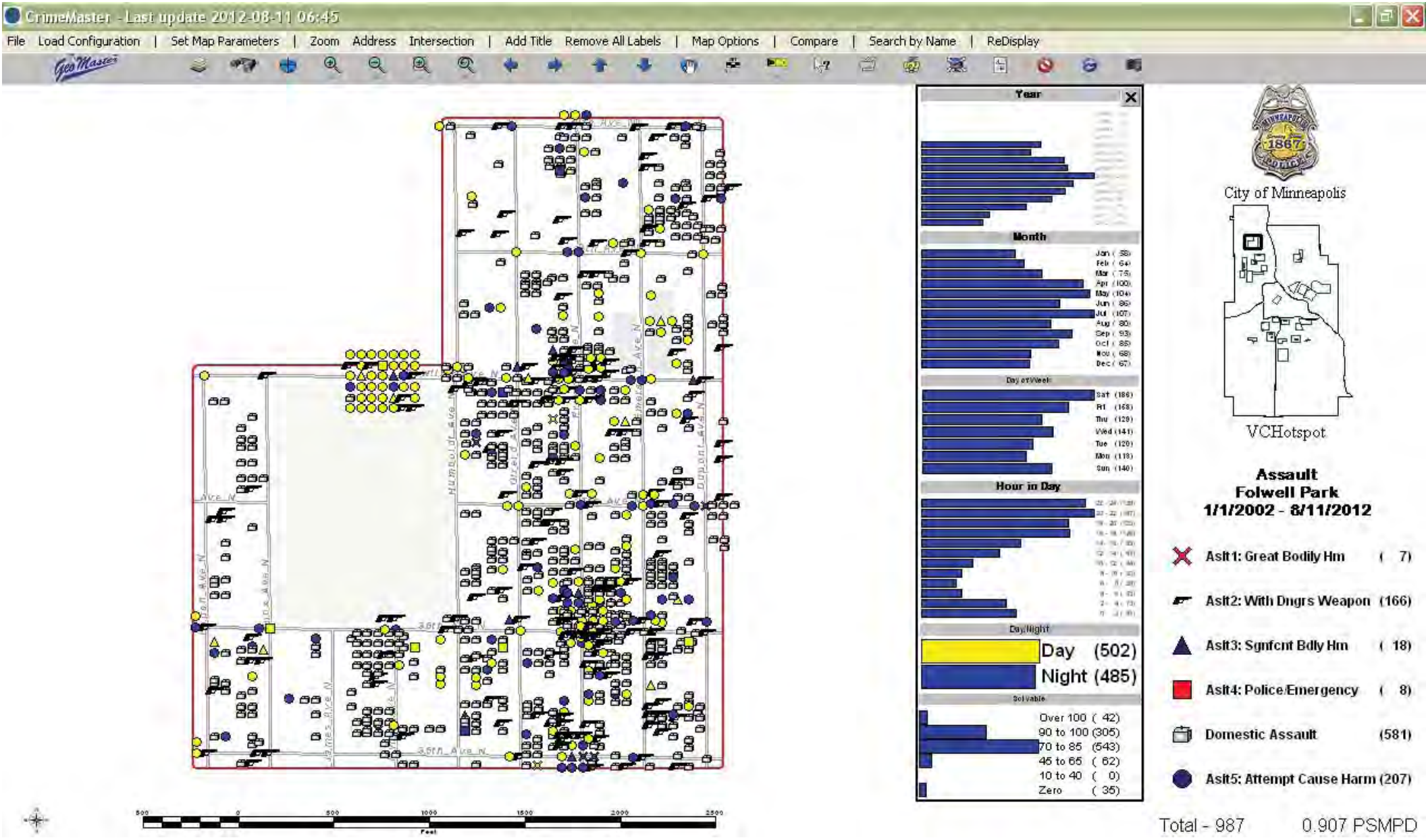
Offense

- Homicide
- Rape
- Robbery Business
- Robbery Person
- Aggravated Assault
- Domestic Aggravated Assault
- Burglary Business
- Burglary Residential
- Auto Theft
- Theft From Motor Vehicle
- Larceny (Other Theft)
- Arson
- Narcotics Arrest
- Recovered Vehicle
- Weapons Arrest

Fourth Precinct Folwell Park Hot Spot	Mid-Year (Jan 1 - Jun 30) This Year Mid-Year	Last Year Mid Year	This Year (Mid-Year Change)
Homicide	1	1	0.00%
Rape	2	1	100.00%
Robbery	7	13	-46.15%
Aggravated Assaults (Non-Domestic)	15	3	400.00%
Domestic Assaults	8	2	300.00%
Violent Crime Total	33	20	65.00%
Burglary	35	45	-22.22%
Auto Theft	9	10	-10.00%
Larceny (Other Theft)	21	9	133.33%
Theft from Motor Vehicle	6	5	20.00%
Arson	6	12	-50.00%
Property Crime Total	77	81	-4.94%
Part I Crime Total	110	101	8.91%
Total Gun Crime	25	15	66.67%
Homicide with Gun	1	1	0.00%
Agg Assault Firearm	10	3	233.33%
Armed Robbery Firearm	6	8	-25.00%
Shooting Non-Fatal	7	4	75.00%
Gun Shot (Other)	6	2	200.00%
Total Calls for Service	1953	1915	1.98%
ShotSpotter Activation	3	7	-57.14%
Sounds of Shots Fired	54	62	-12.90%
Shooting/Shooting Report Only	8	8	0.00%
Suspicious People	104	104	0.00%
Suspicious Vehicle	129	112	15.18%
Traffic Law Enforcement	449	410	9.51%
Total Arrests	263	288	-8.68%
Field Contacts	2	0	#DIV/0!
Curfew	5	5	0.00%
Guns Inventoried	9	7	28.57%

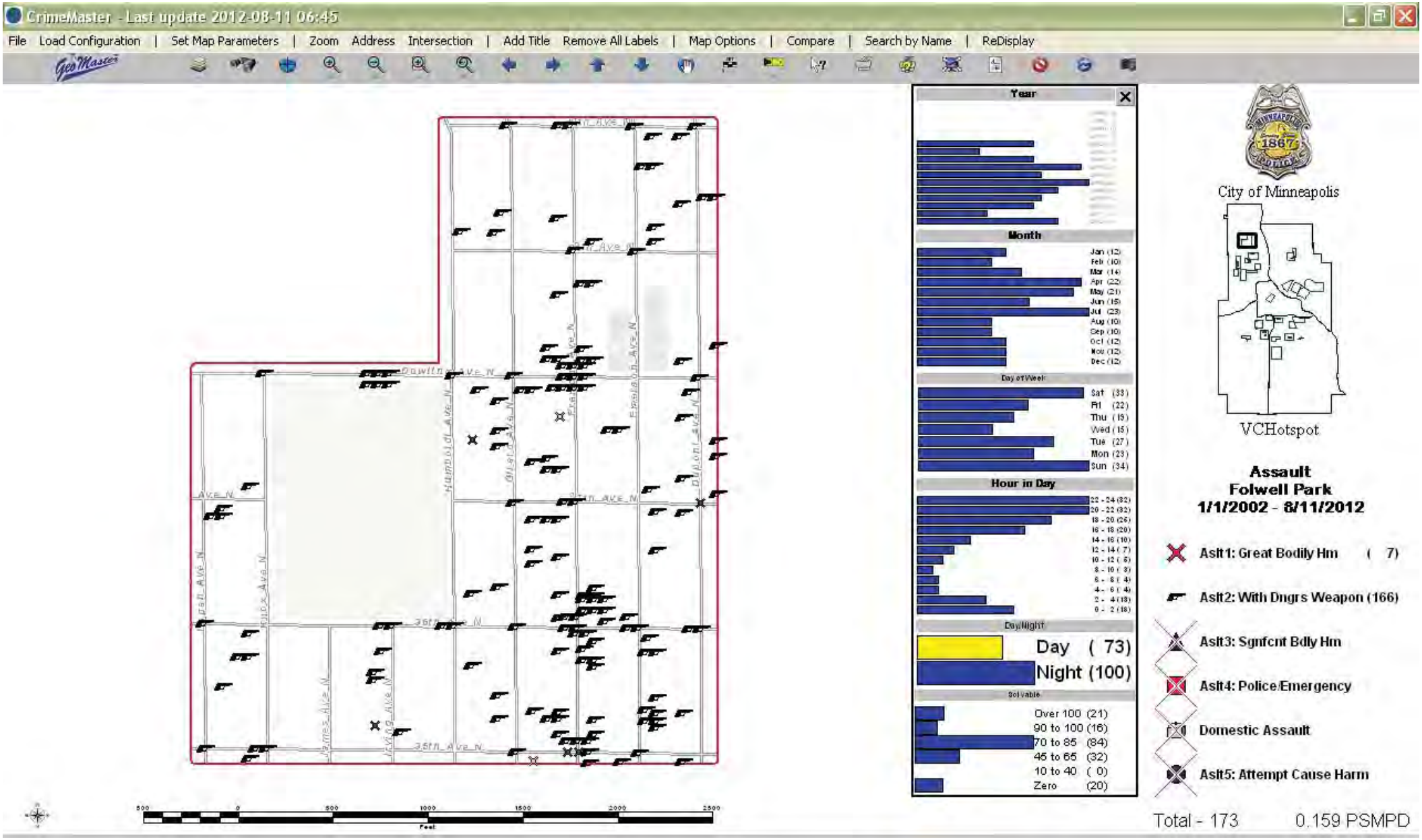
FOLWELL HOT SPOT~ASSAULT INCIDENTS

2002-2012



FOLWELL HOT SPOT~ASSAULT WITH WEAPONS

2002-2012



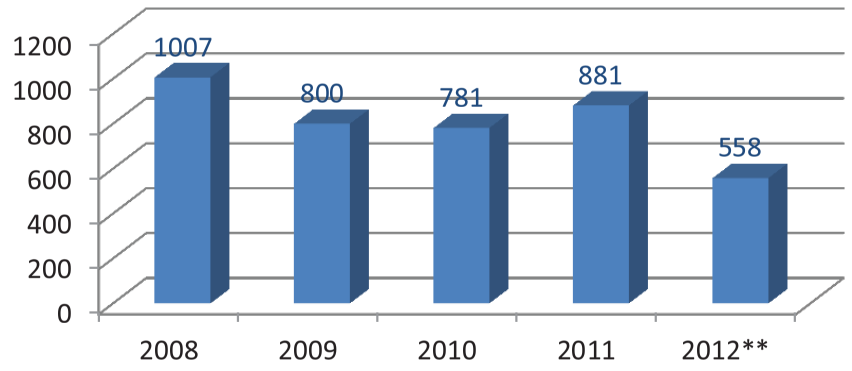
MINNEAPOLIS POLICE ~ FOURTH PRECINCT

Folwell Hot Spot- Zone B

Top Police Calls in Hot Spot

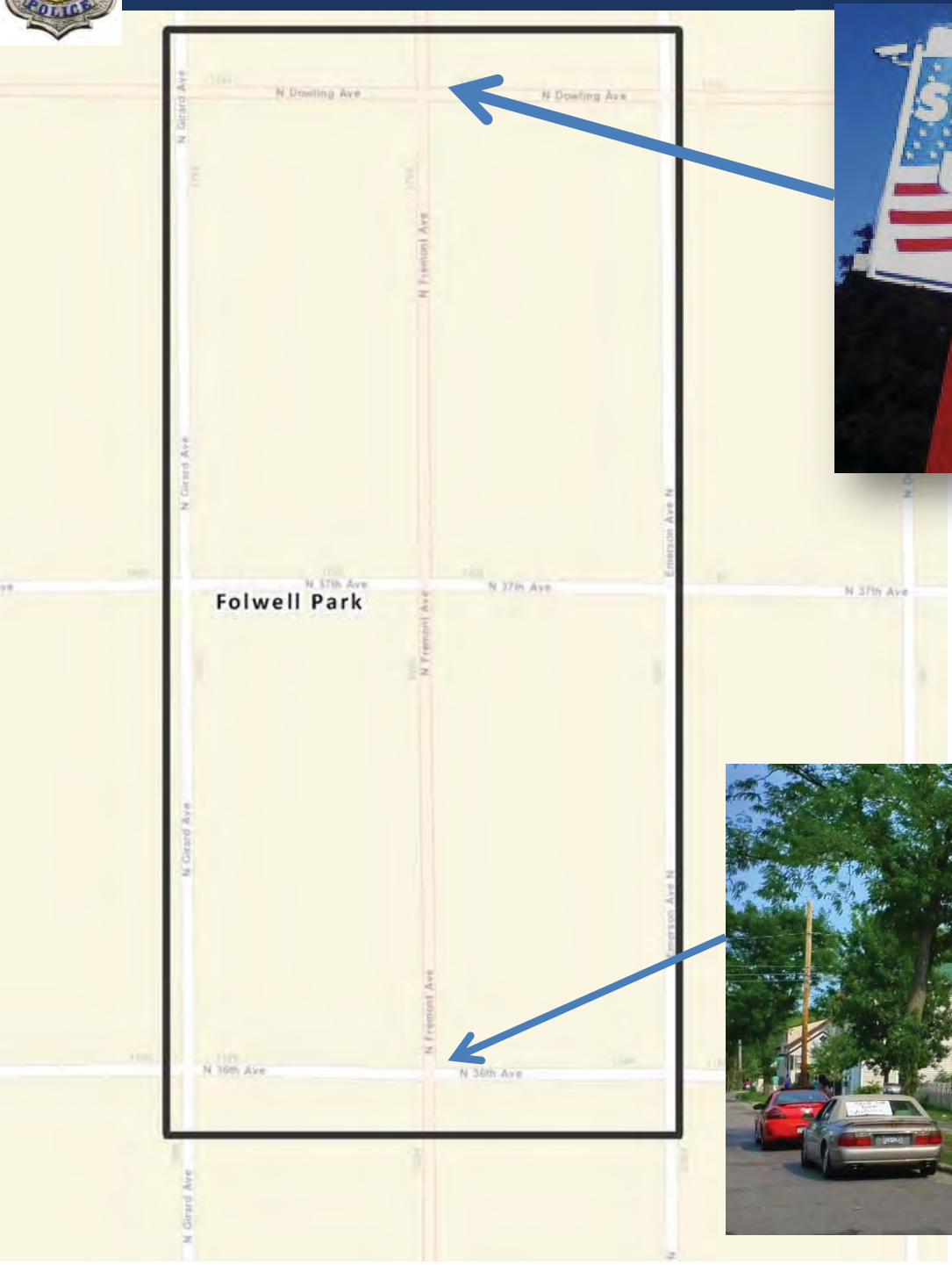
2008-2012

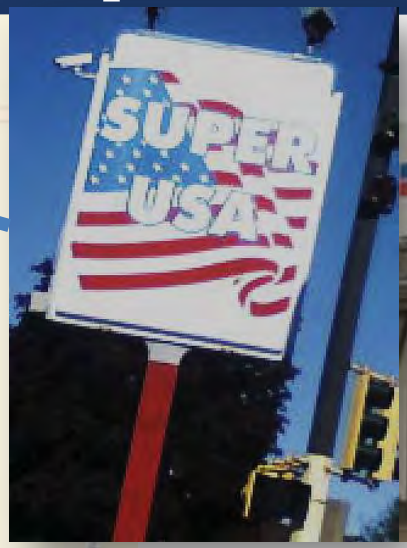
1. 575 Domestic Assault calls
2. 337 Disturbances
3. 213 Shots Fired calls
4. 159 Calls of Unknown trouble
5. 159 Fighting
6. 126 Complaints of Loud Music
7. 127 Check the welfare calls
8. 115 Burglaries in Progress
9. 101 Unwanted persons
10. 99 Burglary reports
11. 99 Assaults in progress
12. 96 Residential alarms
13. 95 Narcotics activity
14. 77 Car accidents
15. 64 Calls of person with a gun



MINNEAPOLIS POLICE ~ FOURTH PRECINCT

Folwell Hot Spot- Zone B





Learning more about the place:

Overcoming silos, sandboxes and information hording

1. Intersection of Fremont & Dowling
   - 659 Calls for Service
2. Intersection of Fremont & 36th
   - 424 Calls for Service
3. 3600 Fremont- Apartment Building
   - 293 Calls for Service
   - 185 Police Reports
4. Intersection of Emerson & 36th
   - 204 calls for service
5. Intersection of Emerson & Dowling
   - 192 Calls for Service

3753 Girard- Folwell Park Apartments

- 141 Calls for Service
- 111 Police Reports

1315 Dowling- Folwell Park Apartments

- 87 Calls for service
- 66 Police Reports

3807 Fremont- Super USA-

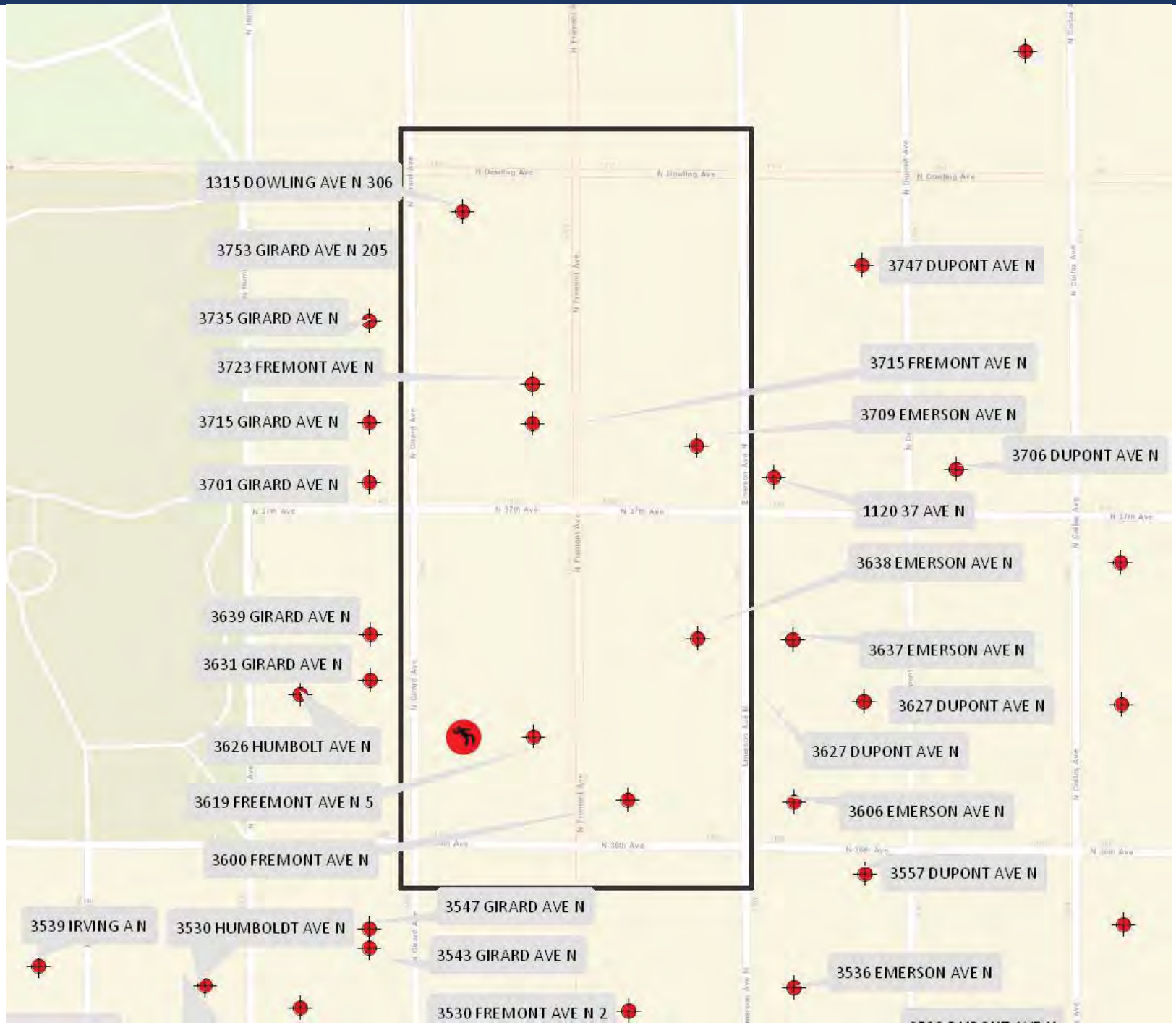
- 80 Calls for Service
- 135 Police Reports

3635 Fremont- Triplex

- 67 Calls for Service
- 36 Police Reports

MINNEAPOLIS FOLWELL HOT SPOT

Zone B – Gang Associations in the vicinity



MINNEAPOLIS POLICE ~ COMPSTAT

Folwell Gun Crime Status (July 31st – August 6th)

Map to the left shows gun crime hot spots in correlation with current week gun crime, Calls for Service Shooting categories and person with a gun.

Zone B:

Girard Ave N to Dupont Ave N and from 36th Ave N to Dowling Ave N

Peak Time of Day: 20:00 – 02:59

Peak Day: Friday/Saturday/Sunday./Monday/Tuesday

Top Address for Calls For Service (Shooting Categories)

- **36XX Girard Ave N**
- **36th Ave N / Fremont Ave N**
- **36th Ave N / Girard Ave N**
- **3627 Dupont Ave N**
- **37th Ave N / Emerson Ave N**

Two Week Gun Crime

- Shooting Non-Fatal
- Gun Shot (Other)
- Gun Crime
- Sound of Shots Fired / Shooting / Shooting Report Only / ShotSpotter Activation
- Per with a Gun
- Guns Inventoried

Byrne Criminal Justice Innovation Program 2010 Grant Proposal

Improve hot spots in Minneapolis

Solving community capacity at gun crime

Developing approach to reduce crime and

developing a "case of places" problem

TAB 4 DIVIDER HERE

BACK OF TAB 4 DIVIDER

Policing Places (Part II)

From Research to Practice:

Institutionalizing Hot Spots Policing in Jacksonville, FL

Jacksonville Experiment on Problem-Oriented Policing and Saturation Patrol at Hot Spots

- Randomized experiment testing the effectiveness of problem-solving v. saturation patrol v. normal operation at 83 hot spots of street violence

Source: Taylor, Koper, and Woods (Journal of Experimental Criminology, 2011)

Hot Spot Identification

- 83 hot spots identified based on non-domestic violence, 2006-May 2008
  - Average size of 0.02 square miles
  - Average of 26 violent street crimes per year (serious and minor)
  - Variety of locations: problem intersections and blocks, apartments, stores, hotels, bars and entertainment

Experimental Conditions

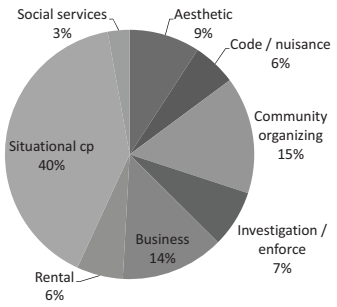
(90-day trial: Jan. 11-Apr. 11, 2009)

- 22 Problem-oriented policing (POP) hot spots
- 21 Saturation patrol hot spots
- 40 Control hot spots (normal operations)

Problem-Oriented Policing Intervention

- Team of officers and crime analyst assigned to each spot
  - 60 officers and 4 crime analysts assigned across 22 hot spots
  - Trained in POP and intelligence-led policing
- Address underlying factors; leverage community partners; employ response; assess results

Problem-Solving Activities



Saturation Patrol Intervention

- On duty and overtime officers
- Deployed at high-risk times
  - Pairs of officers working 1-3 hot spots
  - Officer-hours averaged 53 per week (per spot)
- Patrol, door to door contacts, investigation (traffic stops, pedestrian checks, etc.)
  - 191% increase in self-initiated activities
  - 85% increase in field interviews

Summary of Jacksonville Results

- Saturation may have reduced violence 4% to 20% but effects decayed quickly
- Problem-oriented policing reduced violence up to 33%
  - Larger and more lasting effects

Source: Taylor, Koper, and Woods (Journal of Experimental Criminology, 2011)

From Research to Practice: Institutionalizing Hot Spots Policing in Jacksonville, FL

Christopher Koper
Center for Evidence-Based Crime Policy
George Mason University

Director Micheal Edwards
Director of Patrol & Enforcement

Jamie L. Roush
Crime Analysis Unit Manager

Sergeant Steven Barreira
Operation Safe Streets

Sergeant Kelvin Anderson
Operation Safe Streets

Presented at 2012 Center for Evidence Based Crime Policy (CEBCP) Annual Symposium

How do police agencies turn research into practice?

Organizational Consideration

- Did we receive benefit from the hot spot project prior to receiving formal assessment?
  - Early signs of violent crime decline
  - Early signs of calls for service change
  - Feedback from personnel
- Personnel
- Directing Resources

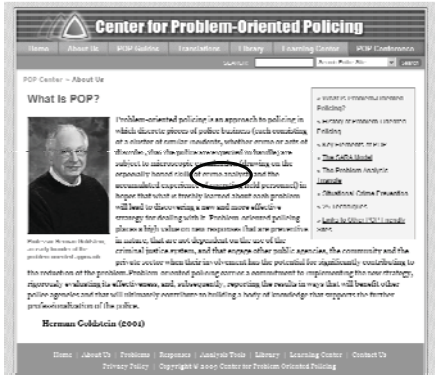
Personnel

- Within the Organizational Chart
  - Stand Alone Unit
    - Coordinated Effort for Management; Training and Commitment to Philosophy of Problem Oriented Policing
    - Learning by Peer Environment
  - As Patrol Resources
    - Disjointed Effort for Management, Training and Difficult to ensure commitment to Philosophy of Problem Oriented Policing
    - Limited Learning by Peer Environment
  - Final Composition
    - Stand Alone Unit: 66 members; 44 Problem Solving; 22 Saturation
- Type of personnel for goals and objectives
  - High Emotional Intelligence
    - Introspective and Communicative
  - Open-Minded/Steadfast
  - Committed to Change

Directing Resources

- Champion(s)
  - Authority and Autonomy
  - Managers who contain same qualities as personnel
- Champion(s) must know the philosophy
  - Frequently ask questions of Why Here? Why Now? What are the conditions that give rise to crime here?
  - Provide training and mentorship
  - Must identify other parts of the organization that fit into philosophy (Crime Analysis Unit)
- Champion(s) must be steadfast in goals and objectives
  - Resist Low-Hanging Fruit / No Arrests

The Role of Analysis

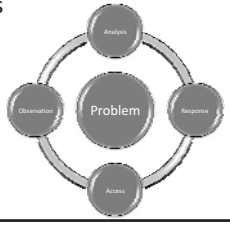


Analytical Consideration

- Use of Evidence Based Policing
  - Problem Oriented Policing requires work of Crime and Intelligence Analysis
- Personnel
  - Must contain same characteristics of officers and others
  - Motivate and Inspire by Doing More With Less
  - Educate on Research
- Use of Research
  - POP Center Training (Problem Solving)
  - Use of Koper Curve (Saturation)

Accomplishing the Daily Work

- Personnel
  - Monitoring Personnel
    - Training and Meetings
  - Resisting Traditional Feedback Methods
- Reinforcing the Ground Rules
  - No Dangling Fruit
  - Real 'Key' Players
  - "5 W's and H"
  - GOAL: **Accurate** Problem Identification

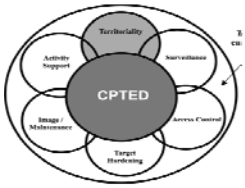


Accomplishing the Daily Work

- Adhere to the Process
  - Observation
    - No CAU Information
    - Diversity in methods
    - Avoid Enforcement Action
    - Documentation to include Video, Community Surveys and Beat Officer Interviews
  - Analysis
    - Critical Crime Analysis Information
    - Marrying Officer and Crime Analysis Information
    - External Sources to include Property Appraiser, Tax Collector, Census, etc

"Devil in the Details"

Ground Rules: **Accurate** Problem Identification



Source: Adapted from Moffat (1983, p. 23)

Problem Solving Checklist

(This is a resource guide ONLY, and is not all inclusive)

Location	
Property Appraiser	Zoning / Code Map / Violations
Abandoned Homes / DART	Formal CPTED Review
Junk Vehicles	"Hot Spot" Identifiers
Activity Generators (Pay phones, Bus Stops)	Overgrown Property / Maintenance
Lighting	Business Compliance / Licensing
Access Control	Territorial Reinforcement
Surveillance	Target Hardening
Transition Area	Crime Attractor / Generator (Bar, ATM, school etc)

Suspect	
ID Key Offenders	Photo spread
Gang Member List	Probation list
Sexual Offenders	Active Warrant List (location and Suspect)
Suspect M.O / CAU Profile	Suspect Interviews
Community Control	

Victim	
Training / Education	Community Meetings
Gang Member List	Probation list
Sexual Offenders	Active Warrant List (location and Suspect)
Suspect M.O / CAU Profile	Suspect Interviews
Community Control	

Victim	
Training / Education	Community Meetings
Community Survey	Victim Interview
Shift / Share with Associate Agency	Community Building
Knock and Talks	Victim Profile

Social	
Daycare	Youth Programs
Elderly Programs	Community Centers
Recreational Center	Outsource Assistance
City Facilities and Programs	Neighborhood Watch
Job Training	Education Programs

Time		
Key time frame of offense based on available data:	Start:	End:

5/8/9929

Documentation

SharePoint

One Note

Emails

Weekly Summaries

Documentation

Location	# Incidents	Problem Statement	Observation	Analysis	Knock-N-Talks	Victim Int	Suspect		Loc.	Vic	Susp
888 Franklin St		1. Poor lighting in parking lot and sidewalks	X						X		
		2. Multiple Escape Routes	X						X		
		3. Has Thru Traffic	X						X		
		4. Does not participate in CFMHU program			X					X	
		5. Weak lease agreement			X				X		
		6.Access control / not monitored			X				X		
		7.Large number of trespassers on the property			X						X
		8. Unlicensed security Officer			X				X		
		9. Rear gate access unsecured. Missing glass panel	X						X		
		10. Numerous code violations	X	X					X		
		11. Apt. Maintenance worker involved in Drug sales			X						X
		12. No way to distinguish residents from guests	X							X	X
		13. Lack of community ownership	X						X	X	
		14. Lack of stakeholder buy-in	X						X		
		15. "1200", "Out East" Gang activity at apartments			X		X				X
		16. Disabled tenants	X		X	X			X		
		17. Uncooperative manager	X						X		
		18. Health condition	X		X						

Accomplishing the Daily Work

- Adhere to the Process
  - Response
    - Utilize Internal and External Resources
    - External Sources can create Challenges
    - Most successful in suspect and location responses
  - Assess
    - Allow for FAILURE and Adjustment
    - Long Term Reductions: Approximately 30-35% Violence

Key to Successful Problem Solving

Invest in People

- Motivate
  - Champion: Knowing/Enforcing the Philosophy
  - Serving the Community
  - Focus on the Goal
  - Generate Enthusiasm
- Training
  - Value of Soft Skills
  - Participate in the Process
- Facilitate Recognition
  - Traditional Recognition vs Non-Traditional Recognition

If you truly ***Invest in People*** , personnel will do this work by DESIRE…

From Research to Practice: How the Jacksonville, Florida, Sheriff's Office Institutionalized Results from a Problem-Oriented, Hot Spots Policing Experiment

BY JAMIE ROUSH AND CHRISTOPHER S. KOPER

Jamie Roush is the crime analysis unit manager in the Jacksonville, Florida, Sheriff's Office.

Christopher S. Koper is codirector of the Evidence-Based Policing Program in the CEBCP and associate professor, Department of Criminology, Law and Society, George Mason University.

Hot spots policing has gained widespread acceptance as an effective approach to reducing crime; however, police continue to grapple with identifying the most effective strategies for implementing and sustaining hot spots policing. In 2009, the Jacksonville, Florida, Sheriff's Office (JSO) undertook a research initiative that has substantially altered its approach to hot spots policing as a method to control street violence. Here we describe the project and JSO's ongoing efforts to translate this research into daily practice.

With funding from the Bureau of Justice Assistance, JSO collaborated with Bruce Taylor (National Opinion Research Center) and Christopher Koper (CEBCP) to test different policing strategies at hot spots of violent crime.[1] The project team identified 83 "micro" hot spots (averaging 0.02 square miles in size) of nondomestic street violence that had exhibited high concentrations of violence over multiple years. These locations were randomly assigned to one of three conditions: problem solving, directed-saturation patrol, or no change for a 90-day experiment that ran from early January through early April 2009.

Although crime declined in both intervention areas, effects were strongest in the problem-solving locations, where serious violence declined by 33 percent. The problem-solving activities were conducted by teams of supervisors, officers, and crime analysts who were assigned to cover the initial 22 problem-solving hot spots on a full-time basis. The teams attempted to identify and address the underlying factors driving crime in these locations, working closely with community partners when possible. Officers implemented a wide array of measures, including situational crime prevention, code enforcement and nuisance abatement, partnerships with business owners and rental property managers, community organizing, improvement of social services, aesthetic improvements, and targeted investigation or enforcement.

Rarely in practice does a research study result in a permanent change in police operations; however, JSO was committed to building on this study and institutionalizing this approach to hot spots. Doing so has posed a number of challenges with regard to resource allocation, training, and the ongoing refinement of problem solving, a strategy with which JSO had only limited prior experience. JSO's efforts provide important lessons in translating a research experiment into regular deployment.

Specifically, JSO created the Operation Safe Streets (OSS) unit in June 2009 to continue the problem-solving work that began during the experiment. The OSS unit consists of 20 officers, selected largely from the experimental problem-solving group, who are dedicated to full-time problem solving. Making this commitment during a time of significant resource constraints was difficult (JSO recently had to lay off 48 officers). JSO command staff and OSS managers had to vigorously market the success of the previous project and the concept of problem solving in staff meetings, agency roll calls, informal training sessions, and an agencywide computerized training session. In addition, OSS unit officers tried to be ambassadors for problem solving to their peers.

During the first postexperiment phase of OSS (June 2009–August 2010), officers were assigned to 19 hot spots that were identified during the original project but not assigned to problem solving. The officers received enhanced training in problem solving that built on the project experience, and they were no longer restricted to a 90-day intervention period. Removing the 90-day restriction allowed officers to work at their own pace and ensured that each stage of the problem-solving process was not rushed or overlooked—a common pitfall for problem-solving efforts. Officers were also encouraged to examine and develop responses for all sides of the Problem Analysis Triangle.[2]

Responses to problems by OSS officers in new areas mimicked many strategies developed during the initial project (e.g., situational crime prevention and partnerships with community stakeholders).

Jamie Roush

Christopher Koper

Sheriff John Rutherford and the OSS Command staff gaining community support in a recent OSS hot spot.

This phase also resulted in similar outcomes; however, OSS also found that officers' effectiveness is more directly tied to how precisely they define problems in their hot spots.

Learning from this first postexperiment phase, OSS managers realized two main challenges that hindered problem solving. During the experiment and first poststudy phase, JSO's Crime Analysis Unit provided officers with an array of information about crime and community stakeholders in their hot spots; however, officers became too reliant on the crime data at the expense of following their natural professional instincts and engaging individuals with knowledge of the area, such as beat officers, city officials, business owners, and citizens. OSS managers also recognized the need for additional and more frequent training.

Hence, beginning in August 2010, the agency adapted OSS further. Officers were not provided initial hot spot data but were instead instructed to conduct an observation phase in their hot spots. They were encouraged to think about policing at a time when data did not exist in their current form and engage individuals to obtain information about the area. Officers received formal and informal training individually and as a collective unit in the middle and end of each phase to improve their understanding of this process. Starting this year, OSS officers also will meet regularly to discuss their progress, allowing personnel working in different locations to discuss problem-solving efforts in an open and dynamic forum where they can learn from one another.

Finally, OSS managers continually try to identify and provide training on specialized skills that officers need for problem solving. For example, some officers were conducting surveys and interviewing ex-offenders to obtain information about their hot spots; however, many of the officers had little preparation for such efforts. Therefore, OSS managers arranged for officers to receive training on how to develop, analyze, and use surveys to understand crime problems. Officers were also trained on how to interview ex-offenders, not for prosecution but to obtain information about hot spots where they live or have committed crimes.

In sum, JSO's efforts to institutionalize the OSS program, which was based on an experimental evaluation, reflect the agency's dedication to evidence-based policing. Through the experimental project and subsequent phases of OSS, JSO's command staff has supported this research-based initiative by devoting resources, providing support and marketing for the effort, continually assessing results, and meeting the need for ongoing training. The agency's experience reflects the challenges and rewards of translating research into practice.

---

[1]See B. Taylor, C. S. Koper, and D. J. Woods. (2011). A randomized control trial of different policing strategies at hot spots of violent crime. *Journal of Experimental Criminology* 7:149-181.

[2]See the Problem-Oriented Policing Center at www.popcenter.org.

A Randomized Controlled Trial of Different Policing Strategies at Hot Spots of Violent Crime in Jacksonville: Executive Summary

By Bruce G. Taylor, Christopher S. Koper, and Daniel J. Woods[1]
In collaboration with Matt White and Jamie Roush

Police interventions focused on "hot spots"—small geographic places or areas where crime is concentrated—have gained widespread acceptance among practitioners and researchers as an effective approach to reducing crime, though ambiguities still exist as to what types of policing strategies work best for hot spots. During 2008 and 2009, the Jacksonville Sheriff's Office (JSO) and the Police Executive Research Forum (PERF) partnered on a project to test the effectiveness of problem-oriented policing and directed-saturation patrol at hot spots as a means of refining JSO's strategies to reduce street violence.

Using data from 2006 through May 2008, JSO crime analysts and the research team identified 83 precisely defined hot spots of non-domestic, street violence in Jacksonville. These "micro" hot spots, which averaged 0.02 square miles in size, consisted of specific addresses, intersections, street blocks, and clusters of street blocks that exhibited high concentrations of violence during the two-and-a-half-year selection period. These hot spots were randomly assigned to problem-solving (22 locations), directed-saturation patrol (21 locations), or normal operating (i.e., "control") conditions (40 locations) for a 90-day experimental period spanning from January 2009 through April 2009.

Problem-solving activities at the first group of locations were conducted by teams of supervisors, officers, and crime analysts who received training in the principles of problem-oriented and intelligence-led policing. In total, 60 officers and 4 analysts were assigned to this effort. Working in two shifts, they covered their assigned locations on a full-time basis, thus providing coverage seven days a week at each location. The officers and analysts attempted to identify and address the underlying factors driving crime in these locations, working closely with community partners where possible. Officers implemented a wide array of measures at these locations, including situational crime prevention, code enforcement and nuisance abatement, partnerships with business owners and rental property managers, community organizing, improvement of social services, aesthetic improvements, and investigation or enforcement activities.

Locations assigned to the directed-saturation patrol group received additional patrol during high-risk days and times as determined by JSO crime analysts. The patrols were conducted by a mix of on-duty officers and officers on overtime. During the selected days and times, pairs of officers in separate cars worked one to three hot spots at a time (officers assigned to multiple hot spots covered locations in close proximity). On average, the directed-saturation patrol locations received 53 officer-hours of additional patrol per week, leading to significant increases in field stops and other self-initiated activities in these places.

An analysis of the program's impacts, which controlled for pre-intervention levels of violence, seasonal patterns, and selected characteristics of the hot spots, revealed that the problem-oriented policing intervention produced stronger and more lasting effects on violent crime. Although violence declined by up to 20% in the directed-saturation patrol locations during the intervention period, this reduction could not be

[1] This executive summary is based on the article, "A Randomized Control Trial of Different Policing Strategies at Hot Spots of Violent Crime," published in the *Journal of Experimental Criminology* (Vol. 7, pp. 149-181) by Bruce Taylor, Christopher Koper, and Daniel Woods.

clearly distinguished from natural variation in crime over time (i.e., the result was not "statistically significant"), and violence levels rebounded after the intervention. In contrast, the problem-solving locations experienced a statistically significant 33% reduction in officially-reported incidents of street violence during the 90-day period following the intervention, relative to trends in the control (non-intervention) locations. (Total violence and serious property crime also declined to a lesser extent.) This suggests that the problem-solving measures implemented by officers and analysts had taken hold by this time and were producing reductions in crime that may have lasted well beyond the study period.

A caveat to this finding is that calls to police about violence increased in areas within 100 to 500 feet of the problem-solving locations, though this did not lead to an increase in officially-reported incidents of violence. This may indicate that crime was displaced from the target locations to the surrounding areas, or that citizens became more inclined to call police about crime when exposed to the beneficial effects of problem-solving police activities in nearby locations.

In sum, this experiment provides evidence that problem-oriented policing can be an effective strategy for reducing violence at hot spots—and one that can produce lasting effects—though police should be aware of the potential for displacement or reporting effects in nearby areas and monitor these developments accordingly. Assigning officers to micro hot spots for extended saturation patrol, on the other hand, does not appear to be an optimal approach for reducing serious crime. Police might therefore experiment with other methods of directed patrol such as assigning officers to larger areas and giving them responsibility to conduct periodic stops and activities at multiple hot spots within those areas. This would potentially optimize patrol time and coverage across numerous hot spots. The research team will be conducting additional analyses of the experimental data to more precisely identify the types and dosages of police activities that were most effective at the hot spots.

JUST ENOUGH POLICE PRESENCE: REDUCING CRIME AND DISORDERLY BEHAVIOR BY OPTIMIZING PATROL TIME IN CRIME HOT SPOTS

Dr. Christopher S. Koper
University of Maryland, College Park

SUMMARY

This study examines the residual deterrence effects of police patrols in hot spots, or small clusters of high crime addresses. Residual deterrence is an effect of police presence in an area which discourages disorderly and criminal behavior after police depart. This study is based on three concepts suggested by research in this area: (1) that controlling disorderly behavior can reduce fear and more serious crime; (2) that police can reduce disorder and crime by increasing their presence at hot spots where such behavior is concentrated; and (3) that the presence of an officer in a hot spot has the effect of deterring disorderly and criminal behavior even after police depart (for example, by driving troublesome people away from the area). Extrapolating from theory and research on police crackdowns, the study examines whether stronger dosages (i.e., longer instances) of police presence create stronger residual effects on crime and disorder and, if so, whether there is an optimal length for police presences at hot spots (i.e., a point of diminishing returns).

DATA AND METHODS

The study employed observational data collected during the Minneapolis hot spots experiment. Observers visited hot spots at randomly selected times to record police presence, crime, and disorder. The analysis is based on approximately 17,000 observed instances of police presence (blocks of time when at least one officer was present at the hot spot) and 4,000 instances of observed disorderly or criminal behavior. Continuous-time, parametric survival models were employed to determine whether patrol presences of greater duration produced a longer "survival" time—i.e., a longer time without observed criminal or disorderly behavior after the police departed. The analysis focused on drive-bys and stops of up to 20 minutes. The survival time was measured using a follow up period of up to 30 minutes following each police presence.

FINDINGS

For police stops, each additional minute of police presence increased survival time by 23%. The ideal dosage for police presence was 10-15 minutes; a threshold dosage of 10 minutes was necessary to generate significantly more residual deterrence than was generated by driving through a hot spot. Residual deterrence effects were greatest for police presences of 14-15 minutes; longer presences had diminishing effects.

IMPLICATIONS FOR POLICY MAKERS

Police can maximize crime and disorder reduction at hot spots by making proactive, 10-15 minute stops at these locations on a random, intermittent basis, thus maximizing deterrence and minimizing the amount of unnecessary time spent at hot spots. However, the study did not address the types of activities conducted by officers at hot spots.

One-Page Research Summaries

One-Page research summaries on crime and place and place-based law enforcement can be found at the CEBCP's "One-Pager" website, http://gemini.gmu.edu/cebcp/OnePageBriefs.html Or, you can link with your smartphones using the following QR code:

- Does crime just move around the corner? (Weisburd et al.)
- Hot spots of juvenile crime: findings from Seattle (Weisburd et al.)
- Police officers on drug corners in Philadelphia (Lawton et al.)
- Trajectories of crime at places (Weisburd et al.)
- Jacksonville study (Taylor et al.)
- General deterrent effects of police patrol in hot spots (Sherman and Weisburd)
- Just enough police presence (Koper)
- Intelligence-led policing to reduce gang corners (Ratcliffe)
- Efforts to address drug markets (Lum)
- Policing crime and disorder hot spots (Braga and Bond)
- Philly foot patrol (Ratcliffe et al.)
- POP at violent crime places (Braga et al.)
- Strategies to reduce possession and carrying of guns (Koper and Mayo-Wilson)

TAB 5 DIVIDER HERE

BACK OF TAB 5 DIVIDER

Implementing research

SERGEANT RENÉE J. MITCHELL

SPD AND RCT's

- Randomized Control Trial
- Does 12-16 minutes of high visibility policing reduce crime and calls for service?
- 42 Hot Spots
- Randomly assigned hot spots and dosage order
- 25% drop in Part I crimes
- 7.7% drop in Calls for Service

Why SPD Conducted an Experiment?

- Needed to become more effective and efficient
- Wanted to get away from
  - **(Insert program here) and crime was reduced by (Insert number here) percent**
- Define what works for SPD
- Move towards becoming an evidence-based policing agency

Getting Started

- Determine the agency's values – not the written ones but the unwritten ones
- Build a team with a diversity of thought
- Build a strategic framework
- Decide how to answer the questions
- Build a timeline – then quadruple that timeframe

Building a Team

- Destroy the hierarchy – nothing kills innovation like fear
- Skunkworks – Toshiba
- Choose people with a range of abilities
- Choose people with a diversity of thought
- Opinion leaders and Innovation Champions

Innovation

- One of the greatest pains to human nature is the pain of a new idea. It…makes you think that after all, your favorite notions may be wrong, your firmest beliefs ill-founded…….. Naturally, therefore, common men hate a new idea, and are disposed more or less to ill-treat the original man who brings it.

  –Walter Bagehot, Physics and Politics (1873)

Opinion Leaders and Innovation Champions

- Innovation Champion
  - Opinion leaders have followers, whereas innovators are the first to adopt new ideas and are often perceived as deviants from the systems (Diffusion of Innovation)
- Survey your organization
- Select from throughout the ranks
- Build from a basis of values
- Educate and train thoroughly

Team Building

- Absence of trust – Invulnerability
- Fear of conflict – Artificial Harmony
- Lack of commitment – Ambiguity
- Avoidance of accountability – Low standards
- Inattention to results – Status and Ego
  - (The Five Dysfunctions of a Team)

Education and Training

- And if you do surround that person with a new enriching culture, then you had better keep surrounding them with it because if they slip back into a different culture, then most of the gains will fade away (The Social Animal, David Brooks)
- Background in obtaining, synthesizing and understanding research, elementary statistics and evidence based policing
- Bloom's Taxonomy
- SARA – adding in research to the analysis component

Culture

- Facts that Challenge Basic Assumptions – and thereby threaten people's livelihood and self-esteem – are simply not absorbed. The mind does not digest them. (Thinking, Fast and Slow)
- Policing culture relies primarily on experience – narrative is the strongest form of learning
- Incorporating science into policing will require monumental effort to overcome resistance
- Leadership on the Line – adaptive leadership

Mistakes

- Individual vs. System
- The more we know how to do something, the harder it is to learn how to do it differently (Kaplan, 1964 p. 31)
- Treating the people around us with extraordinary respect means seeing them for the potential they carry within them. (Dialogue: The Art of Thinking Together)

Books

- Leadership on the Line
- The Five Dysfunctions of a Team
- Dialogue: The Art of Thinking Together
- Diffusion of Innovation
- Thinking Fast and Slow

QUESTIONS

How Agencies Can Conduct Their Own Experiments

With the advent of the Bureau of Justice Assistance's Smart Policing Initiative (http://www.smartpolicinginitiative.com), the increased use of the SARA model of problem-oriented policing, and the need to do more with less, agencies are more and more evaluating their own crime prevention initiatives. Many of these efforts have involved using experimental and quasi-experimental designs, when possible, to create more certainty about the believability of these evaluations.

But how do agencies conduct their own experiments, and what are some challenges in doing so? Building on the experience of the Sacramento Police Department and Sgt. Renee Mitchell's efforts, this demonstration provides a step by step guide on how agencies can conduct their own experimental evaluations. The guide will not only include information on the science of experiments (e.g. how to design an experiment, the statistical benefits of experiments, how and why randomly allocating units is useful), but also a discussion of the prospects and pitfalls for conducting experiments within police agencies. In particular, the guide will focus on addressing potential challenges to agency-led randomized trials. These include using training as a means to teach officers about the value of experiments, identifying change agents in the department and getting them on board to increase officer buy-in, and working with department management to ensure that top leaders are fully committed to the study and are ready to make use of the results.

This guide will be an important addition to existing publications and tools on conducting evaluations more generally, as it specifically focuses on experimental evaluations.

Tools & Links

- Assessing responses to problems: An introductory guide for police problem solvers (John Eck)
- Sacramento PD: “Hot Spot” Policing Reduces Crime
- Sacramento police ‘hot spot’ study shows focus the key (Sacramento Bee)
- “Hot spot” policing reduces crime (Sacramento Press)
- Sacramento police hot spot policing (KTXL- Fox 40)
- Fighting crime in an era of belt-tightening (Atlantic Cities)
- The CEBCP Workshop on the Sacramento Experiment (Renee Mitchell) (coming soon)
- CEBCP Workshop on Randomized Experiments (David Weisburd)

Matrix Demonstration Project Team:

PI: Cynthia Lum

CoPI: Christopher Koper

INSIDE THIS ISSUE

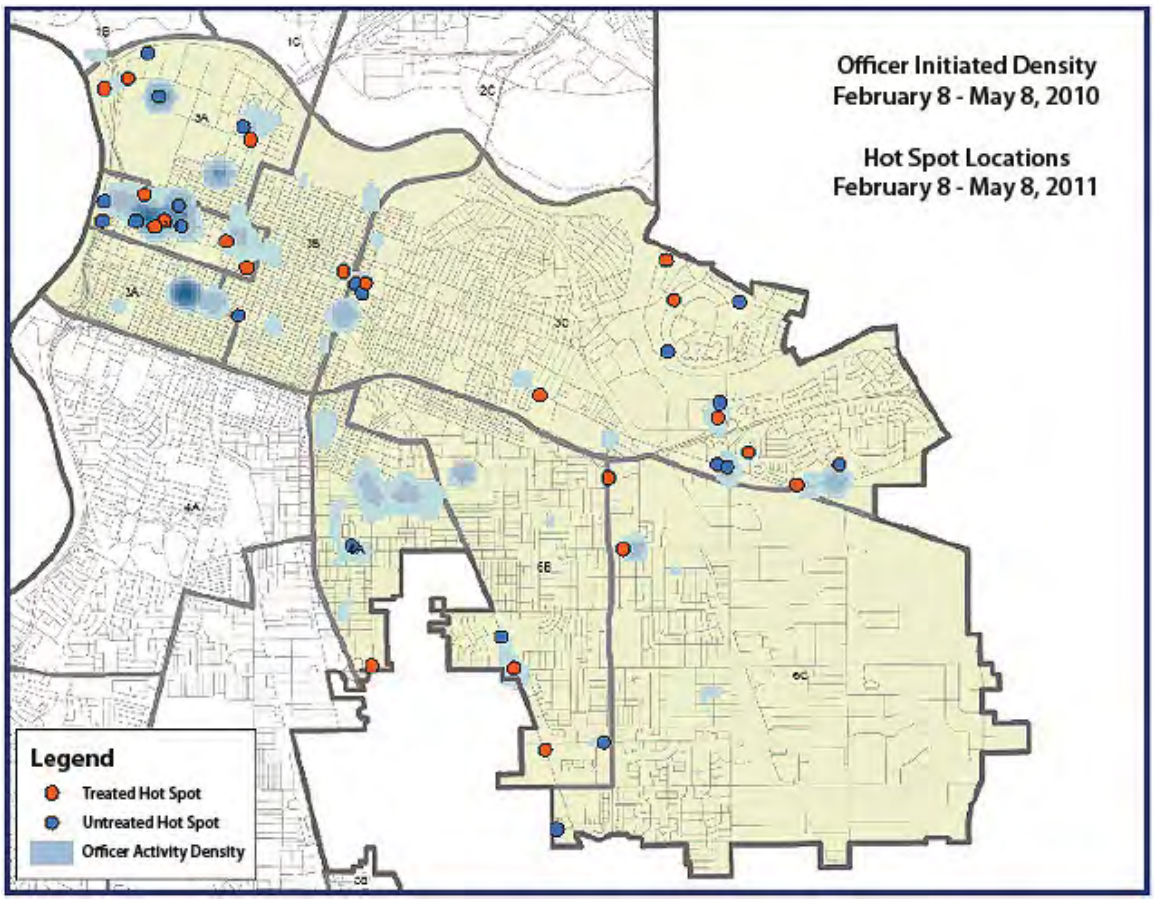
A Hot Spots Experiment: Sacramento Police Department

Within a 90 day time period that started on February 8 and ran through May 8, 2011, Sergeant Renee Mitchell of the Sacramento [California] Police Department designed a research methodology that she hoped would test out the Koper curve theory of hot spot policing. This theory proposes the notion that certain specific locations or neighborhoods can harbor an unequal distribution of crime in comparison to other locations in that same area. Additionally, this theory goes on to explain that police officers who are highly visible in these areas for 12–16 minutes can cause a reduction in crime as well as calls for service (CFS) within that hot spot.[1] With her knowledge and experience in evidence-based policing and hot spot policing, Sergeant Mitchell used her training to conduct research in order to find if such a theory proved true within Sacramento.

The Research Design

Hot spots were chosen and rank ordered as separate areas of interest by identifying those areas with the highest numbers of Part 1 crimes (i.e., homicide, aggravated assault) based on the Uniform Crime Reports statistics as well as how many CFS would come to the police department regarding these Part 1 crimes. Forty-two hot spots were selected and limited to 100 block increments (also called a "micro-place")(see Figure 1). Additionally, due to the small sample size, the 42 hot spots were paired in order to increase statistical power in the research design. By starting with the two highest ranked hot spots and working to the lowest ranked, a computerized random number generator assigned one spot to the treatment (hot spot policing group), while the other was assigned to the control group (routine patrol duties performed). In order to control for any possible variations due to this pairing, the Part 1 crimes, number of CFS, and geography of the hot spot were all similar within the pairs.

Figure 1



With the 42 hot spots selected, it was time to bring in the patrol officers who would be key in taking part in the study. Through random selection, the officers were assigned to the hot spots that they would need to patrol for 90 days. The experiment also required the officers to be proactive in their patrol. It was suggested that they go to their randomly assigned hot spot for 12–16 minutes and be highly visible in the community, while also taking time to talk to the public as well. Additionally, the officers were asked to visit each hot spot in their assigned district every 2 hours. The Koper curve theory claims that these 12–16 minutes of hot spot policing reduce crime for approximately 2 hours afterward in that particular area.[2] By replicating these conditions fully, the Sacramento PD experiment wished to test this theory in its entirety.

Results

At the end of the 3 month experiment, it was discovered that Part 1 crimes decreased by 25 percent in the treatment hot spot areas, while the hot spots in the control areas had their Part 1 crimes increase by 27.3 percent. It is important to note here that the officers in the control group were still patrolling and conducting their regular policing duties as usual, it is just that the treatment group of officers were performing those duties in a different way through hot spot policing. The results also found that CFS decreased by 7.7 percent in the treatment areas, while CFS increased by 10.9 percent in the non-treatment areas. Variables such as temperature and precipitation levels remained relatively the same as in previous years.

Officer productivity was found to have increased as well due to hot spotting. Regular duties such as traffic stops, arrests, officer-initiated calls, etc., did not decrease in comparison to the year prior to the experiment (2010). And although subject stops did decrease, it was a trend that lined up with two other districts whose subject stops also decreased.

Officer Pro-activity Tables:

Table 1

OFFICER- INITIATED ACTIVITY BY DISTRICT			
DISTRICT	FEB 8 - MAY 8 2010	FEB 8 - MAY 8 2011	% OF CHANGE
1	2,913	2,909	-0.1%
2	2,864	2,666	-6.9%
3	2,861	7,543	163.6%
4	2,224	2,677	20.4%
5	1,890	2,492	31.9%
6	3,048	5,270	72.9%
TOTALS	15,800	23,557	49.1%

YELLOW ROWS REPRESENT HOT SPOT PROJECT DISTRICTS

OFFICER- INITIATED ACTIVITY BY DISTRICT - NO D1HOT CALLS			
DISTRICT	FEB 8 - MAY 8 2010	FEB 8 - MAY 8 2011*	% OF CHANGE
1	2,913	2,909	-0.1%
2	2,864	2,666	-6.9%
3*	2,861	3,277	14.5%
4	2,224	2,667	19.9%
5	1,890	2,492	31.9%
6*	3,048	3,223	5.7%
TOTALS	15,800	17,234	9.1%

* 2011 TOTAL DOES NOT INCLUDE D1HOT CALLS

Table 1: "An Example of Incorporating Science into Policing: A Hot Spots Experiment in the Sacramento Police Department". Interview with Sergeant Renee Mitchell; Sacramento Police Department and Powerpoint (Slide 10). May 9, 2012.

In regards to displacement, the department looked at a two block radius as the "buffer zone" surrounding each of the hot spots to see if any Part 1 crime increased in these areas. It was discovered that Part 1 crime and CFS did increase in two treatment areas, but decreased everywhere else. After further research, it was revealed that a brand new department store had just been built near these two treatment areas that could explain the increase in Part 1 crime. Overall, displacement was not a significant issue.

Additionally, through a cost-benefit analysis, it was found that the police department saved close to $300,000 in costs associated with crime by hot spotting. By using an average of the three lowest cost Part 1 crimes and multiplying it by the lowest Part 1 crimes that were eliminated during the 90 day experiment, the Sacramento PD discovered cost savings of $289,550.[3]

Next Steps

It is a huge step forward for law enforcement agencies when best practices in policing can be backed up by empirical studies. In a time of increased budget cuts and limited resources, it is crucial to discover and promote best practices that can be proven to be more effective in the field. The Sacramento PD and Sergeant Mitchell have done something impressive in bringing academic research into the field of policing in order to help our law enforcement officers do their jobs more efficiently. Providing the right training and education to officers who are interested in taking part in research and then coming back to the department to implement a study and/or train other officers in research methodologies would be a great benefit to any law enforcement agency.

Sergeant Mitchell has conducted an immensely important experiment that can not only increase her department's efficiency, but also provide an excellent example to other police departments nationwide in the importance of supporting their best practices through empirical research.[4]

For more information about this experiment in hot spot policing, you may contact Sergeant Renee Mitchell at: rjmitchell@pd.cityofsacramento.org

Danielle Ouellette
Program Specialist
The COPS Office

[1] Sherman, L., and D. Weisburd.1995. "General Deterrent Effects of Police Patrol in Crime 'Hot Spots:' A Randomized Controlled Trial." *Justice Quarterly*, Vol. 12 No. 4, December.

[2] Ibid.

[3] "Cost of Crime Calculator". The RAND Corporation. Retrieved May 11, 2012.

[4] "An Example of Incorporating Science into Policing: A Hot Spots Experiment in the Sacramento Police Department". Interview with Sergeant Renee Mitchell; Sacramento Police Department. May 9, 2012.

Back to top

Vets to Cops | Montgomery County (PA) Veterans Treatment Court | T.A.P.S. Academy | Hot Spots and Sacramento PD | Did you know...?

Building police practice with a little help from research

Peter Neyroud CBE QPM
University of Cambridge
and University of Chester

Current influences on policing practice

- Craft: 'clinical experience model'
- Professional traditions
- Law and Bureaucracy
- Politics

2

Standard police tactics

- Preventive patrol
- Arrest
- Prosecution
- Post release supervision

3

The Treatment model?

- Why do these tactics work (or better still, do they work?)?
- If you were embarking on a medical treatment, would you not
  - Want to know how it works?
  - Want to know about possible side effects?
  - Want to know whether the doctor is well qualified to deliver it?
- As a provider you want to know the relative cost benefit of particular treatments

4

What are the active ingredients?

- Deterrence
  - severity
  - certainty
  - celerity
- Defiance
- Desistance
- Legitimacy

5

Deterrence: what are the ingredients of deterrence?

- Rewards
- Crime Commission costs
- Perceived formal sanctions
- Perceived informal sanctions
- Perceived cost of apprehension
- Perceived possibility of successful completion
- Perceived possibility of apprehension given non completion
- Perceived possibility of apprehension given completion

6

And like all medicines,

- It will only work if you follow the instructions on the packet
- If the diagnosis of your condition is correct
- Some patients will experience side effects
- Overdosing can cause serious side effects
- With some chronic conditions, you may need to repeat the treatment…

7

Case Study: prosecution of offenders

- Rewards
- Crime Commission costs
- Perceived formal sanctions
- Perceived informal sanctions
- Perceived cost of apprehension
- Perceived possibility of successful completion
- Perceived possibility of apprehension given non completion
- Perceived possibility of apprehension given completion

8

Prosecution of offenders: instructions on the tube?

- "do not apply unnecessarily" – formal criminal processes are generally harmful (Petrosino et al.)
- Apply to bad cases only – Berk et al.
- Threatening the treatment may be as effective as treatment -
- Take as quickly as possible – celerity matters
- Don't make idle threats – certainty

9

Operation Turning Point: A test of the treatment of prosecution

- A programme of research exploring whether crime harm could be a better basis for criminal justice decisions (Sherman and Neyroud, 2012 - see http://www.civitas.org.uk/press/proffenderpolicing.htm)
- Operation Turning Point is testing whether low risk offenders could be most cost effectively treated outside the formal criminal justice system

Why would a police chief commit to research?

- Prosecution is an expensive process
  - And money is very tight (20% reduction in UK Police budgets over 4 years)
- Re-offending rates are relatively high
- Victim satisfaction with prosecution is modest
- Once offenders have been prosecuted their fear of the process is diminished

How to research it?

- Operation Turning Point uses a randomised design to assign offenders to treatment or control (prosecution)
- Advantages are reduction in selection bias and increased ability to measure relative costs of the treatment and control
- It posed some ethical challenges which needed careful thought

Management requirements

- Senior commitment and understanding
  - You have to be able to answer the questions so get trained at the outset
- Middle managers engaged and excited and seeing personal opportunities from doing something different
- Frontline staff trained and involved in design, revision and feedback

Measurement is a big challenge

- Most police force data systems are woefully inadequate at answering (or even asking) important questions
- Too many systems are set to answer other people's questions
- Compstat and intelligence led policing have started a shift but more investment in knowing what we need to know is crucial

Requirements on the researchers

- To put the needs of the field first as long as it does not compromise standards of evaluation
- To provide expert consultancy as the experiment runs
- To report back in ways that help force understand progress and communicate with stakeholders
- And avoid “premature articulation”…

What do the police get out of it?

- Turning Point has already
  - Challenged decision making in custody
  - Identified serious flaws in relationship with victims
  - Started to build apparently successful tactics with offenders
- It will deliver
  - The most comprehensive assessment of effectiveness of non court disposals in UK
  - A model of cost benefit to assess prosecution v non court disposals
  - Better approaches for victims

Get a strategy not just an exciting experiment!

- Individual experiments are useful but can be sidelined as 'interesting' or 'innovation'
- A strategy that embeds evidence based approaches would
  - Have a strong commitment to education of staff
  - Have strong links with key national bodies
  - Engage community, partners and key stakeholders
  - Become the 'way we do things things round here'

The Four faces of Evidence-based policing: 1. Place

- Place based strategies: "crime is concentrated at very small geographic units of analysis, such as street segments or small groups of street blocks. Such crime hotspots offer stable targets for interventions…evaluation research provides solid evidence for the effectiveness of hot spots policing" (Braga and Weisburd, 2010: 245).
- The research strongly suggests that police should focus their patrol and problem-solving efforts at a small number of locations.
- Implicitly, this means making a choice to focus a lot less effort and fewer resources at other places

The Four faces of Evidence-based policing: Offenders

- Offender based strategies: Berk et al. (2009) have demonstrated that a small group of offenders are disproportionately likely to commit the most serious crimes, whereas the vast majority of offenders present a low risk of harm.
- Berk at al. (2009), Sherman and Neyroud (2012) and Cosma, Sherman and Neyroud (forthcoming) suggest that police should focus their prosecution and investigative energies on the high harm and highly persistent offenders and adopt less formal, preventive strategies with most offenders.
- Wikstrom et al (2012) have shown the "conjunction of opportunities" – high crime people in high crime places
- The choices proposed are, as with the place-based approaches above, argued from a standpoint that accords greater value to effectiveness of outcome for society rather than equity of treatment for the individual citizen or offender.

The Four faces of Evidence-based policing: 3.Victims

- Victim based strategies: Bridgeman and Hobbs (1997) show that people who had been victims of crime are more vulnerable to being re-victimised and that some victims have a risk of multiple victimisation.
- They demonstrate that police strategies that focus on highly vulnerable victims can be effective at reducing crime.
- Restorative justice research has shown that face to face meetings with offenders increases victim satisfaction and reduces feeling of retaliation

The Four faces of Evidence-based policing: 4. Legitimacy

- A focus on the procedural justice of encounters can help policing agencies both to identify behavior, tactics and strategies that many members of minority communities find problematic and which lead to disaffection,even though the behaviours, tactics and strategies may be lawful and, considered in isolation, appear effective.
- Secondly, a focus on the psychological aspects of legitimacy in individual encounters may have important crime control benefits when incorporated into tactics and strategies.

Leading the "new professional" policing

- Leaders are focused on
  - Processes
  - Outcomes
- Leaders need to
  - Challenge practice with evidence
  - Provide a vision to translate police activity into outcomes
  - Pay attention to values and ethics
  - Transformational and 'authentic' not just transactional

The "new professional" challenges

- Prediction;
  - Ability to predict patterns of crimes and incidents from existing events
- Prevention
  - Prediction allows a sharper focus on prevention
- Protection
  - And predicts the most vulnerable victims and most dangerous offenders
- Persuasion
  - A focus on legitimacy encourages public cooperation and law keeping.

Operation Turning Point

Introduction

Operation Turning Point is a randomised controlled trial, which is comparing the effectiveness of court prosecution for low harm offenders with a structured diversion to a deferred prosecution linked to a "Turning Point Contract".

Turning Point draws on the lessons of studies such as Operation HOPE that suggest that swift and certain action by criminal justice agencies will have enhanced deterrent effects and on the lessons of criminal career and desistance studies on strategies to encourage offenders to stay out of crime.

The Experiment in action

The experiment starts with offenders whom the custody officer has decided that it is in the public interest to prosecute – informal warning and cautions have already been discarded. At that point custody officers go to the Cambridge Gateway – a randomiser tool –, which takes them a series of questions that exclude offenders with multiple convictions, a high likelihood of prison and a serious offence. The Gateway will then, if they are eligible for the experiment, randomise them into prosecution or a Turning Point treatment.

Offenders given Turning Point are asked to attend a meeting the following day with an offender manager or Youth Offending Service officer. They are warned that non-compliance with this requirement, reoffending or failure to meet the terms of the Turning Point contract will result in prosecution. They agree the contract as a result of a structured conversation at their meeting. It is voluntary, but backed up by the threat of prosecution. The carrot is that successful completion of the contract will result in no further action.

The implementation of the experiment

Experiments are a complex change process as well as a research study. This one has been implemented in careful stages:

- Stage 1 was preceded by training custody staff and offender managers and then switching the Gateway on, but with every case set to prosecution, so that custody officers would get used to it and would road test it
- Stage 2 (December to May 2012) saw the Gateway set to Turning Point treatment only, so that Offender managers could build up their practice and, through regular debrief meetings, share it and debate it.
- Stage 3 (started June 1st 2012) the Gateway went to full randomization
- Stage 4 the expansion of the experiment to two further Local Policing Areas and the inclusion of Hate Crime

Ethics in experimentation

This is one of the first experiments to randomise the prosecution decision so ethical considerations have been high on the agenda:

- Randomization only occurs after the decision to prosecute, so no one suffers a greater penalty from random assignment
- The Gateway carefully excludes serious offences and potentially high harm offenders
- The accuracy of custody officers decisions on Turning Point cases has been independently reviewed by CPS

Ultimately, the key justification for such an experiment is that we do not know the answer and the question – how effective is prosecution v diversion – is a critical one for the criminal justice system.

Ensuring validity and measuring the outcomes

The great advantage of an RCT design is the ability to reduce the selection bias. The two samples being compared – those prosecuted and those diverted – should be different only because they have been sent to a different treatment. But we still need to check this. The 'internal validity' of the experiment is critical to the confidence in the results. The Gateway gives us a check on consistency of custody officer decisions. The data in the Turning Point contracts allows us to monitor consistency of contract conditions and enforcement. A big challenge is to check the consistency of the prosecution, control treatment.

The outcomes of the experiment will be measured by two key yardsticks: the prevalence and harm level of offending; the costs of the treatments. The former will be done with data from the Police National Computer, the latter by using cost data from the contracts and estimates of court prosecution costs.

We need a sample large enough to ensure that the effect size should be significant and with low risk offenders this means a larger sample. We are aiming, by expanding to 4 Local Policing Areas, for around 400 cases.

Quantitative and Qualitative research

An RCT is a highly quantitative research design but it would be a mistake to ignore the qualitative aspects of the research. The research team is very experienced in policing and criminal justice research and practice and has effectively provided expert consultancy. The team are also doing observation and interviewing of police officers, offenders and victims to understand what is going on inside the 'black box' of the experiment and assist the force to continue to improve practice.

Partnerships are key to experiments

The experiment is part of a partnership between Cambridge University, Institute of Criminology and West Midlands Police and is funded by the Monument Trust. Experiments don't just happen; they require long term commitments from researchers, practitioners and funders. The Research team would like to thank West Midlands Police and Monument Trust for their support.

The Research Team

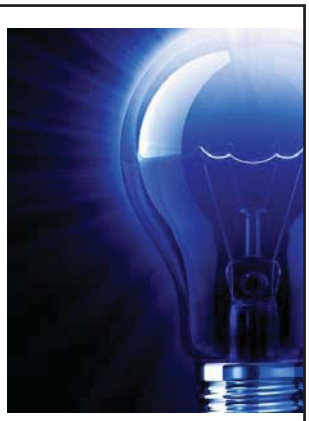
Peter Neyroud, Professor Lawrence Sherman, Dr Barak Ariel and Molly Slothower from Cambridge University and the University of Maryland.
http://www.crim.cam.ac.uk/research/experiments/rex-post/operation_turning_point.pdf

TAB 6 DIVIDER HERE

BACK OF TAB 6 DIVIDER

Matrix Demonstration Project

Institutionalizing research into practice



CHALLENGES

Many, many other ideas

- Building stronger crime analysis units.
- Reassessing knowledge requirements for promotions.
- Building outcome measures into accountability systems.
- Partnering with specialists who can help with technology, evaluations, research.
- Ending random beat patrol.
- Developing problem-solving investigative units w/civilian analysts.
- Filtering technological adoptions through crime prevention evidence, not efficiency assessments.
- Conducting promotional assessments using "portfolio approach" and Matrix mapping.
- Addressing the appropriateness of unions in deployment decisions.

Challenges

- Receptivity
- Mythology
- Systems that are not conducive to the evidence
- Existing managerial systems (COMPSTAT)

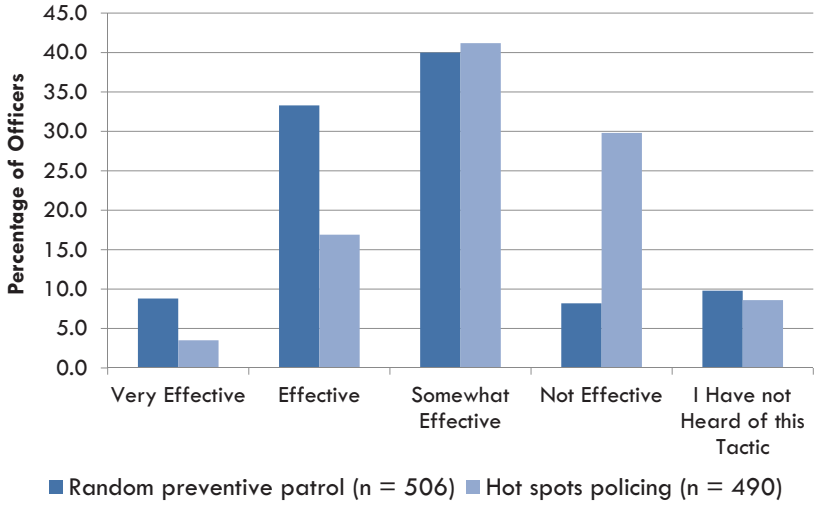
1. Receptivity

83.4% of officers surveyed valued experience over scientific knowledge regarding knowing what policing tactics were most effective.

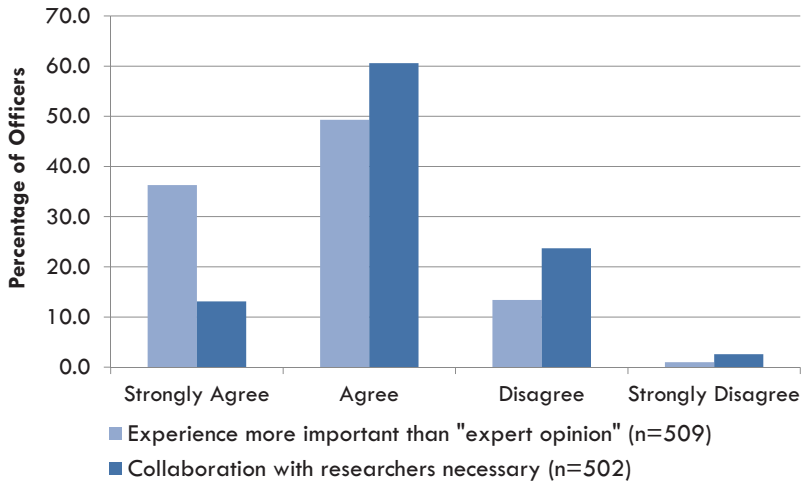
Describe your view of crime analysts/researchers who work in a PD?

Response	n	%
They seem to generate a lot of statistics that are useful mostly to high command.	203	41.4
They are/should be an integral part of day-to-day field operations.	131	26.7
They don't seem to be a very integral part of the daily work of officers and supervisors.	86	17.6
They are a very specialized unit who work on very specific problems.	37	7.6
They are usually called upon on an ad hoc, when-needed basis.	27	5.5
I do not know if these individuals exist in my agency.	6	1.2
Total	490	100.0

Do Police Know "What Works?" No…



Views of researchers



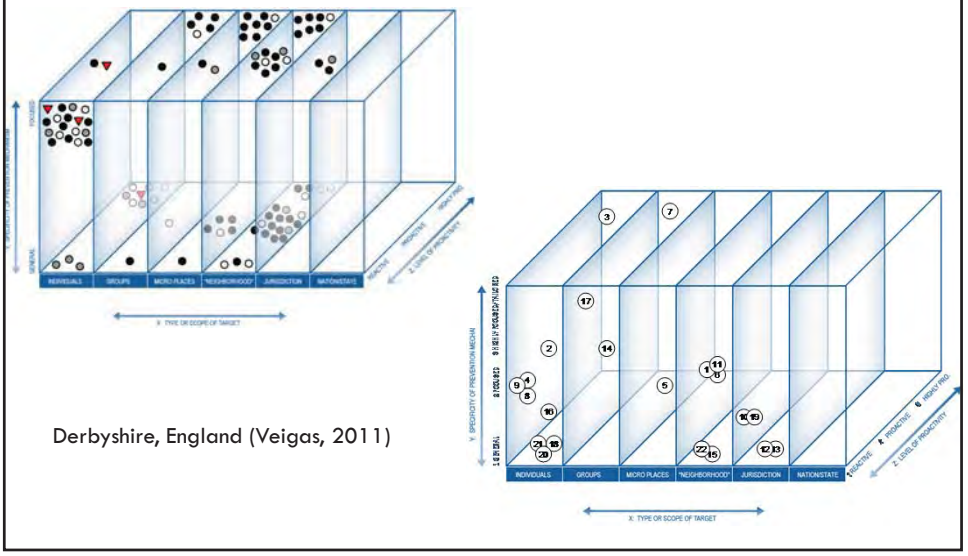
2. Mythology

- "We have no time in-between calls."
- "Good officers are those who make lots of arrests."
- "Officers already know what to do – just let them do their job."
- "Intuition and experience is really what makes the good officer."
- "Officers can't reduce crime; they can only keep the situation from getting worse."
- "If we patrol hot spots, crime will just be displaced."

3. Systems not conducive to "focused", "place-based", or "proactive" strategies.

- Reliance on reactive, random beat patrol and 911.
- Reliance on reactive, individual, case-by-case investigations.
- Isolation from other agencies.
- Problem-solving/analytic processes not institutionalized.
- Lack of professional development in this area in academies, field training, and in-service.
- Little infrastructure or support for research or analysis.
- Decision making models value "hunches", experience, best guesses, emotions, feelings, "common sense".
- Systems of promotion reward excellence in reaction and procedure-adherence.

4. COMPSTAT – a missed opportunity



Derbyshire, England (Veigas, 2011)

LEADERSHIP ROUNDTABLE

Challenges and prospects to institutionalizing evidence into practice

Deputy Chief **HASSAN ADEN**, Alexandria Police Department
Director **MICHEAL EDWARDS**, Jacksonville Sheriff's Office
Assistant Chief **JANEÉ HARTEAU**, Minneapolis Police Department
Retired Chief Constable **PETER NEYROUD**, University of Cambridge
Executive Director **DARREL STEPHENS**, Major City Chiefs Association
Senior Advisor **MICHAEL MEDARIS**, Bureau of Justice Assistance

RECEPTIVITY TO RESEARCH IN POLICING

Cynthia Lum
Cody W. Telep
Christopher S. Koper
Julie Grieco

Center for Evidence-Based Crime Policy
Department of Criminology, Law and Society
George Mason University

Abstract

Evidence-based policing—using research and scientific processes to inform police decisions—is a complex approach to policing that involves various challenges. One primary difficulty is how research can be translated into digestible and familiar forms for practitioners. A central part of successful translation is the receptivity of decisionmakers to research as well as how research is presented and packaged to increase receptivity. In this article we first discuss the complexity of evidence-based policing, highlighting the much-lamented gap between research and practice. We review research from other disciplines and also in policing about what contributes to research being better received and used by practitioners. We then describe our own receptivity survey, offering preliminary findings about the receptivity of officers to research, researchers, and tactics influenced by research. Finally, we conclude with examples of the types of efforts practitioners and researchers can engage in that might improve receptivity to research. Specifically, we discuss the Evidence-Based Policing Matrix as a research translation tool, as well as multiple demonstrations conducted by the authors that focus on institutionalizing the use of research into daily police activities.

The authors would like to thank the Sacramento Police Department, and especially Sgt. Renee Mitchell, for their efforts in administering the research receptivity survey. Thanks also to Julie Hibdon, the JRP editors and anonymous reviewers for their comments, and Jaspreet Chahal and Julie Wan for their research and editorial assistance.

JUSTICE RESEARCH AND POLICY, Vol. 14, No. 1, 2012

In his 1998 *Ideas in American Policing* lecture for the Police Foundation, Lawrence Sherman stated that "police practices should be based on scientific evidence about what works best" (Sherman, 1998, p. 2). Sherman described two dimensions of a research orientation in policing: the use of information from evaluations of police activities and the application of knowledge arising from an agency's own internal analysis. He emphasized that the police should use scientifically rigorous evaluations and research in a more direct and central way, arguing that research findings and data analysis should guide police decisions about tactics and strategies.

While this approach seems rational and straightforward, Sherman was not arguing that the road to evidence-based policing is an easy one to follow. Evidence-based policing, like many policing perspectives, involves complexity and nuance. Those who support this approach are far from asserting that researchers, research, or scientific processes can run a police department's daily operations or resolve law enforcement's concerns, as some have implied (e.g., Sparrow, 2011). Just as the SARA model (scanning, analysis, response, and assessment) of problem-oriented policing (Eck & Spelman, 1987) cannot be expected to be used for all of the activities in which the police engage, and just as community policing is hampered by political and resource constraints, evidence-based policing also has limitations. Why? Because evidence-based policing is a decisionmaking *perspective,* not a panacea. It is grounded in the idea that policies and practices should be *supported by* scientifically rigorous evidence and analytics; that research is *not ignored*; and that research at least becomes a *part of the conversation* about what to do about reducing crime, increasing legitimacy, and addressing internal problems. These nuances provide flexibility in thinking about the role that research and science should play in policing.

Making research a part of the conversation on policing is complicated by the fact that two entities (the scientist and the practitioner) with different expectations and worldviews are attempting to foster and sustain exchanges with one another in order to trade knowledge, skills, and products. These differences can result in divergent interpretations of that knowledge and, more generally, different philosophies about the role and meaning of science in policing. Scientists and practitioners may also disagree on which outputs best measure police effectiveness (e.g., crime reduction or crime detection), how evaluations should be carried out (e.g., experiments, quasi-experiments, simulations, or before/after designs), or what "good policing" should look like (Mastrofski, Willis, & Revier, 2011). The worlds of the practitioner and the scientist operate on vastly different timelines, with police chiefs believing that they need quick solutions, and academics believing that without adequate deliberation, the quality of the science might be compromised. These many difficulties can sometimes result in either the researcher or the practitioner conceding defeat or simply avoiding the relationship, which then manifests itself as the proverbial gap between research and practice (Lum, 2009; Sherman, 1998, 2011; Weisburd, 2008).

At the same time, some police and research personnel are committed to fostering such conversation and see the value of public policy and social interventions being informed by science rather than by hunches, best guesses, or even

"best practices" (Lum, 2009). This mutual belief is reflected in a history of police-research partnerships, as well as initiatives at the federal level to fund such partnerships (see the report on this topic by the International Association of Chiefs of Police [IACP], 2004). Recent examples of federal support for these partnerships are the Bureau of Justice Assistance's *Smart Policing Initiative* (Medaris & Huntoon, 2009) and the National Institute of Justice's *Building and Enhancing Criminal Justice Researcher-Practitioner Partnerships* solicitation.[1]

This interest in reducing the barriers between research and practice is certainly not a new pursuit in modern democratic societies. When Carol Weiss (with Michael Bucuvalas) wrote *Social Science Research and Decision-Making* in 1980, she pointed out that numerous commissions and inquiries by the National Research Council (NRC) and the National Science Foundation had already been undertaken to examine the limited impact of research in the social sciences. And, she wrote, even the most optimistic felt that the "potential of social science research for informing the processes of government … has not been realized" (p. 9; see also Hirschkorn & Geelan, 2008). In the evaluation discipline since, there has been much debate and discussion over the utilization of research (for a review, see Shulha & Cousins, 1997). Twenty years after her study, Weiss (1998) addressed the American Evaluation Association and again offered cautious optimism. In response to the question posed by the title of her speech, *Have We Learned Anything New About the Use of Evaluation?* she answers, "yes, we have learned some things, but the learnings have come more from applying new constructs and perspectives than from research on evaluation use" (p. 23). Nutley, Walter and Davies (2007) in their excellent work *Using Evidence: How Research Can Inform Public Services* also emphasize the lack of empirical evidence on the various models and conceptualizations of research use.

In policing, concern over the gap between research and practice also seems to be a recurring lament. Bayley (1998) bluntly stated that "research may not have made as significant, or at least as coherent, an impression on policing as scholars like to think.... Nor has research led to widespread operational changes even when it has been accepted as true" (pp. 4–5). Mastrofski (1999) emphasized that the challenge was not only to generate more research about useful interventions but also "to figure out how to get police to do them more often" (p. 6). Weisburd (2008) cited the continued reliance by police on random beat patrol as an example of this gap, given the decades of research on directed patrol and problem solving at hot spots. Lum (2009) continued by noting the lack of research in daily policing, suggesting that better translation of research was needed in order for evidence-based policing to be realized.

It is clear that both researchers and police innovators want research to be useful and are sometimes frustrated by its lack of use. When the NRC's Committee to Review Research on Police Policy and Practices convened, it concluded that gaps

---

[1] Grants.gov assignment number - NIJ-2012-3083; NIJ Solicitation number SL000978. Available at: https://www.ncjrs.gov/pdffiles1/nij/sl000978.pdf.

in the supply of, and demand for, studies that address the needs of modern policing continue (NRC, 2004). One problem is that it is not clear what these needs are. Further, any determination of what the police may need from research may depend on what people believe the role and impact of science should be in governance more generally (Sherman, 2011). Evidence-based policing, like problem-oriented policing, ultimately suggests an ideology that incorporates science and research in the practice of policing in democratic societies. However, the notion that science should matter is often trumped by the reality that public opinion, political will, or consensus-based opinions about best practices are what should underpin and drive police actions. But public opinion, political will and consensus-based opinions can be problematic and sometimes conflict with democratic values, such as the protection of due process, equality in service quality and delivery, control of bureaucratic discretion and abuse of authority, or fiscal responsibility to effective and accountable practices. Ideological debates aside, even if we start from a reasonable democratic notion that public policy should at least be partially supported by information, facts, and research knowledge, we still must confront the complex process and difficult research-practitioner conversations implied by the term "evidence-based policy" (Lynn, 1987). This process requires not only that both work together to generate the research, but also that they figure out ways to translate and then use it.

In policing, the generation and supply of research is less the problem than the quality of its translation. There is already a large body of research synthesizing the evaluation literature on a variety of policing interventions (see Braga, 2007; Braga & Weisburd, in press; Bennett, Holloway, & Farrington, 2008; Bowers, Johnson, Guerette, Summers, & Poynton, 2011; Davis, Weisburd, & Taylor, 2008; Koper & Mayo-Wilson, 2006; Lum, Koper, & Telep, 2011; Mazerolle, Soole, & Rombouts, 2007; NRC, 2004; Sherman et al., 1997; Sherman, Farrington, Welsh, & MacKenzie, 2002; Weisburd, Telep, Hinkle, & Eck, 2008; Wilson, Weisburd, & McClure, 2011). There are also Web-based reference tools such as the *Evidence-Based Policing Matrix* (Lum, Koper, & Telep, 2009, 2011)[2] and the Office of Justice Programs' *CrimeSolutions.gov* that house research in more accessible digital forms. But the translation (and effective use) of the research is another story. Compared to police evaluation research, unveiling the mysteries of evidence translation and knowledge utilization has attracted much less funding and interest, despite the implied significance of these endeavors in the push toward evidence-based policy (Tseng, 2010). And, the principles that have emerged about effective policing practices from decades of evaluation research in policing have yet to be seriously institutionalized into police practice. For example, we know that police can be more effective in crime prevention if they focus on targeting places, not just individuals, if they tailor their response to a specific problem (rather than use a more general approach), and if they are proactive, not reactive (Lum, Koper, & Telep, 2011; Sherman & Eck,

[2] See http://gemini.gmu.edu/cebcp/Matrix.html.

2002; Weisburd & Eck, 2004). However, many of the mainstays of policing tend to be individual-based, reactive, and general in nature. Reiterating Bayley's concern, police research may not have made as much of an impact as some may think.

There is also more to be learned regarding what characteristics of researchers, practitioners, and/or organizations improve receptivity to using scientifically derived knowledge to guide practice decisionmaking. Weiss and Bucuvalas (1980) found research use by decisionmakers to be multidimensional, making the study of knowledge utilization challenging. They hypothesized that research could be used to bring an issue to the attention of decisionmakers; formulate new policies or programs; evaluate the merit of alternatives; improve existing programs; mobilize support for positions; change ways of thinking about an issue; or plan new decision-relevant research (see Weiss & Bucuvalas, 1980, p. 141). They argued that with this list of varied and sometimes ambiguous uses comes potential misuse of research, distorted expectations, obstacles to research use, and other difficulties. Sometimes expectations about the promise of research are unrealistic on both the research and practice sides, or research is taken out of context to criticize either the researcher or the practitioner. Barriers to the use of research can be individual, organizational, or political.

Another challenge is that policing occurs in the context of local, state, and federal politics and is constrained by budgets, unions, and organizational cultures and systems, all of which can make change difficult. For example, in budget crises, civilian researchers and analysts may be cut before sworn positions. Yet analysis is a key component in facilitating change and evidence-based policing. Unions may issue statements about new deployment schemes (e.g., problem-oriented policing, hot spots policing, etc.), arguing that such approaches place officers at unnecessary risk, or require more pay or overtime opportunities. These assertions may not only be uncorroborated by research, but may actually be counterintuitive (i.e., if innovations reduce crime and calls for service, this may reduce risk to officers more generally). Shifting from beat patrol to targeted patrol means that ultimately some neighborhoods that have little to no crime will not be patrolled. This may lead to those communities protesting to their local city council member about not seeing an officer. Or, the organizational culture and system of promotions that focus on rewarding knowledge of procedures and reactivity also help strengthen barriers to using research that promotes proactivity or problem solving. Finally, these factors, systems, and cultures in policing can differ across law enforcement agencies of varying sizes, types, and characteristics, which further muddies our understanding of their impact on evidence-based policing.

Weiss (1998; Weiss & Bucuvalas, 1980) also reminds us that researchers have their own set of problems in this venture to have research evidence become part of the policy conversation. Researchers sometimes simplify issues for purposes of analysis or focus on parts of issues and problems rather than on whole, multifaceted systems (IACP, 2004). This reduction may serve scientific ventures well but may reduce the meaningfulness of scientific knowledge for practitioners. Evaluators and

scientists might overestimate the usefulness of their work and, as Patton (2002) points out, lack humility about their science—humility that could serve them better among practitioners (Weiss, 1988). University and scientific cultures may provide little incentive or training for field research or policy evaluation. Learning how to disseminate research and translate it into meaningful forms is rarely emphasized over learning about the tools of research. Further, in decisions about salary and promotions, the academic world gives researchers little credit for writing articles and reports geared toward practitioner audiences as opposed to scientific ones.

Moreover, officers and researchers may have different philosophies about the role of science in law enforcement, and both sides may struggle to understand what is important to the other (Hirschkorn & Geelan, 2008). Rigorous research projects can be time consuming, and police leaders and practitioners work in a world where immediate decisionmaking is required. Research outcomes are sometimes ambiguous and contradictory, often frustrating police leaders who just want to know whether a new program or intervention "works." Evidence-based policing is a difficult venture, which unfortunately can lead to practitioners and researchers both losing interest in the other. Relationships, after all, are messy and require hard work.

Receptivity to Research and Analysis: Lessons from Other Fields

Rather than throwing in the towel, we need to better understand what might improve the chances of productive communication between researchers and the police. Perhaps if we could measure and understand characteristics of police researchers, officers, and their respective organizations that enhance or inhibit knowledge generation and use, we then could achieve the goal of closing the research-practice gap. Currently, we know very little about how individual and organizational aspects of criminal justice practice predict or condition receptivity to research knowledge (Tseng, 2010) or how to use such knowledge if we had it. Building this body of empirical knowledge, however, may prove just as important as generating evaluation results.

Although not often focused on policing or criminal justice, theoretical modeling and empirical research on receptivity to and utilization of research does exist (Nutley et al., 2007; Shulha & Cousins, 1997). In the evaluation science arena, Weiss's research is groundbreaking (Weiss, 1977, 1979, 1988, 1998; Weiss & Bucuvalas, 1980). In 1980, building on earlier work by Caplan (1976), Caplan, Morrison, and Stambaugh (1975) and Caplan and Barton (1976), she and coauthor Michael Bucuvalas empirically examined receptivity to mental health research by decisionmakers, pushing forward a "sociology of knowledge application" (Weiss & Bucuvalas, 1980, p. 23). They interviewed 255 individuals—decisionmakers in mental health agencies and scientists in research communities—asking them a variety of questions related to their views and use of research. They focused on attributes of research studies, as well as factors that might influence individual receptivity, such as attitudes, education, experience, and personal characteristics.

The findings were illuminating and conflicting at the same time, illustrating the complexity of evidence-based processes (Lynn, 1987; Nutley et al., 2007). They found a general receptivity to, and support of, social science research by decisionmakers, as well as strong levels of knowledge about research. The decisionmakers did see research as useful if it was relevant to their work, was plausible and feasible given their experience, provided explicit guidance, challenged the status quo, and was objective and of high quality. Indeed, the quality of research was the single most significant factor for belief in research usefulness (although the sample likely understood research design issues better than other possible samples). At the same time, Weiss and Bucuvalas found that the same decisionmakers who saw research as useful also felt that actual use was uncommon. Use and receptivity to research was further complicated by an individual's personal beliefs and perceptions of the organization. For example, the study's subjects were more receptive to research, even if it critiqued their organization, as long as it meshed well with their personal beliefs and values. Research that challenged the status quo was actually viewed as valuable by decisionmakers, although the use of research as a change agent was uncommon.

In addition to Weiss's foundational work, others have studied research receptivity empirically, often in the public health or social work sectors. Aarons (2004), also working in the mental health field, developed a survey (the Evidence-Based Practice Attitude Scale) to measure the attitudes of mental health providers toward adopting evidence-based practices. He identified four dimensions of willingness to adopt evidence-based practices: intuitive appeal (e.g., whether the practice makes sense), requirements (e.g., whether the practice is required by a supervisor or law), openness (e.g., whether the provider likes trying new things), and divergence (e.g., whether the practice fits in with usual practices). Further, individual and organizational characteristics are associated with these different dimensions. For example, more highly educated providers were more supportive of evidence-based practices with intuitive appeal.

In the fields within medicine, Lacey (1994) and Wangensteen and colleagues (2011) found that many nurses, like the mental health workers in Weiss and Bucuvalas' sample, had positive attitudes toward research and implementing research findings. Wangensteen and colleagues (2011) found that certain personal characteristics made nurses more positive toward research use, including those having "critical thinking"[3] traits and those who more recently graduated from school. However, also like Weiss and Bucuvalas' respondents, the *use* of research findings in practice was low; only 24% of respondents defined themselves as users of research. Guindon and colleagues (2010) found that receptivity toward

[3] Wangensteen and colleagues (2011), using the California Critical Thinking Disposition Inventory (CCTDI) subscales, defined critical thinking as truth-seeking, open-mindedness, analyticity, systematicity, critical thinking self-confidence, inquisitiveness, and maturity (p. 2,438).

research by healthcare providers in low- and middle-income countries may be greater if research is generated and published in their own countries. Further, respondents in these places who were more likely to use research were also more likely to use paper-format clinical guidelines, read scientific journals from their countries, and have trust in the research performed in their countries. Internet access was also positively connected to receptivity. In addition, these researchers cited a number of barriers to using research in medical practices (see also Parahoo & Mccaughan, 2001). These included lack of resources, time, or knowledge, as well as cultural obstructions between doctors and nurses and between employees and hospital management.

Practitioners and researchers in the field of social work have also debated the merits of evidence-based practice and policy. Edmond and colleagues (2006) reviewed the literature in this area and highlighted concerns about the barriers to research use, the paucity of evidence, and the meaningfulness of research for practitioners. Their survey of field instructors, like the surveys of practitioners mentioned above, revealed a generally positive outlook toward evidence-based practices. However, the instructors were much less likely to use research in their daily work. Adding to that work, Chagnon and colleagues (2010) examined factors that might predict research application by child protective service employees. Eight elements appeared important to predicting research application in practice among those surveyed:

- collaboration in research knowledge development;
- perceived usefulness of research knowledge;
- perceived efforts by researchers to disseminate research knowledge;
- personal efforts to acquire research knowledge;
- favorable attitudes toward relations with researchers;
- the medium of communication used to obtain research knowledge;
- organizational context; and
- perceived cost of knowledge utilization.

Receptivity to Research and Analysis in Policing

In police scholarship, empirical receptivity research regarding the acceptance and utilization of knowledge is rare. One example comes from Birkeland, Murphy-Graham, and Weiss (2005), who examined why evaluation findings of D.A.R.E. (Drug Abuse Resistance Education) are often ignored by schools (see also Weiss, Murphy-Graham, & Birkeland, 2005). Of the eight schools they studied, six continued to implement D.A.R.E. despite negative evaluation results. The reasons that were given illuminate some of the difficulties of implementing evidence-based policing. Some schools and police officials felt that the evaluations were measuring unrealistic program goals. Others felt that the evaluations overlooked the program's ability to build relationships between police, students, and their families.

Lastly, police and school officials felt that their own personal experiences with D.A.R.E. outweighed any scientific evidence against it.

Palmer (2011) found complexities and contradictions similar to those found by Weiss and Bucuvalas (1980) with regard to the research receptivity of the police. Building on the Lum and Telep receptivity survey described below, Palmer surveyed all officers of inspector and chief inspector rank in the Greater Manchester Police Department in the United Kingdom about their receptivity toward conducting experimental evaluations and using research. Although his response rate was low (32%, n = 153 of a population of 467), his findings are still illuminating. Among his participants, officers relied highly on professional experience rather than research to guide decisionmaking. However, officers did not reject the idea that research knowledge and evaluations should have some influence in policing. A majority of chief inspectors read research from the Home Office (67%) or the National Policing Improvement Agency of the United Kingdom (NPIA) (54%). While the lower ranking (but still supervisory) inspectors were less likely to read research from these sources, close to half still did (44% read Home Office reports and 48% NPIA reports). Those officers who were more likely to say that the police had sufficient knowledge without acknowledging research were also those who had the least exposure to scientific research. In other words, the more an officer knew about research, the less he or she believed the police organization had enough information on its own about crime and what to do about it.

Palmer (2011) also homed in on the receptivity of the police to experimental evaluation. The use of the randomized controlled trial is viewed as providing researchers with high levels of confidence in evaluation results (Boruch, Snyder, & DeMoya, 2000; Campbell & Stanley, 1963; Cook, 2003; Farrington & Petrosino, 2001; Sherman, 2003; Weisburd, 2003). However, experiments are also difficult and can be challenging to police practice. Moore (2006), for instance, has argued that there may be practical trade-offs with experiments, including de-valuing experience in light of outcomes. Others cite difficulties in using experiments to examine very complex or citywide policing interventions (see Telep & Weisburd, 2011; Weisburd, Telep, Hinkle, & Eck, 2010). In light of these debates, Palmer's use of experiments to evoke feelings about evidence-based practice is helpful, for it taps into these problems as they manifest in the field. Surveying officers about their views on experimental evaluation focuses their attention on research rigor (a factor Weiss and Bucuvalas found compelling to research believability and acceptance), as well as on the barriers to and risks of the use of research more generally.

To gauge receptivity to experimentation, Palmer posed experiment scenarios to the respondents. He found that the more officers had been exposed to research, the more likely they would be willing to engage in an experimental evaluation. He also found that officers were much less likely to stop a tactic in order to conduct a controlled experiment, but they were still willing to participate in pre- and post- designs, showing at least a general willingness to conduct research. Officers were also more likely to stop a tactic for evaluation if the risk to public safety in

doing so was relatively low. However—and again reflecting the contradictions that Weiss and Bucuvalas (1980) found—the officers he surveyed were more likely to be swayed by personal experience and perceptions of community needs, rather than results of experiments, when deciding whether to *use* certain tactics. Practical reasons for research involvement and use seemed to trump scientific ones, and Palmer emphasized that officer receptivity to research depends on the meaningfulness, cost, and perceived risk of the research, as well as on its alignment with an officer's own "sense" (see similar assertions by Landry, Amara, & Lamari, 2001).

Overall, the empirical research on the sociology of knowledge application and acquisition is scant in policing and in other fields. However, these types of studies may prove just as useful as research that generates evaluations or reviews that synthesize knowledge. Understanding what makes police officers and their supervisors willing to look at and incorporate scientific knowledge and processes into their decisionmaking may better inform both researchers and practitioners about how to apply the results of evaluations. Further, although the studies reviewed above examine individual receptivity, deciphering how acceptance and use of research occurs at the organizational level—and the structural changes associated with increasing this use—is also an important venture. While there is much theoretical and empirical research on organizational receptivity to change (see, for example, Newton, Graham, McLoughlin, & Moore, 2003; Pettigrew, Ferlie, & McKee, 1992), it is more difficult to find studies that have specifically examined the receptivity of organizations to research. Nonetheless, such knowledge could be helpful to practitioners who are interested in developing strategies to incorporate research into their practices.

Officer Insights about Receptivity

Given the greater emphasis placed on research generation than on receptivity, Lum, Koper, and Telep developed the *Matrix Demonstration Project* (MDP),[4] which is now funded by the Bureau of Justice Assistance (BJA). The MDP develops, in collaboration with multiple law enforcement agencies, demonstrations and associated tools that show how research use might be institutionalized into daily police practices (academy and field training, management meetings, deployment, etc.). As part of the MDP, the Matrix team developed a "receptivity survey" to gauge officer attitudes, understanding, and use of research.[5] The survey was also designed so that agencies could compare responses before and after research projects or training on the use of research in practice, and compare themselves with other agencies. For researchers, the survey provides more empirical data to develop theory in this area

[4] See http://gemini.gmu.edu/cebcp/MatrixDemo.html.

[5] An updated version of the survey can be found at the Matrix Demonstration Project Web site at http://gemini.gmu.edu/cebcp/matrixdemo/receptivitysurvey.pdf.

and to test factors contributing to (or inhibiting) the use of research in practice. Here, we present some initial results from our piloting of the receptivity survey in the Sacramento, California, Police Department (SPD) and offer commentary on the insights surveys like this can offer with regard to receptivity of evidence-based practices and research. In SPD, 523 officers from a total force of approximately 700 answered the survey during in-service training.[6] In the long term, we hope to survey enough officers across multiple agencies to begin to develop benchmarks for understanding receptivity. These benchmarks would be based on the responses of similar departments in terms of size, geographic location, and problems faced.

The survey instrument focuses on themes related to receptivity to evidence-based policing approaches. An important first question was whether or not officers had heard of the term "evidence-based policing," and if so, how they defined the concept. We then asked a series of questions to better understand what, if any, academic and professional journals and magazines the officer had recently read and the officer's knowledge of the evidence underlying commonly used interventions in policing. We also assessed officers' views regarding crime analysis and criminologists working within the department, and how often officers made use of materials from crime analysis. The survey included a series of questions on officers' views toward innovation, new ideas, working with outsiders (e.g., researchers), and education in policing. Finally, we asked a number of questions about the officer's background. We show some of the preliminary results here, since combined with previous research, they may prove useful in developing future research questions in research translation, receptivity, and use.

Knowledge of Evidence-Based Policing and Use of Research Resources

Our first set of questions asked officers if they were familiar with the term *evidence-based policing*. *Community policing*, for instance, is a household term in policing with commonly ascribed principles, and we were interested in whether a similar diffusion of the term evidence-based policing had occurred. New approaches and perspectives often rely on the spread of information by leadership and other word-of-mouth systems (Rogers, 2003). While the concepts of "evidence-based" or "research-based" policing and crime policy have become common terminology in the academic world, it seems clear that the term "evidence-based policing" is not as

---

[6] The survey was administered by Sergeant Renee Mitchell at the beginning of an in-service training course on crime analysis that was taught to most officers. The survey took 15 to 20 minutes to complete, and officers were told the survey was voluntary and that results would only be shared with their department in aggregate form. Officers were also asked to provide some demographic information (gender, race, age) and departmental information (rank, years of experience), but no efforts were made to link these data to particular officers in order to protect officer confidentiality. We do not have exact response rate data, but Sgt. Mitchell reported only a small proportion of officers refused to take the survey. The survey was administered over a nine-month period beginning in February 2011.

well known in the world of practitioners. Only a quarter of SPD officers had heard of it (24.9%), and we suspect this finding would be common in other agencies.

Along these same lines, we were also interested in officers' general knowledge of police research and the sources of that knowledge. We asked officers what journals or magazines they had read in the past six months, including both academic (e.g., *Criminology*) and professional (e.g., *The Police Chief*) publications. As Table 1 shows, three quarters of the officers had not read any of the seven well-known publications listed in the survey. We also asked whether they had read any information about the effectiveness of particular tactics or strategies and if so, to name the organization that provided it. Officers were much more likely to have read formal or written information provided by their own agency versus information from federal, state, nonprofit, or research organizations (see Table 1). This stands in contrast to Palmer's (2011) sample, which showed a greater level of exposure to research among police in Greater Manchester. This might reflect a general difference in national versus local policing (police agencies in the United Kingdom are all

Table 1

Officers' Responses to Survey Questions Regarding Professional Reading

"In the last SIX months, from which of the following journals or magazines have you read an article or feature?"		
Source	n	%
• None of the above[a]	402	76.9%
• Other	73	14.0
• *FBI Law Enforcement Bulletin*	32	6.1
• *The Police Chief*	18	3.4
• *Criminology and Public Policy*	5	1.0
• *The Criminologist*	4	0.8
• *Criminology*	4	0.8
• *Justice Quarterly*	4	0.4
• *Police Quarterly*	4	0.8

"In the last SIX months, have you read any formal or written information provided by the following organizations specifically about the effectiveness of particular tactics or strategies?"		
Source	n	%
• Your own police agency	241	46.1%
• None of the above[a]	236	45.1
• Other	38	7.3
• COPS Office	22	4.2
• International Association of Chiefs of Police (IACP)	20	3.8
• A university	13	2.5
• Police Foundation	10	1.9
• National Institute of Justice	9	1.7
• Police Executive Research Forum (PERF)	9	1.7
• BJA	8	1.5
• Bureau of Justice Statistics	5	1.0
• Office of Justice Programs	3	0.6
• A library database	1	0.2

Note. Officers could choose as many answers as were applicable.

[a] This item appeared in the survey at the bottom of the list within this table, hence the use of the term "above."

part of a national police force), differences in the knowledge requirements placed on supervisors in the agencies, or differences in the average rank of the respondents in the agencies (which was higher in Greater Manchester). Indeed, in a survey of police chief executives, Rojek, Alpert, and Smith (2012) found more exposure and use of research than discovered here.

Given Weiss and Bucavalas's (1980) and Palmer's (2011) findings and the organizational literature more generally, our findings regarding the source of knowledge that officers rely upon are not surprising. Practitioners tend to get their information from their organization and from each other, not from other sources (academic or otherwise) unless required by their jobs or positions. This emphasizes the importance of researchers and police leaders using existing mechanisms of communication within the organization to disseminate information, such as discourse by official, unofficial, and opinion leaders, as well as organizational systems of information dissemination. Using these existing systems may help information to be better disseminated and received.

It is also important to consider the form of information disseminated. While it may not be realistic to think a sizable number of officers will regularly read academic journals, they may read summary information from relevant studies. Each study included in the Evidence-Based Policing Matrix, for example, has a Web page with the study's abstract and some brief information on the overall findings. Additionally, the Center for Evidence-Based Crime Policy has put together a series of one-page research summaries[7] highlighting key findings and policy implications of a number of studies in policing. Combining these easy-to-digest forms of information with existing communication systems could be one means to better highlight research findings for officers.

Knowledge of Research Findings on Effective Practices

To further gauge officer knowledge and impact of existing policing research, we asked officers about the effectiveness of a variety of police strategies that have already been researched and evaluated. We felt this would be more useful than asking officers more directly: "Do you use research?" Research use may be subconscious, and activities the police engage in may indeed be supported by research, even if not obvious. Thus, we instead gave officers a series of common police tactics, and then for each we asked them to answer whether the tactic was "very effective," "effective," "somewhat effective," or "not effective." They could also choose, "I have not heard of this tactic." We asked about 14 different tactics (Question 5 of the survey instrument). Again, while the full results will be reported after other agencies take this survey, we highlight a few results here.

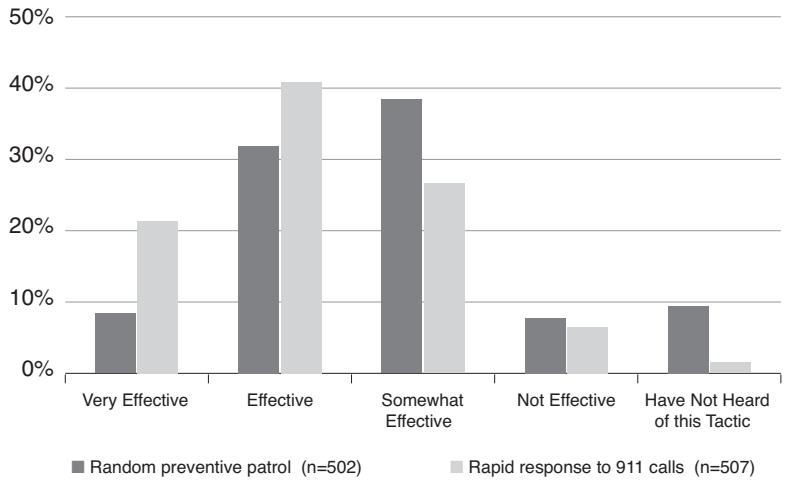
The survey results revealed that traditional beliefs about the effectiveness of random preventive patrol, as well as rapid response to 911 calls still persist. Only 7.8% of officers thought random preventive patrol was ineffective (see Figure 1).

[7] See http://gemini.gmu.edu/cebcp/OnePageBriefs.html.

Of course, agencies may vary widely on these beliefs depending on size, leadership orientation, and past training. Further, while research has shown that rapid response to 911 calls has little effect on crime (e.g., see review in Sherman & Eck, 2002), Sacramento officers attributed even greater crime control effectiveness to this practice than to random patrol (see Figure 1); indeed, a majority of officers in Sacramento (62.3%) believe rapid response is either very effective or effective.

Figure 1

Officers' Responses to Question of Whether Random Preventive Patrol and Rapid Response to 911 Calls Are Effective for Reducing Crime and Disorder



Further, when we asked officers specifically about directed patrol (also known as hot spots policing), only 19.2% of officers responded that the tactic was effective or very effective, and 27.9% responded that hot spots policing is ineffective (see Figure 2). This finding was especially interesting for two reasons. First, the police department had just internally undertaken a highly publicized experimental evaluation on hot spots, which showed that the intervention significantly reduced crime (Telep, Mitchell, & Weisburd, in progress).[8] Secondly, a large body of research has indicated that (1) directing officers to crime hot spots so they can implement problem-solving patrols and (2) providing greater visibility in these high-crime areas are more effective than traditional or "random" preventive beat patrol (see

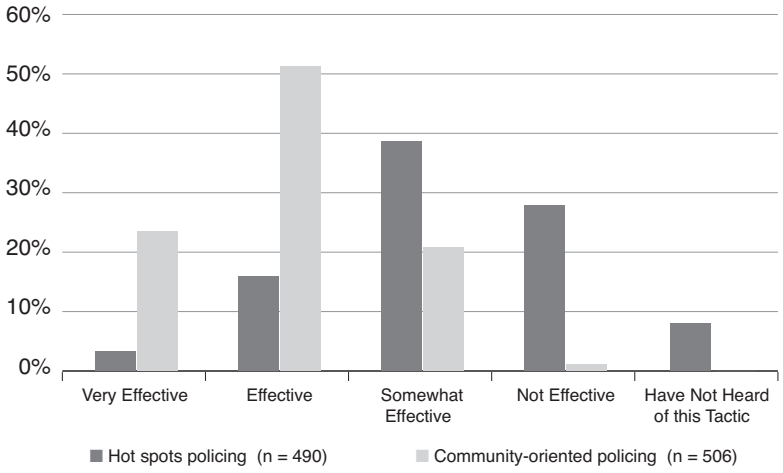
[8] This evaluation was entirely conducted and funded internally, and developed and led by Sgt. Renee Mitchell of the Sacramento Police Department with consultation from the Center for Evidence-Based Crime Policy. The results of the experiment were covered by several media outlets, including the *Sacramento Bee* (see http://blogs.sacbee.com/crime/archives/2011/10/sacramento-police-hot-spot-study-shows-focus-the-key.html) and the local Fox affiliate (see http://www.fox40.com/news/headlines/ktxl-sacramento-police-hot-spot-policing-new-strategy-for-reducing-hot-spot-crime-20111004,0,7921680.story). However, since the experiment was not completed until May 2011, some officers took the survey before the final results were available.

reviews by Braga, 2007; Lum, Koper, & Telep, 2011; NRC, 2004; Sherman & Eck, 2002; Weisburd & Eck, 2004). A variety of randomized controlled experiments support this notion (e.g., Braga & Bond, 2008; Braga et al., 1999; Sherman & Weisburd, 1995; Taylor, Koper, & Woods, 2011; also see the compilation of these experiments in Lum, Koper, & Telep, 2011). At the basic level, officers and law enforcement agencies that focus some of their attention on geographic concentrations of crime (whether they call this hot spots, predictive policing, intelligence-led policing, or even community-oriented policing) would show they were more in tune with an evidence-based approach (Weisburd, 2008). Despite this, there appears to be a belief that these approaches are not effective.

In contrast, community-oriented policing—a well-known and common police innovation but one for which the evidence on crime-control effectiveness is limited and vague (see Sherman & Eck, 2002; Weisburd & Eck, 2004; Weisburd, Bennett, Gill, Telep, & Vitter, in progress)—was believed by 74.7% of officers to be "very effective" or "effective" in controlling crime (Figure 2). Also interesting was the fact that while 8.0% of officers had not heard of hot spots policing, not a single officer responded that he or she had not heard of community-oriented policing.

Figure 2

Officers' Responses to Question of Whether Hot Spots Policing and Community-Oriented Policing Are Effective for Reducing Crime and Disorder



Why were these officers' views so inconsistent with research on these strategies? While we cannot generalize about all officers, given that *these* officers are generally unaware of research findings, their beliefs about the effectiveness of innovations like hot spots policing, predictive policing, or community-oriented policing might depend on how interventions are discussed informally and presented to officers. Officers may be asked by senior leadership to engage in new tactics for the purposes of research evaluation or accountability for COMPSTAT meetings, and because of that they may view such orders with disdain or suspicion. Or, even

when officers are aware of research, perhaps they remain unconvinced of the more global effectiveness of certain approaches, given that their daily experiences are so individualized and case-by-case. Perhaps another explanation is that officers may resent the loss of discretion that occurs in more targeted deployment strategies like hot spots policing. In terms of community policing, while our question asked specifically about crime control effectiveness, it could be the case that officers were answering in terms of other potential benefits of community policing, like increasing citizen satisfaction or increased perceptions of legitimacy. These outcomes are more consistent with the research evidence (see Weisburd, Bennett, Gill, Telep, & Vitter, in progress) and do have some potential to impact crime indirectly (e.g. see Sherman & Eck, 2002; Telep & Weisburd, 2011).

Even though hot spots policing shows great promise, officers' assertion that it is "not effective" may reflect displeasure toward the recent experiment that the agency had conducted on hot spots. Anecdotal accounts of that experiment indicated that some officers resisted or resented changes in their routines. Their reaction may explain some findings, but also provides important lessons in transitioning evidence-based activities from ad-hoc studies to regular deployment. Thus, not only are the mechanism of dissemination and the translation of information important to officer receptivity of research knowledge, but the context of the introduction of the information is also key. It could also be the case that officers remain concerned that hot spots interventions will simply displace crime to other places nearby (i.e., just push crime around the corner). We did not ask directly about this on our survey, but this was an issue raised by SPD officers during the hot spots experiment. This is another instance where officers' views could potentially be altered by greater familiarity with research, which generally shows little or no displacement resulting from hot spots interventions (see Braga, 2007).

Interestingly, 85.7% of SPD officers felt problem-oriented policing (POP) was either effective or very effective, which is consistent with research showing the effectiveness of this strategy (NRC, 2004; Weisburd et al., 2010). It is not clear from our survey data why officers are so much more amenable to POP than hot spots policing, given that they can have substantial overlap in practice, and given that POP would require an even greater level of effort and evaluation. It could be because of more familiarity (and potentially more personal success) with problem solving. On the other hand, the problem-solving process may be much less familiar to officers than targeted patrol and crackdowns.[9] Whatever the reason, this raises the intriguing notion that POP might be an effective vehicle for institutionalizing the use of research, given that POP involves research assessment, data analysis, and the evaluation of interventions as part of the well-known SARA model (Eck & Spelman, 1987).

---

[9] One reviewer of this article made an interesting suggestion here that is worth mentioning: He/she stated that "it might be an important finding that police might be more responsive to modifications to existing practices, rather than to wholesale changes in the way they conduct their work." The question for debate and deliberation is which approach —problem solving or hot spots policing—is closer to traditional policing.

Receptivity Toward Researchers and Analysts

We also gauged officer receptivity to researchers, analysts, and the products they create. Reservations and misgivings between researchers, analysts, and practitioners are not unusual in anecdotes about police research. However, these reactions likely vary among police agencies and are tempered by the agencies' and officers' experiences with researchers and their own beliefs about education (Palmer, 2011). To gauge this dimension of receptivity, we asked officers a series of questions about how they felt about researchers inside and external to their agency. Overall, responses reflected some optimism and some pessimism toward researchers by these officers. More feel analysts and researchers are integral to day-to-day work than not (25.0% versus 16.4%). We also found that over 71% of officers find research regarding police tactics to be somewhat (50.3%) or very (21.0%) useful.

However, SPD officers seemed to have lukewarm feelings about the usefulness of products generated by crime analysts and researchers, as Table 2 indicates. The most popular response category was that crime analysts seem to generate a lot of statistics that are "useful mostly to high command." While other receptivity surveys in different arenas (e.g., nursing, mental health, medical fields) showed more positive feelings toward research than seen in policing, these findings are nonetheless somewhat encouraging.[10]

Table 2

Officers' Responses to Survey Question Regarding Their Views of Researchers

"Which best describes your view about crime analysts, statisticians, or other researchers who work in a police department?" (n = 490)

Response	n	%
• They seem to generate a lot of statistics that are useful mostly to high command.	203	38.8%
• They are/should be an integral part of day-to-day field operations.	131	25.0
• They don't seem to be a very integral part of the daily work of officers and supervisors.	86	16.4
• They are a very specialized unit who work on very specific problems.	37	7.1
• They are usually called upon on an ad-hoc, when-needed basis.	27	5.2
• I do not know if these individuals exist in my agency.	6	1.1

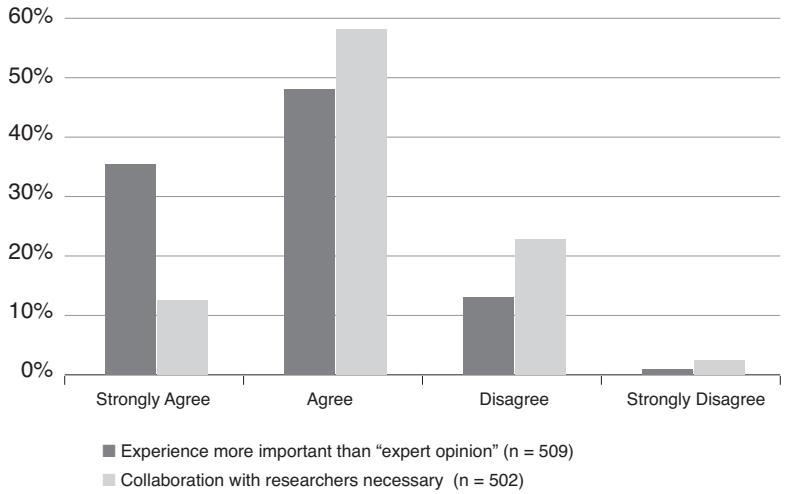
[10] One reviewer of this article asked whether we had thoughts about the receptivity of civilian versus sworn analysts. While our survey did not gauge this, the study authors have informally observed the analyst-officer relationship in many agencies since the widespread diffusion of analysis and crime mapping in the early 1990s. Anecdotally, it seems that the sworn/civilian status matters less to officers than the function assigned to that officer. Sworn officers who become analysts may also be held in greater disdain, especially when analysis is linked to managerial processes like COMPSTAT, which other officers may view negatively because they are seen as accountability systems. While our survey in Sacramento was only of sworn officers, we plan to survey both sworn and civilian employees in other agencies, which should shed more light on this issue.

Similar to what Palmer found in Greater Manchester, SPD officers greatly value experience over expert opinion. More than four fifths (83.4%) of respondents felt their own experience, rather than "expert opinion" was key to determining the most effective strategies to use (Figure 3). However, this finding may not necessarily be contrary to the belief that research and researchers can play a role in law enforcement agencies. Experience is undoubtedly shaped and created by the mandates, opportunities, and environment presented to officers by their agencies in the form of their work assignments and mission. What officers believe to be their experience, to which they attach great importance, is perhaps "a collection of loose and non-systematic combinations of memories that emerge from [reactive and procedural] routines" (Lum, 2009, p.12). Thus, U.S. police are not fated to their current "experience" that is created by a reactive, procedures-based, case-by-case, rapid response perspective. We already know from lessons learned when community policing was introduced into policing that agencies and officers can (and do) alter their approach and worldview.

We are also not certain to what extent officers correlate "experts" with "researchers"; they might see them as two separate groups of people. For example, when we asked whether officers would be willing to take the initiative to approach an outside researcher to help with evaluating a policing tactic, only a third of officers (31.2%) said that they would be unwilling. Additionally, 70.7% of officers either agreed or strongly agreed that collaboration with researchers is necessary for a police agency to improve its ability to reduce crime (Figure 3). These findings

Figure 3

Officers' Level of Agreement to the Statements, "Experience Is More Important than 'Expert Opinion' in Determining 'What Works' in Policing" and "Collaboration with Researchers Is Necessary for a Police Agency to Improve Its Ability to Reduce Crime."



suggest an important lesson for researchers working with police agencies. The professional experience of officers should not be ignored in undertaking evaluation research not only because officers likely have valuable insights that will improve the overall project, but also because officers will likely be more willing to cooperate with researchers who recognize and appreciate the value of officer knowledge and experience (see Weiss, Murphy-Graham, Petrosino, & Gandhi, 2008 for an example of the problems that can result from not appreciating the professional judgment of practitioners).

Willingness to Engage in Research

We also asked officers questions to gauge their innovativeness and openness to trying new tactics, including carrying out evaluations of tactics, even if it meant stopping their existing activities. Here, like Weiss and Bucuvalas (1980), we discovered interesting contradictions that seem to indicate two dimensions of receptivity to innovation and research. Nearly all officers (94.1%) were willing to try new tactics and ideas, and close to two thirds (64.6%) felt that SPD uses a mix of innovative and more traditional tactics (although, 22.4% of officers viewed the department's tactics as primarily traditional). However, *how* these new ideas are presented to them may matter in terms of their receptivity. There were 75.1% of officers who agreed or strongly agreed that when a new idea was presented by top commanders, it was usually a fad and that things would eventually return to normal. This nuance may reflect a cultural resistance to command (Bayley, 1994) rather than a true resistance toward doing something new or different.

High-quality research evaluation often requires experimentation and may involve the police stopping their existing tactics or starting up new ones for some people or places and not others. In the SPD sample, 47.0% were somewhat willing and 27.2% were quite willing to do this, with a smaller percentage (8.8%) being very willing to stop a tactic to see if a problem gets worse. Compared to their British counterparts in Palmer's study, officers in Sacramento were more willing to stop a tactic for purposes of evaluation, even though they had less knowledge of and exposure to research. We also asked officers whether they would be willing to implement a small, place-based, randomized experiment by randomly selecting 20 areas where a problem occurs and using a coin flip to assign 10 to a treatment group that receives the tactic and 10 to a control group that does not. Just over a quarter of officers (27.5%) responded that they were unwilling to do this, while just over one third (35.0%) were somewhat willing. About 36.0% of officers were either quite willing or very willing to try this method to evaluate a tactic (see Figure 4). And, like Palmer's officers, when SPD officers were asked whether they were willing to implement what is typically called a before/after design for evaluating a tactic, more than 62.0% of officers were quite willing or very willing to do so. The greater willingness to use this less rigorous evaluation tactic is clearly obvious in Figure 4. It might be expected that officers are more

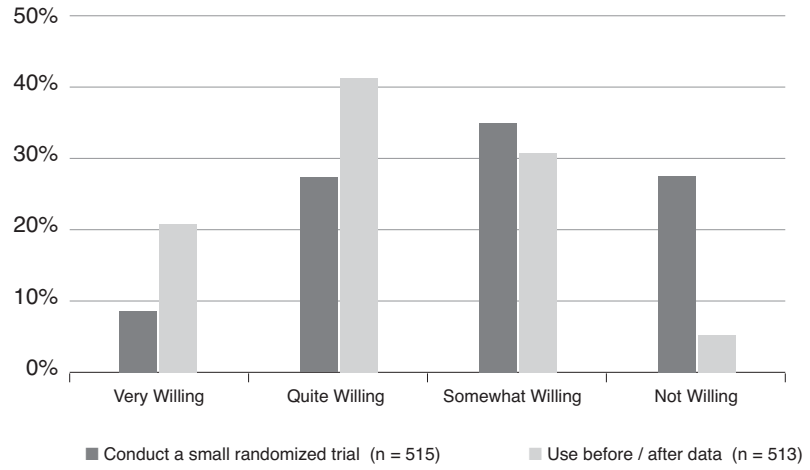
open to evaluations that are less disruptive to daily operations, even though the lower internal validity of such designs make the results less believable than those from a randomized trial.

Figure 4

Officers' Level of Willingness to Test Effectiveness of Two Tactics

"Find the Top 20 Areas Where this Problem Exists and Toss a Coin to Assign 10 Areas to Have the Tactic and 10 Areas Not to Receive the Tactic and Compare"

"Use Data Before the Police Implemented the Tactic and Compare It to Data from After the Tactic Was Up and Running" in Order to Test Whether a Particular Tactic the Police Are Currently Using Was Effective.



Digestible Research

The findings from previous studies, as well as our survey of Sacramento officers, tells researchers that we will have to try harder and be more creative if we want those in the trenches of everyday criminal justice practice to pay attention to our efforts. The beliefs that science and reason are the solid foundations on which modern democracy is built or that the main priority of the police is to reduce crime through effective, evidence-based practices are only idealistic fantasies if we cannot show that using research, analysis, and science is possible, beneficial, cost-effective, and community-oriented. Of course, there are many excellent examples of positive and mutually respectful police-researcher relationships, especially between seasoned researchers and high-ranking police officials. But while many different types of practitioners—police officers, nurses, doctors, social workers, and teachers—respect research, *using* the information, especially at the level of the rank and file, is an entirely different matter. If officers in other agencies are like those we surveyed, they may rarely seek outside sources of information, and primarily rely on

knowledge dissemination from within their own agency. Even the belief that professional magazines like *The Police Chief* are more widely read than other sources of research may only be true at the highest levels of command. These commanders themselves may also face similar difficulties in translating their research-influenced ideas into daily practice. Further, officers continue to believe in the efficacy of long-standing traditional approaches to policing, even though many "standard model" tactics have long been shown to be ineffective (see Weisburd & Eck, 2004). They are less informed about research on the effectiveness of practices than we think; indeed, the findings related to officer views about hot spots policing in this study emphasize that the strong research knowledge regarding hot spots policing (NRC, 2004) has not necessarily reached (or convinced) a wide audience.

Additionally, the deliverers of the research—crime analysts and researchers inside or external to an agency—are still viewed cautiously. While it may be clear to some that crime analysis is incredibly important to policing, and while the SARA problem-oriented policing model directly requires analysis and assessment for problem solving, officers question the role of researchers, analysts, and experts in their daily work. SPD officers are likely similar to officers in many other agencies and to other professionals across different social services. In this and other studies, experience is placed on a much higher pedestal than analytic or scientific knowledge, which may be viewed with suspicion. Yet, at the same time, officers show a willingness to try new things, to take the risks that evaluation might pose, and to work with outsiders. Weiss and Bucuvalas (1980) also saw a similar nuance in their study. Decisionmakers were willing to challenge the status quo with new ideas as long as ideas did not go against their personal beliefs or daily routines. Their and our findings indicate an interesting organizational paradox about practitioners' receptivity toward research.

This organizational paradox regarding research receptivity should not be seen as a barrier to evidence-based crime policy but rather an opportunity to harness a force that could improve receptivity to research. Police researchers and police officers (and not just top commanders) need to work together to make research more digestible and ready for the consumer—law enforcement officers. Agencies that value research, evaluation, and analysis have to build these ideas into the officer's everyday experience. At a minimum, the few empirical findings in this area suggest that we have to rethink how scientists and their practitioner partners not only generate research but package both research processes and outputs for organizations and their employees. Research and researchers may be better received in police agencies if familiar and internal mechanisms of information dissemination are used to present their findings. Further, it appears officers do not reject new ideas up front, but they may be highly suspicious if they look like fads and if they come from the high command or outside experts. Research ideas that arise from officers themselves, in which they have a stake and are part of a team effort, as well as outputs and processes that look and feel like regular policing, may fare much better (see Toch, Grant, & Galvin, 1975).

But how can we translate research into concepts, deployments, procedures, operations, strategies, and tactics that look and feel like everyday police activities? A wide variety of ideas might be tried, some of which might directly attempt to use or generate research and others that might be more creative. Nutley et al. (2007) delineate different models by which research use occurs, and they developed their own taxonomy of research use (pp. 129-130). In that taxonomy, they highlight five key mechanisms to improving research use: dissemination, interaction, social influence, facilitation, and incentives and reinforcement. Nutley et al. suggest that these mechanisms often overlap in practice. Reflecting many of their ideas, we give two examples in policing, one focusing on the translation of research into practice and the other discussing the institutionalization of research into practice.

Translating Research: The Evidence-Based Policing Matrix

One way to translate research into practice is to create tools that convert abstract ideas and multiple research findings into easy-to-understand principles that can be applied to practice. But dissemination, as Nutley et al. (2007) point out, is often viewed linearly and one-way. An alternative might consider conversion tools that satisfy the demand for research, rather than its supply. The Evidence-Based Policing Matrix is an example of how this might be accomplished (and also of the challenges in doing so). The Matrix was initially developed by Lum, Koper, and Telep as an unfunded project (see Lum, 2009; Lum & Koper, 2011; Lum, Koper & Telep, 2009, 2011).[11] The goal of the Matrix creators was to develop a translation tool that would make the large body of police crime prevention research more usable and accessible. All evaluations of police-related crime prevention/control interventions that are at least "moderately rigorous"[12] are included in the Matrix. They are individually mapped into a three-dimensional visualization intended to reveal generalizations across the body of research in order to assist police in developing crime prevention strategies that are evidence-based.

The translation occurs from placing dots (each representing an evaluation and its findings) into the three-dimensional matrix and then drawing generalizations from the visual clusters within the Matrix. Each evaluation is classified according to three very common dimensions of crime prevention strategies that make up the Matrix's x-, y-, and z-axes, as shown in Figure 5. The x-axis comprises the type and scope of the target of an intervention—from an individual or group of individuals to

---

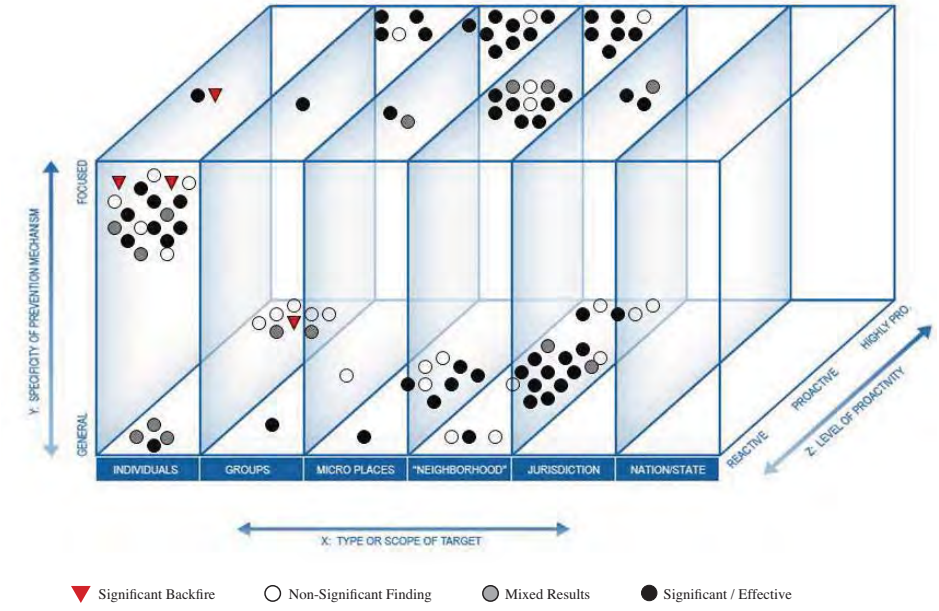
[11] After the Matrix was developed, the Bureau of Justice Assistance funded its transition into a Web-based tool and ultimately into a demonstration project. But at the start, the Matrix did not fit into regular grant solicitations, which either called for evaluations or primary research.

[12] The minimum threshold for a study's inclusion in the Matrix is that at least one comparison group (or area) that did not receive the intervention was included in the evaluation. Additionally, the study had to meet at least one of the following criteria: (1) comparison group was well matched, (2) use of multivariate controls, or (3) use of rigorous time series analysis (Lum, Koper, & Telep, 2011)

micro places, neighborhoods, and even larger geographic aggregations. The y-axis indicates the level of specificity of an intervention and its goals, from general to focused (see Weisburd & Eck, 2004). This axis should be viewed as a continuum, since many tactics share both general and specific deterrent goals (see Sherman, 1990), and divisions can be murky. Finally, the z-axis represents the level of proactivity of an intervention, ranging from reactive to proactive to highly proactive. Using this Matrix, the authors mapped all[13] moderately rigorous to highly rigorous research studies on police crime control interventions according to how they might be characterized on these three dimensions, as shown in Figure 5.

Figure 5

The Evidence-Based Policing Matrix



As a result of this process, clusters of studies (and their findings) illustrate the distribution and concentration of evaluations and effective practices within areas of the Matrix that represent intersections of dimensions. Each area reflects the combination of three factors or dimensions: the description of the intervention evaluated in terms of the target, the specificity of the prevention mechanism, and the extent to which the program was proactive. For example, notice the cluster of black dots in the portion of the Matrix in which "micro-places," "highly proactive," and "focused" intersect. These seven black dots and one white dot reflect seven evaluated interventions that showed significant positive effects of an

[13] At the time of writing the Matrix contained 104 studies.

intervention, and one that did not. What this suggests is that, overall, interventions targeted at small geographic units that are more specific and proactive tend to fare well with regard to crime prevention. A number of problem-oriented, hot spots policing approaches fit this bill, and these general principles could help guide the creation of new tactics in a specific agency.

Thus, using the Matrix, police might be able to better glean generalizations from a large body of research about what intersecting dimensions tend to characterize effective interventions. Agencies could also use the Matrix by mapping existing strategies against studies already mapped to quickly assess strategies and tactics (as done by Veigas, 2011; see also Lum & Koper, 2011; Lum, Koper, & Telep, 2011). Or, principles from the Matrix might be used to guide the development of jurisdiction-specific interventions for specific problems, or even be used to map deployment portfolios of those looking to be promoted (e.g., from squad sergeant to shift lieutenant). Hence, at least in theory, research knowledge could be translated for potential applications through such a translation tool.

Institutionalizing Research: The Matrix Demonstration Project

One way that individuals in an agency might change their attitudes towards research, researchers, and research-supported interventions may be to make fundamental organizational changes in the everyday functions of the agency that create more receptivity to research. Institutionalizing research into practice reflects many of the interaction, social influence, facilitation, and incentives and reinforcement mechanisms discussed by Nutley et al. Institutionalization also suggests structural changes to processes that the agency regularly employs, which may help to adjust and transform habits that reflect evidence-based approaches. As mentioned previously, the authors have begun the Matrix Demonstration Project (MDP) which attempts to perform this task. The goal of this project is for researchers and practitioners to interact to develop specific demonstrations in agencies that show how research might be more permanently institutionalized into everyday tactics, activities, routines, standard operating procedures, organizational practices and cultures in ways that are easily digestible and familiar. This is slightly different than (but akin to) Weiss's (1998) suggestion to involve practitioners in evaluations to increase the use of findings from them. In the MDP, police personnel take ownership (see Weisburd & Neyroud, 2011) of figuring out how to use research already generated.

Three guiding principles surround the MDP. First, projects must focus on institutionalizing research and analytic processes into the *regular* practices of policing through a more permanent change in infrastructure or operations. The MDP demonstrations are not ad-hoc deployments or stand-alone evaluations, but are demonstrations and examples that show how the processes or outputs of research might be more permanently institutionalized. Second, each project must be anchored by good-quality research evidence on police practices. Research anchors can be of many different types, including research on police interventions, officer

discretion, departmental practices and policies, use of force, or other internal or external issues that law enforcement agencies face. But the visibility of the research used need not be obvious. For example, a more visible use of research might be the replication of an intervention shown to be successful in a research study. However, a more inconspicuous approach might be adjusting field training activities to better reflect broad principles from the Matrix, or to reflect the spirit of a research finding (i.e., proactivity, place-based). The third guiding principle is that each agency will work closely with the MDP team to create a free tool or Web site download so that other agencies can try something similar in their agencies, using the advice provided by the demonstration agencies (rather than the researchers). A few demonstrations might help illustrate the MDP further.

In one demonstration, we are working with agencies to develop the capacity for training academies to have a regular module focused on knowledge derived from research about police practices. However, the knowledge would be delivered in ways that were meaningful to recruits, and the module would be designed to be taught by academy instructors, like the majority of modules. As a part of training on how to correctly make an arrest, for example, recruits might also learn about targeting repeat offenders or focused deterrence strategies. Or, officers learning how to speak with citizens or victims might also learn some of the research about why this is important (i.e., using procedural justice to enhance police legitimacy). Although training seems the easiest way to incorporate research knowledge in policing, such incorporation is far from reality. It would not be surprising to find that most police academies and in-service systems do not incorporate the latest information on the most effective tactics and strategies police can use to reduce crime, increase legitimacy in the community, or reduce problem behaviors within the agency. Academies traditionally teach about police procedures and the law, and they provide physical, firearm, and driver training.

Training also can't be one-size-fits-all. The officer on the street finds different meaning from research and interprets and digests it differently than the police chief, the crime analyst, or the first-line supervisor. Tailoring research to fit the characteristics, expectations, and responsibilities of different types of ranks and units can help make knowledge more digestible.

Further, field training is also an area ripe for modification toward an evidence-based approach. Another demonstration focuses on changing activities in field-training checklists and manuals in order to bring in activities and performance measures that reflect what we know from research (for example, having a SARA exercise as a requirement for completion of field training). This may better help police officers develop their craft.

Another demonstration focuses on using radio/computer-aided dispatch call codes to create proactive habits in officers through their interaction with the dispatch in the daily recording of their activities. In its totality, the research on police effectiveness indicates that proactive, problem-solving, and place-based approaches are the most fruitful approaches to crime prevention (see Lum, Koper, & Telep,

2011). But how do we shift a very reactive police culture to one that better balances proactivity and reactivity orientations? Police may not respond to training on problem-oriented policing or commands calling for "more proactivity." However, requiring a call code to be used when officers engage in proactive activity during the time they are not answering calls may help to institutionalize this habit, especially if the code is measured against crime-reduction efforts (and then built into accountability systems for officers and first-line supervisors).

Research might also be institutionalized in investigations by taking advantage of the well-understood structures of investigative work, as well as the prestige and culture of detective work. In another demonstration, we developed something called "case of places." Here, we ask detectives to change their unit of investigation—from a person suspected of a crime to a place suspected to be connected to multiple crimes. The research team is working with one agency to use the same case folder system detectives use to investigate people to investigate places. The requirements in those case folders that detectives must meet when building a case are then converted to place-based "equivalents." For instance, "suspects" in a traditional case folder might also be "suspects" in a case of place, but the suspect could be a person, a building, a problem or situation, or a routine. In this way, we hope to increase detectives' receptivity to this evidence-based approach by making procedures (and rewards) similar to traditional investigative work, but with a different unit of investigation. A proactive place-based focus may aid in making detective work less reactive and more effective in terms of crime control (see Braga, Flynn, Kelling, & Cole, 2011).

Yet another demonstration example: A command staff that wants first-line supervisors and officers to move toward more innovative types of policing might build in new knowledge and activity requirements within its existing promotions and accountability systems. This will require not only specialized training on what the research is, where to find it, and how to interpret it, but also a strong effort on the part of researchers to make products that are geared for practice. Along these same lines, in an age where COMPSTAT-like management meetings are a primary way in which agencies are attempting to develop accountability structures, departments might consider experimenting with ways to use such meetings and systems to transfer different types of knowledge to leaders and officers. Such meetings might also be transitioned from pre-planned (and often boring) recitations of statistics by precinct commanders or even one way conversations and question-asking to learning environments in which research and analysis are discussed, debated, and explored. As Weiss ponders:

> What they may really want is a forum, a place where program managers, planners, and policymakers can interact with evaluators, researchers and academic experts to discuss their questions, offer their own experience and learn about the state of knowledge in the field. The forum would be a place to negotiate the meanings of available knowledge for their own particular circumstances. (Weiss, 1998, p. 31)

Following this idea, the MDP team is working with an agency to consider how COMPSTAT meetings might be transitioned into more dynamic learning environments. Perhaps research findings disseminated through videos or live feed by other police leaders or researchers could be used to generate lively debate and discussion or on-the-spot strategic or tactical planning. Research findings can help jumpstart discussions and provide a learning environment for commanders who often do not have opportunities for professional development. In other words, the use of more interesting visuals and videos might make COMPSTAT meetings a better forum for receptivity of research to occur.

There are many other organizational transformations that may not at first seem related to evidence-based policing or problem solving but may also help to improve research digestion. This does not mean simply hiring more officers who have more education, which may prove fruitless if organizational structures and cultures of reactivity are stronger than abstract benefits that a previous education might provide. Rather, transformations that may help improve receptivity toward research, evaluation, and analysis include strengthening analytic capabilities by increasing both the number and training of analysts in an agency, making information systems easier to access by all, building outcome measures like crime reduction as opposed to arrests into accountability systems, or creating systems of friendly competition between units and precincts to use analysis and to problem solve. Further, normalizing relationships with outside researchers through memorandums of understanding, regular interaction, and police leaders facilitating good quality interactions is important. Adopting new technologies through a filter of evidence about that technology, rather than the lens of efficiency, politics, or special interests, is also key.

Perhaps one of the most important changes that might improve police receptivity to research and analysis is changing the community's expectations about what the police should and can achieve with regard to crime prevention and high-quality policing. Law enforcement executives and leaders must not only educate their city councils but also help their city councils educate the public about why police are undertaking certain approaches to crime and what types of interventions work (or do not work). As an example, chiefs and city council members may need to write/speak/communicate about evidence-based policies in policing as a way to both reduce crime and efficiently spend public dollars. The public may also need to be educated about what they and the police can do together to increase the fairness and effectiveness of police strategies. Some communities may benefit from better knowledge about why they might not require the extra police patrols needed by other communities. The point is that the police are not fated to a single and unchanging public understanding and opinion about them. The argument that evidence-based policing cannot survive because of "politics" implies such a fate, and that local public officials are incapable of educating their public or reshaping expectations.

Of course, all of these ideas (and many efforts by others to institutionalize research into practice) themselves need rigorous testing; some approaches to

institutionalizing research into daily practice may work better than others and under different conditions and situations. And, while the efforts to improve receptivity discussed here focus on police agencies, receptivity also requires effort by researchers as well—a subject that is scarcely addressed here but is equally as compelling. For example, how can researchers improve the way they approach and implement evaluations and experiments in order to simultaneously build support for both science and the results of the evaluation (whatever they may be)? In what ways can academic promotion and tenure requirements be adjusted to create greater incentives for researchers to care about the receptivity of their research? Can we test certain types of dissemination mechanisms (i.e., the Policing Matrix, *CrimeSolutions.gov*, Campbell Collaboration systematic review summaries,[14] professional education) with regard to efficacy and effectiveness of research dissemination? What types of organizational structures are best exploited to convert research into tangible and operational forms? Does the way researchers conduct their projects have a greater impact on the receptivity to research than the findings from the research, no matter how compelling? How can we improve and hone the craft of practice-oriented research? Although formal training may help (see IACP, 2004), this only works if incentive structures for both researchers and practitioners are attached to that acquisition of knowledge.

Translating and applying knowledge for practical use requires a mutual interaction and understanding between both parties (i.e., researchers and practitioners). As Bradley and Nixon (2009) suggest, we should examine more sophisticated, long-term, and complex types of relationships, which may better help us understand collaboration than an examination of more traditional, ad-hoc partnerships. Police-research collaborations are excellently positioned for this type of effort and knowledge generation, as the infrastructure for research-practice relationships is no longer in its infancy. And, in a time of austerity and tight budgets for police departments and universities, leveraging one another to improve practices, shake up traditions and cultures, and provide meaningful experiences to advance both may be just what the doctor ordered.

---

[14] A list of these summaries is available at http://gemini.gmu.edu/cebcp/ReviewBriefs.html.

References

Aarons, G. A. (2004). Mental health provider attitudes toward adoption of evidence-based practice: The Evidence-Based Practice Attitude Scale (EBPAS). *Mental Health Services Research, 6*, 61–74.

Bayley, D. H. (1994). *Police for the future*. New York, NY: Oxford University Press.

Bayley, D. H. (1998). Policing in America: Assessments and prospects. *Ideas in American Policing*. Washington, DC: Police Foundation.

Bennett, T., Holloway, K., & Farrington, D. (2008). *The effectiveness of neighborhood watch*. Retrieved January 10, 2012, from Campbell Collaboration Systematic Reviews: http://campbellcollaboration.org/lib/download/248/

Birkeland, S., Murphy-Graham, E., & Weiss, C. (2005). Good reasons for ignoring good evaluation: The case of the Drug Abuse Resistance Education (D.A.R.E.) program. *Evaluation and Program Planning*, *28,* 247–256.

Boruch, R., Snyder, B., & DeMoya, D. (2000). The importance of randomized field trials. *Crime and Delinquency*, *46,* 156–180.

Bowers, K., Johnson, S., Guerette, R. T., Summers, L., & Poynton, S. (2011). *Spatial displacement and diffusion of benefits among geographically focused policing interventions*. Retrieved January 10, 2012, from Campbell Collaboration Systematic Reviews: http://campbellcollaboration.org/lib/download/1171/

Bradley, D., & Nixon, C. (2009). Ending the "dialogue of the deaf": Evidence and policing policies and practices, an Australian case study. *Police Practice and Research: An International Journal, 10,* 423–435.

Braga, A. A. (2007). *Effect of hot spots policing on crime*. Retrieved January 10, 2012, from Campbell Collaboration Systematic Reviews: http://campbellcollaboration.org/lib/download/118/

Braga, A. A., & Bond, B. J. (2008). Policing crime and disorder hot spots: A randomized controlled trial. *Criminology, 46,* 577–608.

Braga, A. A., Flynn, E. A., Kelling, G. L., & Cole, C. M. (2011). Moving the work of criminal investigators towards crime control. *New Perspectives in Policing, Harvard Executive Session on Policing and Public Safety.* Washington, DC: U.S. Department of Justice, National Institute of Justice.

Braga, A. A., & Weisburd, D. (in press). The effects of focused deterrence strategies on crime: A systematic review and meta–analysis of the empirical evidence. *Journal of Research in Crime & Delinquency*. doi: 10.1177/0022427811419368

Braga, A. A., Weisburd, D. L, Waring, E. J., Mazerolle, L. G., Spelman, W., & Gajewski, F. (1999). Problem-oriented policing in violent crime places: A randomized controlled experiment. *Criminology, 37,* 541–580.

Campbell, D., & Stanley, J. C. (1963). Experimental and quasi–experimental designs for research. In N. L. Gage (Ed.), *Handbook of research on teaching*. Chicago, IL: Rand McNally.

Caplan, N. (1976). *The use of social statistics by federal executives with special attention to policy decisions in education*. Paper prepared for Committee on National Statistics Panel on Methodology for Statistical Priorities, National Research Council. Washington, DC: National Academy of Sciences.

Caplan, N., & Barton, E. (1976). *Social indications 1973: A study of the relationship between the power of information and utilization by federal executives*. AnnArbor, MI: University of Michigan, Institute for Social Research.

Caplan, N., Morrison, A., & Stambaugh, R. (1975). *The use of social science knowledge in policy decisions at the national level: A report to respondents*. AnnArbor, MI: University of Michigan, Institute for Social Research, Center for Research on Utilization of Scientific Knowledge.

Chagnon, F., Pouliot, L., Malo, C., Gervais, M. J., & Pigeon, M. È. (2010). Comparison of determinants of research knowledge utilization by practitioners and administrators in the field of child and family social services. *Implementation Science*, *5,* 41–53.

Cook, T. D. (2003). Resistance to experiments: Why have educational evaluators chosen not to do randomized experiments? *The Annals of the American Academy of Political and Social Science*, *589,* 114–149.

Davis, R. C., Weisburd, D., & Taylor, B. (2008). *Effects of second responder programs on repeat incidents of family abuse*. Retrieved January 10, 2012, from Campbell Collaboration Systematic Review: http://campbellcollaboration.org/lib/download/233/

Eck, J. E., & Spelman, W. (1987). *Problem solving: Problem-oriented policing in Newport News*. Washington, DC: Police Executive Research Forum.

Edmond, T., Megivern, D., Williams, C., Rochman, E., & Howard, M. (2006). Integrating evidence-based practice and social work field education. *Journal of Social Work Education, 42,* 377–396.

Farrington, D. P., & Petrosino, A. (2001). The Campbell Collaboration Crime and Justice Group. *Annals of the American Academy of Political and Social Sciences, 578,* 35–49.

Guindon, G., Lavis, J., Becerra-Posada, F., Malek-Afzali, H., Shi, G., Yesudian, C., & Hoffman, S. (2010). Bridging the gaps between research, policy and practice in low- and middle-income countries: A survey of health care providers. *Canadian Medical Association. Journal*, *182,* E362–E372.

Hirschkorn, M., & Geelan, D. (2008). Bridging the research–practice gap: Research translation and/or research transformation. *The Alberta Journal of Educational Research, 54,* 1–13.

International Association of Chiefs of Police. (2004). *Unresolved problems and powerful potentials: Improving partnerships between law enforcement leaders and university based researchers*. Alexandria, VA: International Association of Chiefs of Police.

Koper, C., & Mayo-Wilson, E. (2006). Police crackdowns on illegal gun carrying: A systematic review of their impact on gun crime. *Journal of Experimental Criminology, 2,* 227–261.

Lacey, E. (1994). Research utilization in nursing practice—A pilot study. *Journal of Advanced Nursing*, *19,* 987–995.

Landry, R., Amara, N., & Lamari, M. (2001). Utilization of social science research knowledge in Canada. *Research Policy*, *30,* 333–349.

Lum, C. (2009). Translating police research into practice. *Ideas in American Policing.* Washington, DC: Police Foundation.

Lum, C., & Koper, C. (2011[2008]). Is crime prevention relevant to counter-terrorism? In B. Forst, J. Greene, & J. Lynch (Eds.), *Criminologists on terrorism and homeland security*. New York, NY: Cambridge University Press.

Lum, C., Koper, C., & Telep, C. (2009). Evidence-Based Policing Matrix. Retrieved from http://www.policingmatrix.org or http://gemini.gmu.edu/cebcp/matrix.html

Lum, C., Koper, C., & Telep, C. W. (2011). The Evidence-Based Policing Matrix. *Journal of Experimental Criminology*, *7,* 3–26.

Lynn, L. E., Jr. (1987). *Managing public policy.* Boston, MA: Little Brown and Co.

Mastrofski, S. D. (1999). Policing for people. *Ideas in American Policing*. Washington, DC: Police Foundation.

Mastrofski, S. D., Willis, J. J., & Revier, L. (2011). *How police distinguish quality in police work*. Paper presented at the Annual Meeting of the American Society of Criminology, Washington, DC.

Mazerolle, L., Soole, D. W., & Rombouts, S. (2007). *Street-level drug law enforcement: A meta-analytic review*. Retrieved January 10, 2012, from Campbell Collaboration Systematic Reviews: http://campbellcollaboration.org/lib/download/123/

Medaris, M., & Huntoon, A. (2009). Smart Policing Initiative. *BJA Fact Sheet.* Washington, DC: U.S. Department of Justice, Bureau of Justice Assistance.

Moore, M. H. (2006). Improving police through expertise, experience and experiments. In D. Weisburd & A. A. Braga (Eds.), *Police innovation: Contrasting perspectives* (pp. 322–338). New York, NY: Cambridge University Press.

National Research Council, Committee to Review Research on Police Policy and Practices (W. Skogan & K. Frydl, Eds.). (2004). *Fairness and effectiveness in policing: The evidence*. Washington, DC: The National Academies Press.

Newton, J., Graham, J., McLoughlin, K., & Moore, A. (2003). Receptivity to change in a general medical practice. *British Journal of Management*, *14,* 143–153.

Nutley, S., Walter, I., & Davies, H.T. (2007). *Using evidence: How research can inform public services*. Bristol, United Kingdom: The Policy Press.

Palmer, I. (2011). *Is the United Kingdom Police Service receptive to evidence–based policing? Testing attitudes towards experimentation* (Unpublished master's thesis; Supervisor: Cynthia Lum). Cambridge University, UK.

Parahoo, K., & Mccaughan, E. M. (2001). Research utilization among medical and surgical nurses: A comparison of their self reports and perceptions of barriers and facilitators. *Journal of Nursing Management*, *9,* 21–30.

Patton, M. Q. (2002). Weiss' call for humility: Further reflections. *American Journal of Evaluation, 23,* 231–233.

Pettigrew, A. M., Ferlie, E., & McKee, L. (1992). *Shaping strategic change: making change in large organizations: The case of the National Health Service*. London, UK: Sage Publications.

Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). New York, NY: Free Press.

Rojek, J., Alpert, G., & Smith, H. (2012). The utilization of research by police. *Police Practice and Research*. doi: 10.1080/15614263.2012.671599

Sherman, L. W. (1990). Police crackdowns: Initial and residual deterrence. *Crime and Justice: A Review of Research, 12,* 1–48.

Sherman, L. W. (1998). Evidence-based policing. *Ideas in American Policing*. Washington, DC: Police Foundation.

Sherman, L. W. (2003). Misleading evidence and evidence-led policy: Making social science more experimental. *The Annals of the American Academy of Political and Social Science, 589,* 6–19.

Sherman, L. W. (2011). Democratic policing on the evidence. In J. Q. Wilson & J. Petersilia (Eds.), *Crime and public policy* (pp. 589–618). New York, NY: Oxford University Press.

Sherman, L. W., & Eck, J. E. (2002). Policing for crime prevention. In L. W. Sherman, D. P. Farrington, B. C. Welsh, & D. L. MacKenzie (Eds.), *Evidence-based crime prevention* (pp. 295–329). New York, NY: Routledge.

Sherman, L. W., Farrington, D. P., Welsh, B. C., & MacKenzie, D. L. (Eds.). (2002). *Evidence-based crime prevention*. New York, NY: Routledge.

Sherman, L. W., Gottfredson, D., MacKenzie, D. L., Eck, J., Reuter, P., & Bushway, S. (1997). *Preventing crime: What works, what doesn't, what's promising*. Washington, DC: National Institute of Justice.

Sherman, L. W., & Weisburd, D. (1995). General deterrent effects of police patrol in crime hot spots: A randomized controlled trial. *Justice Quarterly*, *12,* 625–648.

Shulha, L., & Cousins, J. B. (1997). Evaluation use: Theory, research, and practice since 1986. *Evaluation Practice, 18,* 195–208.

Sparrow, M. (2011). Governing science. *New Perspectives in Policing, Harvard Executive Session on Policing and Public Safety.* Washington, DC: U.S. Department of Justice, National Institute of Justice.

Taylor, B., Koper, C. S., & Woods, D. J. (2011). A randomized controlled trial of different policing strategies at hot spots of violent crime. *Journal of Experimental Criminology, 7,* 149–181.

Telep, C. W., Mitchell, R., & Weisburd, D. (In progress). *How much time should the police spend at crime hot spots? Answers from a police agency directed randomized field trial in Sacramento, California*.

Telep, C. W., & Weisburd, D. (2011). *What is known about the effectiveness of police practices?* Presented at "Understanding the Crime Decline in NYC." Retrieved January 10, 2012, from http://www.jjay.cuny.edu/Telep_Weisburd.pdf

Toch, H., Grant, J. D., & Galvin, R. T. (1975). *Agents of change: A study in police reform*. New York, NY: John Wiley & Sons.

Tseng, V. (2010). Learning about the use of research to inform evidence–based policy and practice: Early lessons and future directions. *William T. Grant Foundation 2009 Annual Report.* New York, NY: William T. Grant Foundation.

Veigas, H. (2011). *Assessing the evidence-base of strategies and tactics of uniformed patrol in Derbyshire Police*. Unpublished master's thesis, Cambridge University, UK.

Wangensteen, S., Johansson, I., Bjorkstrom, M., & Nordstrom, G. (2011). Research utilisation and critical thinking among newly graduated nurses: Predictors for research use. A quantitative cross–sectional study. *Journal of Clinical Nursing*, *20,* 2436–2447.

Weisburd, D. (2003). Ethical practice and evaluation of interventions in crime and justice: The moral imperative for randomized trials. *Evaluation Review*, *27,* 336–354.

Weisburd, D. (2008). Place-based policing. *Ideas in American Policing*. Washington, DC: Police Foundation.

Weisburd, D., Bennett, T., Gill, C. E., Telep, C. W., & Vitter, Z. (In progress). *Community-oriented policing to reduce crime, disorder, and fear and increase legitimacy and citizen satisfaction in neighborhoods*. Campbell Collaboration Systematic Reviews.

Weisburd, D., & Eck, J. E. (2004). What can the police do to reduce crime, disorder, and fear? *The Annals of the American Academy of Political and Social Science, 593,* 42–65.

Weisburd, D., & Neyroud, P. (2011). Police science: Toward a new paradigm. *New Perspectives in Policing, Harvard Executive Session on Policing and Public Safety*. Washington, DC: National Institute of Justice.

Weisburd, D., Telep, C. W., Hinkle, J. C., & Eck, J. E. (2008). *Effects of problem-oriented policing on crime and disorder*. Retrieved January 12, 2012, from Campbell Collaboration Systematic Reviews: http://campbellcollaboration.org/lib/download/228/

Weisburd, D., Telep, C. W., Hinkle, J. C., & Eck, J. E. (2010). Is problem-oriented policing effective in reducing crime and disorder? Findings from a Campbell systematic review. *Criminology & Public Policy, 9,* 139–172.

Weiss. C. (Ed.). (1977). *Using social research in public policy making*. New York, NY: D. C. Heath and Company.

Weiss, C. (1979). The many meanings of research utilization. *Public Administration Review*, *39,* 426–431.

Weiss, C. (1988). Evaluation for decisions: Is anybody there? Does anybody care? *American Journal of Evaluation, 9,* 5–19.

Weiss, C. (1998). Have we learned anything new about the use of evaluation? *American Journal of Evaluation, 19,* 21–33.

Weiss, C., & Bucuvalas, M. J. (1980). Social science research and decision–making. New York, NY: Columbia University Press.

Weiss, C., Murphy-Graham, E., Birkeland, S. (2005). An alternative route to policy influence: How evaluations affect DARE. *American Journal of Evaluation, 26,* 12–30.

Weiss, C. Murphy-Graham, E. Petrosino, A., & Gandhi, A. G. (2008). The fairy godmother and her warts: Making the dream of evidence-based policy come true. *American Journal of Evaluation, 29,* 29–47.

Wilson, D. B., Weisburd, D., & McClure, D. (2011). *Use of DNA testing in police investigative work for increasing offender identification, arrest, conviction, and case clearance*. Retrieved January 10, 2012, from Campbell Collaboration Systematic Reviews: http://campbellcollaboration.org/lib/project/126/

Cynthia Lum (Ph.D., University of Maryland) is an Associate Professor in the Department of Criminology, Law and Society at George Mason University. She is also the Deputy Director of the Center for Evidence-Based Crime Policy, where she leads numerous research projects on policing and security within the Center's Evidence-Based Policing research program.

Cody W. Telep (M.A., University of Maryland) is a doctoral student in the Department of Criminology, Law and Society at George Mason University. He is also a graduate research assistant in the Center for Evidence-Based Crime Policy, where he is the coordinator for the research program on Evidence-Based Policing.

Christopher S. Koper (Ph.D., University of Maryland) is an Associate Professor in the Department of Criminology, Law and Society at George Mason University and a Senior Fellow with the University's Center for Evidence-Based Crime Policy. His work focuses largely on issues related to policing and firearms policy.

Julie Grieco (M.A., Marymount University) is a doctoral student in the Department of Criminology, Law and Society at George Mason University. She is also a research assistant at the Center for Evidence-Based Crime Policy.