The Center for Evidence-Based Crime Policy and the Center for Justice Leadership and Management at George Mason University present:

**Evidence-Based Policing Leadership Training for First and Second Line Supervisors**

January 24, 2014
George Mason University, Arlington Campus, Founders Hall

with support from the Bureau of Justice Assistance, The Police Foundation, The Northern Virginia Criminal Justice Academy, and George Mason University
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00am</td>
<td><strong>Registration</strong>, Founders Hall Auditorium, George Mason University ARLINGTON Campus (3351 Fairfax Drive, Arlington, VA 22201)</td>
</tr>
<tr>
<td>8:30am</td>
<td><strong>Welcome and Opening Remarks</strong> (Professors Cynthia Lum and James Willis, George Mason University)</td>
</tr>
<tr>
<td>8:40am</td>
<td><strong>Introduction to Evidence-Based Policing for 1st and 2nd Line Supervisors</strong> (Professor Cynthia Lum, George Mason University CEBCP/Department of Criminology, Law and Society)</td>
</tr>
<tr>
<td>9:15am</td>
<td><strong>Assessing Quality in Police Encounters with the Public</strong> (Professor James Willis, George Mason University, CJLM/Department of Criminology, Law and Society)</td>
</tr>
<tr>
<td>9:45am</td>
<td><strong>Calibrating Hot Spots Policing for Deterrence and Prevention</strong> (Professor Christopher Koper, George Mason University, CEBCP/Department of Criminology, Law and Society)</td>
</tr>
<tr>
<td>10:15am</td>
<td><strong>Break</strong> (15 minutes)</td>
</tr>
<tr>
<td>10:30am</td>
<td><strong>Becoming a Pracademic</strong> (Sgt. Renée Mitchell, Sacramento, California Police Department)</td>
</tr>
<tr>
<td>11:10am</td>
<td><strong>Procedural Justice and Police Legitimacy</strong> (Professor Stephen Mastrofski, George Mason University, CJLM/Department of Criminology, Law and Society)</td>
</tr>
<tr>
<td>11:50am</td>
<td><strong>Discussion and practical examples by Chief Hassan Aden</strong> (Greenville, NC Police Department and Evidence-Based Policing Hall of Fame Member)</td>
</tr>
<tr>
<td>12:10pm</td>
<td><strong>Lunch</strong> (provided by CEBCP, CJLM, and the Police Foundation)</td>
</tr>
<tr>
<td>1:00pm</td>
<td><strong>Leadership and Evidence-Based Policing for First Line Supervisors</strong> (Chief Darrel Stephens, Major City Chiefs Association and Evidence-Based Policing Hall of Fame Member)</td>
</tr>
<tr>
<td>1:30pm</td>
<td><strong>Moderated Panel Session for Question and Answers</strong>. Featuring Darrel Stephens, Hassan Aden, William O'Toole, Renee Mitchell and Jim Bueermann. Moderated by Cynthia Lum and Stephen Mastrofski.</td>
</tr>
<tr>
<td>2:30pm</td>
<td><strong>Break</strong> (10 minutes)</td>
</tr>
<tr>
<td>2:40pm</td>
<td><strong>Research Evidence for Supervisors: Use of Force and Police Pursuits Policies</strong> (Professor Geoff Alpert, University of South Carolina)</td>
</tr>
<tr>
<td>3:10pm</td>
<td><strong>Crime Analysis for First Line Supervisors</strong> (Jamie Roush, Jacksonville Sheriff's Office and Evidence-Based Policing Hall of Fame Member)</td>
</tr>
<tr>
<td>3:50pm-4:00pm</td>
<td><strong>Closing Remarks and Administration</strong> (Professor Cynthia Lum, George Mason University, CEBCP/Department of Criminology, Law and Society)</td>
</tr>
</tbody>
</table>
January 24, 2014

Dear Participants:

Welcome to George Mason University. The Center for Evidence-Based Crime Policy and the Center for Justice Leadership and Management, in collaboration with their partners in the law enforcement community, have prepared an exciting agenda for you on evidence-based policing and leadership.

This event reflects our core institutional characteristic—the Mason IDEA—to be Innovative, Diverse, Entrepreneurial, and Accessible. As the largest state university in Virginia, with more than 33,000 students, Mason is at the center of the culture and economy of Northern Virginia and the National Capital region. A modern, innovative, metropolitan, multicampus, comprehensive research university, Mason represents a new model of higher education: one that seeks inclusion and diversity in its education approach, real impact in its research, deep engagement with its community, and a global outlook and mindset. It has been acknowledged as one of the best young universities in the world.

Our goal in being a place of consequential and impactful research means actively exchanging knowledge with practitioners in the field like you. Mason has one of the largest concentrations of policing scholars in the U.S., many of whom you will meet today. Our faculty includes world-renowned scientists, artists, and thought leaders; many of whom are often called on by national and international organizations to provide expert advice or serve in important decision-making roles. Our presence in one of the richest business and policy centers in the world allows us to bring leading professionals and lawmakers to our classrooms as guest lecturers and adjunct professors.

Mason is proud to be at the forefront of making a substantial contribution to the law enforcement community.

Sincerely,

[Signature]

Ángel Cabrera
Dear Participants:

Thank you for taking the time out of your very busy schedules to attend this seminar for first- and second-line law enforcement supervisors presented by the Center for Evidence-Based Crime Policy and Center for Justice Leadership and Management at George Mason University. In exchange for committing your time and attention today, you will have an opportunity to hear from some of the leading police research experts on what works in keeping our communities safer. It is truly exciting to review the agenda and see names like Dr. Steven Mastrofski, Chief Darryl Stephens (ret.), and Dr. Geoff Alpert who have come together to work with you today. I want to especially commend Dr. Cynthia Lum and her colleagues at George Mason University for championing this effort. Dr. Lum, a former police practitioner herself, has dedicated her research career to ensuring that evidence-based best practices are disseminated to the field. This training is just one example of how Dr. Lum and her colleagues at George Mason and the Bureau of Justice Assistance work together daily on this important goal.

In 2014, every profession—but especially law enforcement—moves with lighting speed and faces innumerable challenges. Figuring out what works today may not be the best solution next week, or even tomorrow. We hope that the training being offered today will equip you with the most progressive thinking regarding research and policing. I am hopeful that you will return to your departments with an inspired and improved knowledge of police research and practice to share with your colleagues. Best wishes for a great session.

Sincerely,

Denise E. O’Donnell
Director
Bureau of Justice Assistance
Participants in the Evidence-Based Policing Leadership Training for Supervisors:

The Northern Virginia Criminal Justice Training Academy is pleased to partner with the George Mason University’s Center for Evidence-Based Crime Policy as a participant in the Evidence-Based Policing Leadership Training for Supervisors. The challenges that law enforcement officers and supervisors face today are numerous, complex, and sometimes controversial. Effective leadership and supervisory training is critical to the success of accomplishing law enforcement objectives and in garnering trust and support from our communities.

In recent years, policing philosophies and strategies have changed and they continue to evolve. Most departments have embraced some form of community-oriented policing with a focus on problem resolution and more effective police response. Other titles and strategies that have become popular include variations of the NYPD’s COMPSTAT model, Intelligence-led policing, and Evidence-based policing. You might ask yourself, “what does each of these titles really mean and how do they differ from one another? And, is one better than the others?” I think if we put the titles aside and, instead, focus on the potential outcomes, we might see that all of these philosophies and strategies have value and that their sum totals amount to what we might just refer to as “quality policing”. It is from this viewpoint that I urge you to consider the important roles that evidence and research play in evaluating operational effectiveness and developing policing strategies.

Your role, as the first line supervisor, is without question the most important assignment in any law enforcement agency. If any policing strategy is going to be successful, it will likely be due, in large part, to the effectiveness of the first line supervisor. You are expected to be an effective leader, coach, mentor, and supervisor of others, being responsible for both the performance of other people and for the outcome of events. Successfully performing this role and these responsibilities may not always be easy, but the rewards can be lasting and most gratifying.

The best law enforcement leaders consistently model the highest ethical standards, they promote a strong culture of officer safety, and they give their very best efforts at all times. Please take your responsibilities seriously and be thankful for the privilege to lead others. I hope you find this training to be valuable and informative and I thank you for your leadership contributions!

Sincerely,

William C. O’Toole
Executive Director
Welcome to George Mason University! This free training is brought to you by George Mason University's Center for Evidence-Based Crime Policy and Center for Justice Leadership and Management, with the support of the Bureau of Justice Assistance, the Police Foundation, and the Northern Virginia Criminal Justice Training Academy. With their generous support, we were able to expand the space capacity for this training.

We especially thank the following individuals who have volunteered their time and expertise to present this free workshop today:

Hassan Aden, Greenville (NC) Police Department
Geoff Alpert, University of South Carolina
James Bueermann, The Police Foundation
Charlotte Gill, George Mason University
Julie Grieco, George Mason University
Kristen Hutzell, George Mason University
Christopher Koper, George Mason University
Cynthia Lum, George Mason University
Stephan Mastrofski, George Mason University
Renee Mitchell, Sacramento (CA) Police Department
William O’Toole, Northern Virginia Criminal Justice Training Academy
Jamie Roush, Jacksonville (FL) Sheriff’s Office
Steven Smylie, Northern Virginia Criminal Justice Training Academy
Darrel Stephens, Major City Chiefs Association
Heather Vovak, George Mason University
David Weisburd, George Mason University
James Willis, George Mason University

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

Catering Services are provided by George Mason University Special Occasions Catering
TABLE OF CONTENTS

TAB 1: INTRODUCTION TO EVIDENCE-BASED POLICING
• Presentation by Cynthia Lum, George Mason University
• Extra Resources and Materials

TAB 2: ASSESSING QUALITY IN POLICE ENCOUNTERS WITH THE PUBLIC
• Presentation by James Willis, George Mason University
• Extra Resources and Materials

TAB 3: CALIBRATING HOT SPOTS POLICING FOR DETERRENCE AND PREVENTION
• Presentation by Christopher Koper, George Mason University
• Extra Resources and Materials

TAB 4: BECOMING A PRACADEMIC
• Presentation by Sgt. Renée Mitchell, Sacramento (CA) Police Department
• Extra Resources and Materials

TAB 5: PROCEDURAL JUSTICE AND POLICE LEGITIMACY
• Presentation by Stephen Mastrofski, George Mason University
• Response and discussion by Chief Hassan Aden, Greenville (NC) Police Department
• Extra Resources and Materials

TAB 6: LEADERSHIP AND EVIDENCE-BASED POLICING FOR FIRST LINE SUPERVISORS
• Presentation by Chief Darrel Stephens, Major City Chiefs Association
• Pages for Notes

TAB 7: RESEARCH EVIDENCE FOR SUPERVISORS: USE OF FORCE AND POLICE PURSUITS POLICIES
• Presentation by Geoffrey Alpert, University of South Carolina
• Extra Resources and Materials

TAB 8: CRIME ANALYSIS FOR FIRST LINE SUPERVISORS
• Presentation by Jamie Roush, Crime Analysis Manager, Jacksonville Sheriff’s Office
• Extra Resources and Materials
Attending Organizations

Alexandria Police Department
Anne Arundel County Police Department
Arlington County Police Department
Bureau of Justice Assistance (USDOJ)
Charles County Sheriff’s Office
Chesterfield County Police Department
Clarke County Sheriff’s Office
DHS-Federal Protective Service
Fairfax County Police Department
Fauquier County Sheriff’s Office
Federal Judicial Center
Frederick Police Department
Fredericksburg Police Department
Front Royal Police Department
George Mason University
George Mason University Police Department
Greenville Police Department (NC)
Henrico County Police Division
Herndon Police Department
Jacksonville Sheriff's Office
King George County Sheriff’s Office
Leesburg Police Department
Loudoun County Sheriff’s Office
Louisa County Sheriff’s Office
Major City Chiefs Association
Manassas City Police Department
Maryland Police & Correctional Training Commission
Metro Transit Police Department
Middleburg Police Department
Morristown Police Department
NVCC Police Department
Prince George’s County Department of Corrections
Prince William County Police Department
Rappahannock County Sheriff’s Office
Reading, PA
Richmond Police Department
Riley County Police Department
Roanoke County Police Department
Rockville City Police Department
Sacramento Police Department
Seattle Police Department
Spotsylvania County Sheriff’s Office
Staunton Police Department
University of Maryland Police Department
University of South Carolina/ Griffith University
Ventura, CA Police Department
Vienna Police Department
Virginia State Police
Winchester Police Department
Hassan Aden, Greenville Police Department
Chief Hassan Aden serves with the Greenville Police Department in North Carolina, where he was appointed Chief in 2012. Prior to that, he served as Deputy Chief in the Alexandria (Virginia) Police Department. He joined the APD in 1987 and held numerous administrative, investigative and operational assignments at the Department, working with questions such as crime control policies and strategic planning. Chief Aden holds a Masters of Public Administration from American University’s School of Public Affairs. He is a member of the International Association of Chiefs of Police as well as the Police Executive Research Forum. Chief Aden was inducted into the Evidence-Based Policing Hall of Fame in 2010.

Geoff Alpert, University of South Carolina
Professor Geoffrey Alpert has been conducting research on high-risk police activities for more than 25 years, and has published more than 100 journal articles and 15 books. His book is Understanding Police Use of Force: Officers, Suspects, and Reciprocity (with R. Dunham) and was published in 2005 by Cambridge University press. Dr. Alpert recently completed a major study on police officer decision making funded by the National Institute of Justice, and an investigation of racial profiling for the Miami-Dade County, Florida Police Department. He is working on a use of force study that focuses on less-lethal technology and the effectiveness of their applications. Dr. Alpert routinely provides commentary for the national networks’ evening news programs and morning talk shows.

Christopher Koper, George Mason University
Dr. Christopher S. Koper is an Associate Professor in the Department of Criminology, Law and Society at George Mason University and a senior fellow in the Center for Evidence-Based Crime Policy. Dr. Koper holds a Ph.D. in criminology and criminal justice (University of Maryland) and has over 20 years of experiencing conducting criminological research at George Mason, the Police Executive Research Forum, the University of Pennsylvania, the Urban Institute, the RAND Corporation, the Police Foundation, and other organizations. Dr. Koper specializes in issues related to firearms, policing, and program evaluation. His work includes studies of the 1994 federal assault weapons ban and other policies and practices to reduce gun violence, studies of hot spots policing (including the “Koper curve” principal of hot spots patrol), the Evidence-Based Policing Matrix, and studies of police technology.

Cynthia Lum, George Mason University
Dr. Cynthia Lum is 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 evidence-based policing and security. Her works in this area have included evaluations of policing interventions and police technology, understanding the translation and receptivity of research in policing, examining place-based determinates of street-level police decision-making, and assessing security efforts of federal agencies. With Drs. Christopher Koper and Cody Telep 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.

Stephen Mastrofski, George Mason University
Stephen Mastrofski is University Professor in the Department of Criminology, Law and Society and Director of the Center for Justice Leadership and Management at George Mason University. His research interests include police discretion, police organizations and their reform, and systematic field
observation methods in criminology. He has published extensively on the application of systematic observation methods to street-level police work. For several years Professor Mastrofski led a large team of researchers supporting and evaluating the transformation of the Trinidad and Tobago Police Service. He is currently engaged in research projects on measuring the quality of street-level policing, assessing the role of first-line police supervisors, and measuring police organization development and change. He is a co-principal investigator on the NIJ-funded National Police Research Platform project. In 2000 he received the O.W. Wilson Award from the Academy of Criminal Justice Sciences for education, research, and service on policing and was elected Fellow to the American Society of Criminology in 2010.

**Renée Mitchell, Sacramento Police Department**
Renée J. Mitchell is a Sergeant for the Sacramento Police Department (SPD) where she has served since 1998. She was the principal investigator on a department-led, 90-day randomized control trial in hot spots policing that employed the Koper Curve theory and showed promising results. The study won the 2012 IACP/Sprint Excellence in Law Enforcement Research Silver Award. She holds a masters in counseling psychology as well as business administration, and a juris doctorate from the University of the Pacific, McGeorge School of Law. Renee is a member of the California Bar Association and the Society of Evidence-Based Policing.

**Jamie Roush, Jacksonville Sheriff’s Office**
Jamie L. Roush is the Crime Analysis Unit Manager for the Jacksonville Sheriff’s Office. In her current assignment she manages 3 Public Safety/Crime Analyst Supervisors and 16 Public Safety/Crime Analysts. During her tenure she has completed tactical, investigative, and administrative analysis in support of a multitude of units within the Department(s) of Patrol and Enforcement and Investigations and Homeland Security. Ms. Roush has also completed specialized projects supporting various internal and external initiatives with federal, state and local law enforcement partners. Ms. Roush is the North Florida Assistant Program Director for the Crime Analyst Training and Mentorship Program (CAMP) run by the Orange County (FL) Sheriff’s Office. Ms. Roush was inducted into the Evidence-Based Policing Hall of Fame in 2012.

**Darrel Stephens, Major City Chiefs Association**
Darrel Stephens 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. He was also awarded the ACJS O.W. Wilson Award (1996) and the prestigious Police Executive Research Forum’s Leadership Award (2005). Chief Stephens was inducted into the Evidence-Based Policing Hall of Fame in 2010.

**James Willis, George Mason University**
James J. Willis is an Associate Professor in the Department of Criminology, Law and Society at George Mason University and Associate Director of the Center for Justice Leadership and Management. His research interests are in police organizational change and police decision-making at the street-level. His work in this area includes evaluating how Compstat does or does not change police agencies, assessing the relationship between Compstat and community policing, understanding the effects of technology on police organization and practice, and examining the craft of policing and its implications for police reform.
The Evidence-Based Policing Hall of Fame

Nominations can be made at http://cebcp.org/hall-of-fame/

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

2013 INDUCTEES

General Jose Roberto Leon Riano, Director General of National Police of Colombia
Assistant Chief James Whalen, Cincinnati (OH) Police Department
The work of George Mason’s Center for Evidence-Based Crime Policy...has led the way in practitioner-researcher cooperation."
Howard Silver, Consortium of Social Science Associations in testimony to the U.S. House of Representatives

The Center for Evidence-Based Crime Policy

at George Mason University

Our goals...
- Rigorous evaluation of interventions
- Agency partnerships and learning communities
- Mentoring future criminologists
- Awarding excellence
- Facilitating scholarly collaboration
- Impacting public policy
- Serving our communities
- Creating research-to-practice translation tools
- Making evaluation resources available
- Encouraging innovation
- Advancing the field of criminal justice
- Disseminating information about evidence-based practices

...how we accomplish them.
- Support from George Mason University
- Funded & unfunded projects
- Distinguished advisory board
- Congressional Briefings
- Yearly symposia and special events
- Translational Criminology Magazine
- Systematic reviews of interventions
- The Evidence-Based Policing Matrix
- Our Video Library
- Workshops and technical assistance
- Research “one-pagers”
- The University e-Consortium
- Home to the Evidence-Based Policing Hall of Fame and the Distinguished Achievement Award
- Faculty-student co-authorships
RESEARCH – research in the justice field that contributes to basic scientific knowledge that is useful to policy makers and practitioners in this area

TRAINING – professional training and technical assistance to justice organizations, their leaders, and managers in Northern Virginia, throughout the Commonwealth, the Nation and Internationally.

DISSEMINATE KNOWLEDGE – disseminate state-of-the-art knowledge and research findings to the public, professionals, and policy makers through conferences, web sites, newsletters, seminars and policy forums, and other appropriate venues.

THE CJLM MISSION

- RESEARCH – research in the justice field that contributes to basic scientific knowledge that is useful to policy makers and practitioners in this area
- TRAINING – professional training and technical assistance to justice organizations, their leaders, and managers in Northern Virginia, throughout the Commonwealth, the Nation and Internationally.
- DISSEMINATE KNOWLEDGE – disseminate state-of-the-art knowledge and research findings to the public, professionals, and policy makers through conferences, web sites, newsletters, seminars and policy forums, and other appropriate venues.

HOW TO REACH US

CJLM Director – Dr. Stephen Mastrofski (smastrof@gmu.edu); 703-993-8183
CJLM Associate Director – Dr. James Willis (jwillis4@gmu.edu); 703-993-8192
Mailing address:
Department of Criminology, Law, and Society
George Mason University
4400 University Drive, 4F4
Fairfax, VA 22030
Website: http://cjlm.gmu.edu/

RECENT PROJECTS

ASSESSING QUALITY IN PATROL WORK
What is good policing? What does it look like to the street cop? This project uses surveys, interviews, and ride-alongs to identify factors that patrol officers themselves believe distinguish high quality patrol work.

PATROL WORK AND PROCEDURAL JUSTICE
Research suggests that the fairness with which the police exercise their authority delivers a host of benefits to the police and those they serve. This project measures the level of procedural justice that officers deliver in their everyday encounters with the public and asks under what conditions patrol officers show more or less procedural justice.

TERRORISM AND HOMELAND SECURITY
CJLM coordinated with the National Domestic Preparedness Coalition to develop a threat, risk, and vulnerability assessment course and train 4000 emergency responders throughout the United States.

OUR EXPERIENCE
The Center has conducted research, technical assistance, and training for a variety of funding organizations, including:
- U.S. Department of Justice
- U.S. Navy
- U.S. Department of Homeland Security
- The COPS Office

OUR OUTCOMES
Our core goal is to produce research that matters. To this end Center researchers and affiliates have sought to:
- Reform the entire police service of Trinidad and Tobago
- Identify ways to effectively integrate two recent and highly touted police reforms: Compstat and community policing
- Conduct operational testing and assessment of technology including night vision, surveillance cameras, and multi-band radios for first responders
HIGHLIGHTS

- Significant graduate funding available
- Faculty mentorship of graduate students
- Opportunities for student research and publishing
- Multiple collaborations with justice agencies
- Outreach to policymakers and practitioners
- Non-Thesis MA Policy and Practice Concentration

RESEARCH CENTERS

- Center for Advancing Correctional Excellence
- Center for Evidence-Based Crime Policy
- Center for Justice Leadership and Management
- Cochrane Collaboration College for Policy


The Master of Arts and Doctoral programs in Criminology, Law and Society at George Mason University prepare students for careers in research, academia, criminal justice leadership, non-profit organizations and public affairs.

Students gain expertise across three areas: crime and crime policy, justice organizations and leadership, and justice and law. The multidisciplinary faculty specialize in the areas of policing, courts and corrections, justice health, social inequality and justice, and legal policy, and offer students a wealth of opportunities to experience criminal justice policy first hand.

Come and visit the Department of Criminology, Law and Society at George Mason today. To meet one of our award-winning faculty and to speak to other graduate students, please contact clsgrad@gmu.edu to arrange an appointment.

Department of Criminology, Law and Society
cls.gmu.edu
APPLICATION REQUIREMENTS

- An earned baccalaureate degree from an accredited institution, verified by official transcripts from all institutions attended
- Completed online *Application for Graduate Study*
- Nonrefundable application fee
- Three letters of recommendation from individuals with first-hand knowledge of academic or professional capabilities
- A statement of your academic goals
- Official GRE scores taken within 5 years of application submission
- Writing sample of a recent sole-authored work of at least 2,500 words
- Résumé or C.V.

APPLICATION DEADLINES FOR FALL ADMISSION

**December 1:** All PhD applicants, including those seeking research or teaching assistantships

**February 1:** All MA applicants

For more information, please contact clsgrad@gmu.edu
Evidence-Based Policing

Cynthia Lum
Center for Evidence-Based Crime Policy
George Mason University
www.cebcp.org

Training Goals

- Disseminate knowledge, information and tools
- Preparation for promotion and advancement
- Exchange and generate ideas
- Challenge existing models of policing
- Build networks

Why 1st and 2nd-Line Supervisors?
What is Evidence-Based Policing?

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

Lawrence Sherman
Ideas in American Policing, 1998

We want to take medicine that has been tested and approved.

- The medicine's effects have been scientifically tested, and we know it works.
- There is rigorous evidence about "what works" in preventing crime or improving officer health.
- These medical tests were tested on different people who live in different places and different conditions.
- The evidence in policing has many generalizations which can be used in different places.
- Because of research, we know the medicine has a very slim chance of harming you.
- Some CJ interventions increase recidivism and victimization (or have no effect at all).
What is Evidence-Based Policing?

Research must be translated into digestible forms for use.

Policies and practices reflect crime prevention principles derived from rigorous research.

Some decisions include and incorporate scientific processes and analysis.

Research is “a part of the conversation” about police deployment and strategies.

(Lum, 2009; Lum et al., 2012)

Is this the current policing model in the U.S.?
The Professional Model

• Heavy emphasis on procedure-based decision making in deployment, investigations, and promotions.
• Supervision is focused on ensuring procedures are met (passive and reactive).
• Responding quickly to calls for service.
• Avoiding errors, accidents, mistakes, deviations.
• Officers and detectives are motivated and rewarded by making arrests.

Community Oriented Policing
Problem-Oriented Policing

Alternatives to the professional model (is this “just another fad?”)

Intelligence Led Policing Evidence-Based Policing

Predictive Policing

EBP can incorporate or challenge different interventions within existing models

• Professional Policing
• Community-Oriented Policing
• Problem-Oriented Policing
• Intelligence-Led Policing
• Predictive Policing
Why should police consider an evidence-based approach?

- Can reduce crime
  - Can't simply "arrest our way out of crime"
- Can improve police legitimacy
- Accountability to outcomes, not just processes
- May increase job satisfaction

Good quality evidence that police can use does exist

The Evidence-Based Policing Matrix

http://www.policingmatrix.org
By Cynthia Lum, Christopher Koper and Cody Telep
1. Police can be effective if they focus on specific places, not just on people.

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

3. Officers are more effective when they tailor their interventions to problems.
When patrol officers reorient their activities to be more proactive, place-based, and tailored, they are more likely to reduce and prevent crime.

Supervisor’s Role in EBP?

- Dissemination and translation
- Adjustment and adaptation
- Implementation (proactive, place-based, tailored)
- Activation of “golden time” of patrol
- Mentorship (not procedural, but critical and analytic)

Other thoughts for supervisors

1. The beat patrol, 911-response model is only one way to deploy officers.
2. The case-by-case investigation approach is only one type of investigation scheme.
3. Individuals are only one type of unit of investigation.
4. It isn’t black or white: Assessing your proactive-reactive or place-individual or general-specific balance.
Assessing a patrol/promotion portfolio

More thoughts for supervisors

5. "Best Practices" might not really be best practices, just consensus-based practice and "good policing" may be grounded in tradition, not fact.
6. Not all research evidence is good evidence.
7. Academy, field, and in-service training could be reinforcing ineffective or harmful practices (whatever the outcome sought).
8. Current management models may or may not achieve outcomes (EBM).

Evidence-Based Policing
Some final points

- Wide range of research available to supervisors.
- EBP is not just about generating evidence, but translating and using it.
- EBP is about including research in the conversation of policing—it is not the panacea or the intervention.
- 1st and 2nd line supervisors at the forefront of implementation of EBP.
More readings and resources for evidence-based policing

Evidence-Based Policing within the CEBCP (many resources at this site):
http://cebcp.org/evidence-based-policing/

The Evidence Based Policing Matrix
http://cebcp.org/evidence-based-policing/the-matrix/

The Matrix Demonstration Projects and Free Tools


Evaluation

► Bullying Prevention: Assessing Existing Meta-Evaluations

Event Characteristics

► Estimator Variables and Eyewitness Identification

Event Control: Criminal Event, Routines Activities, Presentness, Occasions

► Control Theory

Evidence-Based Corrections

► Examining the Effectiveness of Correctional Interventions

Evidence-Based Crime Policy

► Evidence-Based Policy in Crime and Justice

Evidence-Based Policing

Cynthia Lum and Christopher S. Koper
Department of Criminology, Law and Society, George Mason University, Fairfax, VA, USA

Overview

Evidence-based policing is a law enforcement perspective and philosophy that implicates the use of research, evaluation, analysis, and scientific processes in law enforcement decision making. In this entry, we review the nuances of this definition, the research underpinning evidence-based policing, and what agencies employing evidence-based approaches might look like.

Fundamentals of Evidence-Based Policing

Evidence-based policing is a law-enforcement perspective and philosophy that implicates the use of research, evaluation, analysis, and
scientific processes in law-enforcement decision making. This research could cover a wide array of subject matters, from evaluations on interventions and tactics to analysis of police behavior, activities, and internal management. In his 1998 “Ideas in American Policing” lecture for the Police Foundation, Lawrence Sherman gave one of the most well-known articulation of evidence-based policing. He posited that “police practices should be based on scientific evidence about what works best” (p. 2). In particular, Sherman focused on two dimensions of a research orientation in policing: (1) using the results of scientifically rigorous evaluations of law-enforcement tactics and strategies to guide decisions, and (2) generating and applying analytic knowledge derived from an agency’s analysis of its own internal issues and crime problems. Although using research and analysis was not a new concept in governance and social interventions when Sherman gave this lecture, what was innovative was his assertion that police should use research and analysis more frequently, substantively, and directly, discontinuing the use of tactics that were shown not to be effective.

The idea of using objective scientific information and criteria to inform public policy and agency decision making reflects a common value in modern liberal democracies: there must be evaluative and objective accountability for governmental actions and spending (Chalmers 2003; National Research Council 2004; Sherman et al. 2002; Sherman 2003). Sherman has argued that this is especially important in policing, given the important mandate the police have ensure the rule of law. In a lecture at the Royal Society for the Encouragement of Arts, Manufactures, and Commerce (RSA) in November 2011, Sherman emphasized this point when he said:

The competence that we achieve today stems largely from the 18th century Enlightenment. The debt we owe to that era is the great transition in so many professions from customs to science, from opinions to evidence. That enlightenment idea of objective knowledge is also crucial to the success of our liberal democracy in which the rule of the majority protects individual liberty under a rule of law. No institution is more important to that success than the police, whose competence at ensuring the rule of law is constantly challenged by thousands of opinions on how the police should do their job. It is therefore essential that our society improves the competence of its police not merely with our opinions but primarily with a fact that is derived from objective knowledge.

This notion that evidence-based approaches are implicated in the values and ethics of modern democratic governance – particularly of government accountability and reducing harm (Chalmers 2003) – is mirrored in many social arenas, but especially in public health and medical practices. There are many requirements and laws stipulating that medical treatments and remedies must be supported by believable and rigorous scientific testing and replication and that those treatments must provide the least amount of harm or negative side effects (or at least report those side effects). Our demand for evidence-based treatment is so strong that doctors spend a large proportion of their income insuring themselves against lawsuits if they commit malpractice. However, when the police carry out an intervention that does not work, or that increases crime or recidivism, or worsens police-community relations, it is much less likely that they will be held similarly responsible. The ideology behind evidence-based policing, however, suggests nurturing similar expectations. Former National Institute of Justice Director Jeremy Travis went so far as to assert in his keynote address at the Sentencing Project’s 25th anniversary celebration that “[w]e need a professional ethic that views failure to adopt those proven policies and practices as a form of justice malpractice.” While this type of legal accountability is not likely to be soon adopted in American criminal justice practice, the idea behind evidence-based policing emphasizes that law enforcement should at least be held accountable to the knowledge already known about policing interventions and also to crime analysis generated in their own jurisdictions. Police should be deploying patrol officers, specialized units, detectives, supervisors and commanders in ways that can be shown to achieve results, whatever results are sought (i.e., crime or fear reduction; legitimate, fair, and respectful treatment; or responsiveness).
Adopting an evidence-based approach to police decision making may bring numerous benefits to the police. Most obvious are the rewards reaped from employing strategies and tactics that have been shown to reduce crime, increase legitimacy, reduce internal problems, address community concerns, or reduce fear (Lum 2009; National Research Council 2004; Sherman and Eck 2002). Policies deemed harmful or ineffective could be discarded (or at least questioned), potentially saving law enforcement agencies time, money, frustration, and blame. Using more objective judgments regarding deploying tactics also seems more ethically justifiable than other nonscientific methods such as best guessing or strategies based on anecdotes or personal preferences. This approach to policing may lead to greater transparency, legitimacy, and accountability in practice, which could improve police-citizen relations and trust.

There may be additional benefits of such an approach. Evidence-based policing requires agencies to access their information and data capabilities regularly (to carry out outcome evaluations or analysis). This may lead to improvements in managerial accountability and efficiency, better data recording, collection and analysis, and a push to improve information technology systems to accommodate these needs. Other decision-making perspectives in policing, including community-oriented policing, problem-oriented policing, and professionalism, could be strengthened through the inclusion and use of scientific information and analysis. Problem-oriented policing, for example (see the Braga entry for this encyclopedia; Eck and Spelman 1987; Goldstein 1979, 1990), demands analyzing crime problems, using interventions that have been shown to be effective, evaluating interventions against sought outcomes, and potentially discarding interventions that are not shown to be effective through rigorous evaluation. Community policing might also be strengthened from an evidence-based approach, given that many different types of community-based strategies have been developed and also evaluated, some which have not been shown to either reduce crime or improve legitimacy (see Sherman and Eck 2002; Weisburd et al. in progress). Research has also played — and can continue to play — an important role in developing professional policing, especially for police concerns such as the use of force, racial profiling, or internal corruption.

An evidence-based approach may also increase satisfaction in police work by providing creative ways to carry out the profession and also challenge the status quo. Many strategies shown to be effective run counter to professional mainstays, such as rapidly responding to 911 calls, randomly patrolling one’s beat, or making arrests. Weiss (1980) found that challenging the status quo is one reason bureaucrats may be receptive to research in the first place. Related to this, applying critical, analytic, and proactive thinking in police work is also more akin to transformational, as opposed to transactional, leadership and deployment styles. Transformational approaches implicate more satisfaction among both supervisors and subordinates because more creative and proactive thinking is involved (Bass 1985; Burns 1978; McCardle 2011). In this manner, evidence-based policing, as with problem-oriented policing, could influence organizational and cultural forces that can inhibit both growth and a dynamic learning environment in policing. If using certain strategies, tactics, and internal practices lead to more positive results, this may then lead to greater motivation and job satisfaction.

Yet, despite these potential benefits, laments continue about the proverbial “gap” between research and practice (Bayley 1998; Lum 2009; Lum et al. 2012; Mastrofski 1999; NRC 2004; Weisburd 2008; Weiss 1980). Even in the field of medicine, where we might expect that practices are guided by the best scientific research, these gaps persist (Chalmers 2003; Sherman 2003). In policing, Weisburd (2008) points out that the best example of the disconnect between the evidence and its use in practice is the general failure of police agencies to regularly adopt hot spots, or place-targeted patrol, despite the strong evidence of the efficacy of this approach for crime and disorder reduction (NRC 2004) and the clear criminological support for the spatial
Evidence-Based Policing

concentration of crime (Weisburd 2008). Further, Koper (2008) found that while many agencies claim to be doing hot spot policing, much of the strategies agencies discussed appear to be consistent with more traditional beat- and neighborhood-based strategies. Other examples are the continued use of the DARE program (Drug Abuse Resistance Education), reactive arrests, rapid response to 911 calls, and gun buybacks—all strategies that have evidence showing ineffectiveness.

Reasons for the lack of evidence-based approaches in policing are many. Transforming more abstract and general research findings and experiences into tangible and specific law-enforcement tactics, practices, and strategies is a difficult and hard-to-measure venture, just as is applying one’s education or training to any workplace task. Research knowledge often is not written in ways that make it straightforward for officers to receive or use in practice. Police chiefs often cite the lack of resources, political will, and the potential for police unions to object as challenges to adopting an evidence-based approach. There are also false expectations and beliefs about the role of researchers and research in policing. Despite what some have argued (see Sparrow 2011), researchers have rarely claimed that research or scientific processes can run a police department’s daily operations or resolve law-enforcement concerns, just as problem-oriented policing, community-oriented policing, or professionalism cannot. However, incorrect beliefs and prejudices about research and researchers may lead to a widening communication gap between researchers and practitioners.

Further, implementing evidence-based policing is a challenge because its principles of decision making compete with an organizational culture in which decisions are made using other philosophies and processes. These include lunches and best guesses; traditions and habits; anecdotes and stories; emotions, feelings, whims, and stereotypes; political pressures or moral panics; opinions about best practices; or just the fad of the day (Lum 2009). Granted, sometimes these processes and best practices can be influenced by knowledge, information, and analyses. However, they are also highly vulnerable to personal opinions, ideology, and stereotypes. The difficulty of evidence-based policing lies not only in the transformation of research into practice but also in adjusting the culture to be more receptive to research and scientific processes.

Some have also argued that evidence-based policing needs to acknowledge that crime control research sometimes focuses on outcomes that are not as practical as initially believed. For example, Mastrofski and Willis (2010) suggest that police visibility and responsiveness are how the public judges effectiveness of policing, not necessarily some abstract notion of crime reduction. In turn, this may explain why police have not fully adopted an approach that targets crime concentrations. Citizens may want to see police patrolling their own neighborhoods, irrespective of where crime is most prevalent. And they may focus on other performance measures when judging the police, such as quick response and fairness. Whether this is the reason why police have been reluctant to move from a reactive to a more proactive patrol strategy should itself be subjected to study. Nonetheless, these are important debates about the utility of evidence-based policing and its focus. As Professor Stephen Mastrofski emphasized in personal correspondence to the authors, “for evidence-based policing to be useful in a democratic setting, it needs to measure success with sufficient sensitivity to the diversity of values that come to play in making choices about policy and practice. An evidence-based policing strategy that focuses on only a narrow range of values is more appropriately termed ‘blinder-based policing.’”

Thus, while the notion of evidence-based policing may in theory seem reasonable, rational, and even democratic, using research in police daily practice is much more complex and nuanced in reality. Building on Sherman’s discussion, therefore, Lum et al. (2012) add three nuances into the definition of evidence-based policing, which in turn highlight the difficulty in the fulfillment of its own definition:
1. Evidence-based policing is a decision-making perspective, not a panacea.

2. It is grounded in the idea that policies and practices should be supported by research evidence and analytics, not blindly determined by them.

3. It suggests that research is not ignored and that it at least becomes a part of the conversation on what to do about reducing crime, increasing legitimacy, or addressing internal problems.

The Research Supporting Evidence-Based Policing

Given that evidence-based policing requires the use of research in practice, what then is the research evidence that supports it? There have been decades of policing and criminal justice research that can benefit police decision making across multiple areas of police practices and activities, as most recently reviewed by a special committee of the National Research Council (NRC 2004). Below, we focus on the research evidence regarding crime control and prevention of police interventions as only one example. We italicize “one example” because some critics view evidence-based policing as a “what works” movement, focused only on experimental evaluations of crime prevention interventions. However, we remind and caution the reader that there is much evidence in policing that is not about tactical interventions, which is also part of the research base in evidence-based policing, as Moore (2006) and Willis (2012) point out. Evidence-based policing is a general reform concept about the use of research in policing, not about the specific areas of research or the type of researcher that should be its focus.

But even though research can span the gamut of areas and types, it should also be mentioned that no matter what area of research is used to underpin law-enforcement decisions, a fundamental tenet of an evidence-based approach is that not all research in that area should be used. Research in policing uses a wide gamut of methods, including experiments, quasi-experiments, before-and-after designs with (and without) control groups, correlational research, case studies, ethnographies, and other qualitative studies. An evidence-based approach posits that agencies should make use of what Sherman (1998) calls the “best available” evidence – research that is of high quality, scientifically sound, believable, and therefore of high internal and external validity (Boruch et al. 2000; Campbell and Boruch 1975; Farrington 2003; MacKenzie 2008; Weisburd 2000). However, like the “what works” critique mentioned above, what constitutes high-quality research is also debated (Moore 2006). For example, with crime-control evaluation research, not all research evidence is created equal (Sherman et al. 2002). What is the threshold of methodological rigor by which an evaluation study should matter? Further, there are ranges of quality and fidelity in the implementation of research designs. Various sampling and measurement issues may also influence the validity of findings.

At the same time, we know there are many examples of criminal justice interventions that were deemed effective using scientifically weak assessments (or no assessment at all) and that were later discovered to be ineffective or even harmful (DARE, boot camps, reactive arrests, some community policing strategies, intensive supervised probation). As Weisburd et al. (2001) discovered, evaluation studies of lower quality in criminal justice, which may be less valid and reliable, are also more likely to report positive findings. While there are specific debates regarding the utility and ability of experimentation to evaluate crime prevention interventions (see Berk 2005), there is general agreement that an evidence-based approach posits that the rigor of the science behind an evaluation is an important consideration in the believability (and utility) of any particular study.

Thus, many reviews of research attempting to synthesize crime prevention and control research for practical use have been sensitive to the methodological rigor of studies. One of the more influential and recent reviews was conducted by Sherman as part of the University of Maryland Report to Congress on “What Works, What Doesn’t, and What’s Promising” in crime
prevention, later updated by Sherman and Eck in Sherman and colleagues' (2002) study. Each policing evaluation was scored with regard to rigor of method used for evaluation, and then, based on evidence and the methodological rigor underpinning that evidence, a judgment was made about the effectiveness of policing interventions. Relying on the studies exhibiting strong internal validity, Sherman and Eck (2002) concluded in their update that directed patrols to hot spots, proactive arrests of serious repeat offenders and drunk drivers, arrest for employed suspects for domestic violence, and problem-oriented policing seemed to be evidence-based policing approaches. On the other hand, minor juvenile arrests, arrest for unemployed suspects of domestic violence, drug market arrests, some community policing approaches, or increasing police numbers did not seem evidence based.

In addition to — and prompted by — the Maryland Report were a number of subsequent reviews of the evidence of policing interventions promoted by the Campbell Collaboration, specifically its Crime and Justice Coordinating Group (see Farrington and Petrosino 2001). Similar to the Maryland Report, Campbell reviews emphasize that more weight should be given to research evidence with high levels of internal validity. In many reviews, only experiments and multi-subject quasi-experiments are considered in making final determinations about interventions in which multiple studies have been undertaken. Unlike the Maryland Report, Campbell reviews hone in on specific areas of policing and law enforcement. In policing and security, the most highly cited is likely the systematic reviews of the research evidence on hot spot policing (Braga 2007), which have shown place-based targeted patrol to be effective in reducing crime at places. The problem-oriented policing review (see Weisburd et al. 2010) indicates that specific and tailored approaches, in particular focusing on small places, can be effective. Bennett et al. (2008) neighborhood watch review found positive effects of neighborhood watch, although studies with lower internal validity were included in this review, and the conclusions of which counter Sherman and colleagues’ (2002) more pessimistic findings. In their review of gun-carrying suppression, Koper and Mayo-Wilson (2006) found that police crackdowns on gun carrying are effective on reducing gun crime in crime hot spots.

Further, contrary to the Braga hot spots review, Mazerolle et al. (2007) systematic review of evaluations regarding street-level drug enforcement interventions found that problem- and community-oriented approaches were more effective in reducing drug calls and incidents than only focusing law enforcement at drug hot spots using standard tactics. In a review of second-responder programs for family abuse, Davis et al. (2008) found that such programs do not reduce the likelihood of future violence. Upcoming reviews include studies on pulling levers (Braga and Weisburd 2012) and community policing (Weisburd et al. in progress). These systematic reviews examine multiple studies on the same subject to draw conclusions and generalizations about the evidence, so that law-enforcement entities can better digest large amounts of research in an organized way.

Recently, a committee of policing scholars conducted a broader review of law-enforcement research for the National Research Council (NRC). Writing about the Fairness and Effectiveness in Policing (NRC 2004), the committee found that with regard to research on the “effectiveness of police activities in reducing crime, disorder and fear,” the committee noted four key points about the state of research evidence in policing (summarized from NRC 2004: pp. 246–247):

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 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 (also see 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 (also see Braga 2007; Koper and Mayo-Wilson 2006; Mazerolle et al. 2007; Weisburd et al. 2010).

4. Problem-oriented policing—a strategy involving systematic analysis of crime and disorder problems and the development of tailored solutions (Goldstein 1979) — is effective (also see Weisburd et al. 2010).

Supporting many of the findings from the Campbell reviews and Sherman (1997) and Sherman colleagues’ (2002) reviews, place-focused, hot spot policing strategies—that is, patrol, problem-solving, and/or other interventions focused on small areas or specific places of crime concentration—have proven particularly effective in several rigorous outcome interventions (Braga 2007). In the judgment of NRC, the research on hot spot policing constitutes the “strongest collective evidence of police effectiveness that is now available” (NRC 2004, p. 250).

Finally, and most recently, Lum (2009) and Lum et al. (2011) have developed the Evidence-Based Policing Matrix (http://cebcp.org/evidence-based-policing/the-matrix/) an interactive web-based tool which houses all police crime-control intervention research of moderate to high methodological quality. As with other reviews, the Matrix’s intentions are to provide easy ways for the evidence base to be accessed and used by decision makers (i.e., practitioners, policy makers, and researchers). However, the goal of the Matrix is not just to show but also to refine knowledge and to facilitate its translation and implementation through the application of the online tool (Lum 2009; Lum et al. forthcoming). The idea of evidence-based policing translation tools suggest that such tools can draw out generalizations of tactics that are effective by examining a range of studies and then transform and apply that knowledge to specific problems an agency faces.

The Matrix uses a classification system for police interventions based on three very common dimensions of crime prevention strategies: the nature and type of target, the degree to which the strategy is proactive or reactive, and the strategy’s level of focus (the specificity of the prevention mechanism it used). Using this three-dimensional “matrix,” Lum (2009) and Lum and colleagues (2011) mapped all moderately rigorous to highly rigorous research evidence on police crime-control interventions according to how they might be characterized on these three dimensions (see Fig. 1, from Lum et al. 2011). By doing this, clusters of studies (and their findings) illustrate the distribution and concentration of evaluations and effective practices along intersections of dimensions. In other words, police might be able to better glean generalizations from a large body of research about what intersecting dimensions tend to characterize effective interventions.

In general, the Matrix indicates the following general principles of the evidence base of police crime-control interventions:

- A large majority (79% at the time of writing) of successful interventions studied occur at “micro-places” or “neighborhoods.”
- 64% of successful interventions are “focused” or tailored strategies.
- 80% of successful interventions are either “proactive” or “highly proactive.”
- 53% of interventions that show “no effect” or a “backfire effect” focus on targeting individual(s).

The evidence from the Matrix suggests that when police build strategies and tactics that are more proactive (or are based on using information-led and problem-solving approaches to reduce crime and related problems), when they target problems with greater specificity as to place and prevention mechanism, and when they shift from only a reactive/individual approach to incorporating more proactive place-based approaches, they will likely be more effective in reducing crime and disorder (see Lum et al. 2011). These findings are even more marked when only considering studies within the Matrix that are high-quality quasi-experimental and experimental research.

Although reviews of evaluation research by Campbell reviews, the Matrix, or the Maryland Report help to organize studies by rigor or type,
there are other sources that could also be used to support an evidence-based approach in policing. For example, Crimesolutions.gov, an Office of Justice Programs website, reviews a number of studies across multiple criminal justice arenas. The Center for Problem-Oriented Policing (http://www.popcenter.org/) houses a number of guides, which emphasize not only the application of research knowledge but also systematic problem-solving approaches using crime analysis. Numerous centers and universities also house information and research regarding faculty areas of expertise.

What Would an Evidence-Based Policing Agency “Look Like”?

Additional insights into defining “evidence-based policing” can be gleaned from a discussion of what an evidence-based law-enforcement agency might look like given this specific research base. Again, the examples used here focus on the crime-control research base reflected in the Matrix, but other research categories could also be similarly applied (e.g., research on what strengthens police legitimacy). Given the evidence, at the most basic level, an evidence-based policing agency requires an effort to at least balance traditional and reactive deployment approaches with other types of patrol and investigative techniques that are generally supported by research evidence. But what are these more evidence-based patrol and investigative techniques? From the knowledge gained from the last three decades of research, an agency would be more “evidence-based” if it shifted its deployment strategy from one primarily spent on rapid response and random patrol to more proactive, directed, and problem-oriented targeting of crime hot spots. The research also indicates in its totality that a shift from vague community-oriented approaches to more targeted,
problem-solving approaches at specific places involving multiple agencies may be more effective (Weisburd and Eck 2004; Weisburd et al. 2010). If agencies want to focus on individuals, focusing on repeat violent offenders and strengthening postarrest case enhancement and the use of DNA analysis may be important. Further, as Mastrofski commented above (see footnote 4), research on other values and priorities, such as due process, respectfulness, and fairness, would also have to be considered in developing these different patrol approaches.

Another basic requirement for an agency to be more research-oriented is that it has to have some way of assessing tactics and strategies and gathering knowledge about crime, the community, and internal issues. This involves having personnel assigned and committed to data collection, analysis, and evaluation, as well as having regular systems and procedures for using research and analytic evidence for various organizational functions (e.g., in managerial meetings, promotions, and assessments). This can include strengthening crime analysis or research and planning units, as well as establishing standard operating procedures that ensure that units apply this information.

Finally, at the most basic level, knowledge from research, whether it comes from evaluations of policing interventions, research on racial profiling or traffic stops, or research regarding different ways to interact with the community, must be incorporated into academy and in-service training. This is a basic requirement that seems the easiest (and most obvious) to implement yet is likely furthest from reality. As indicated by Bureau of Justice Statistics data on academies (see Reeves 2009), it would not be surprising to find that many police academies and in-service systems do not seriously incorporate the latest information on what are the most effective ways police can use to reduce crime, increase legitimacy in the community, or reduce problem behaviors within the agency. Academies traditionally teach reactive skills such as applying police procedures and the law, writing reports and submitting evidence, or using firearms and motor vehicles. All of these focus on police reactive response to crime. Yet, a large portion of an officer’s time is not committed to reactive procedural response but is uncommitted, leaving room for high levels of officer discretion (see Famela et al. 2005). Given this, the proactive skills and knowledge base that are needed to carry out effective and legitimate crime prevention during this discretionary time are often not taught. Yet a large portion of an officer’s time is not committed to reactive procedural response but is open to use at the officer’s discretion (see Famela et al. 2005). Further, knowledge disseminated about respectful and fair policing may build a more respectable and legitimate police force.

Such efforts only reflect what an evidence-based approach would be at the minimum. Agencies that want to be more advanced in using analytic and research knowledge may pursue these with greater intensity and innovation. For example, mid-level achievement in evidence-based policing might be reflected in an agency having an active crime analysis culture (and specifically allocated resources) that constantly generates information for proactive enforcement and assessment of activities. In even more intense versions of evidence-based policing, these analysts become the criminologists, seeking to find underlying reasons for crime problems and patterns and also assisting the agency in evaluating both its strategies and tactics to reduce crime and its approaches to addressing internal concerns.

More intensive evidence-based approaches might include not only incorporating research and analytic knowledge into academy and in-service training but also using it to rewrite standard operating procedures (SOPs) to conform more to research knowledge. An example might be the SOPs related to preventive patrol and uncommitted time. Currently, SOPs may not include guidance or directives on what officers should be doing when they are not answering calls or writing reports. By building research knowledge into SOPs, such knowledge also becomes part of the information base used for decisions about issues such as promotions and transfers. Further, when police receive research
information through familiar agency sources, it increases their receptivity to the information – (Lum et al. 2012). In these agencies, commanders, first line supervisors, and officers ideally would develop a more sophisticated understanding of these issues which become part of their technical expertise (and a requirement for promotion).

Agencies well entrenched in an evidence-based approach work regularly with researchers inside and outside of their agencies and use that knowledge and those relationships to mold both officer and citizen expectations of the law-enforcement role and function in society. The sheriff or chief might even take an active role in reminding his or her political counterparts in the city council or state governments about outputs from research as justifications for activities and resource allocation. Agencies committed to evidence-based approaches would have a portion of their budget specifically devoted to research and analysis of the agency’s activities and behaviors.

These are only just a few examples of how research might be incorporated into police practices. Institutionalizing the use of research in practice involves many adjustments to organizational, personnel, incentive, and policy structures in policing. (For more in-depth discussion and examples of these ideas, see the Matrix Demonstration Project (http://cebcp.org/evidence-based-policing/the-matrix/matrix-demonstration-project/) as well as Lum et al. 2012 and Weisburd and Neyroud 2011.) Further, achieving evidence-based policing cannot rely only on the will of police leaders or the merits and volume of the research base. Police must be receptive to such an approach; the research must be useful, and there needs to be a demand for such knowledge in policing. The logic and rationality of evidence-based policy more generally in medicine, governance, or social interventions can be overshadowed by stronger human tendencies of habit, tradition, and culture that can block receptivity toward research use in policing. The example of the continued use of DARE (Drug Awareness Resistance Education) comes to mind (Birkeland et al. 2005). Despite research evidence showing DARE’s ineffectiveness, police, schools, and parents support the program for reasons other than meeting its intended outcome. Overcoming a culture of reactivity, low use of analysis, weak supervision and accountability, and a suspicion of researchers, research, and scientific processes will be keys to successfully implement such an approach. This not only requires a sea change in law enforcement culture but also real changes in organizational infrastructure that allows for research to be better received and digested by members of the agency.

Related Entries

- History of Randomized Controlled Experiments in Criminal Justice
- Hot Spots and Place-Based Policing
- Intelligence-Led Policing
- Problem-Oriented Policing

Recommended Reading and References

Campbell DT, Boruch RF (1975) Making the case for randomized assignment to treatments by considering the alternatives: Six ways in which quasi-experimental


Koper C (2008) The varieties and effectiveness of hot spots policing: Results from a national survey. Presentation at the annual meeting of the American Society of Criminology, St. Louis, November 2008


Weisburd D, Bennett T, Gill CE, Telep CW, Vitter Z (In progress) Community-oriented policing to reduce crime, disorder, and fear and increase legitimacy and citizen satisfaction in neighborhoods. Campbell Collaboration systematic review


Evidence-Based Policy and Practice

Evidence-Based Policy in Crime and Justice

Anthony Petrosino¹ and Robert Boruch²
¹Learning Innovations, WestEd, Woburn, MA, USA
²Graduate School of Education, University of Pennsylvania, Philadelphia, PA, USA

Synonyms

EBP; Evidence-based crime policy; Evidence-based policy and practice

Overview

Evidence-based policy in crime and justice is defined here as a conscientious approach to intentionally use research to make decisions about programs, practices, and larger scale policies. Evidence-based policies, by and large, are those found to be effective in prior rigorous studies to reduce crime or improve justice. This article first summarizes the rationale for an evidence-based approach and the different types of evidence needed to respond to different policy questions.

Exactly how much influence evidence should have on policy is then considered, and key mechanisms in the approach are illuminated. After providing a brisk history of evidence-based policy, the article concludes with some important by-products and limitations to the approach.

Introduction

In recent years, the term “evidence-based” has become the catch phrase to describe the intentional use of research evidence to make policy and practice decisions. The cornerstone of evidence-based policy would be a conscientious attempt by government and other decision-makers to adopt policies, practices, and programs (hereafter, policies) that have been shown to be effective in prior evaluation studies, usually rigorous randomized controlled trials or high-quality quasi-experiments. There are a few who would argue that policies are “evidence-based” if they have sound theoretical and conceptual footing based on prior research, even if the actual policy has not been previously tested. A commitment to evidence-based policy would be demonstrated, among other things, by decision-makers determining what prior research indicates about their current policies and whether they should be continued or revised and what prior evidence is on any new policies they are considering adopting.

Why Evidence-Based Policy in Crime and Justice?

Why has evidence-based policy become “all the rage” (Tilley and Laycock 2000), in the USA and elsewhere? The pursuit of evidence-based policy has several drivers. First, policies may have a range of effects, from strong positive impact (helping the situation) to no effect (basically a zero impact in the setting) to a large negative effect (hurting the situation). Policy makers who wish to maximize the possibility of having positive impacts with the future policies they implement may do so by adopting policies shown to be effective in prior research.
TAB 2 DIVIDER HERE
Assessing quality in police encounters with the public

James J. Willis
Department of Criminology, Law and Society

Plan of action

Focus on domain of everyday encounters with public
Deepen our understanding for how quality of performance might be improved
"How well" and not "how much"

Craft of policing

Police have long thought of what they do as a craft
- Often deal with complex and uncertain situations with multiple goals or values at play
- Good policing demands "knowledgeable, skilled, and judicious performance" (Bittner 1983, 3)
How do we go about improving these aspects of police performance?
Why should we care about quality?

- Patrol officers themselves care very much about the quality of police work
- The public cares very much about how they are treated by patrol officers

When evaluating patrol officers' work performance, how much weight to give quantity v. quality of work performed

It ain't easy measuring quality
Can we identify criteria for assessing good performance?

- Good performance varies across different situations so context really matters
  - Video clip
  - Neighbor dispute New York City

### Officer ratings of performance (N=38)

<table>
<thead>
<tr>
<th>Officer Rating (1-10)</th>
<th># of Officers</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Average rating = 5 (0 = not skilled at all, 5 = average skill; 10 = highly skilled)

### Criteria for good performance

- See Bayley and Bittner (1984); Mastrofski (1996)
  1. Problem diagnosis
  2. Treatment of citizens
  3. Problem resolution
  4. Lawfulness of police response
  5. People’s safety
  6. Safety and order at the scene
  7. Economy
Problem diagnosis

- Possible definition:
  - Using available resources, including the parties involved, to conduct a broad inquiry into the specific nature of the problem. The purpose of the inquiry is to define the problem accurately, to identify possible underlying causes through open and persistent probing, and to assess the seriousness of its effects.

In an officer’s words...

One officer said:

"Try to get better sense of what caused this dispute. What time was the door slamming occurring? Why specifically was it causing so much anger? Did the second woman work nights and it was waking her up? Was the dispute only about door slamming or something deeper? How long had the dispute been going on for? Was there evidence that it was escalating?"

Causes of undesirable results in police-public interactions
What can we do to improve quality? Some ideas….

- Use video clips to identify criteria for assessing performance in common or problematic situations
  - Use these to help train officers
  - Perhaps as a basis for developing an instrument for assessing quality
- Create opportunities for patrol officers to discuss hard cases and get feedback

Further reading

Improving Police: What’s Craft Got to Do with It?

By James J. Willis

Over the last century or so, the police have been the object of almost continuous and intensive attempts at reform. Currently, one of the most powerful forces for transforming what the police do and how they do it is the evidence-based policing movement, an approach that challenges the police to base their actions on scientific evidence about “what works.” This puts scientific research squarely in the driver’s seat of police decision making, unlike past reforms that have aspired to professionalism by focusing on the legal and administrative features of the police environment (Klockars 1988). For example, the origins of the professional policing...
model that dominated much of the twentieth century lay in the implementation of laws, organizational policies, and departmental rules. As features of bureaucratic organization, their purpose was to strengthen accountability and to influence the choices made by patrol officers and the organizations that employed them (Reiss 1992). Community policing, the most popular reform of the last few decades, then sought to reverse this trend by assigning a greater role to the needs and concerns of local communities for guiding police actions (Mastrofski and Greene 1993, 80).

Whatever the reform approach, it is a common lament among those seeking to improve policing that the policing “craft,” or the culmination of knowledge based on hands-on experience, is a feature of police culture that poses a formidable obstacle to implementing new policies and practices. Supporters of community- and problem-oriented policing, two recent and highly-touted reforms (Goldstein 1990; Skogan 2006), have expressed this concern, as have advocates of evidence-based policing. For example, Cynthia Lum (2009) notes in a previous Ideas in American Policing lecture that despite research demonstrating the crime control benefits of concentrating police officers in high-crime areas or hot spots, there is little indication that police agencies have actually tried to reallocate their patrol resources accordingly. Here she echoes a lament made over twenty-five years ago by Lawrence Sherman, a leader in the evidence-based policing movement, about police officers’ general resistance to scientific discovery. Despite evidence showing that arresting batterers in misdemeanor domestic violence incidents in Minneapolis was the most effective response for reducing future offending, patrol officers in the department said they would continue to use their standard responses, including talking to both parties or asking one to leave (Sherman 1984, 75). While proponents of evidence-based reform are careful to avoid attributing a reluctance to embrace research to a single cause, it is clear that they consider the lower status that police officers assign to science than to craft as a significant impediment to reform (Sherman 1984, 1998; Weisburd 2008; Lum 2009).

Today it appears that scholars are being attracted in increasing numbers toward the evidence-based movement and policymakers, such as the United States Department of Justice, are encouraging police to do the same. Consequently, improvements in policing rest heavily on the shoulders of those who do policing at the coalface, and patrol officers have long thought of the way they perform their work as a craft.

---

1 My comments in this essay concentrate on patrol officers. Thus, policing and police work refer to the activities of these front-line practitioners unless otherwise noted.

2 Subsequent replications of this research at additional sites revealed more complex findings, including the contribution of arrest to future domestic violence under some circumstances (Sherman 1992).

3 For example, the Office of Justice Programs’ Bureau of Justice Assistance Web site provides resources on evidence-based approaches and practices (http://www.ojp.usdoj.gov/BJA/evaluation/evidence-based.htm).
it would seem to be a good time to reconsider the value of the police craft in relationship to police science (Bayley and Bittner 1984). Improvements in policing rest heavily on the shoulders of those who do policing at the coalface, and patrol officers have long thought of the way they perform their work as a craft (Wilson 1978, 283). Thus, unless more attention is given to the craft aspects of policing within the context of the evidence-based movement, it is unlikely that efforts to integrate science with policing will deliver the results that reformers desire (Weisburd and Neyroud 2011). Ultimately, any attempt to improve police performance must take into account the views of those who constitute any department’s largest resource and their understanding of what constitutes superior police work (Skogan 2008).

Some might argue that craft and science already work well together, noting that the relationship between police researchers and practitioners has improved substantially over the past few decades (Bayley 2008). This might be, but, aside from a few scholars (see Bayley and Bittner 1984; Mastrofski 1996), not much attention has focused on examining how scientific and professional knowledge might contribute to one another in mutually supportive ways in the context of street-level decision making. In this essay, I consider what a true marriage of craft and science might look like for guiding the decisions of rank-and-file officers in two domains relevant to police practice: (1) advancing knowledge about what works, and (2) making decisions about the right thing to do. In doing so, I hope to illuminate some possibilities for reform that policymakers, practitioners, and researchers might wish to consider in their efforts to improve the police of the future.

Let Me Introduce Our Couple, Science and Craft

From the perspective of evidence-based policing, it is social science that promises to revolutionize the use of police discretion (Sherman 1984, 61). A glance through any research methods textbook reveals that social science encompasses a range of methodologies. However, the scientific gold standard of the evidence-based policing movement is the experimental study, as it is the most rigorous methodological tool for determining whether a causal relationship exists between a particular treatment and a desired outcome (Sampson 2010). If you want to learn whether problem-oriented policing is more effective than directed patrol for reducing crime at hot spots (Taylor, Koper, and Woods 2011), or whether arrest is the best option for reducing recidivism in domestic violence cases (Sherman 1992), then randomized trials are your best hope. This view of police science conjures an image of the police professional as a technical expert, someone whose efforts to solve crime and disorder problems are influenced powerfully by scientific research. Indeed, Lawrence Sherman (1984, 76–77) has envisioned police officers making street-level decisions by accessing research results on laptop computers in their patrol cars. Having entered data about a particular suspect, a preprogrammed algorithm would advise the patrol officer on the best course of action based on the likely effects of the officer’s actions on the suspect’s behavior.

From the perspective of craft, professionalism is defined quite differently. Experience, not scientific knowledge, is the foundation of effective police work. By encountering a variety of situations and people over time, patrol officers learn valuable practical knowledge and develop specific skills. Some of these situations might seem clear cut, like dealing with a bank robbery or other violent crime in progress but others, such as domestic disturbances or traffic stops, are more complex and uncertain. This makes the decision about how best to respond much more challenging.

Under these conditions, what is embraced is “situated knowledge” that offers an officer immediate guidance about the constraints and possibilities for responding to a specific incident (Thacher 2008, 51). Craft places a high value on flexibility
to fit the right response to the particulars of the situation and does not necessarily demand orthodoxy in response. It also recognizes that what works well for one officer might not work so well for another due to differences in skills and personal traits. Scientific knowledge predicting the likely outcomes of a specific action is certainly useful, but patrol officers generally assign much greater importance to knowledge of laws and rules and in-depth understanding of people, places, and events. The former helps define the nature of the problem and the outer limits of the police officer’s authority and responsibilities (Mastrofski, Willis, and Revier 2011, 16), and the latter increases an officer’s “ability to predict intention and behavior” when confronting an unfamiliar setting for the first time (Bittner 1990, 252).

Craft combines this knowledge with a specific set of skills. For patrol officers, these include the ability to remain calm under pressure, to talk and listen to people, to use force sparingly, and to exercise good judgment by weighing up “a complex set of factors before coming to a reasoned decision” (Bayley and Bittner 1984; Fielding 1984; Kritzer 2007, 335; Muir 1977). Those who have mastered these tools of the trade are regarded by their peers as master craftsmen or women, that is, for being “cool, poised, inventive, careful, active, and nonviolent—officers who can cope without jeopardizing themselves or others” (Bayley and Bittner 1984, 51–52).

In contrast to a computer-driven robocop, the craft image of the professional police officer is of someone who thinks quickly on her feet to behave in ways that are wise, compassionate, and fair. Under some circumstances, especially when an officer senses immediate danger, choices are made automatically and intuitively (Sherman 2012), but decision making also involves considerable observational and analytic rigor, and even admits the possibility that creativity in devising a course of action may be valuable (Muir 1977, 189–259). Thus, when police officers make street-level choices, they combine experience-based intuition and science-like analytic strategies for thinking both “fast” and “slow” (Kahneman 2011).

**What Might a Good Marriage Between Science and Craft Look Like?**

This image of science and craft vying for supremacy, in the hope that springs eternal from American police reformers’ desire to improve policing, generates at least three distinct ways that science and craft may be coupled together. In the first coupling, science is dominant and craft is suppressed. While this model is not unduly dismissive of experience as a guide to police action (Sherman 1984, 62), it emphasizes the limitations of intuitive knowledge and expresses alarm about its potential for negative consequences (Lum 2009). From an evidence-based policing standpoint, policing as a craft projects an overly romantic conception of a diligent and skillful practitioner making judicious decisions. In doing so, it fails to consider fully that even the most well-respected patrol officers have a limited range of experiences to draw upon and often lack the ability to learn much about the long-term consequences of their actions (that is, beyond what they are able to observe during an encounter) (Sherman 1984). Where science is absent, officers are free to dispense their own version of justice based on any number of problematic or unethical factors, including guesswork, personal biases, and offensive stereotypes (Lum 2009, 3; Maynard-Moody and Musheno 2003). Moreover, because officers often do not have reliable knowledge about the results of their actions, what they do, no matter how well intentioned, may be ineffectual or even harmful to suspects, victims, and offenders (Sherman 1984, 64).

These are important criticisms, but there are also limitations to science’s capacity to dictate decision making. Leaving aside the fact that police may simply not trust scientific findings, supporters of good scientific evaluations often attribute the failure of practitioners to embrace science
to their not being aware of relevant findings published in academic journals, or to not understanding the form in which they are delivered (Birkeland, Murphy-Graham, and Weiss 2005). The obvious solution is to disseminate knowledge about “what works” more widely and in more “digestible” formats (Lum, Telep, Koper, and Grieco 2012). Clear examples of such an approach are the recent creation of the Office of Justice Programs’ CrimeSolutions.gov Web site to highlight and rate the effectiveness of different criminal justice approaches on a straightforward color-coded scale, and the Evidence-Based Policing Matrix summarizing the effects of different crime control strategies in a simple three-dimensional cube.⁴

No doubt distrust and the unavailability and inaccessibility of scientific findings help explain some of the gap between research, policy, and practice, but there are other good reasons why craft may be deaf to science’s exhortations. One is the crucial recognition that police organizations and the officers who work for them are expected to accomplish multiple goals at once. The evidence-based movement has tended to identify crime reduction as the primary end of policing, but police work is characterized by a swath of values or ends, such as equity, legitimacy, liberty, and efficiency, which often conflict.

The evidence-based movement has tended to identify crime reduction as the primary end of policing, but police work is characterized by a swath of values or ends, such as equity, legitimacy, liberty, and efficiency, which often conflict.

⁴http://gemini.gmu.edu/cebcp/

as equity, legitimacy, liberty, and efficiency, which often conflict (Thacher 2001, 392). Under these conditions, scientific knowledge that identifies the best means to a given end, such as crime control, offers useful guidance, but it cannot resolve these value conflicts and thus “serve as a firm guide to action” (Thacher 2001, 389). This is particularly true for patrol officers working at the street level who must try to reconcile the numerous requirements that justice demands, say between being responsive to the needs and wishes of a victim while reducing the risk of future offending. For example, in the case of a minor assault, should the officer make an arrest when a husband—the family’s only breadwinner—swears that he will never slap his wife again and she supports his claim while pleading for leniency?

There are also times when an officer’s judgment should override the dictates of even well-established scientific findings. For example, we probably do not want police officers to single out domestic violence offenders for arrest based on their employment status or where they live, even if evidence suggests that arresting those with jobs or who live in affluent areas is the most effective means for reducing the risk of future violence (Sherman 1998, 8). Finally, social science at best improves the odds of success of a given sort but, given the complexities of human behavior, it rarely guarantees it and it is far from matching the predictive power of the natural sciences (Gutting 2012). Sherman (1984,
In the first instance, police science could probably do more to pay attention to police craft in order to validate what works and under what conditions.

1998) frequently acknowledges this fact, but not in the context of subjecting to empirical testing the assumption that social science is superior to craft in producing desirable outcomes.

In the second coupling between craft and science, craft is dominant and science is missing or, if it is present, it is merely a “presentational strategy” for justifying traditional police policies and practices (Manning 1992, 365). That is, science is not really driving decision making, at least in the ways it is supposed to. Compstat could be considered an example of this version of the science-craft relationship. Implemented in the New York City Police Department in 1994, Compstat is an information and management tool that tallies and maps crime statistics to hold command staff accountable for crime levels in their beats. According to Compstat doctrine, police are supposed to go beyond their own experiences and to apply innovations in crime prevention theory and research in order to solve crime problems (Bratton 1998). In practice, however, in-depth research conducted at multiple sites has shown that despite the availability of electronic maps, timely crime data, and crime analysis, police continued to rely heavily upon what they have learned in the course of their careers about where crime occurs and how best to respond. Rather than carefully assessing a range of promising alternatives before selecting the most effective crime strategy, district commanders frequently used tactics they have tried in the past and that they believed work, such as saturating an area with patrol or increasing arrests (Willis, Mastrofski, and Weisburd 2007).

In this case, impressive electronic maps and crime statistics—the harbingers of science—help confer legitimacy on police actions while the experience-based aspects of police work continue to hold sway.

A third model regards craft and science as a true marriage, where each partner bestows equal worth on the other and has a rightful place in guiding the decisions of the rank-and-file officer. In the next section, I try to envision what a successful marriage of this sort would look like. Which partner—craft or science—does what, and how might some differences between the two be resolved?

Advancing Knowledge About What Works

In the first instance, police science could probably do more to pay attention to police craft in order to validate what works and under what conditions. In focusing so much of its energy on identifying the best means to preventing crime, the evidence-based movement has improved understanding about how police can contribute to public safety. In comparison, it has largely overlooked the many concerns officers must take into account when making a decision, including the many different tactics that are available to them (Bayley and Bittner 1984). Egon Bittner noted long ago that the work of front-line police officers could not be adequately captured and assessed.
in such simple terms as fighting crime or enforcing laws (Bittner 1970). In their encounters with the public, officers must consider other important goals, including preventing disputes from escalating, ensuring safety at the scene, and responding adequately to legitimate citizen needs (Bayley and Bittner 1984; Mastrofski 1996). Little is still known about the best treatments available for accomplishing these kinds of goals. Albert Reiss (1995, 103) noted with surprise almost twenty years ago that interpersonal conflicts and disputes were the cause of much violence but that “little is known about the effectiveness of police in preventing the occurrence of different kinds of disputes or their escalation into crimes when they occur.” Little seems to have changed in the interim, suggesting that researchers need to do more to learn from practitioners themselves at close range, that is, through direct observations and interviews, about the goals they identify as most important in any given situation and the specific tactics they use for their accomplishment. Ethnographers, such as Egon Bittner and William Muir, have provided valuable insights into how patrol officers use their discretion but not as part of a self-conscious attempt to propose standardized treatments and then subject them to empirical evaluation.

In the absence of scientific attempts to identify, analyze, and validate much of what experience has taught patrol officers, practitioners currently must rely on what they have learned by listening to old hands in their agency or through their acquisition of personal experience. As Bayley and Bittner (1984, 47) observed almost thirty years ago, those interested in improving the quality of police work stand to gain much by using systematic ways to identify and test scientifically the “operational imperatives” that officers consider important in their daily work dealing with the public.

Like a good marriage, the willingness of both partners to consider alternative perspectives on any given issue before making judgments is an important criterion for success. In this regard, proponents of science or craft should not just assume that one is more effective than the other in leading to desirable outcomes. This leads craft or science to merely proselytize to one another rather than using evidence and reason to try to resolve where their differences lie. Thus, it would be fruitful for those interested in improving police work to compare police discretion that is exercised using science to police discretion exercised using craft (and some combination of the two).

One could envision an experiment that uses a variety of treatment conditions. Some officers could be provided with access to scientific knowledge that they are prepared to use in concert with the kind of “computer-aided discretion” model espoused by Sherman and discussed earlier. Officers assigned to this group would be required to have their discretion governed by scientific findings. In responding to a particular situation, such as a domestic dispute, a computer would advise officers about the preferred strategy given their answers to a set of relevant questions that might include the offender’s prior record and the seriousness of the offense.

A second treatment condition might be a special training and supervision program that brings out the best of what craft has to offer. Bayley and Bittner (1984, 54) propose such a model when they recommend that those officers identified as master craftsmen or women are used to train their peers on those skills they consider most important to producing high quality police work. Supervision by these experienced and respected craftspeople might include regular debriefings, especially following situations that an officer found particularly challenging. Their purpose would be to allow officers to discuss and seek counsel on their decision-making process, including the accuracy of the initial diagnosis of the situation, the appropriateness
of the goals being pursued, and the strengths and limitations of the tactics used for their accomplishment.

A third treatment condition could be a hybrid approach, where officers are exposed to scientific evidence and are prepared to use it, but they are also exposed to the best that craft has to offer. These officers are then given the freedom to fashion their actions to best fit particular circumstances. The control condition would be that the department provides no more guidance than is usually available to officers through its existing rules, training, supervisory practices, and performance review process.

The experiment could be designed to measure a range of outcomes, including reductions in crime and disorder and also citizen satisfaction or alienation. Thus, information could be provided not just on which of these approaches is more likely to produce desirable results, but which of these produces more desirable results.

The experiment should also incorporate a process evaluation for patrol officers to provide feedback to researchers about how well each method worked and what were the most helpful or difficult aspects of doing each. In addition to helping illuminate why a particular innovation did or, as importantly, did not work (since information about failures is equally valuable to advancing reform), this feedback can open up potentially fruitful avenues for future scholarly inquiry (Willis and Mastrofski 2011). Moreover, here craft might be particularly useful in identifying the specific circumstances under which one response is likely to be more or less effective. Replications of the Minneapolis experiment on domestic violence showed that the effects of arrest depended on the status of offenders and the degree to which they experienced procedural justice (Sherman 1992), but similar insights can be revealed by tapping frequently and systematically into the rich vein of practitioners’ experiences and then testing them.

But it is not just the offender who matters in predicting outcomes. Ethnographies and surveys reveal that officers generally believe that what works best for one officer might not work well for another based on the skills and characteristics of the individual officer doing the job (Muir 1977; Mastrofski, Willis, and Revier 2011). These characteristics include an officer’s gender, amount of experience, physical size, and verbal facility. Identifying and then using science to measure these interactive effects might reveal that different officer styles are equally effective and therefore provide a range of alternative responses from which to choose. In turn, such customization of responses could increase the prospects that any research would actually be incorporated into officers’ daily decision making by eschewing a one-size-fits-all approach (Bayley and Bittner 1984, 51). In short, validating what works, under what conditions, and by whom would help strengthen the bond between science and craft by serving the needs and perspectives of front-line workers directly.

In doing so, it would redress a current imbalance in police research that tends to focus on the kinds of program evaluations that are more relevant to policymakers and police managers than street-level decision makers (Thacher 2008).

Deciding on the Right Thing to Do

The marriage between science and craft could be further improved by partisans from both sides working more closely together to help police officers deliver more justice than is currently on offer. To date, social scientists have commonly ignored the fundamental normative component to assessing the quality of work that street-level patrol officers perform, preferring to focus on explaining and predicting variations in what police do and how they do it (e.g., use of force, arrests). This trend toward separating fact from value, or how much from how well, extends back at least as far as Max Weber, who asserted that while science could offer factual statements and causal explanations, it was incapable of resolving questions about important public values
or about “what ought to be” (Thacher 2006). According to Weber, answers to these questions ultimately depended on one’s particular moral or political outlook and could not be validated empirically. The problem here, of course, is that measuring the quantity of police work an officer performs tells us very little about its quality, or whether or not an officer uses his or her discretion to do the right thing. A consequence of this traditional divide is that science is virtually silent on those aspects of police work that matter most to police leaders, their officers, and the communities they serve. This is a major oversight. Over the last few decades, many police leaders have demonstrated a clear commitment to promoting better policing (Bayley 2008), patrol officers have expressed interest in more sophisticated approaches to assessing their performance than simple tallies of work outputs (Mastrofski, Willis, and Revier 2011), and research has shown that citizens care mightily about the quality of treatment they receive in their personal encounters with police officers (Tyler 2004; Bottoms and Tankebe 2012). Surely as researchers we can do more to learn from patrol officers and help them make better choices.

Take, for example, two patrol officers responding to a dispute between two neighbors in an apartment building. A complainant is upset that the woman living in the adjacent apartment, who may or may not be suffering from mental illness, has been pounding on her door with a flat iron and physically threatening her. When questioned, the woman with the flat iron says she is frustrated by the complainant’s tendency to slam her door when entering and leaving. The officers express puzzlement that this should be the cause of so much hostility, but they do not explore this in detail with the second neighbor. They advise the complainant that she should get a summons, and advise the second woman that she could also get a summons but that she is not allowed to take the law into her own hands and retaliate by damaging the complainant’s door. When she remains defiant, they tell her that if they have to return that night, she will be taken down to the precinct. Having given this warning, the officers leave, disposing of the flat iron in a nearby trash can as they wait for an elevator. The entire encounter lasts less than ten minutes.

This is the kind of run-of-the-mill dispute that characterizes everyday police work, but what is the best response in this particular case? Is it delivering a sense of justice to the citizens involved? Resolving the underlying cause of the dispute? Giving these citizens the capacity to solve this problem without summoning the law? Making costly police resources available to those who are in greater need of police services? This dispute is taken from a video clip5 of an actual incident, which my colleagues and I showed to...
patrol officers as part of a study examining how they judge the quality of the work that they perform (Willis et al. 2011). What we discovered was that there was little consensus about what constituted good police work, suggesting that at present work quality at the street level is left largely to the will and skill of the individual patrol officer.

While it is impossible to generalize from a study of a single department, officers’ responses to this clip appear to indicate that existing mechanisms may not be doing a very good job of promoting and advancing a common vision of what constitutes good policing. There are good reasons for this. Available options for offering practical guidance, namely, bureaucratic rules and laws and, as has been identified here, increasing scientific knowledge, can offer only partial solutions as they are challenged by their general qualities (Marx 2006, 280). The art of street-level decision making is in figuring how, if at all, these can be applied to the contextual richness of individual cases where information is often limited, inchoate, and conflicting, and where there is pressure to act quickly (Schon 1983). The advantage of craft is that it provides a stock of knowledge acquired through years of handling many different situations and contingencies, and yet this source is seldom tapped systematically and made available as a source of guidance. What is more, science can play an important role in this process.

Take the disgruntled neighbor scenario described above. The video clip could be shown to a group of officers who have been recruited for their skillful work. They could be asked to judge the quality of the officers’ response in the clip and to identify the strengths and weaknesses of the approach on display. A police researcher could play a useful role in this process by helping identify and clarify the major concerns that arise. Based on what we heard during our interviews, these might include a range of dimensions as shown in the table on this page.

Working in this collaborative environment, the group could then be asked to identify more or less desirable responses, with the researcher offering insights based on scientific theory and evidence, particularly regarding potentially harmful consequences. It would also be necessary to try to establish priorities among these criteria in order to make their application useful to others, a tough challenge but one that it is still possible. Studies on the craft-based culture of policing have often examined its undesirable or negative features, such as

<table>
<thead>
<tr>
<th>Possible Dimensions for Measuring Quality of Police Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Procedural justice</strong></td>
</tr>
<tr>
<td><strong>Problem diagnosis</strong></td>
</tr>
<tr>
<td><strong>Safety and order at the scene</strong></td>
</tr>
<tr>
<td><strong>Lawfulness of response</strong></td>
</tr>
<tr>
<td><strong>Distributive justice</strong></td>
</tr>
<tr>
<td><strong>Economy</strong></td>
</tr>
<tr>
<td><strong>Prospects for future risk</strong></td>
</tr>
</tbody>
</table>
alienation from the department hierarchy or hostility toward the public, but ethnographies show that good officers develop intellectual and moral virtues that help them weigh the exigencies of any given situation and make sophisticated judgments about the best thing to do (Muir 1977, 189–224). Providing a forum that encourages thoughtful deliberation about these judgments and the trade-offs they imply would help clarify priorities among different value systems. Anticipating potential conflicts ahead of time would also help guide discretion in the field, as trying to resolve these while under pressure to act quickly is very difficult. In the case of the disgruntled neighbor, while the officers were certainly attentive and polite, a persuasive case could be made that their gracious and efficient manner took undue precedence over efforts to minimize the possibility of future conflict. In our interviews, some respondents were surprised that the officers seemed satisfied with leaving the problem in the same state they had found it. There will certainly be disagreements about how to best handle these kinds of disputes, but, by identifying what the relevant values are in a particular context, exploring their meanings, and clarifying which should take priority, it should be possible to justify some responses as superior to others. Furthermore, acknowledging where the tensions lie between different uses of discretion and identifying acceptable levels of compromise would also help inform decision making.

Police leaders, especially chiefs, first-line supervisors, recruit trainers, and field training officers, should play a key role in this process. Through their participation, they can help establish the important public values that the organization should pursue and inspire others to embrace them. What is often lost in discussions about science’s role in governing practice is the vital contribution a coherent and enlightened philosophy can make to police work, and yet it is a valuable leadership trait for those in authoritative positions to establish the cultural tone of their organization by advancing a view of good policing that is transparent both to employees and to the public (Bass 1998).

The next important step would be to subject these standards to empirical testing before coming up with a strategy that allows for them to be applied in an operational setting (Mastrofski 2007). It might be possible, for example, to construct a checklist that promotes memory recall about what is important and why and also helps improve consistency, a key element of craft (Gatawande 2009; Kritzer 2007). While guidelines cannot account for every contingency and will sometimes not work as intended, by providing structure they can increase the likelihood that patrol officers will use their discretion in desirable ways (Kelling 1999). This approach to mobilizing craft could be used for a variety of encounters that are selected for being particularly problematic (like various domestic disputes), or because they are commonplace (traffic stops, for example). The availability of body cameras easily allows for this kind of naturalistic observation, as well as opportunities for supervisors to give feedback on officers’ performance before and after the implementation of this discretionary tool.

**Conclusion**

I have suggested that we want our police officers to act wisely and well, doing the kind of job that makes us step back in admiration at their capacity to make good judgments. Undoubtedly there are some officers who prompt this reaction, so perhaps it makes sense to take greater advantage of the insights they have to offer and to do more to assess their effects. The evidence-based movement has captured the attention of government and generated excitement about the possibilities for reform, so this is a good time to use science to cultivate and test what accumulated experience has to offer. Oscar Wilde once remarked that the proper basis for marriage was mutual misunderstanding, and that happiness could not be found within its bounds. This
does not have to be the case for craft and science, with one looking past the other and lamenting missed opportunities. A fuller appreciation of the qualities each brings to the other promises a much more satisfying and enduring relationship.

Advancing reform in ways that police administrators, officers, researchers, and ordinary citizens all care about requires that we focus on what can be gained by strengthening this union and not on the differences that divide it.

I would like to thank David Weisburd and Cynthia Lum for their thoughtful comments on the science and craft of policing. A special note of gratitude goes to Stephen Mastrofski, the voice inside and outside of my head always pushing me to think harder. His comments on earlier drafts on this essay were invaluable. Finally, I appreciate the assistance of Mary Malina, Police Foundation communications director, who oversaw this essay’s production. Any errors that remain are my own doing.

References


Mastrofski, Stephen D., James J. Willis, and Lauren Revier. 2011. Results of a survey on high quality policing in Manassas City, VA. Fairfax, VA: George Mason University, Department of Criminology, Law and Society.


Willis, James J., Stephen D. Mastrofski, Jillian Baird, Lauren Revier, Terri Hines, and Tal Jonathan. 2011. Results of interviews on high quality policing in Manassas City, VA. Fairfax, VA: George Mason University, Department of Criminology, Law and Society.

ABOUT THE POLICE FOUNDATION

The Police Foundation is a national, nonpartisan, nonprofit organization dedicated to advancing innovation and science in policing. As the country’s oldest police research organization, the Police Foundation has learned that police practices should be based on scientific evidence about what works best, the paradigm of evidence-based policing. Established in 1970, the foundation has conducted seminal research in police behavior, policy, and procedure, and works to transfer to local agencies the best new information about practices for dealing effectively with a range of important police operational and administrative concerns. Motivating all of the foundation’s efforts is the goal of efficient, humane policing that operates within the framework of democratic principles and the highest ideals of the nation.

DIVISION OF RESEARCH, EVALUATION, & PROFESSIONAL SERVICES

Karen L. Amendola  
Chief Operating Officer

David Weisburd  
Senior Fellow

Garth den Heyer  
Senior Research Fellow

Travis Taniguchi  
Senior Research Associate

Edwin E. Hamilton  
Professional Services Director

Emily Owens  
Research Fellow

Adam Kaufman  
Research Assistant

Mary Sigler  
Research Assistant

Maria Valdovinos  
Research & Administrative Coordinator

RESEARCH ADVISORY COMMITTEE

David Weisburd, Chair  
Hebrew University and George Mason University

Anthony A. Braga  
Rutgers University and Harvard University

Robin S. Engel  
University of Cincinnati

Christopher Koper  
George Mason University

Jerry H. Ratcliffe  
Temple University

BOARD OF DIRECTORS

Chairman  
Weldon J. Rougeau

President  
James Bueermann

George H. Bohlinger III

Clarence Edwards

Dean Esserman

Paul Helmke

Julie Horney

William H. Hudnut III

Jonathan Knowles

Mark S. Mellman

W. Walter Menninger

Elsie L. Scott

Andrew L. Sonner
Calibrating Hot Spots Policing for Deterrence and Prevention

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

CEBCP Evidence-Based Policing Leadership Training for Supervisors
January 24, 2014

Crime Concentration and “Hot Spots”

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

- (e.g., Sherman 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, 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

• Braga et al. review of 19 rigorous studies focused on hot spot “places” (as of 2010)
  — Strategies included directed patrol, crackdowns, problem-solving
  — Crime reductions in 20 of 25 tests
  — Diffusion of benefits to nearby areas more likely than crime displacement

Source: Braga et al. review for Campbell Collaboration (2012)

Using Patrol at Hot Spots

• Minneapolis Hot Spots Experiment
  — Based on 110 hot spots
    • Address clusters with 20+ calls for “hard” crime per year
    • Accounted for 11% of all calls
    • Places where crime occurred in public
  — Increased patrol presence at 55 randomly selected hot spots—intensified, intermittent patrol
    • Officers spent additional time at locations between calls

Source: Sherman and Weisburd (Justice Quarterly, 1995)
Experimental Hot Spots Improved Relative to Control Hot Spots

Changes in Crime

- Control
- Exp.

Optimizing Patrol Time in Hot Spots

- Is there an optimal length of time for police to stop in a hot spot?
  - Maximize effectiveness and efficiency

- Analysis of 17,000 drive-bys and patrol stops at hot spots and subsequent crime / disorderly behavior (Minneapolis data)
  - Do stronger dosages (longer stops) reduce crime and disorder?
  - Is there a point of diminishing returns?

Effects on Crime and Disorder Maximized by 14-15 Minute Stops

Source: Koper analysis of Minneapolis hot spots data (Justice Quarterly, 1995)
Likelihood of Crime or Disorder Within 30 Minutes of Police Presence

Source: Koper (Justice Quarterly, 1995)

Implications

- Police can maximize deterrent effects of patrol by making proactive 10-15 minute stops at hot spots on random, intermittent basis
- Reorient patrol around hot spots

Sacramento Patrol Study Using the “Koper Curve”

- 90-day hot spots experiment
- Officers conducted 12-16 min. stops at assigned hot spots every 2 hours on avg. (3-4 visits per day)
- Normal patrol (no overtime or special units)
- Compared 21 test hot spots to 21 with no extra patrol time

Study by Telep, Mitchell, and Weisburd (Justice Quarterly, 2012)
Experimental Hot Spots Improved Relative to Control Hot Spots

Changes in Crime (Sacramento results)

- 20%
- 30%
- 10%
- 0%
- -10%
- -20%
- -30%

Calls for Service
Part I Crime

- Control
- Exp.

Shorter, More Frequent Visits May Generate Greater Deterrence

<table>
<thead>
<tr>
<th>Study and Intervention</th>
<th>Daily Dosage</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minneapolis: Intermittent visits and drive-bys</td>
<td>2-3 hours</td>
<td>Total calls down 11% Soft crime calls down 12%</td>
</tr>
<tr>
<td>Number and length of visits variable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sacramento: Intermittent 12-16 minute stops</td>
<td>75-1 hour</td>
<td>Total calls down 17% Serious crime reports down 41%</td>
</tr>
<tr>
<td>3-4 stops per day (avg.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Other Guidelines for Calibrating Hot Spots Patrol

- Fixed, extended presence inefficient
- Daily regularity may enhance deterrence
- Patrol style and use of technology matter and can be tailored to type of hot spot
  - Slow roving versus fixed surveillance
  - Use of license plate readers
- Can apply well to suburban settings also
Jacksonville Study of Problem-Solving and Directed Patrol at Hot Spots of Violence

- 83 violent crime hot spots assigned to one of three conditions for 90-days in 2009
  - 22 Problem-oriented policing (POP) hot spots
  - 21 Saturation / directed patrol hot spots (extra patrol at high-risk times)
  - 40 Control hot spots (normal operations)

Study by Taylor, Koper, and Woods (J of Experimental Criminology, 2011)

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

- Social services 3%
- Aesthetic 9%
- Code / nuisance 6%
- Community organizing 15%
- Investigation / enforce 7%
- Business 14%
- Rental 6%
### 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
  - Nuisance abatement/code enforcement, targeted investigation, and situational crime prevention most effective
  - JSO has continued strategy (40-officer unit)

### Institutionalizing Problem-Solving at Hot Spots: “Case of Places”

- Method for tracking problem places—focus investigative and other resources
  - Crime history
  - Identify key actors, locations (addresses), environmental conditions
  - Police, government, and community information
  - Diagnose problems and develop responses
  - Record police and community actions and results
- Tool available from CEBCP
Implementing Hot Spots Policing

- Need geographic crime analysis based on both recent and long-term patterns
- Reorient patrol to hot spots (problem blocks, intersections, places)
  - Use 15 minute stops
- Use problem-solving at hot spots for larger and longer-term crime reductions
  - Short and long-term responses
  - Multi-agency
- Collect better data on places

Contact information:

Dr. Christopher Koper
Associate Professor
Center for Evidence-Based Crime Policy
Department of Criminology, Law and Society
George Mason University
ckoper2@gmu.edu
(703) 993-4982

CEBCP website: http://cebcp.org
JUST ENOUGH POLICE PRESENCE: REDUCING CRIME AND DISORDERLY BEHAVIOR BY OPTIMIZING PATROL TIME IN CRIME HOT SPOTS
Dr. Christopher S. Koper (George Mason University)

SUMMARY
This study examined the residual deterrence effects of police patrols in hot spots, or small clusters of high crime addresses. Residual deterrence in this study represents the continuing deterrent effect that police presence has on disorderly and criminal behavior after police depart from a location. This study was based on three concepts: (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 examined 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. Survival analysis methods were used 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. The likelihood of criminal or disorderly behavior occurring within 30 minutes after a police drive-by was 16%; for stops of 10-15 minutes, this was reduced to 4%. 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. The study did not address the types of activities conducted by officers at hot spots.

Reference:
Police interventions focused on “hot spots”—small geographic places or areas where crime is concentrated—have gained widespread acceptance as an effective approach to reducing crime. However, practitioners and researchers are still learning about what types of strategies and operational dosages work best for different types of hot spots. To address this issue, the Jacksonville Sheriff’s Office (JSO) teamed with outside researchers on a project to test the effectiveness of problem-oriented policing (POP) and directed saturation patrol at hot spots of violent crime.¹

Using data from a two-and-a-half-year baseline period, crime analysts and the research team identified 83 precisely defined hot spots of street violence in Jacksonville (excluding intimate partner violence). These “micro” hot spots, which averaged 0.02 square miles in size, consisted of specific addresses, intersections, street blocks, and clusters of blocks that exhibited high and consistent concentrations of violence during the selection period. These hot spots were randomly assigned to problem-solving activities (22 locations), directed saturation patrol (21 locations), or routine/“control” operations (40 locations) for a 90-day experiment 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 patrols during high-crime 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 for periods that ranged from less than an hour to several hours (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.

The analysis of the program’s impacts, which controlled for preintervention 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 percent in the directed saturation patrol locations during the intervention period, this reduction could not be 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 percent 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 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.

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 possibilities. 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. While this strategy may produce some benefits, other patrol methods can be more efficient. Other studies suggest, for example, that officers can significantly reduce crime at hot spots just by making periodic 10-15 minute stops at these locations. Assigning patrol officers or special units to work multiple hot spots in this manner may therefore be one way to optimize patrol time and coverage across numerous hot spots.

JSO has committed itself to building on the study’s results by establishing a permanent 40-member unit that does full-time problem solving at violent crime hot spots. JSO has continued to refine this strategy through more extended POP efforts (longer than those used during the initial 90-day study), enhanced training, and ongoing assessment of results. JSO’s experience reflects the potential rewards of translating research into practice.

Action Items:

1. Identify precise micro hot spots. Focusing on the blocks, intersections, and clusters of blocks at highest risk will help officers to identify tangible problems at these locations while maximizing the deterrent effects of patrol.
2. Assign teams of officers and crime analysts to study problems at hot spots and devise responses. Give appropriate emphasis to fully dissecting problems and developing both traditional and non-traditional responses. Assigning officers to this work full time can be beneficial.
3. Use short, intermittent stops at hot spots to maximize patrol effectiveness and efficiency while avoiding unnecessarily long saturations.

Notes:

1. For a more detailed discussion of the study summarized here, see: Bruce Taylor, Christopher S. Koper, and Daniel J. Woods, “A Randomized Control Trial of Different Policing Strategies at Hot Spots of Violent Crime,” *Journal of Experimental Criminology* 7, no. 2 (June 2011): 149-181. This work was supported by a grant from the Bureau of Justice Assistance (U.S. Department of Justice). The authors also thank Matt White, Daniel Woods, and members of JSO’s Operation Safe Streets team for their contributions to the project’s development, implementation, and analysis.


Please cite as:


From The Police Chief, vol. LXXX, no. 10, October 2013. Copyright held by the International Association of Chiefs of Police, 515 North Washington Street, Alexandria, VA 22314 USA.
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).

1 gemini.gmu.edu/cebcp
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.


2See the Problem-Oriented Policing Center at www.popcenter.org.
TAB 4 DIVIDER HERE
back of divider
Becoming a Pracademic
Sergeant Renée J. Mitchell

Where learning occurs

[Graph showing the concepts of limit of tolerance, adaptive challenges, productive ranges of resistance, threshold of learning, and technical problem over time]


The Hero's Journey

[Diagram illustrating the stages of the hero's journey]

Additional references and notes...
**Reason for Study**

- Lay offs – lost 150 officers
- 70% of an officer's time is downtime
- Pro-activity in areas that were not hot spots
- Needed effective and efficient patrol strategy
- Improving Compstat
- Homerun

---

**Research**

- 1995 Minneapolis Hot Spot Study
- 4.7% street segments generated 50% of calls for service
- 1995 Koper Curve
- Evaluate whether directing officers to hot spots for 12-16 minutes would drive down crime and calls for service
**Study Design**

- Calls for service, Part I crimes and nuisance crimes
- Rank ordered
- Eliminated calls
- Minneapolis Hot Spot Study
- Mapped with GIS
- Study only carried out in District 3 and 6

**Study Design**

- 42 hotspots total
- Similar hot spots paired up to increase statistical power due to low sample size
- Each pair randomly assigned to treatment or non-treatment
- Study ran for 90 days – February 8 to May 8
- Officers put themselves D1HOT on a hot spot computer generated in random order for 12-16 minutes approximately every 2 hours
- Officers were given suggestions for proactivity and told to be highly visible

**Implementing the Study**

-Attended every roll call to train on how to hot spot one week before study began
-Attended two to three roll calls a week to ensure the study was running smoothly
-Sent out the weekly numbers for hot spotting
-Checked AVL to ensure that the officers were hot spotting when they said they were
Total Number of Visits

<table>
<thead>
<tr>
<th>Location</th>
<th>Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>220 Jibboom St – 430</td>
<td>7,095</td>
</tr>
<tr>
<td>301 Richards Blvd – 408</td>
<td></td>
</tr>
<tr>
<td>N. 5 St/14th St – 361</td>
<td></td>
</tr>
<tr>
<td>13th St/24th St – 378</td>
<td></td>
</tr>
<tr>
<td>1800 Capital Ave – 359</td>
<td></td>
</tr>
<tr>
<td>2838 J St – 379</td>
<td></td>
</tr>
<tr>
<td>1035 Alhambra – 361</td>
<td></td>
</tr>
<tr>
<td>5600 Folsom Blvd – 333</td>
<td></td>
</tr>
<tr>
<td>8341 Folsom Blvd – 377</td>
<td></td>
</tr>
<tr>
<td>7901 College Town Dr – 304</td>
<td></td>
</tr>
<tr>
<td>400 University Ave – 309</td>
<td></td>
</tr>
<tr>
<td>200 Biennial St – 349</td>
<td></td>
</tr>
<tr>
<td>100 Capitol Ave – 370</td>
<td></td>
</tr>
<tr>
<td>5th St/15th St – 323</td>
<td></td>
</tr>
<tr>
<td>8th St/16th St – 333</td>
<td></td>
</tr>
<tr>
<td>715 K St – 237</td>
<td></td>
</tr>
<tr>
<td>5550 Mck Blu Blvd – 359</td>
<td></td>
</tr>
<tr>
<td>6135 Stockton Blvd – 408</td>
<td></td>
</tr>
<tr>
<td>Stockton Blvd/Fruitridge Rd – 437</td>
<td></td>
</tr>
<tr>
<td>2933 65th St – 361</td>
<td></td>
</tr>
<tr>
<td>6770 14th Ave – 380</td>
<td></td>
</tr>
</tbody>
</table>

7,095 total visits
(2-8-11 to 5-8-11)

Week 1 – 446 visits (2-8 to 2-13)
Week 2 – 467 visits (2-14 to 2-20)
Week 3 – 698 visits (2-21 to 2-27)
Week 4 – 664 visits (2-28 to 3-6)
Week 5 – 521 visits (3-7 to 3-13)
Week 6 – 532 visits (3-14 to 3-20)
Week 7 – 667 visits (3-21 to 3-27)
Week 8 – 548 visits (3-28 to 4-3)
Week 9 – 526 visits (4-4 to 4-10)
Week 10 – 530 visits (4-11 to 4-17)
Week 11 – 534 visits (4-18 to 4-24)
Week 12 – 540 visits (4-25 to 5-1)
Week 13 – 432 visits (5-2 to 5-8)

Results

• Part I crimes decreased by 25% in treatment areas
• Part I crimes increased by 27.3% in non-treatment areas
• CFS decreased by 7.7% in treatment areas
• CFS increased by 10.9% in non-treatment areas
• George Mason University ran a one-tailed test in which p=0.0255 for Part I crimes and p = .0405 for CFS, which is statistically significant at a scientific level of p < .05
• Meaning you can assume with 95% accuracy that the effect of the treatment is not caused by chance
But, What If?

- Response times to CFS increase
- Pro-activity decreases
- Displacement occurs
- Online reported varied
- There is rain
### BSTOPS BY DISTRICT

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>FEB 8 - MAY 5 2016</th>
<th>FEB 8 - MAY 5 2015</th>
<th>% OF CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>762</td>
<td>909</td>
<td>-23.5%</td>
</tr>
<tr>
<td>2</td>
<td>837</td>
<td>776</td>
<td>-7.5%</td>
</tr>
<tr>
<td>3</td>
<td>683</td>
<td>608</td>
<td>-12.7%</td>
</tr>
<tr>
<td>4</td>
<td>434</td>
<td>673</td>
<td>55.1%</td>
</tr>
<tr>
<td>5</td>
<td>377</td>
<td>429</td>
<td>12.8%</td>
</tr>
<tr>
<td>6</td>
<td>1,076</td>
<td>903</td>
<td>-18.2%</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>4,191</strong></td>
<td><strong>4,039</strong></td>
<td><strong>-3.6%</strong></td>
</tr>
</tbody>
</table>

### TSTOP CITATIONS BY DISTRICT

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>FEB 8 - MAY 5 2016</th>
<th>FEB 8 - MAY 5 2015</th>
<th>% OF CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>267</td>
<td>219</td>
<td>-21.8%</td>
</tr>
<tr>
<td>2</td>
<td>267</td>
<td>219</td>
<td>-21.8%</td>
</tr>
<tr>
<td>3</td>
<td>292</td>
<td>291</td>
<td>-0.5%</td>
</tr>
<tr>
<td>4</td>
<td>302</td>
<td>158</td>
<td>92.0%</td>
</tr>
<tr>
<td>5</td>
<td>257</td>
<td>327</td>
<td>27.2%</td>
</tr>
<tr>
<td>6</td>
<td>290</td>
<td>399</td>
<td>-30.8%</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>1,630</strong></td>
<td><strong>2,137</strong></td>
<td><strong>-28.6%</strong></td>
</tr>
</tbody>
</table>
Displacement

- Ran data on 2 block area surrounding both treatment and non-treatment areas
- Did not run data on areas where catchment area overlapped
- Part I crime slightly increased in only two areas – one contained Target Store that had not been built in 2010
- CFS increased in three areas – one contained the Target Store
- Displacement was not a significant issue
**Things to Consider**

- Response times to CFS did not increase substantially
- Productivity did not decrease due to hot spotting, but actually increased
- The same number of officers worked in Districts 3 and 6 in 2011 as worked in 2010
- Displacement was not a significant issue

**More Things to Consider**

- Online reporting levels stayed the same as in previous years
- Average temperatures and precipitation levels stayed relatively the same as in previous years
- There were no changes in the hot spots’ geography from 2010 to 2011 except the addition of one Target Store
- SPD created a research design and ran a valid scientific study that has contributed to the science of policing on a national level
**Why Research Is Important**
- Need to find a way of policing that uses fewer resources but still reduces crime.
- Prevents wasted time, effort and money
- Allows officers to actually see whether something works; can help in converting officers to evidence-based policing
- Gives you a scientific argument against media, politicians and public
- Does not require a significant investment of funds – just employee resources

---

**Cost Benefit Analysis**
- Rand study - Heaton
  - Average cost of Part I crimes lowest three – Burglary, Larceny, MV theft - $8430
  - Eliminated 35 Part I crimes in 90 days
  - Saved $295,050 in costs associated with crime
  - $75,000 – cost of patrol and crime analysis
  - Increased pro-activity
  - Reduction in Crime

---

**So why should you care?**
- Money
- Crime
- Curiosity
- Oath
- Stop and Search
- Arrest
- Self-Actualization
- Boredom
If you care then here are some cautions

• Create the design with the systems you have available
• Personally verify parameters of the study
  • Train team on EBP
  • Research available
• Issue study from the Office of the Chief, not from the Sergeant of the Crime Analysis Unit
• Officer reaction
  • Don’t introduce two new ideas at once
  • Take time to train officers on theory and research

What do you need to start

• Willingness to try
• Willingness to listen
• Willingness to problem solve
• Willingness to lead and to follow
• Willingness to be uncomfortable
• Willingness to be wrong
• Willingness to make adjustments during the process
• Willingness to become a social pariah

Beginning the process with supervisors and your team – develop critical thinking skills

• Focus not on what is correct but on the thinking process – that will develop critical thinking skills
• What ideas do you have?
• What outcomes do you seek?
• What alternatives are you considering?
• What hunches do you have to explain this situation?
• How do we know what we think we know?
• Given your experience and knowledge of this problem what are some of your ideas about this?
• What are some of the benefits you will derive from this activity?
• As you anticipate your project, what are some indicators that you are progressing and succeeding?
Stuart Firestein: The pursuit of ignorance

What you know

Undergraduate

Masters

Chief

Everything

Nothing

A little

How much you know about it

A lot

• In an honest search for knowledge, you quite often have to abide by ignorance for an indefinite period of time
  - Erwin Schrödinger, 1948

Always Remember That: Failure is Simply Feedback
Questions
Sergeant Renée J. Mitchell
rjmitchell@pd.cityofsacramento.org
916-628-4055
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. 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
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

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.

<table>
<thead>
<tr>
<th>OFFICER-INITIATED ACTIVITY BY DISTRICT</th>
<th>OFFICER-INITIATED ACTIVITY BY DISTRICT - NO D HOT CALLS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DISTRICT</strong></td>
<td><strong>FEB 8 - MAY 8 2010</strong></td>
</tr>
<tr>
<td>1</td>
<td>2,913</td>
</tr>
<tr>
<td>2</td>
<td>2,864</td>
</tr>
<tr>
<td>3</td>
<td>2,861</td>
</tr>
<tr>
<td>4</td>
<td>2,224</td>
</tr>
<tr>
<td>5</td>
<td>1,860</td>
</tr>
<tr>
<td>6*</td>
<td>3,048</td>
</tr>
</tbody>
</table>

***YELLOw ROWS REPRESENT HOT SPOT PROJECT DISTRICTS***

*2011 TOTAL DOES NOT INCLUDE D HOT CALLS*

2 Ibid.


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
TAB 5 DIVIDER HERE
back of divider
Procedural Justice and Police Legitimacy

Stephen Mastrofski
Criminology, Law & Society
George Mason University

Today’s topics

• What is procedural justice?
• How is it supposed to work?
• Does it work?
• Knowing it when you see it
• Promoting it in your department

Procedural justice defined

• Police commit procedural justice when they...
  — Show the public that police use fair procedures in exercising their authority
• PJ does not depend on outcomes
  — Effectiveness in crime and disorder control
  — Fairness in the distribution
• It’s about the process
Why is procedural justice important?

• Easy to observe
  — Difficult to judge the effectiveness of a police decision
    • Was a decision not to arrest the best choice in this case?
  — Difficult to judge the equity in a given decision
    • How consistently do police treat others in the same situation?
  — Easy to judge if I was treated with fairness & respect
• Procedural fairness is a powerful sign
  — It shows the value that police place on the citizen

The bottom line

“For when the one great scorer comes to mark against your name,
He writes – not that you won or lost –
But how you played the game.”

Grantland Rice

The 4 elements of PJ

• Participation
  — Citizens allowed/encouraged to explain their situation & describe their views before police decide what to do.
• Neutrality
  — Police use legitimate evidence to decide, not personal biases.
  — Police are transparent about the basis of their decisions.
• Dignity
  — Police are polite, acknowledge citizen's rights.
• Trustworthy motives
  — Show care about citizen's well-being.
  — Show concern for society's welfare.
Procedural justice as practical communication

**Do:**
- Listen reflectively, allow venting
- Display positive body language
- Show empathy
  - “I understand”
- Explain
  - What you did & why
  - What you will do & why
  - What they can do
  - What will happen
  - Why people are treated differently
- Use names (yours & theirs)
- Say “no” positively
- Look for opportunities to help
  - Physical, emotional, information, advice
  - “Anything else that needs to be done?”

**Don’t:**
- Use police jargon or technical terms
- Be rude, obscene, dismissive
  - Be insensitive to cultural differences
- Be less considerate to lower status citizens
- Neglect witnesses, 3rd parties, bystanders
- Escalate unnecessarily
  - Use force unless necessary for control
- Be inconsistent
- Show uncaring attitude

The philosophical foundation of procedural justice

The Golden Rule

Do unto others as you would have them do unto you.

www.rcvveddaphotography.net

Theory: How PJ produces benefits

<table>
<thead>
<tr>
<th>What police do</th>
<th>How citizens feel</th>
<th>How citizens behave</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedural Justice</td>
<td>Police Legitimacy</td>
<td>Comply</td>
</tr>
<tr>
<td>Communicate fair process</td>
<td></td>
<td>Cooperate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Obey law</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Police are proper, appropriate, &amp; just</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Obliged to comply voluntarily</td>
<td></td>
</tr>
</tbody>
</table>
Where can procedural justice occur?

- General patrol
- Community policing
- Restorative justice
- Problem-oriented policing
- Criminal investigations interviews
- Interrogations
- Booking

Findings on the impact of procedural justice

- When police behave or are perceived to behave in a procedurally just fashion...
  - Citizens are more satisfied with police, have greater confidence & trust
  - Citizens perceive police as more legitimate
    - PJ is usually more influential than outcome effectiveness or distributive justice
  - Citizens are more compliant & cooperative
  - Citizens are less inclined to reoffend
    - Marginal effect

Mazerolle et al. 2013, Legitimacy in policing: A systematic review

Balance sheet on procedural justice

Benefits (validated)
- Less resistance to police
- More compliance
- More cooperation
- Fewer complaints against police
- Public feels better about police
- Less reoffending

Risks (unvalidated)
- Officer safety
- Some citizens immune to its effects
- Takes more time
- Can be deceptive and abused
- Point of diminishing returns
Procedural justice exercise: Neighbor dispute

- Rate officers’ PJ in video
  - Each of 4 PJ elements
  - Overall PJ performance
- Would more PJ be desirable in this situation?

Implementation issues:
Making PJ work for your department

- Recruitment
  - What kind of people are good at PJ?
- Training
  - Less theory, more practice
  - But base curriculum on scientific evidence
- Supervision
  - Rookies
  - Old dogs, new tricks
- Monitoring performance
  - Officer feedback
  - Citizen feedback
- Community education

Conclusion

- Procedural justice is a very promising strategy
- Presents challenges for departments to develop and implement
- Consider using your department as a site to learn what works and what doesn’t
  - More involvement of supervisors and rank-and-file
  - Use researchers to assist in evaluation
  - Contribute to evidence-based policing
PROCEDURAL JUSTICE RATING SHEET

*Neighbor Dispute (“Knife fight”)*

1. Rate the officers’ use of procedural justice toward the two sisters they encountered, one arrested (blue shirt) and the other threatened with arrest (yellow shirt). Then rate the officers’ performance on the other two criteria of safety and problem solving.

<table>
<thead>
<tr>
<th>Performance Element</th>
<th>Unsatisfactory</th>
<th>Satisfactory</th>
<th>Good</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participation:</strong> The officers’ encouragement of the citizen to tell her side of the story?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Neutrality:</strong> Officers’ display of neutrality? (Neutrality means avoid showing personal bias, no decision until all viewpoints heard, explain decisions)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Respect:</strong> Officers’ show of respect &amp; absence of disrespect (Using respectful language, calling people by their name, calm voice, not making fun of the citizen, avoiding disrespectful gestures, attentive listening)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Trustworthy motives:</strong> Officers’ show of concern for citizen’s well-being and worthy goals. (Examples: comforting, reassurance, fulfill citizen’s requests for help, friendly advice, appeal to desirable societal goals)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**OVERALL PROCEDURAL JUSTICE SCORE**
(Weight the 4 elements as you see fit).

2. Would engaging in more procedural justice have been a good idea or a bad idea for these officers? Why?
Procedural Justice: Some Suggested Resources

Provided by: Prof. Stephen Mastrofski, Center for Justice Leadership & Management, George Mason University, 4400 University Dr., MS 4F4, Fairfax, VA 22030  smastrof@gmu.edu

Overview of the theory and research literature on procedural justice


Tactical issues


Training


**Supervision and management**


**Performance evaluation**

The Paradox of American Policing: Performance without Legitimacy

The 2004 National Academy of Science report on policing argued that in recent decades the objective quality of policing in America has improved. The police are more effective in fighting crime; they are less corrupt; and they are less likely to engage in unprofessional acts such as unlawfully shooting civilians. While there are many ongoing issues involving police performance, in particular in terms of their relationship with minority communities, the overall impression given by the report is of increasingly professional and effective police departments and of more and more sophisticated policing practices. There is indeed a new professionalism in policing and it benefits all people who deal with the police.

These increases in the objective quality of policing notwithstanding, the other consistent finding of studies of the police is that in the last 30 years public support for the police—often indexed as “confidence” in the police—has been more or less unchanged. The percentage of Americans expressing confidence in the police between 1980 and 2009 has generally ranged between 50 and 60 percent. In 2009, it was at 59 percent (U.S. Department of Justice).

Similarly, there has been a large and persistent racial gap in confidence. In 2000, a national Gallup poll suggested that Whites were 27 percent more likely to express confidence in the police, while in 2009 a national Department of Justice survey reported that Whites were 26 percent more likely to express confidence in the police. Meanwhile, a 2007 Pew Research Center study suggested that Whites are 29 percent more likely to have confidence that the local police will enforce the law; 29 percent are more likely to say that the police will not use excessive force; and 30 percent are more likely to say that the police will treat all races equally.

This discrepancy between the improving level of police performance and generally unchanging levels of public support suggests the need to focus on what shapes public views about the legitimacy of the police. If public confidence in the police is not linked to objective performance, the nature of confidence needs to be addressed as a distinct question in and of itself. That issue is: What is the basis of perceived police legitimacy?

Understanding how public views about police legitimacy form and change can provide us with a new framework through which to evaluate policing policies and practices. That framework is the lens of public views on police legitimacy.

The theoretical basis for current policies

Current policing policies and practices reflect a psychological framework of social control referred to as deterrence: the use of the threat of or use of punishment to motivate behavior. This model shapes how the police behave in their everyday interactions with the public; it supports policies such as racial profiling, zero tolerance policing, and the massive use of arrest and incarceration as a law enforcement strategy. Research suggests that this model is false and that it is simply not the case that punishment—real or threatened—is the best mechanism for effective policing. This is true both because punishment is not the best way to achieve
compliance and because its use undermines willing deference and voluntary compliance, both of which greatly aid the police in performing their jobs.

In the last 20 years, research has shown that people obey the law and cooperate with legal authorities if and when they view legal authorities as legitimate. That legitimacy, in turn, is a product of how the police treat people when they are exercising their regulatory authority. Fairness in decision-making, i.e. neutral and nondiscriminatory behavior, is key to being viewed as legitimate. Realizing that the fairness of police behavior—not the fear of police force and the threat of punishment—creates legitimacy, and through it drives public actions has dramatic implications for a range of policing policies such as racial profiling and zero tolerance policing.

There is need for a new approach to policing in America. The framework of policing needs to focus upon how policing policies and practices affect public views about police legitimacy. The police need to select, train, and reward officers with an eye to those whose encounters with the public build legitimacy—a focus that leads to concerns about the quality of people’s experiences, not just their outcomes. Even legally trivial interactions, i.e. situations in which a person is not arrested or incarcerated, can have a strong influence on people’s views about the police.

This framework further suggests that we need to measure police legitimacy when evaluating the police and policing practices, not just arrest or clearance rates. This argument involves accountability to the public. It suggests that accountability involves focusing on how the public evaluates the police and then building policies and practices that reflect this public conception of justice and accountability. And studies clearly suggest that the public holds the police accountable for delivering justice.

Legitimacy as an issue

To address the question of the legitimacy of the police and policing practices among members of the public, we need to think about policing in a new way. We must focus on the influence of police policies and practices and on the views that the public has about police legitimacy.

How do people evaluate police practices?

From a legitimacy perspective, we should treat every encounter that the public has with the police, the courts, and the law as a socializing experience that builds or undermines legitimacy. Every experience is a teachable moment and the question is what the public learns. And, to know that we need to consider which aspects of people’s personal experiences the public considers when reacting to encounters with police officers.

What does research tell us about how people evaluate their personal experiences with the police? Fortunately, there are a number of research studies that explore personal experiences with the police. These studies show that the primary issue shaping people’s reactions to personal encounters with the police is whether or not the police exercise their authority in fair ways, something referred to as procedural fairness.

The importance of legitimacy

Why do we care how people end up feeling about the police? Success in policing efforts depends upon gaining supportive public behavior. This includes the compliance with police orders already discussed. In fact, police researchers have noted that skill in “handling the rebellious, the disgruntled, and the hard to manage” in ways that lead to compliance is the litmus test of the quality of a street officer’s performance. Based upon observational data studies estimate that the general public noncompliance rate when dealing with the police is around 22 percent. Such public behavior depends upon how members of the public perceive the police and interpret police behavior. If people evaluate police policies and practices as procedurally fair, they view the police as legitimate and accept their decisions.

More broadly, public judgments matter because the law relies upon widespread voluntary public compliance with the law and cooperation in police efforts to fight crime. Other studies suggest that such general compliance and cooperation is linked to overall assessments of the procedural fairness of policing policies and practices through the role of such judgments in shaping people’s judgments about the legitimacy of the police. Justice leads to legitimacy, which promotes compliance and cooperation. Hence, it is also important that those members of the public who have little or no personal contact with the police and the courts believe that those
authorities generally exercise their authority through fair procedures.

*Changing police practices*

Can the police implement changes and develop practices that lead them to be viewed as fairer? The answer is clearly yes. First, the changes in police procedure needed are simple and easy to implement. They involve learning to provide people with opportunities for explanation before decisions are made; explaining how decisions are being made; allowing people mechanisms for complaint; and in particular treating people with courtesy and respect. These changes are inexpensive. Certainly in comparison to the costs of putting more officers on the streets or buying new technologies, these programs would be low cost. Hence, these low-cost, high-impact changes are a smart use of limited policing funds.

*Conclusion*

This is an ideal moment to consider transforming policing. If we put into place policies that encourage an approach to communities, particularly the minority community, in which public views are central, we are addressing the concerns of both the minority and the majority population. We can build upon that approach through adopting policing styles that motivate voluntary acceptance and willing cooperation on the part of the public.

—Tom R. Tyler, Ph.D.

Professor and Chair, Psychology Department
New York University

In collaboration with

-- Albert. A. Pearsall, III

Senior Policy Analyst
The COPS Office
TAB 6 DIVIDER HERE
back of divider
Research Evidence for Supervisors: Use of Force and Police Pursuits Policies

Evidence-Based Policing Leadership Training

George Mason University
January 24, 2014

Geoffrey P. Alpert
University of South Carolina
and
Griffith University
Brisbane, Australia

Mind the Gap:
Researchers and Practitioners

• Looking at Use of Force/Emergency Driving

  • What information do agencies measure and maintain?
  • What do we know about these events, and how do we know it?
  • What we are not going to do today is go over data from other agencies, these are readily available in the academic and professional literature
  • What we are going to discuss is the importance of research evidence

Use of Force

Most reports are limited to the versions presented by the involved officers (sometimes supervisors)

Use of Force vs Response to Suspect Resistance
Use of Force

What type of investigation is conducted on these events, and who conducts them?

What elements of the event are captured in these reports?

What is done if there are inconsistencies?

Use of Force Information

- Force/Resistance Statement must include:
  - Detailed Account of the Incident
  - The Reason for the initial police presence (call or observed)
  - Detailed description of the acts that led up to the use of force/resistance
  - Level, type and justification for each use of force/resistance
  - Levels and types of resistance by suspect
  - Did investigators use leading questions
  - Did the officer use conclusory statements without supporting detail, including “boilerplate” or “policy” language

Use of Force Information

- Do the injuries appear proportionate to the use of force described
- Summaries of subject, witness and officer statements (available identifying information for anyone who refuses to provide a statement)
- Was the suspect examined for injuries
- Was the suspect interviewed for complaints of pain after advising the subject of his/her rights
- Did the subject receive medical attention from an appropriate medical provider
Use of Force Information

- Are there any audio and video recordings or photographs
- Photographs of injuries or the absence of injuries
- Were officers involved in a use of force incident separated until interviewed
- Interviews with civilian witnesses were recorded
- Follow-up interviews with officers were recorded

Why Collect this Information

- Policy Considerations
- Training Concerns
- Equipment modification
- Discipline
- Defense of Law Suit

Create a Data Base

- These data can be added into the current use of force data base or can be used to track trends, practices and de facto policies.
- Analyses of these data can provide you with an understanding of what your officers are dealing with and how they respond.
Trends, Practices and de Facto Policies

- Severity of suspect’s behavior (crime)
- Whether the Suspect Posed an Immediate Threat to the Safety of the Officer or Others
- Whether the Suspect was Actively Resisting or Attempting to Evade Arrest by Flight

Trends, Practices and de Facto Policies

- Are there people, places or circumstances that can explain suspect resistance/officer use of force?
- Use of a Force Factor Analysis

Emergency and Pursuit Driving

- Data issues surrounding driving and force are very similar
- Collection and use of these data help determine trends, practices and de facto policies
Emergency and Pursuit Driving

- How does your agency balance the need to immediately apprehend suspect with risk to the community?
- How does your agency balance the need to take risks to respond to an emergency call for service?

Pursuit Driving

- Judgmental
  - Officers and supervisors consider elements of need to apprehend and risk and determine whether to chase or terminate
- Restricted
  - The policy restricts pursuits to a pre-determined type of offense or other conditions

Pursuit Driving

- Pursuit driving involves several agency considerations:
  - Policy
  - Supervision
  - Training
  - Accountability
Trends, Practices and de Facto Policies

• Are there people, places or circumstances that can explain negative outcomes of pursuits or emergency runs?

• What is the message you want to send to your community and officers?

The Data

• If you only collect information on crashes – it will appear that all your pursuits result in a crash.

• Logically, if you keep data on every time a person flees or does not stop when emergency equipment is initiated, then you will have a data set that shows true percentages of risk.

Emergency and Pursuit Driving

Survey of more than 1,000 officers in Minnesota involved in more than 10,000 pursuits. 9% resulted in police car crashing, 34% resulted in suspect’s car crashing.

Officers reported that in town, a fleeing suspect would slow after 2 blocks once the lights were turned off. On freeways, the officers reported that the suspects would slow after 4 miles.

These opinions mirror those of suspects who have fled from the police.

Emergency Driving

• Survey of more than 2,000 officers found that: .01% of all emergency runs made a critical difference in the outcome of an emergency situation.

Almost 500 resulted in a crash

Suspect Behavior During a Pursuit

• Surveys and interviews with officers and suspects have informed us that after the police turn off emergency equipment, the suspects will quickly slow down.

• StarChase technology has provided scientific proof that suspects slow down quickly after the lights and sirens are turned off

Summing Up

• Evidence from your own and surrounding agencies can help paint the picture of responses to suspects and suspect behavior
Police Pursuit: Policies and Training

by Geoffrey P. Alpert

The basic dilemma associated with high-speed police pursuit of fleeing suspects is deciding whether the benefits of potential apprehension outweigh the risks of endangering police officers, the public, and suspects in the chase. The issues addressed in a comprehensive National Institute of Justice (NIJ) study of police pursuit echo those discussed in research on police use of deadly force: On the one hand, too many restrictions placed on police use of pursuit could place the public at risk from dangerous individuals escaping apprehension. On the other hand, insufficient controls on police pursuit could result in needless accidents and injuries.

Until now research on police pursuits has focused on in-depth studies of single agencies or studies based on limited data from multiple agencies. The recent comprehensive NIJ study included information from:

• A national survey of 737 law enforcement agencies, which yielded usable data from 436.

• More than 1,200 pursuits recorded by three police departments: Metro-Dade (Miami), Florida; Omaha, Nebraska; and Aiken County, South Carolina.

• Surveys of 779 officers and 175 supervisors—as well as selected interviews—in the above jurisdictions as well as in Mesa, Arizona.

• Surveys of 160 police recruits before training and 145 of them after training—as well as selected interviews—in South Carolina and Miami, Florida.

• Public opinion interviews with 300 people in Omaha and 255 in Aiken County.

• Interviews with 146 jailed suspects who had been involved as drivers in high-speed chases in Columbia, South Carolina; Omaha, Nebraska; and Miami, Florida.

Results of the study indicate that law enforcement personnel and members of the public focused on the severity of the offense committed by the suspect when supporting a pursuit. The second most important factor was the risk to the public (as defined by traffic, road conditions, and the weather). This Research in Brief discusses these and other major findings of this study and their implications for policy and training issues.

Results of the national survey

A sampling of 800 municipal and county police agencies was selected, consisting of 40 percent large agencies and 60 percent smaller jurisdictions (population fewer than 100,000). Of the 737 agencies contacted, 436 provided usable data, 284 reported that they could not provide the
Issues and Findings  

- Increasing the number of vehicles involved in police pursuits increased the likelihood of apprehension, but also the chance of accidents, injuries, and property damage.
- There is a lack of initial and continuing training for law enforcement on the specific risk factors and benefits of pursuit driving. The survey of police recruits before and after academy training indicates that such education can have a major impact on attitudes.

These and other study findings indicate the need for agencies to develop a clear and understandable police pursuit policy delineating departmental requirements within the context of State laws and the police mission and to create and implement specific training to support the policy.

Target audience: State and local policymakers, law enforcement supervisors and officers, criminal justice trainers, and researchers.

Policies. Ninety-one percent of the 436 responding agencies had written policies governing pursuits, but many of them were implemented in the 1970s. Forty-eight percent of the agencies reported having modified their pursuit policy within the past 2 years, and most of those (87 percent) noted that modification had made the policy more restrictive than before.

Although most (89 percent) reported that routine followups to pursuit incidents were mandated by their agencies, most said they were either informal supervisory reviews (33 percent) or incident reports prepared by pursuing officers (47 percent).

Data collection. Municipal and larger agencies were more likely than county or smaller agencies to collect pursuit information routinely. The majority of the 135 agencies that collected pursuit data routinely did so voluntarily (fewer than 5 percent of the States represented by the survey respondents reported that their data collection programs were State mandated). Although this means only 31 percent of the respondents had data collection programs, 308 agencies (71 percent) were able to provide the number of pursuits their officers had engaged in during 1993.

The number of pursuits reported ranged from none to 870 during the 1-year period, with large agencies reporting higher numbers of incidents than small ones. One-quarter of the responding agencies indicated that officers used force to apprehend a suspect after a pursuit during 1993.

Training. Many departments acknowledged taking only limited steps to train their officers on skills and procedures regarding pursuits. For example, although 60 percent of the agencies reported providing entry-level driving training at their academies, the average time devoted to these skills was estimated at less than 14 hours. Once in service, the amount of additional training offered averaged only slightly more than 3 hours per year and focused on the mechanics of defensive and/or pursuit driving rather than on issues that should be considered when deciding to continue or terminate pursuits. Respondent agencies may have spent at least some time teaching officers how to pursue, but training devoted to when—or why—to pursue appears to have been minimal or nonexistent.

Implications of the national survey

These findings point to several issues for consideration by State and local law enforcement agencies:

- Create and maintain systems to collect information on pursuit driving. Without this information, the impact of local policies on police pursuit cannot be determined.
- Review and update pursuit policies. The fact that most agencies had policies was favorable, but the quality and direction of those policies was questionable as departments had instituted them as long as 20 years ago, although many have updated them recently to make them more restrictive.
- Evaluate the need for pursuit-specific training. Officers cannot make proper and appropriate decisions with minimal or no training.
- Support written policies with training and supervision. A written policy may mean little if officers are not both carefully trained to implement it and held accountable for abiding by its provisions.
• Require that officers justify their actions or have a supervisor evaluate the pursuit (afteraction reports). When actions are found to be inappropriate, officers may not be receiving meaningful discipline for problem pursuits.

Results of case studies in three jurisdictions

While the national survey provided a panoramic snapshot of pursuit policies and practices, the cases studied provided data for indepth analysis. Researchers reviewed case records of more than 1,000 pursuits conducted by Metro-Dade (Miami), Florida, officers between 1990 and 1994; 229 pursuits conducted by officers in Omaha, Nebraska, between 1992 and 1994; and 17 pursuits conducted in Aiken, South Carolina, between 1993 and 1994 (see table 1).

Risk of injuries. Pursuit-related accidents were found to occur more frequently when pursuits were conducted for felonies than for nonfelonies, when they occurred on surface streets rather than on highways or freeways, and when they happened in urban and suburban areas rather than in rural areas. The likelihood of accidents also increased as the number of pursuing vehicles increased.

The prediction of personal injury resulting from a police pursuit depended primarily on four variables in Metro-Dade: the greater the number of police cars the greater the likelihood of injury. Involvement of other police agencies also increased the likelihood of injury. High-speed chases resulted in more injuries than low-speed pursuits, and chases in residential areas resulted in more injuries than those conducted in nonresidential areas.

In Omaha, pursuit-related property damage occurred in 40 percent of pursuits. In Omaha also, the pursuits least likely to end in an accident were those initiated because of vehicles being identified as “suspect.”

Apprehension vs. escape. In Metro-Dade, the likelihood of the suspect’s escape was found to depend on the number of police vehicles and police departments involved in pursuit (increasing the number of vehicles decreased the likelihood of escape), the location of the pursuit (fewer suspects escaped in business districts than in residential or rural areas), and the time of day (fewer suspects escaped during daytime hours than at night).

In Omaha, the likelihood of escape was related to supervisory assistance (the lack of supervisory assistance increased the likelihood of escape), the number of police cars involved in the chase (pursuits with one police car resulted in more escapes than chases with more than one police car), the speed of the chase (chases conducted at higher speeds resulted in more escapes than those at lower speeds), the location of the pursuit (chases in residential areas resulted in more escapes than those in rural areas), and the level of traffic congestion (chases in light traffic resulted in more escapes than those in heavy traffic).

<table>
<thead>
<tr>
<th>Reasons for Pursuit</th>
<th>Metro-Dade (Miami) Florida</th>
<th>Omaha, Nebraska</th>
<th>Aiken County, South Carolina</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic violations</td>
<td>448 (45%)</td>
<td>112 (51%)</td>
<td>5 (36%)</td>
</tr>
<tr>
<td>DUI/Reckless driving</td>
<td>8 (4%)</td>
<td>7 (3.5%)</td>
<td>1 (7%)</td>
</tr>
<tr>
<td>“Suspect” vehicle</td>
<td>7 (3.5%)</td>
<td>3 (1.5%)</td>
<td>2 (14%)</td>
</tr>
<tr>
<td>Felonies</td>
<td>344 (35%)</td>
<td>89 (40%)</td>
<td>6 (43%)</td>
</tr>
<tr>
<td>Armed robbery</td>
<td>117</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Vehicular assault</td>
<td>67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggravated assault</td>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stolen vehicles</td>
<td>37</td>
<td>36</td>
<td>3</td>
</tr>
<tr>
<td>Burglary</td>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other felonies</td>
<td>62</td>
<td>53</td>
<td>1</td>
</tr>
<tr>
<td>Accidents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal injury</td>
<td>428 (41%)</td>
<td>31 (14%)</td>
<td>2 (12%)</td>
</tr>
<tr>
<td>Property damage</td>
<td>213 (20%)</td>
<td>91 (40%)</td>
<td>4 (24%)</td>
</tr>
<tr>
<td>Arrests</td>
<td>784 (75%)</td>
<td>118 (52%)</td>
<td>14 (82%)</td>
</tr>
</tbody>
</table>
In Omaha, pursuits initiated for reckless driving or driving under the influence (DUI) were the most likely to end in an arrest (75 percent), while pursuits initiated because a vehicle was “suspect” resulted in the smallest proportion of arrests (43 percent). Officers were most likely to terminate the pursuit voluntarily when it was initiated for suspect vehicles (29 percent), and least likely in chases initiated for felonies (16 percent).

Implications of case studies

Policy. Like the national survey, the findings from these sites point to similar implications for policy and training. In addition, the case study findings allow for more specific analyses. For example, although the national survey shows that most of the agencies that had updated policies had made them more restrictive, findings from both Metro-Dade and Omaha show the strong effects of policy changes. When Metro-Dade adopted a “violent felony only” pursuit policy in 1992, the number of pursuits decreased 82 percent the following year. In 1993 Omaha changed to a more permissive policy, permitting pursuits for offenses that had previously been prohibited; the following year, the number of pursuits increased more than 600 percent (see table 2).

Implications of other case study findings are not as clear. For example, the data reveal that the more police cars involved in a pursuit, the more likely a collision will result. However, data also show that the more police cars involved in a pursuit, the more likely an apprehension will be made. One implication could be that in violent felony situations, it may be reasonable to take the risk of causing traffic accidents by increasing the number of police vehicles in the chase in order to improve the likelihood of apprehension. Such a policy would not endorse the uniform increase of police units involved in a pursuit; instead it suggests that policymakers might rethink the use of police vehicles to block civilian vehicles from entering intersections. The supervisor might be given the authority to assign cars to specific locations to travel at reasonable speeds (i.e., within the speed limit) and without emergency signals in addition to directing primary and secondary units.

Training. Any change in policy requires development of rules and regulations and then training for supervisors to enable them to recognize when to take the risks of accidents to achieve the desired result of suspects’ apprehension. Similarly, in interjurisdictional pursuits, officers must know how to assess a situation and make sure that the pursuit is within their agency’s policy before providing support for other officers.

Police officers’ and supervisors’ views

Conditions for chases. Police officers and supervisors in four police departments (Metro-Dade; Omaha; Aiken County, South Carolina; and Mesa, Arizona) were asked whether they would engage in or approve a pursuit under low- and high-risk conditions (see tables 3 and 4). The major finding is that the percentage of all officers willing to engage in a pursuit, and of all supervisors willing to approve a pursuit, increases as the severity of the crime increases. In other words, the need to immediately apprehend a dangerous suspect is the most important concern for law enforcement personnel. Police said that the most important risk factors to consider during a pursuit were traffic conditions and weather. Advances in technology could lead to changes in risk factors (see “Technology and Pursuit Driving”).

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Nature of Policy Change</th>
<th>Before Change</th>
<th>After Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro-Dade, Florida</td>
<td>more restrictive</td>
<td>279</td>
<td>51</td>
</tr>
<tr>
<td>Omaha, Nebraska</td>
<td>more permissive</td>
<td>17</td>
<td>122</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 3: When Police Officers Say They Would Engage in Pursuits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Violation</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Traffic Violation</td>
</tr>
<tr>
<td>Property Crime: Misdemeanor</td>
</tr>
<tr>
<td>Property Crime: Felony</td>
</tr>
<tr>
<td>Stolen Vehicle</td>
</tr>
<tr>
<td>DUI</td>
</tr>
<tr>
<td>Violent Felony: No Death</td>
</tr>
<tr>
<td>Violent Felony: With Death</td>
</tr>
<tr>
<td>Officer Shot</td>
</tr>
</tbody>
</table>

* Risk was defined by level of traffic congestion, weather conditions, type of road (e.g., whether surface street, highway, or interstate), and area of pursuit (e.g., whether urban, rural, or commercial). In filling out the questionnaire, respondents themselves determined whether they felt their risk was high or low.
The fluctuations between and among agencies in relation to the type of law violation reveal distinctions that have implications for policy and training. Although there is widespread agreement about officers’ willingness to pursue when a fellow officer has been shot or when violent felons have committed murder, there was wide variation within and among agencies regarding other situations:

- The more experienced officers in Omaha and Aiken County were more likely to engage in pursuit of misdemeanor property crime suspects under high-risk conditions than their less experienced counterparts.
- Officers in Mesa, Arizona, with more than 5 years of experience were nearly twice as likely to pursue suspects of traffic violations under low-risk conditions than the less experienced officers.

These findings suggest that some officers, especially veterans, may need retraining on the dangers of pursuit.

**Results of pursuits.** The risks of pursuits were seen in the officers’ responses to the results of their efforts (see also “Sanctions.” page 7) Seventy-three percent had been involved in at least one pursuit during the previous 12 months:

- Forty percent reported that a pursuit in which they were driving the primary vehicle resulted in an accident.
- Forty-five percent felt physically threatened by the suspect in the pursuit.
- Thirty-three percent reported that from about one-fourth to one-half of all pursuits resulted in use of force to apprehend the suspect. Slightly more than half of the officers described those more likely to use excessive force as “aggressive” or “hotheaded.”

**Recruits’ opinions**

Similar to the results obtained from the officers and the supervisors, the percentage of recruits who were willing to engage in a pursuit increased as the severity of the crime increased. The importance of the risk factors also decreased as the seriousness of the offense increased.

Data collected from recruit classes both before and after training at four locations (see table 5) show that the training had an effect on altering some opinions reported by the recruits. For example, prior to the training course, 77, 79, and 86 percent of recruits at each of three locations (St. Petersburg, South Carolina Highway Patrol, and Metro-Dade) were willing to engage in pursuit for a stolen vehicle under low-risk conditions. After the training, the percentage decreased to 59, 70, and 73 percent respectively. At Metro-Dade, before training, 100 percent said they would pursue a DUI suspect under low-risk conditions; after training, 73 percent said they would. These results indicate that training programs can be designed to support policy objectives.

### Table 4: When Supervisors* Say They Would Approve Pursuits

<table>
<thead>
<tr>
<th>Violation</th>
<th>Level of Risk**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
</tr>
<tr>
<td>Traffic Violation</td>
<td>31%</td>
</tr>
<tr>
<td>Property Crime: Misdemeanor</td>
<td>38%</td>
</tr>
<tr>
<td>Property Crime: Felony</td>
<td>59%</td>
</tr>
<tr>
<td>Stolen Vehicle</td>
<td>59%</td>
</tr>
<tr>
<td>DUI</td>
<td>71%</td>
</tr>
<tr>
<td>Violent Felony: No Death</td>
<td>91%</td>
</tr>
<tr>
<td>Violent Felony: With Death</td>
<td>98%</td>
</tr>
<tr>
<td>Officer Shot</td>
<td>97%</td>
</tr>
</tbody>
</table>

* Supervisors’ responses are from the three largest departments surveyed.
** For an explanation of risk level, see Table 3 (page 4).

**Technology and Pursuit Driving**

The data from this study show that a suspect who does not know he or she is being pursued will drive in a reasonably safe manner, and suspects who know they are being pursued and drive dangerously will slow down after the police terminate their pursuit.

Continued improvements in technology to slow or stop a vehicle may reduce risks in pursuits. The use of helicopters or fixed-wing airplanes, while expensive, already can allow law enforcement to monitor a fleeing suspect unobtrusively and alert ground units when he or she stops. The spike belt, a strip of spikes that slowly deflate a vehicle’s tires when run over, has been available for several years; nets and barricades are being developed to bring vehicles to a stop; and emerging technology promises remote-control devices to allow police to shut down a car’s electrical system.
and that jurisdictions could assess whether or not their training programs are meeting their goals.

**Public opinion**

Interviews with 555 residents of Aiken County and Omaha indicate support for police in apprehending individuals suspected of violating the law. The public agreed with law enforcement personnel that the seriousness of the offense increases the need to pursue suspects, but the level of risk to the public decreases that need. Although some differences in opinion were found between races and socioeconomic levels for some law violations, no differences were found for serious felony offenses.

Media coverage of pursuit-related issues may have an effect on public perceptions. In Omaha, the print and electronic media covered pursuit driving regularly, with stories that included changes in policy, accidents, injuries, and proposed legislation. In Aiken, only minimal coverage was reported on a few tragedies. More research is necessary both to determine the relative risks the public is willing to allow for the apprehension of suspects and to compare the opinions of community members who are aware of the risks and benefits of pursuit.²

**Suspects’ opinions**

A unique feature of this study was the information received from those who fled from the police. One hundred forty-six interviews were conducted in jail cells in three cities: Omaha, Miami, and Columbia, South Carolina.

More than 70 percent of the suspects³ said that they would have slowed down “when I felt safe,” whether the pursuit was on a freeway, on a highway, or in a town. The phrase “when I felt safe”

---

**Table 5: When Recruits Say They Would Engage in Pursuit**

<table>
<thead>
<tr>
<th>Offense</th>
<th>Before Training (T)</th>
<th>After Training (T2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Metro-Dade (Miami) (N=33)</td>
<td>St. Petersburg, Florida (N=31)</td>
</tr>
<tr>
<td><strong>Traffic Violation</strong></td>
<td>Low Risk: 71% 15%</td>
<td>Low Risk: 58% 7%</td>
</tr>
<tr>
<td><strong>Property Crime: Misdemeanor</strong></td>
<td>Low Risk: 41% 11%</td>
<td>Low Risk: 58% 13%</td>
</tr>
<tr>
<td><strong>Property Crime: Felony</strong></td>
<td>Low Risk: 69% 22%</td>
<td>Low Risk: 73% 10%</td>
</tr>
<tr>
<td><strong>Stolen Vehicle</strong></td>
<td>Low Risk: 86% 43%</td>
<td>Low Risk: 77% 35%</td>
</tr>
<tr>
<td><strong>DUI</strong></td>
<td>Low Risk: 100% 68%</td>
<td>Low Risk: 81% 57%</td>
</tr>
<tr>
<td><strong>Violent Felony: No Death</strong></td>
<td>Low Risk: 100% 86%</td>
<td>Low Risk: 87% 76%</td>
</tr>
<tr>
<td><strong>Violent Felony: With Death</strong></td>
<td>Low Risk: 100% 100%</td>
<td>Low Risk: 97% 90%</td>
</tr>
<tr>
<td><strong>Officer Shot</strong></td>
<td>Low Risk: 100% 100%</td>
<td>Low Risk: 97% 97%</td>
</tr>
</tbody>
</table>
Sanctions

Today, in many jurisdictions, fleeing and eluding a police officer is a minor offense, which is often dropped or plea bargained. Officers in this study reported strong opinions on sanctions for suspects fleeing and eluding the police:

<table>
<thead>
<tr>
<th>Sanction</th>
<th>Percentage Agreeing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incarceration</td>
<td>90%</td>
</tr>
<tr>
<td>6–9 months in jail</td>
<td>40%</td>
</tr>
<tr>
<td>1 year in prison</td>
<td>53%</td>
</tr>
</tbody>
</table>

A critical component of police training should be an analysis of the specific risk factors as well as the benefits of pursuit driving. This education requires careful training in departmental policies and the reasoning that underlies the more recent, restrained philosophies and policies.

Notes

1. The respondent sample included 149 agencies (34 percent) that had 1 to 25 sworn officers, 97 agencies (22 percent) that had 26 to 150 sworn officers, 100 agencies (23 percent) that had 151 to 500 sworn officers, 49 agencies (11 percent) with more than 500 sworn officers, and 41 agencies (10 percent) that did not report the number of officers among their personnel. It should be noted that the sample respondents overrepresent large police departments. For example, based on Bureau of Justice Statistics surveys, 79 percent of police departments have 25 or fewer sworn officers (vs. 34 percent in this sample) and fewer than 1 percent have 500 or more (vs. 11 percent in this sample).


3. The average age of fleeing suspects in this study was 26.2 years and ranged from 18 to 40. In ethnicity fleeing suspects were 56.8 percent white, 36.3 percent African American, and 6.8 percent Hispanic American. Ninety-four percent of fleeing suspects were male and 6 percent were female.
Additional references


This project was supported under NIJ award 93–IJ–CX–0061 from the National Institute of Justice to Geoffrey P. Alpert, Ph.D., Professor in the College of Criminal Justice, University of South Carolina. The complete report by Geoffrey Alpert, Dennis Kenney, Roger Dunham, William Smith, and Michael Cosgrove, “Police Pursuit and the Use of Force. A Final Report to the National Institute of Justice,” is available from the National Criminal Justice Reference Service (NCJRS) through interlibrary loan or for a copying fee. Call 800–851–3420; write NCJRS, 1600 Research Boulevard, Rockville, MD 20850; or e-mail asknjrs@ncjrs.org; ask for NCJ 164833.

Also available is a 60-minute videotape of Dr. Alpert’s discussion of this research, which was prepared as part of NIJ’s Research in Progress series. The tape Police in Pursuit: Policy and Practice includes questions from the audience of researchers and practitioners. It can also be ordered from NCJRS; ask for NCJ 161836. Costs per tape, including postage and handling, are $19 (U.S.) or $24 (Canada and other countries).

Findings and conclusions of the research reported here are those of the authors and do not necessarily reflect the official position or policies of the U.S. Department of Justice.


Additional references


back of divider
Crime Analysis for First Line Supervisors

Jamie L. Roush
Crime Analysis Unit Manager
Jacksonville (FL) Sheriff’s Office

Evidence-Based Policing Leadership Training for Supervisors
George Mason University
January 2014

Objectives

• Why Crime Analysis?
• What Is Crime Analysis?
• Expanding Patrol Operations
• Supporting Investigative and Specialized Unit Operations
• Maximizing Resource Allocation
• What Makes Crime Analysis Success?

Why Crime Analysis?
Crime Analysis is...

According to Dr. Rachel Boba (Florida Atlantic University)

The ‘systematic study of crime and disorder problems as well as other police-related issues — including socio-demographic, spatial, and temporal factors — to assist the police in criminal apprehension, crime and disorder reduction, crime prevention, and evaluation’


Intelligence Analysis is...

According to the International Association of Law Enforcement Intelligence Analysis

‘information compiled, analyzed, and/or disseminated in an effort to anticipate, prevent, or monitor criminal activity’


Transformation to Better Decision Making

• Decision Making Influences
  ◦ Public Opinion
  ◦ Media
  ◦ Politicians
  ◦ Other Police Agencies
  ◦ Crime and Intelligence Analysis
  ◦ Other Government Agencies
  ◦ Non-Government Agencies
  ◦ “What We’ve Always Done”
Transformation to Better Decision Making

- Better Decision Making
  - Data Driven Operations through Crime Analysis
- Objective
- Progressive
- Defendable
- Crime Analysis should become the key factor in decision making

Why Crime Analysis?

- All major policing strategies clearly identify the use of data and analysis
- Crime Analysts provide the link to not only identifying relevant data but conducting analysis to make sense of the myriad of data
- Quality Crime Analysts and Analytical Capabilities leads to better decision making and efficient and effective policing

What Is Crime Analysis?
Crime Analysis is...

According to Dr. Rachel Boba (Florida Atlantic University)

The 'systematic study of crime and disorder problems as well as other police-related issues – including socio-demographic, spatial, and temporal factors – to assist the police in criminal apprehension, crime and disorder reduction, crime prevention, and evaluation'

Intelligence Analysis is...

According to the International Association of Law Enforcement Intelligence Analysis

‘information compiled, analyzed, and/or disseminated in an effort to anticipate, prevent, or monitor criminal activity'

Is This Crime Analysis?

<table>
<thead>
<tr>
<th>Year</th>
<th>Area</th>
<th>Total</th>
<th>Total Time</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Calls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Calls</td>
<td>12,345</td>
<td>15.46</td>
<td>+20%</td>
</tr>
<tr>
<td></td>
<td>12,345</td>
<td>13,456</td>
<td>16.57</td>
<td>+20%</td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Calls</td>
<td>12,567</td>
<td>15.78</td>
<td>+20%</td>
</tr>
<tr>
<td></td>
<td>12,567</td>
<td>13,678</td>
<td>16.89</td>
<td>+20%</td>
</tr>
</tbody>
</table>

Response Times 2011 - 2012
List of Business Burglaries Citywide November 2012 – January 2013

Map of Auto Burglary Incidents in Past 3, 7 and 30 Days & 6 Month Hot Spots

Crimes by Area for Citizens
Is This Crime Analysis?

2012-2013 Comparison by City Council Area

<table>
<thead>
<tr>
<th>Charge Offense</th>
<th>1/6/12-6/12</th>
<th>1/6/13-6/13</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>ROBBERY/HOME INVASION</td>
<td>3</td>
<td>3</td>
<td>-16.7%</td>
</tr>
<tr>
<td>ROBBERY/BUSINESS</td>
<td>3</td>
<td>3</td>
<td>-50.0%</td>
</tr>
<tr>
<td>ROBBERY/CARJACKING</td>
<td>31</td>
<td>21</td>
<td>-32.3%</td>
</tr>
<tr>
<td>ROBBERY/ATTEMPT</td>
<td>3</td>
<td>3</td>
<td>0.0%</td>
</tr>
<tr>
<td>ASSAULTED BATTERY</td>
<td>32</td>
<td>18</td>
<td>-43.8%</td>
</tr>
<tr>
<td>Assault</td>
<td>11</td>
<td>18</td>
<td>63.6%</td>
</tr>
<tr>
<td>Burglary/Residential</td>
<td>431</td>
<td>199</td>
<td>-54.4%</td>
</tr>
<tr>
<td>Burglary/Busineses</td>
<td>277</td>
<td>127</td>
<td>-52.5%</td>
</tr>
<tr>
<td>Auto Theft</td>
<td>130</td>
<td>186</td>
<td>45.4%</td>
</tr>
<tr>
<td>Auto Burglary</td>
<td>320</td>
<td>792</td>
<td>142.7%</td>
</tr>
<tr>
<td>Carjacking</td>
<td>8</td>
<td>12</td>
<td>50.0%</td>
</tr>
<tr>
<td>Tressthat/Business</td>
<td>550</td>
<td>375</td>
<td>-32.7%</td>
</tr>
<tr>
<td>Invite Tressthat/Bus</td>
<td>23</td>
<td>354</td>
<td>-93.0%</td>
</tr>
<tr>
<td>Property/Business</td>
<td>72</td>
<td>254</td>
<td>-71.5%</td>
</tr>
<tr>
<td>Total</td>
<td>3,889</td>
<td>3,446</td>
<td>-11.2%</td>
</tr>
</tbody>
</table>

Is This Crime Analysis?

Map of Burglaries by Neighborhood

Is This Crime Analysis?

Arrest List for Auto Burglary
Is This Crime Analysis?

Density/Hot Spots of Property Crime Incidents

Is This Crime Analysis?

COMPSTAT Priority Incident/Arrest Comparison Report

Is This Crime Analysis?
What Is Crime Analysis?

- Crime Analysis is not using data for display. It is about extending the data to provide context and understanding.

- Crime Analysts should be viewed as consultants that are objective, add value and provide actionable intelligence

What Is Crime Analysis?

- Traditional data systems allow for querying for:
  - Suspects with nickname ‘JoJo’ OR
  - Suspects with crown tattoo OR
  - Suspects who live in Garden Grove Neighborhood

- Crime Analysts are able to correlate disparate systems to locate the suspect with a nickname ‘JoJo’ with a crown tattoo who lives in the Garden Grove Neighborhood

Locating Suspects Beyond Traditional Data Systems
What Is Crime Analysis?

- Crime Analysts expand identifying a suspect to:
  - Suspects' associates
  - Associates who have visited the suspect in jail previously
  - Associates' vehicles
  - Associates' phone numbers

- Crime Analysts conduct deeper, extended searching

Expanding Suspect from Individual to Group

What Is Crime Analysis?

Thresholds: Expanding Simple Increases/Decreases in Crime

Expanding Patrol Operations
Nuisance Calls for Service
• Using the limited information such as date, time, locations, person information and description or comments…the analyst is able to:
  ▫ Close the gap in your systems not making notification to the second officer or deputy
  ▫ Close the gap of the officers or deputies thinking to share the information
  ▫ Connect with other jurisdictions
  ▫ Review social media related to the filming aspect of the call
• The resulting information is then disseminated to you and your personnel by the crime and intelligence analyst for officer awareness and safety.

Simple Assault Calls for Service
• While the officer or deputy moves onto the next call for service…the crime analyst begins...
  • The crime and intelligence analyst is able to:
  ▫ Identify the female in which the males were arguing
  ▫ Determine the female’s brother is an associate of one male. He is also a person of interest in a burglary series in a neighboring city
  ▫ The property stolen in the burglary series has been pawned in your jurisdiction
  ▫ Identify other burglaries that may be related in your jurisdiction
  ▫ Provide details to potentially interview the arrested suspect for information on the burglaries or property

Shoplifting Calls for Service
• For incidents such as this, the crime analyst is able to:
  ▫ Correlate other incidents in your jurisdiction by property taken, modus operandi and suspect descriptions
  ▫ Identify potential suspects by description
  ▫ Determine if the issue is multi-jurisdictional
  ▫ Identify potential suppression strategies
  ▫ Identify avenues for fencing property
Patrol Operations Follow Up

- Nuisance Calls for Service
  - Provide officer awareness and safety by linking events that are calls for service handled by your officer or deputy to larger systematic problem
  - Link to other jurisdictions and social media

- Simple Assault Calls for Service
  - Provide information about group rather than individuals involved in assault
  - Link to known crime problem and other jurisdictions and provide follow up

- Shoplifting Calls for Service
  - Provide information about larger systematic problem
  - Identify potential suspects and avenues for fencing property
  - Identify potential solutions to crime problem

Supporting Investigative and Specialized Unit Operations

Robbery Investigations

- The crime analyst is able to:
  - Identify a list of potential suspects based on description and past criminal history
  - Begin to connect the incidents to other similar incidents

- In the process, the crime analyst identifies a suspect who is a known gang member.
Robbery Investigations

- From this information, the analyst:
  - Connects the known gang member to his or her associations
  - Identify another robbery that matches the description from another gang member previously
  - Review other incidents from similar gang members
  - Determine the incident to be possibly gang initiation revealing a criminal enterprise

Robbery Investigations

- The crime analyst connects data from a variety of sources that include:
  - Gang Members
  - Nicknames
  - Tattoos
  - Phones
  - Vehicles
  - Jail Visitation
  - Jail Phone Calls
  - Commissary Account Information
  - Social Media

Robbery Investigations
Robbery Investigations

Specialized Units

• In support of these efforts, crime analysts:
  ▫ Expand link analysis charts to secondary and tertiary degree associations using a myriad of disparate data sources
  ▫ Integrate advanced mapping techniques for cell phone data into the larger picture
  ▫ Investigate content of jail phone calls and jail visitation
  ▫ Provide clues for efficient and effective interviewing by investigators

Investigative and Specialized Unit Follow Up

• The role of crime analysts in support of investigative units consist of:
  ▫ Integrating data from a variety of different sources including traditional law enforcement data, corrections related data and social media for the purposes of:
    ▪ Identifying persons of interest based on a variety of factors including but not limited to description and criminal history
    ▪ Linking individuals to associates and associates’ criminal activity
    ▪ Linking individuals to events
  ▫ While investigators are focused on their specific investigation, the development of analysis by the analyst provides a bigger, broader picture of the crime problem
Investigative and Specialized Unit Follow Up

- Analysis in support of specialized units are conducted with greater depth to:
  - Provide greater level of connections by person and event
  - Provide deeper context to information rather than knowing that it simply exists
  - Provide context and information that makes interviewing poignant, efficient and effective

- Ultimately analysts conducting this type of depth and context allows for investigators to focus on continually gathering information and following up on leads

Maximizing Resource Allocation

Nuisance Calls for Service

- Many departments have calls for service that represent a greater majority and take more time than others. Some of these include:
  - Nuisance Calls for Service
  - Alarm Calls
  - Assault Calls

- Crime Analysis using CAD data can inform the frequency and location of these types of calls to ensure staffing is adequate.

- Analysts can also identify strategies to combat repetitive calls for service through long term strategies like Problem Oriented Policing.
Response Times

- Increase in signals coded as Priority 1 Calls for Service
- Changes in call handling of Priority 1 Calls for Service
- Increases in Communications Center handling time
- Increases in Patrol Travel Time due to Construction on Main Roads

<table>
<thead>
<tr>
<th>Area</th>
<th>2011 Calls</th>
<th>2012 Calls</th>
<th>%Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Downtown</td>
<td>33,900</td>
<td>34,000</td>
<td>0.3%</td>
</tr>
<tr>
<td>Zone 1</td>
<td>15,194</td>
<td>15,019</td>
<td>-1.1%</td>
</tr>
<tr>
<td>Zone 2</td>
<td>16,704</td>
<td>16,981</td>
<td>1.6%</td>
</tr>
<tr>
<td>Zone 3</td>
<td>1,908</td>
<td>1,981</td>
<td>4.2%</td>
</tr>
<tr>
<td>Zone 4</td>
<td>25,704</td>
<td>26,084</td>
<td>1.1%</td>
</tr>
<tr>
<td>Zone 5</td>
<td>7,923</td>
<td>7,923</td>
<td>0.0%</td>
</tr>
<tr>
<td>Zone 6</td>
<td>9,605</td>
<td>9,605</td>
<td>0.0%</td>
</tr>
<tr>
<td>Patrol Area</td>
<td>33,900</td>
<td>34,000</td>
<td>0.3%</td>
</tr>
</tbody>
</table>

Shift Deployment of Resources

Geographic Deployment of Resources
Investigative Case Assignment

• Crime Analysts can provide an assessment of investigative case assignment:
  ▫ Review of cases per detective and outcome measures for an individual unit
  ▫ Comparison of similar units

• Analysis can inform decision making to increase investigative unit staffing

Forecasting Crime Trends

<table>
<thead>
<tr>
<th>Crime Category</th>
<th>2011</th>
<th>2013 Forecast</th>
<th>Change</th>
<th>Change Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Violent Crimes</td>
<td>155</td>
<td>180.9</td>
<td>25.9</td>
<td>16.6%</td>
</tr>
<tr>
<td>Property Crimes</td>
<td>1010</td>
<td>1234.7</td>
<td>224.7</td>
<td>22.1%</td>
</tr>
<tr>
<td>Total Reports</td>
<td>1165</td>
<td>1415.6</td>
<td>250.6</td>
<td>21.6%</td>
</tr>
</tbody>
</table>

• Forecast increases in grand thefts the result of increasing price of metal and lack of scrap metal regulation
• Forecast increases in carjacking result of improvements in automobile technology and reduction of automobile theft
• Identification can be utilized for adjustment of investigative personnel or task forces with a variety of subject matter experts

Maximizing Resource Allocation

• Crime Analysis provides guidance as it relates to:
  ▫ Deploying resources to address high proportions of calls for service by type, time and location optimally
  ▫ Ensuring investigative functions are appropriately staffed for maximum benefit
  ▫ Adjusting agency resources to new and emerging crime problems

• Crime Analysts providing all of the above ensures that resources are deployed efficiently and effectively.
What Makes Crime Analysis Success?

Crime Analysis Success

- Quality Reporting
- Displaying Data/Reporting is Automated
- Crime and Intelligence Analysts are Analyzing

- Analytical Systems Allow for Analysts to:
  - Provide Information with Speed, Integration, Flexibility and Quality

- Analytical Products provide:
  - Added Value, Actionable Intelligence and Deeper Context of Who, What, Where, When, Why and How

Crime Analysis Success

- Crime Analysts are:
  - Consultants
    - Independent, Objective, Dependable
    - Respected Members of the 'Team' at All Levels

- Crime Analysis is Central to Decision Making
- Crime Analysts Assist in Development of Successful Policing Strategies

- The Organization is More Efficient and Effective
  - Administration, Operations and Crime Fighting
Crime Analysis Suggested Readings


Available to download from [http://cebcp.org/wp-content/TCmagazine/TC5-Fall2013](http://cebcp.org/wp-content/TCmagazine/TC5-Fall2013)


Available to download from [http://www.popcenter.org/library/reading/PDFs/60steps.pdf](http://www.popcenter.org/library/reading/PDFs/60steps.pdf)


Is Crime Analysis “Evidence-Based”?

BY CYNTHIA LUM

Cynthia Lum is director and associate professor of the Center for Evidence-Based Crime Policy in the Department of Criminology, Law and Society at George Mason University.

One question I am often asked is whether crime analysis—especially the use of mapping and data analysis in policing—is “evidence-based.” My first instinct is to reply, “Of course!” Crime analysts have long played an important role in law enforcement progress, evaluation, and innovations in policing, most notably in the early development of hot spots policing and problem solving. Analysts and analysis have also become key components in developing both the fiscal and evidence-based accountability of law enforcement activities in an era of austerity. Yet, on deeper examination, the answer to the question of whether crime analysis is evidence-based requires more thought and perhaps some qualification.

To begin, it is important to emphasize that we now have a fairly robust evidence base for crime control interventions in policing (see, for example, the Evidence-Based Policing Matrix at www.policing-matrix.org). Of course, more knowledge is always needed, especially in such areas as the impact of multijurisdiction task forces (as discussed by Stevenson et al., in this issue) or whether problem-solving or hot spot approaches at places will work in large and small jurisdictions (Lum and Koper, 2013). However, there is general consensus on some principles of effective policing. Targeted, focused, tailored, proactive, and place-specific interventions can reduce and prevent crime, rather than the traditional approach of reactive patrol and case-by-case investigations.

Crime analysis lies at the heart of developing these targeted, place-based interventions and therefore is an important requirement for a police department to carry out evidence-based strategies. Analytic processes such as computerized crime mapping, repeat offender analysis, network mapping, and crime pattern discovery are essential for the deployment and evaluation of effective approaches. But is this enough to say that crime analysis itself is “evidence-based”?

Asking this question is like asking whether hot spotting is evidence based. While it is true that hot spot policing is one of the most strongly supported police tactics with regard to the evidence (see Weisburd and Eck, 2004; Sherman and Eck, 2002), the approach combines three distinct steps:

1. Determining the hot spots through crime analysis
2. Getting officers to deploy themselves to the hot spots
3. Determining what to do when officers get to the hot spots

Even if (1) is done successfully, hot spots policing can only reduce crime if (2) is ensured and (3) is done in a way that creates a deterrent or preventive effect within the parameters of democratic policing. Indeed, hot spots policing doesn’t always work well; it depends on dosage, timing, and what officers do when they are inside these areas where crime is highly concentrated (Koper, 2013). And, even if implemented well, hot spot policing won’t continue to work if officers lose interest in, or are not accountable for, addressing those concentrations of crime over time.

Similarly, the “effectiveness” of crime analysis is intricately tied to whether the agency carries out and sustains evidence-based practices and how crime analysis is implemented toward these goals. Indeed, just by carrying out evidence-based practices such as hot spots policing, problem solving, or targeting repeat offenders, agencies can reduce the risk that analysis will be ineffectively used or inefficiently generated. More specifically, crime analysis can be used in three ways that support evidence-based policing. First, crime analysis is useful in developing practices and policies we know to be effective. Second, crime analysis (such as outcome evaluation) is essential to determine whether an intervention is effective. And finally, crime analysis is needed to understand crime and disorder, and direct police to places...
and people to implement interventions that are evidence-based.

However, crime analysis can just as easily support the development of ineffective tactics and strategies, or be misused in ways that do not advance the development of proactive, targeted, and focused approaches. One only needs to look at certain symptoms of this problem that are pervasive throughout many law enforcement agencies. In some agencies, analysts primarily are used as accountants, generating simple statistics for COMPSTAT meetings about counts of crime—an adaptation of the historical role of analysts as data collectors for the Uniform Crime Reporting program. This symptom indicates that analysts are less often, if at all, being used for causal, exploratory, or even descriptive analysis to contribute to strategic, operational, organizational, or tactical goals. Analysts can be misused in investigative partnerships, too. When they are relegated to the role of keyword searcher, Google engager, or data sifter, investigators lose the opportunity to engage analysts in delving into underlying problems, such as patterns of robbery, to develop long-term crime reduction strategies.

Often agencies devalue the role of the crime analyst, which is evident in the low ratios of analysts to officers, the dismissal of analysts (and other civilians) before sworn personnel in times of fiscal austerity, the funding of crime analysis units solely on federal or state grants, and the way other units and officers view analysts as nonintegral parts of everyday deployment (see Lum et al., 2012; Telep, 2013). Analysts are rarely asked to be an integral part of management meetings, and it’s even more rare that analysts work alongside—and are treated as professional equals with—commanders in efforts to work through crime problems, find meaningful solutions, or lay out plans for evaluating existing strategies. These situations all indicate that a law enforcement agency is not using its crime analysts in evidence-based ways.

The important question, therefore, is not whether crime analysis is evidence based, but rather, Is my agency using crime analysis in ways that directly support the development, implementation, and evaluation of tactics and strategies (whether related to crime, legitimacy, or internal issues) that are evidence based? To answer in the affirmative, here are some ideas agencies might consider:

- **Institutionalize evidence-based policing.** Crime analysis units can only be evidence based to the extent that their agencies makes a strong and tangible commitment to institutionalizing proactive strategies that are focused, targeted, place-based (when appropriate), and problem-oriented. This requires a major adjustment to traditional patrol deployment and investigative strategies. Agencies can start by unchaining themselves from reactive beat patrol. This step requires developing deployment strategies based on geographic crime patterns rather than political boundaries. It also calls for first-line supervisors and officers to focus their attention on not simply calls for service but the time in between calls for service that can be reaped for crime prevention (Dermody, 2013).

- **Develop cases on places, not just on individuals.** In addition to traditional detective work that focuses on individual cases, analysts could be paired with investigators to focus on other units of analysis that may be more fruitful in reducing the opportunity for victimization in the first place. One idea that draws from problem-solving and place-based policing is creating investigative units charged with opening investigations on places rather than people (see “Case of Places” described in this issue and in the Matrix Demonstration Projects: cebcp.org/evidence-based-policing/the-matrix/matrix-demonstration-project/case-of-places).

- **Include analysts in strategic and tactical planning.** Law enforcement agencies need to rethink the way analysts are used and incorporated into management meetings. Lead analysts should be treated as professional equals with command staff and engage together in conversations about the nature and correlates of crime, and how different types of analysis might support the development, implementation, and evaluation of tactics and strategies to address those crime problems. Using analysts to only generate and report on crime numbers per week is a waste of this resource and is disconnected from an evidence-based approach. This effort will require a sea-change in police organizational culture and the way traditional managerial meetings and COMPSTAT approaches are implemented. Too often have I encountered disheartening stories of creative and top-notch analysts being hampered by internal disagreements about their role and influence, reactive and traditional commanders who are closed-minded to innovation, or simply a lack of motivation, understanding, and use of analysis by officers, detectives, and supervisors.

- **Invest in crime analysis.** Police agencies have to invest in crime analysis as a major unit within the agency to accomplish the ideas above. This means increasing the size of analysis units at the
possible expense of reducing the number of sworn officers. Agencies have to treat these units as seriously as they do investigative units and stop using crime analysis units as places to rotate employees who do not have analytic skills or as easy targets to cut in times of austerity.

- **Use analysts to achieve evidence-based policing.** Agencies have to think more broadly about the way crime analysis can be used. For community policing efforts, analysts could develop methodologically rigorous community surveys, including developing appropriate sampling strategies, longitudinal survey plans, and questions that are informed by what we know from survey research to be most appropriate in gauging the issues of interest. Aligned with evidence-based policing, analysts could not only help develop deployments, but also evaluate interventions. Analysts could be used to help investigate problem places as mentioned above.

- **Train officers and supervisors to better understand analysis.** Training about the use and importance of crime analysis should be incorporated into academy and in-service training, just as officers and commanders are trained about the importance and use of weapons, cars, mobile computers, and radios. As a start, agencies might view the two freely available training modules that the CEBCP has created for this purpose (see cebcp.org/evidence-based-policing/the-matrix/matrix-demonstration-project/evidence-based-academy-curriculum).

Like all technologies, innovations, or deployments, agencies have to determine the most cost-effective way to use crime analysis to reduce crime, increase legitimacy, and improve internal management. This is especially important, given that so many evidence-based practices rely on the proper application of crime analysis for implementation and evaluation. From an evidence-based perspective, crime analysis can be most cost-effective when it is used to develop geographic and person-based crime patterns, conduct network analysis, identify problems, evaluate interventions and performance measures on a regular basis, assess the pulse of the community and its relationships with officers and the department, and identify internal organizational concerns to help commanders proactively address them. Using crime analysis to bolster evidence-based practices and also adjusting police practices to be more receptive to crime analysis by encouraging and training on effective interventions that require its use, is a crucial first step.

---

**References**


Koper, C. S. (2013). Putting hot spots research into practice. Presentation at the sixth international Conference on Evidence-Based Policing. Cambridge University, United Kingdom.


---

As part of the Matrix Demonstration Project and in collaboration with Jamie Roush, crime analyst manager for the Jacksonville Sheriff’s Office, the CEBCP has created two training videos on the importance and use of crime analysis in evidence-based policing for both commanders and operations. These are located at the CEBCP YouTube site, clsmason, or can be directly accessed here at cebcp.org/evidence-based-policing/the-matrix/matrix-demonstration-project/evidence-based-academy-curriculum.