

Executive Summary | Person Name

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Introduction

POLICE ARE AMONG, police organizations are struggling to provide the same level of services with smaller budgets. In January 2009, 63 percent of departments said they are preparing for cuts to their total funding in the next fiscal year.¹ Government leaders are calling on police chiefs to be more creative and efficient. The increasing reliance of volunteers to cordon off crime scenes, direct traffic, and patrol parks is an example of these efforts.³ As Peter Neyroud noted at the 2011 Jerry Lee Crime Symposium, these measures, once thought to be temporary, are likely to become permanent fixtures of police organizations as budget forecasts continue to look grim. Though daunting, the calls for reform are promising to some, including former San Francisco chief of police George Gascón. “We can do a great service to the profession,”

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Policing by the numbers: Toward a new allocation of police resources

Police are among , police organizations are struggling to provide the same level of services with smaller budgets. In January 2009, 63 percent of departments said they are preparing for cuts to their total funding in the next fiscal year.¹ These budget-cutting decisions can have unintended consequences, as described in a December 2010 report by the Police Executive Research Forum (PERF).² [[The report highlights a vivid example, telling how one police department lost millions of dollars in federal funding because it had laid off the civilian whose job included gathering the required crime statistics.]]



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Though daunting, the calls for reform are promising to some, including former San Francisco chief of police George Gascón. “We can do a great service to the profession,” Gascón tells us, “if we alter the dialogue, the budget dialogue, to go beyond police.” Already, government officials, police executives, and researchers have taken up this challenge. [[As part of the Harvard Executive Sessions on Policing, David Weisburd and Peter Neyroud released a paper in January 2011, which laid out a framework for how police work might become more closely entwined with academic work often conducted in a university setting.]]

Directors’s Message | Person Name

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Understanding current models and preparing for the future

“We have the shadow of the current economic situation,” reflects Herman Goldstein, but “the kind of thing that we’re working on is a long range thing that requires the development of a new mindset within policing that asks some of the hard questions.” Indeed, economic analysis is at the fore of today’s conversation about police organizations as mayors, police chiefs, and budget makers are searching for answers on how to spend limited resources. And in the midst of the current crisis, there is also a need to plan for the future, recognizing that budgets will remain low and that resources must be spent more efficiently across government sectors. To address both sets of concerns, we turn to a discussion of what economic analysis can tell us about current models of policing and how it might be able to inform the policing future.



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Roundtable attendees

Hassan Aden, deputy chief, Patrol Operations Bureau, Alexandria, VA, Police Department

Todd Foglesong, senior research associate, Program in Criminal Justice Policy and Management, Harvard Kennedy School

George Gascón, district attorney, City of San Francisco, CA

Herman Goldstein, professor of law emeritus, University of Wisconsin Law School

Paul Heaton, economist, RAND Corporation

John MacDonald, associate professor of criminology, University of Pennsylvania

Leonard Matarese, director of research and project development, Center for Public Safety Management, International City/County Management Association

Ed McGarrell, director and professor, School of Criminal Justice, Michigan State University

Bernard Melekian, director, Office of Community Oriented Policing Services

Peter Neyroud, former chief executive, National Policing Improvement Agency, UK

Bethan Page-Jones, head of cost-effectiveness, National Policing Improvement Agency, UK

Michael Scott, director, Center for Problem-Oriented Policing, Inc.

Ellen Scrivner, deputy director, National Institute of Justice

Teresa Szymanski, chief of police, Lansing, MI, Police Department

Sandra Webb, deputy director, Office of Community Oriented Policing Services (COPS)

David Weisburd, director, Center for Evidence-Based Crime Policy, George Mason University

Susan Shah, program director for the Center on Immigration and Justice, moderated the roundtable.

From within the policing field, there are several prominent examples of co-production, but the trend has not spread widely throughout police agencies.

Current models: The disconnect between economic research and policing

In January 2011, Camden, New Jersey, the nation's second-most dangerous city according to 2009 crime data, joined a series of police organizations forced to lay-off uniformed staff. The cuts in Camden were dramatic, affecting 167 of the city's 373 police officers.⁴ These lay-offs, like those in other parts of the country, were made without much solid information on the costs and benefits to be incurred. Camden officials could not predict with any certainty whether or how much crime would rise, and how rising crime rates would affect property values, victim costs, and law enforcement costs in the long-term. Officials also had no way of knowing whether cuts from other areas of the municipal budget could have yielded greater net benefits.

A CBKB ANALYSIS REPORT

The Cost-Benefit Snapshots are designed to provide policymakers and researchers with an overview of cost-benefit analyses (CBA) in the criminal justice field. Together, the Snapshots cover more than 400 analyses on topics such as incarceration, law-enforcement, prison-based treatment, and reentry services, among many others. To identify these analyses, researchers at the Cost-Benefit Analysis Unit of the Vera Institute of Justice conducted a comprehensive literature search between January and June 2010.

The inclusion of the work described herein does not represent an endorsement by the Vera Institute of Justice or the Bureau of Justice Assistance, which has provided the funding for this work. This briefing is intended to provide a survey of the existing literature and is not an exhaustive review.

Indeed, we know of few instances where economic analysis has been used to inform decision-making about police, but the exceptions provide insight to how economic analysis might inform the current police model.

Cost-effectiveness analysis has largely carried the day in discussions about how to curb police spending and reduce crime. Cost-effectiveness analysis compares programs with similar outcomes and helps identify whether there is a cheaper or more efficient way to achieve a desired outcome. A program is cost-effective if it has the lowest costs expressed in present value terms for a given outcome. The National Policing Improvement Agency (NPIA) of the United Kingdom has largely set an international standard for cost-effectiveness analysis in policing. The NPIA aims to ensure efficient management of resources by reducing bureaucracy and creating a national procurement framework. It is estimated that the NPIA will save more than £545m (or about \$843m) each year by 2014.⁵ Cost-effectiveness analysis, whether knowingly or not, has also been used to inform decisions about whether or not to hire a civilian employee to perform a task that was previously performed by a uniformed police officer. Cost-effectiveness analysis, though informative, is not as robust as other economic tools.

Paul Heaton, economist at the RAND Corporation, used cost-benefit analysis (CBA) to help chief of police Charlie Beck make a case that the Los Angeles City Council should support additional police hiring. Heaton's study, published in 2010, found that Los Angeles could generate benefits of \$475 million annually if it invested \$125 million to \$150 million annually to increase the size of the police force by 10 percent.⁶ Heaton told us that Chief Beck could now go in front of council, armed with enough information to say, "if you value your after-school program, your anti-gang program more than that, then your ought

The ability of police to use resources more efficiently is closely linked to police efforts to prevent crime from happening in the first place.

to cut my police and keep your programs.” Similarly, economists John Donahue and Jens Ludwig used cost-benefit analysis to make a case that the U.S. Department of Justice should grant additional funding to its Office of Community Oriented Policing. The study found that a restoration of \$1.4 billion in COPS funding (the original cost of the program in 2006 dollars) would yield \$6 to \$12 billion in benefits.



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[[In addition to decisions about policing hiring, cost-benefit analysis has also been used to think about whether to continue a strategy or purchase new technology.]] A forthcoming cost-benefit study by the Urban Institute on the use of surveillance cameras in crime hot spots in Chicago says the cameras reduce crime and generate social benefits, yielding \$4 in benefits for every dollar invested.⁷ Other cost-benefit studies have shown that it is cost-beneficial to invest resources in traffic enforcement, police pursuit, helicopters, and programs that reduce the prevalence of driving under the influence.⁸

The examples cited here are the exception not the rule. Economic analysis, while a promising tool for assessing police spending, has not found widespread use in evaluating police investments. Few police agencies have the capacity to conduct CBA and there is a lack of consensus around what costs and benefits to measure, and how to value the intangible aspects of policing work. There are also looming questions about how to apply the results of cost-benefit analysis to actual decision making and spending, and whether the results will matter at all, given the largely political context surrounding policing.

Future models: Shaping police planning with economic analysis

“We need to build for the future rather than just respond to past situations,” observes David Weisburd of George Mason University. [[We discussed what the future of policing might look like with law enforcement, government officials, and researchers. These conversations brought forth four emerging trends in policing and suggestions for how economic analysis can inform the development of these trends.]]

Strengthening deterrence and crime prevention

[[Goal: tell reader why we’re mentioning deterrence and crime prevention as the future of policing]]

Even as the financial crisis threatens police budgets, research has emerged to suggest that spending on law enforcement reduces more crime per dollar invested than spending on incarceration.⁹ This research, published in the February 2011 issue of *Criminology and Public Policy*, points to a growing body of evidence that suggests that police, if deployed in ways that materially heighten the risk of detection and apprehension, can exert a substantial deterrent effect. [[As author Daniel Nagin puts it, deterrence, above all police activity, is a cost-effective investment of resources because, “a crime that doesn’t happen,

does not require the use of courts, corrections, or other community supervision.” I’m not sure of the specific quote. I can get it from listening to the George Mason podcast or contacting Nagin directly.]] The ability of police to use resources more efficiently is closely linked to police efforts to prevent crime from happening in the first place.

Though the research on how police prevent crime is limited, the studies that do exist tell us some strategies work better than others. In a search for practices that work, criminologists at the Center for Evidence-Based Crime Policy at George Mason University compiled nearly 100 studies in an Evidence-Based Policing Matrix.¹⁰ Many of the studies lack rigor and score low on the Maryland Scale of Scientific Methods, a problem that persists since Lawrence Sherman and his colleagues at the University of Maryland first identified it in 1996.¹¹ In this 1996 study, the authors could not draw reasonably certain conclusions about what works, what doesn’t, and what is promising. Today, however, the Evidence-Based Policing Matrix identifies “realms of effectiveness,” which provide insight to effective police strategies.

The Matrix’s realm of effectiveness includes hot spot policing, problem-oriented policing, and drug market enforcement that uses civil remedies, which have in common focused, place-based, and highly proactive characteristics. Hot spots and pulling levers policing, derivatives of the problem-oriented policing model, rely on assumptions about the concentration of crime. Hot spots policing, which directs policing resources to the relatively small geographic areas contributing to the most crime, has demonstrated positive crime results in Minneapolis, MN; Richmond, VA; and Jersey City, NJ.¹² Similarly, pulling levers policing, which directs policing resources to the most likely victims or perpetrators of violence, has shown significant reductions in homicide and gunshots reported to local police units.¹³

These identified strategies are pro-active, and require police to engage with the communities or people that are most likely to commit crime *before* the crime occurs. These strategies not only reduce crime, as studies show, but also have the potential to increase efficiency for police organizations, which may be able to file less paperwork, process fewer cases, and arrest fewer people,



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and the justice system at large. [[For these reasons, strengthening crime prevention and deterrence are likely to be important aspects of policing in the future.]]

Coordinating and pooling resources with other police organizations

There are approximately 18,000 police agencies in the United States. The majority (81 percent) of local police departments are small, employing fewer than twenty-five sworn police officers; forty-two percent of agencies employ fewer than five.¹⁴ [[The question of how to coordinate these police agencies and how to make them more efficient has been on the mind of policy-makers since at least the President’s 1967 Commission on Law Enforcement and Administration of Justice.]] At that time, the Commission recommended, “each metropolitan area and each county should take action directed toward pooling, or consolidation, of police services through the particular technique that will provide the most satisfactory law enforcement service and

HOW TO ESTIMATE MARGINAL COSTS

The first step in estimating marginal costs is to project the impact of an initiative on the criminal justice system's operations. The magnitude of the impact will determine whether **short-term** or **long-term** marginal costs are used in the analysis. For example, if a program or a policy reduces the inmate population by 20 people, a corrections department may save on food, clothing, and some medical costs. These are considered short-term marginal costs. If an initiative reduces the inmate population by 100 people, the department may save on staffing costs as well, thus increasing the savings. If a large-scale initiative closes an entire prison, then the total cost of operating that prison can be eliminated. The cost-savings described in the second and third examples are considered long-term marginal costs.

After projecting the likely impact of an initiative on agencies' workloads, the next step is to estimate the relevant marginal costs. This can be done using one of the following methods.

protection at lowest possible cost."¹⁵ It identified areas ripe for consolidation, including recruitment, selection, and training of personnel, planning, organizing crime intelligence, purchasing, maintaining public records, and conducting forensic analysis.¹⁶ The economic argument: combining services and eliminating reductions across police organizations can help police achieve economies of scale and improve efficiency. Despite more than forty years of discussion on the topic, few police agencies in the United States have taken up the challenge of consolidation, despite acknowledging that coordination and data-sharing can control crime that crosses jurisdictional boundaries.

Also prompted by the fiscal crisis is a separate but related discussion of the optimal size of a police force. Bernard Melekian, director of the Office of Community Oriented Policing Services (COPS), asks, "What is the acceptable minimum size of a police department in this country? Can we move in that direction?" To date, research has found that smaller police departments can provide equal or superior performance to their larger counterparts.¹⁷ The research also notes that the ideal size of a police department largely depends on what you would like it to do.

[[It is not a given that coordinating or pooling resources across agencies should require the full-scale merger of police departments. As the 1967 Commission report notes, some areas of policing will be particularly ripe for pooling resources, while others will largely remain the same. Economic analysis can inform decisions about how to consolidate or pool resources across police organizations, and given the context of the current budget crisis, these issues are likely to govern the future of policing services.]]

Shifting, spreading, and sharing responsibility with residents and private businesses

[[“We encourage them to think about the cost, but also the question of who's going to pay it,” Michael Scott tells us, describing his advice to police administrators.]] Indeed, police organizations often rely on residents and businesses to take private action to protect valuables and secure property. Most private actions, including the purchase of locks, security cameras, and home security systems, are done without formal coordination with the police department. When police do, however, formally ask residents or private businesses to contribute to the production of police services, by either making use of their resources, expertise, or information, this strategy is commonly-referred to as the *co-production of public safety*. Examples for within policing and in analogous fields indicate that co-production of public safety, or the shifting, spreading, and sharing of responsibility with residents and private businesses, is a new wave of policing strategies. These types of partnerships can help police departments operate more efficiently with lasting effects on crime rates.

From within the policing field, there are several prominent

examples of co-production, but the trend has not spread widely throughout police agencies. The Department of Homeland Security’s “If You See Something, Say Something” campaign, is one prominent example, where the government encourages private citizens to report suspicious activity. Through this campaign, private citizens are welcomed as partners with law enforcement in the effort to prevent violent or terrorist activity. Similarly, on a local level, COPS funded partnerships between police organizations and community developers seeking to improve public safety through city planning. “Police investments,” says Bill Geller, co-author of the COPS report, “leveraged tens of millions of dollars in physical revitalization resources by developers.”¹⁸ Through these partnerships, police identified crime-attracting establishments, such as slum housing, bars, and pawn shops, and worked with community developers to replace these places with community assets, such as supermarkets, banks, and green spaces. [[Police also assured developers and investors that they would maintain their presence in the newly-developed area, assuring long-term public safety and security of the investment.]]

An analogous example in fire departments demonstrates how co-production can greatly improve efficiency. “Fire departments have something going for them that the police do not have,” says Herman Goldstein, “They have made a substantial investment in scientific inquiry to what causes fires, and they have taken action given the combined interest of insurance companies and fire personnel.” [[Much of this action has been taken around code enforcement and public-private partnerships to ensure proper building materials, sprinkler systems, and fire alarms that save lives.]] These partnerships have greatly increased efficiency in fire departments [[citation]]. [[And, as Michael Scott notes, “I wish they could find something else to do with their time, but they’ve earned that time by being so incredibly effective in preventing fires.”

[[If policing were to move toward greater co-production of safety, it is likely that economic analysis could inform the extent and scope of the partnership. Take, for example, a cost-benefit study of a LoJack car security system, which found that every dollar spent on LoJack reduced the cost of auto theft by ap-

proximately ten dollars.¹⁹ Such a study might encourage police to invest in private alarm systems, which would in turn, improve the police organization’s ability to detect and investigate automobile theft.]] Philip Cook suggests this position in a 2011 study in *Criminology and Public Policy*, encouraging policymakers to consider that “police effectiveness depends to a considerable extent on private action, and in important respects, the police and private citizens coproduce crime control.”²⁰ For the most part, however, the step has not been made to formalize these partnerships.

Limiting the scope of police services

“Police work” is a phrase that conjures up in some minds a television drama with the police investigating crime and often catching the perpetrator. But, we have learned that police work today varies widely in scope, ranging from routine traffic enforcement and patrol to the operation of after-school programs, recreational leagues, and even, animal shelters. Should police be in the business of carrying out all these activities? Could private actors or other government agencies take over some of these functions?

There are many variables outside the scope of policing that influence police efficiency. For some chiefs, like George Gascón, the role of policing needs to expand to meet these variables. He notes, “We’re not participating in the solution. How do we keep them in school, how do we make them stay in school, and how do we help them graduate?” In other cases, police chiefs that the increasing public demand for services is driving up costs that they can no longer afford, creating a subtle shift in the mission and role of police officers. Gascón and Todd Foglesong quote one police chief, “We have become the social agency of the first resort for the poor.”²¹

How do police agencies decide when to off-load resources and when to take on more responsibility? Too often, these decisions are made in the context of a budget battle, wrought with political overtones and emotion. Economic analysis, were it developed further in policing, could help police decide whether or how to limit the scope of their activity and push resources to other agencies or private actors.

Challenges to advancing economic analysis in policing

[[The results of an economic analysis are generally straightforward. A program's benefits either outweigh the costs, or they don't; a program is either cost-effective, or it isn't. As the previous section demonstrated, this type of information and the process used to achieve it can be valuable to policy makers. But, the achievement of sound results is dependent on solid methodologies for determining the likely impact of a proposed policy or program and estimating the costs and benefits. There are significant methodological challenges to advancing economic analysis in policing. There are also practical challenges to how police organizations would use the results of such analyses, and whether they would be helpful in shaping policymaking, given the highly political and localized context of much policing activity. We explore some of the challenges, first methodological then practical, to advancing economic analysis in policing.]]

Methodological challenge

We've laid out the case for how economic analysis can be helpful to policing, but have yet to discuss the methodological im-

"It will just help you explain fully why you're doing what you're doing because at the end of the day, irrational politicians might also make those decisions."

PAGE-JONES

pediments to advancing this work in the field. The goal of this section is to lay out the three methodological impediments that stand in the way of advancing economic analysis in policing.g:

- > *Evaluationw that do not collect the type of information needed for an economic analysis.* A growing body of evaluation tells us that some policing strategies work better than others, but there are elements routinely missing from policing evaluations that, if included, could help support further economic studyt.

- > *Limited understanding of policing costs and how police decide to allocate resources within the department.* Though most police organizations make their budget data available to the public, we need to know more about how administrators allocate resources, and what costs are important to policymakers.
- > *Lack of information on policing benefits, both tangible and intangible, of policing.* The principal mission of police is crime control, and thus the principal benefit to be measured in a cost-benefit analysis is crime averted—the most commonly measured outcome of policing evaluations.²² But, there are other benefits of policing interventions that are unknown, unmeasured, or difficult to assign a dollar value.

Evaluations that do not collect the type of information needed for economic analysis

"I've never seen a study that was that timely and that what you found in the study, you couldn't apply years later. So I think we should just take ownership that sometimes the research process takes a while for the right reasons so people don't—800% return, and, uh, until we have better—more contemporary evidence that suggests a change of thought, the, then this is, you know, the best we have."

MACDONALD

The first step to measuring value in policing is figuring out if a proposed program or policy works. Though a growing number of evaluations tell us that some policing strategies work better than others, the existing body of evaluations are largely missing information that would be needed to support economic analseis. A 2006 study on the topic, published by the National Institute of Justice (NIJ), found only five policing evaluations that would support a cost-effectiveness or cost-benefit analysis.²³ A 2006 study on the topic, published by the National Institute of Justice (NIJ), found only five policing evaluations

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The NIJ study critiqued the existing body of evaluations on three fronts. First, it noted that evaluations did not link changes in policing to changes in crime. Evaluations, for instance, did not measure outputs, or changes in policing levels, but instead focused on outcomes, such as changes in the crime rate. . It would be easier to make the case that an outcome was a product of an intervention if information on outputs were available. [Need to say why]. Next, the NIJ study critiqued the evaluations for failing to measure inputs, such as the number of police officers dedicated to an intervention or the number of overtime hours used to carry out the policy. Measuring inputs is a key step to understanding costs. [[need to say why]]. Lastly, the

“ or are these really issues for which, you know, even though economists might say you can come up with a dollar value, this is really something about justice and fairness, and it’s—and it’s just something that ought to be outside the bounds of a cost benefit analysis.”

HEATON

study urged the development of stronger, more robust outcome measures. Evaluations, the study said, tended to use subjective outcomes, such as asking survey respondents whether they thought their neighborhood had improved.

Though the NIJ recommendations are key to advancing economic analysis in policing, there are indications that some of the steps will be easier to implement than others. Herman Goldstein [[did he say this?]] noted the difficulty of measuring inputs because police resources are fluid and largely based in personnel expenses. [[The development of a new initiative rarely calls for new hiring, but rather overtime hours or a re-allocation of time.] In many cases, a new policing strategy is fully integrated into the day-to-day routine of the officer.

Limited understanding of policing costs

The concept of cost not only refers to the price tag of an inter-

vention, but the opportunity cost of the intervention—the cost of not using funds for their most productive alternative use. Cost can be something as obvious as the administrative price of a program or policy or as elusive as placing a dollar amount on police authority.

Police personnel spending is the primary cost associated with any policing strategy, but there are also tangible and intangible costs that can be difficult to measure. Tangible costs are more easily monetized and include standard line items in police budgets, such as salaries and fringe benefits, overtime, and equipment costs. Administrators are typically referring to tangible costs when discussing rising police spending, and personnel costs are the single largest contributor to growing police budgets. There are also costs that accrue off the policing budget. An arrest made by a police officer, for example, can trigger a host of costs in the criminal justice system, including court fines and fees, prison construction and maintenance, and rehabilitation, among others. The growing cost of policing may also affect the quality of other government services.²⁴ Some types of policing activity, including community policing strategies, can generate costs in the community, which include the time spent to volunteer for service on committees, citizen patrols, or advisory boards; and the labor and resources of social-service agencies, clergy, and other government agencies brought into problem-solving activities.²⁵ Though these costs would be included in a thorough economic analysis, they are often unknown and difficult to measure.

There is also little information about how policing cost are distributed across different police strategies, and how policing costs would adjust if presented with an opportunity to become more efficient or effective. [[I need to expand this further.]] As previously noted, officers can work on multiple strategies at the same time, changing course from one minute to another. [[Research tell us that it is exceedingly difficult to keep track of the time allocated to a certain activity and record the cost.]] It is also unclear how unit costs change in response to a given intervention. Would a police department lay off officers if it could become more efficient? Would it hire additional civilian staff? The answer is unclear given the political nature of police layoffs as well as the upfront investments that police departments often

make in training new uniformed officers. [[can we talk here about lateral movement into policing?]]

Lack of information on policing benefits, both tangible and intangible

Not all costs and benefits of police activity translate to police budgets or performance reviews. [[In fact, many of the most important costs and benefits of policing accrue off-budget and are never directly measured, but these intangible costs and benefits have a direct and clear effect on how police control crime.]] “There’s a cost to officers if they know that they’re not going to get cooperation when they make arrests,” says John MacDonald, professor at the University of Pennsylvania. Similarly, police activity comes at a cost to communities that pay in a range of ways, from the time it takes to appear in court to lost privacy that comes along with police presence in the home or community. MacDonald reflects, “there’s a social cost to having thousands of people cycling through and spending half a day in court when nothing happens.”

“It’s easy to miss these hidden benefits of policing, including people’s ability to use public space, reduction in fear, and improved quality of life,” reflects Ed McGarrell, professor at Michigan State University. [[The benefits of good public safety are clearly valued by society and an important outcome for police departments. The benefits of good policing can also improve law enforcement’s ability to resolve cases in the long-term.]] In a recent presentation to the National Institute of Justice, Yale law professor Tracey Meares expanded on this point, arguing for the importance of legitimacy in policing. Legitimacy is “the belief that police are trustworthy, honest, and concerned about the well being of the people that they deal with, and when this is true, that police authority ought to be accepted.” When community members believe that police are legitimate, or righteous in their application of the law, they are more likely to report crime, cooperate with investigations, and commit less crime. [[When considering where to make budget cuts or where to take the future of policing, these intangible benefits must also be part of the conversation.]]

Yet, there is little precedent for monetizing the intangible costs and benefits of policing.²⁶ We have not yet put a dollar value on

the price of false arrests or unauthorized use of force, and we lack the methodology to do this work. Measuring and monetizing intangible costs and benefits does, however, have precedent in other areas of justice. Economic analyses of justice programs or policies have focused primarily on putting a dollar value on reductions in crime. Economists have put a dollar value on victim pain and suffering, for example, or fear of public safety. [[Do we need to expand on this here?]] And, even as we mention that there are not currently ways to measure some of the intangible benefits of policing, there are also concerns that measuring such benefits could generate unintended consequences. As Paul Heaton notes, “We express things in numbers that make sense to people, but there’s also a danger that, in the very process of making things have a common metric, we gloss over the costs to different agents.”

Practical Challenges

Next steps to advancing economic analysis in policing

Dummy TEXT! Evaluation proposals that measure both inputs and outputs are more likely to support cost-benefit analysis. Inputs include number of officer labor hours devoted to a project, number of civilian labor hours, and quantity or type of material purchased. Outputs could include number of guns confiscated, arrests, treatment and counseling services, referrals to prosecution, or lighting improvements. Too often, policing evaluations included only the overall affect on the crime rate without providing data on these intermediate measures. Without an account of inputs or outputs, it is often difficult to establish whether the police activity had a causal effect on the outcome.²⁸ It also increases the difficulty of assigning a monetary cost.

Methodological next steps

We’ve already demonstrated how economic analysis can inform policing and we’ve discussed the methodological and practical

impediments that stand in the way of more fully integrating economic analysis and policing. This section points out the next steps that must be taken to address the methodological impediments to economic analyses in policing.]]

This publication discusses three methodological impediments to policing. These three impediments lead to three recommendations:

- > Ensure that policing evaluations support cost-benefit analysis.
- > Encourage more transparency around policing costs and budgets.
- > Develop methods that help practitioners put a dollar value on the intangible costs and benefits of policing.

Ensure that policing evaluations support cost-benefit analysis

The National Institute of Justice does not require that solicitations include a cost-benefit component, concluded Ellen Scrivner, NIJ deputy director, and they have not issued guidance about acceptable cost-benefit methods in justice.²⁷ Yet, Scrivner acknowledged that there was an interest and a need to more fully integrate economic analysis and evaluation. Specifically, solicitations for evaluations would need to encourage proposals that measure both inputs and outputs, and establish a preference for objective, rather than subjective measures.

Evaluation proposals that measure both inputs and outputs are more likely to support cost-benefit analysis. Inputs include number of officer labor hours devoted to a project, number

of civilian labor hours, and quantity or type of material purchased. Outputs could include number of guns confiscated, arrests, treatment and counseling services, referrals to prosecution, or lighting improvements. Too often, policing evaluations included only the overall affect on the crime rate without providing data on these intermediate measures. Without an account of inputs or outputs, it is often difficult to establish whether the police activity had a causal effect on the outcome.²⁸ It also increases the difficulty of assigning a monetary cost.

[[Evaluations that establish a preference for objective, rather than subjective measures are also more likely to support cost-benefit analysis.]] Policing evaluations have typically surveyed community members to ask about quality of life conditions, for example. Another way to do this would be to measure objective signs of community disrepair, such as the number of square meters of graffiti or the amount of trash on the street, The NIJ study instead recommended more use of objective measures, such as measuring square meters of graffiti or amounts of trash on the street, which are also easier to assign a dollar value.²⁹ might be easier to assign a dollar value. In sum, more must be done to ensure that policing evaluations support further economic analysis.

Develop methods that help practitioners put a dollar value on the intangible costs and benefits of policing

“Economists express things in numbers that make sense to people,” says Paul Heaton, economist at the RAND Corporation. But, there are many intangible costs and benefits of policing that are not easily assigned a dollar value. To encourage economic analyses in policing, we must begin to put a dollar value on intangible costs and benefits. One way to do this would be to develop a methodology for measuring intangible costs and benefits that we would want to know about, such as the cost of an unsubstantiated arrest or the value of improvements in quality of life. Some ideas that economists and researchers have for doing this type of work include the following:

- > Use survey data to examine average differences in public’s perception of legitimacy and control for demographic variables to determine whether there are significant differences across demographic groups;

This project is supported by Grant No. 2009-MU-BX K029 awarded by the Bureau of Justice Assistance. The Bureau of Justice Assistance is a component of the Office of Justice Programs, which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, the Office for Victims of Crime, the Community Capacity Development Office, and the Office of Sex Offender Sentencing, Monitoring, Apprehending, Registering, and Tracking. Points of view or opinions in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice.

- > Conduct a willingness-to-pay survey to estimate how much people are willing-to-pay for emergency response or other police activities;
- > Collect insurance records to determine how much public pays for alarm systems that require police to show up at the house if the alarm goes off; and
- > Monetize the cost of waiting in the court to defend against a conviction on trumped up charges.

We could also take a broader look at the costs and benefits of

a specific policing strategy, such as stop and frisk, or hot spots policing.

Practical Next Steps

Simulation modeling is not entirely new to policing. The RAND Corporation cost of crime calculator acts as a simulation model for the Los Angeles Police Department. The calculator used research to predict how changes in police hiring

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