## USING SCIENCE TO ADVANCE THE POLICE PROFESSION

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#### I. INTRODUCTION

Recent events across the country have shone light on a destructive rift between law enforcement and the people they are sworn to protect. Calls for criminal justice reform have become commonplace, and the general public is looking to law enforcement to demonstrate a commitment and ability to minimize tragic outcomes and increase trust and legitimacy across all communities. Law enforcement—perhaps now more than ever—is called to increase performance expectations and advance the field as a profession, with all of the standards and quality assurances incumbent in such a designation.

While these calls for reform and increased professionalism ring from multiple sources at increasing volumes, less attention is generally paid to evidence-based practices and policies as solutions to advance these reforms. In light of these recent events, President Obama formed a Task Force on 21st Century Policing comprised of some of the leading minds in law enforcement, civil rights, and civil liberties. Last year, the Task Force released a report that, by most accounts, represents a compendium of the most salient and effective reforms law enforcement agencies can institute to promote effective crime reduction while building public trust. Many of these suggested reforms are either grounded in science or lend themselves to evaluation that will advance the science of policing. The report also calls on law enforcement agencies to increase the quality and quantity of their data collection, to conduct jurisdiction-wide surveys to assess their progress, and to inform additional research on high-priority issues in the field.<sup>2</sup>

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<sup>1.</sup> President's Task Force on 21st Century Policing, Washington DC Office of Community Oriented Policing Services, Final Report of the President's Task Force on 21st Century Policing, (2015), http://www.cops.usdoj.gov/pdf/taskforce/taskforce\_finalreport.pdf [hereinafter President's Task Force Final Report].

<sup>2.</sup> *Id.* at 19–21.

The Task Force Report presents a strong framework from which to advance the use of science and data to identify improved policies and practices in policing. However, if policing is to be firmly established as a profession whose standards reflect evidence-based practices—particularly with regards to building trust and legitimacy within the communities they serve—science must be infused throughout policy and practice. This point cannot be overstated and is key to effectively moving policing into the future. Departments must demonstrate a systemized commitment to being consumers of knowledge and adopters of strategies that have been proven to work and have positive impact with minimal to no negative consequences on communities. Furthermore, as the realities of practice evolve, so too must the policies that shape the practice. Departments' best chance at instituting effective policies is to both design procedures that reflect our current understanding of what works in policing and faithfully evaluate the impact of these policies on the field and community writ large.

The following article explores how science supports and informs policing practice both in terms of developing solutions—such as the recommendations from the Task Force report—and advancing the field by bridging the gap between research and practice through professional development and maximal attention to incorporating what science has shown works. The article also delves into the crucial intersect between research and practice, illustrating how the realistic value of research is inextricably tied to the extent to which it answers the field's most pressing questions and crafts those answers in a way that can be practically implemented. Finally, the article outlines a path forward for both police professionals and researchers to increase the impact of research on policing practice through professional development.

### II. ADVANCING POLICE SCIENCE AND RESPONDING TO THE NEEDS OF THE FIELD

As noted by David Weisburd and Peter Neyroud in *Police Science: Toward a New Paradigm*, "[t]he advancement of science in policing is essential if police are to retain public support and legitimacy, cope with recessionary budget reductions, and . . . alleviate the problems that have become part of a policing task." Weisburd and Neyroud posit that in order for these advancements to occur, policing as a profession must commit to adopting and advancing evidence-based policies while researchers must

David Weisburd & Peter Neyroud, Police Science: Toward a New Paradigm, in NEW PERSPECTIVES IN POLICING, HARVARD EXECUTIVE SESSION ON POLICING AND PUBLIC SAFETY, 6 (Jan. 2011), http://www.hks.harvard.edu/content/download/67528/1242922/version/1/file/NPIP-Police+Science-TowardaNewParadigm.pdf.

commit to becoming "active participants in the everyday world of police practice."

The National Institute of Justice (NIJ)—the U.S. Department of Justice's research, development, and evaluation agency—seeks to do just that. NIJ has a long history of supporting researchers who demonstrate both a practical understanding of criminal justice practitioners' needs and a dedication to designing research to address these needs. NIJ is also strongly committed to supporting law enforcement agencies in their efforts to implement evidence-based practices, evaluate effects of programs and policies, and coordinate with researchers to inform project development. We have been and currently are in a unique position to advance the efforts of the federal, state, local and tribal governments to apply solid science to practice and generate policies informed by that science, both of which are highlighted in the Task Force Report. And given that NIJ supports science across the entire criminal justice system, efforts to advance policing practices and policies are mindfully occurring in the larger context of the entire system.

## A. Leveraging the President's Task Force on 21<sup>st</sup> Century Policing Report to Improve Police Practice Through Evidence-based Policies in Priority Areas

The President's Task Force on 21st Century Police Report ("Task Force Report") offers a starting point for practitioners looking to institute evidence-based reforms and also serves as a guidepost for researchers committed to developing projects that meet the high-priority needs of the field. With significant contributions from both the practitioner and academic communities, the Task Force Report demonstrates the value of cyclic exchanges between practitioners and researchers. The six pillars serve as mainstays of improving police practices, and the following explores how science has identified what works in these priority areas and can inform future developments, as well as how science can support law enforcement agencies seeking to implement these recommendations.

#### 1. Building Trust and Legitimacy

Supported by decades of research illustrating the importance of the public's perception of police legitimacy and procedural justice, the first pillar encourages agencies to embrace a culture in which police serve as guardians of the public rather than as warriors.<sup>5</sup> The pillar highlights the

<sup>4.</sup> Weisburd & Neyroud, *supra* note 3, at 6.

<sup>5.</sup> President's Task Force Final Report, *supra* note 1, at 11–12.

importance of procedural justice to guide not only interactions with the general public but also among the rank and file, and encourages departments to proactively engage with communities through positive, nonenforcement activities.<sup>6</sup>

A number of completed and ongoing research projects (and initiatives with significant research components) test these principles and illustrate how best to increase public trust. For example, in the fall of 2014, Attorney General Eric Holder launched the National Initiative for Building Community Trust and Justice, aimed at not only improving relationships between police and the communities they serve, but also advancing the scholarly understanding of issues that affect these relationships.<sup>7</sup> Together with a number of other Department of Justice components,<sup>8</sup> NIJ is supporting six pilot sites across the country as they deploy newly developed interventions informed by implicit bias and procedural justice research. These pilot efforts will include robust research and evaluation efforts to determine the efficacy and impact of these interventions, providing lessons learned to effect change beyond those jurisdictions being studied.

There is also a robust body of social science research that delves into the contextual factors influencing police legitimacy and procedural justice and evaluating which mechanisms serve to improve police/community relationships, much of which NIJ has supported through research grants. Science has shown us exactly how an officer's actions impact the public's perceptions of fairness and legitimacy, how officer actions actually matter to public perception more than the outcome of the encounter, and what mechanisms officers can use in public interactions to increase public perceptions of fairness.<sup>9</sup> Additionally, NIJ-supported operational evaluations of equipment deployed in the field will help determine if such technologies as body-worn cameras positively impact police encounters with the public.

In addition to furthering scientific understanding of police legitimacy and procedural justice, NIJ is also supporting a mechanism by which agencies can collect data related to non-traditional metrics of police performance, looking beyond the typically used benchmarks of crime incidents, number of arrests, citizen complaints, etc. Progressing from

NATIONAL INITIATIVE FOR BUILDING COMMUNITY **TRUST** JUSTICE, AND http://www.trustandjustice.org (last visited Feb. 20, 2016).

Id. at 10-16.

See id. at https://trustandjustice.org/pilot-sites. The participating agencies are: Bureau of Justice Assistance, Office of Juvenile Justice and Delinquency Prevention, Office for Victims of Crime, Office of Community Oriented Policing Services, Office on Violence Against Women, Civil Rights Division, Community Relations Service.

See NATIONAL INSTITUTE OF JUSTICE, OFFICE OF JUSTICE PROGRAM, http://www.nij.gov (last visited Feb. 2016). For more information on NIJ's police legitimacy and procedural justice portfolio, please visit http://www.nij.gov, keyword: legitimacy.

merely counting activities to actually measuring the quality of policing is an essential step for agencies seeking to sustainably improve community relations. That is why NIJ has designed and supported the Policing Platform—a study to demonstrate the feasibility of creating a foundation from which to launch studies on multiple aspects of policing that are not traditionally measured such as officer health, productivity, and attitudes.<sup>10</sup>

These are just a few examples of the efforts to advance strategies to improve policing practices, measure their impact and effectiveness, evaluate innovative ways of understanding the dynamics of policing practices and community trust. There is much more that needs to be done to further the understanding of these efforts.

#### 2. Policy and Oversight

The second pillar focuses on the policies regulating law enforcement actions in such areas as use-of-force, mass demonstrations, obtaining consent prior to searches, gender identification, racial profiling, and performance measures.<sup>11</sup> Specifically, the pillar encourages agencies to "develop policies and strategies for deploying resources that aim to reduce crime by improving relationships, increasing community engagement, and fostering cooperation."<sup>12</sup>

A key component of this approach requires that policies reflect lessons learned from critical incidents, encouraging agencies to "implement nonpunitive peer review of critical incidents separate from criminal and administrative investigations.<sup>13</sup>" NIJ's Sentinel Events Initiative (SEI) offers an extremely promising model for agencies seeking to implement this recommendation; it is proven to have led to significant improvements in hospital operations, the aviation industry, numerous private sector businesses, and even other areas of governmental activities. Since 2011, NIJ has been investigating whether non-blaming, forward-looking, all-stakeholder reviews of sentinel events (such as wrongful convictions or wrongful releases) can be used to learn from errors and decrease future bad outcomes. While SEI has just completed a beta phase of analysis, initial results are promising that these reviews (akin to after accident reviews by the NTSB or child death review panels in medicine) can be used to inform policy improvements throughout the criminal justice system. While these

A Foundation for Policing Research: The Policing Research Platform, NATIONAL INSTITUTE OF JUSTICE, http://nij.gov/topics/law-enforcement/administration/policing-platform/Pages/welcome .aspx (March 16, 2010).

<sup>11.</sup> President's Task Force Final Report, supra note 1, at 19–30.

<sup>12.</sup> Id. at 2.

<sup>13.</sup> Id. at 22

NIJ's Sentinel Events Initiative, NATIONAL INSTITUTE OF JUSTICE, http://nij.gov/topics/justicesystem/Pages/sentinel-events.aspx (last modified Jan. 11, 2016).

efforts to date have not focused specifically on policing activities, their attempts at holistic system improvement will likely effect positive change within policing as a result. Further, many of the types of sentinel events that warrant further study (such as non-fatal shootings and excessive use of force) have direct implications for police policy and practice.

#### 3. Technology and Social Media

The third pillar encourages law enforcement agencies to adopt new technologies, as long as these technologies are evaluated with regards to effectiveness and efficiency and do not infringe on individual rights. <sup>15</sup> The pillar highlights the need for standards across all law enforcement technology development, and urges law enforcement to identify and adopt best practices for technology-based community engagement that increases community trust and access. <sup>16</sup>

The value of science in establishing standards for technology use and performance and conducting operational evaluations of technology in the field cannot be overstated. NIJ's standards and testing program develops and publishes standards for equipment and technology that specifically address the needs of law enforcement, ensuring that products are safe, reliable, and perform according to established requirements.<sup>17</sup> These standards take into account the practical experiences of the law enforcement community and allow for technologies and equipment to be tested in a valid and consistently replicable manner.<sup>18</sup> Current NIJ standards include vehicle tracking devices, auto-loading pistols, drug reagent test kits, and ballistic resistant body armor, among others.

Additionally, social science is helping us understand the impact of less-lethal technologies. A recent NIJ study suggests that less-lethal weapons such as pepper spray and conducted energy devices (such as the Taser) decrease rates of injury both for officers and offenders. <sup>19</sup> Operational evaluations of these technologies in the field are offering insight into best practices for ensuring safety and effectiveness, as well as identifying in which scenarios less-lethal technologies are most appropriate.

It is extremely important that the evaluation of any and all technologies not focus solely on the efficiencies accomplished but also determine if and how they are used and even more importantly what impact

<sup>15.</sup> PRESIDENT'S TASK FORCE FINAL REPORT, supra note 1, at 31–39.

<sup>16.</sup> *Id*.at 31.

NIJ Standards and Testing, NATIONAL INSTITUTE OF JUSTICE, http://nij.gov/topics/technology/standards-testing/pages/welcome.aspx (last modified June 25, 2015).

<sup>18.</sup> Id.

<sup>19.</sup> MICHAEL R. SMITH, *ET AL.*, A MULTI-METHOD EVALUATION OF POLICE USE OF FORCE OUTCOMES: FINAL REPORT TO THE NATIONAL INSTITUTE OF JUSTICE, at, 4.18-4.19 https://www.ncjrs.gov/pdffiles1/nij/grants/231176.pdf (July 2010).

they contribute to policing effectiveness. Without that last element of looking at measurable outcomes, it is impossible to evaluate whether or not the investments are appropriate and the desired results are actually being achieved. This is true not only for technology but for all programmatic and policy efforts. We cannot focus simply on efficiencies and satisfaction within policing but must look at effectiveness and impact (both positive and negative) on communities, the policing profession and the interface between those two worlds.

#### 4. Community Policing & Crime Reduction

Pillar four encourages law enforcement agencies to work with communities to better understand their problems and work jointly to develop criminal justice solutions.<sup>20</sup> The pillar highlights the importance of community engagement in managing public safety, and advances a culture of policing that reflects "the values of protection and promotion of the dignity of all—especially the most vulnerable."<sup>21</sup>

Incumbent in that approach is community policing, acknowledging the role that community residents have in understanding crime drivers and how best to reduce crime in their neighborhood. NIJ recently issued a solicitation for research and evaluation on community oriented policing, exploring strategies used to build and strengthen police-community relationships and assessing whether these strategies are effective in reducing crime and disorder. The solicitation also seeks research on the congruence of community oriented policing strategies and homeland security initiatives, among other priority issues. This will build on previous work supported by NIJ that lead to early advancements in community oriented policing. As is true of much of what we are discussing, this crucial area requires further attention and investment as the police profession develops.

Furthermore, NIJ focuses research on reducing specific types of pervasive crime (such as violence against women, human trafficking, and elder abuse), focusing on the factors that increase crimes and effective responses to prevent them. NIJ recently launched the Comprehensive School Safety Initiative (CSSI), a research-focused program aimed at increasing school safety and decreasing school-based crime nationwide. This Initiative is built on robust partnerships between educators, researchers, and other disciplines to better understand the root causes of school violence, evaluate safety programs and strategies, and ultimately

<sup>20.</sup> PRESIDENT'S TASK FORCE FINAL REPORT, *supra* note 1, at 41–50.

<sup>21.</sup> Id. at 3.

develop a comprehensive framework to reduce school-based crime.<sup>22</sup> Of particular relevance to policing is the emphasis in CSSI of enhancing the understanding of the impact of School Resource Officers. We are committed to understanding the impacts (both positive and negative) of placing police officers in schools and ensuring that investment in this strategy is informed by science and achieves the intended result of making schools safer.

NIJ also hosts CrimeSolutions.gov. CrimeSolutions is a publicallyavailable website containing information on criminal justice programs and Specifically, CrimeSolutions uses research to rate program effectiveness with regards to criminal justice outcomes and provides a compendium of what works and what is promising in criminal justice, juvenile justice, and victims services. CrimeSolutions includes many programs on crime prevention, including community crime prevention strategies that target changes in community infrastructure, culture, and/or physical environment to reduce crime.<sup>23</sup> Such repositories are essential in disseminating information about what science shows works along a continuum of assessments—from programs that have undergone rigorous evaluations to promising practices grounded in a rich body of understanding but not yet fully evaluated. CrimeSolutions represents the end of the spectrum rooted in the most rigorous evidence based methodologies, but there is an equal need for careful review and inclusion of those programs with a rich enough body of practice based evidence that allow for making the best choices even when there is limited research available, which is currently the case with many programmatic strategies. It is always best to rely on rigorous research, but when that is not yet available, there still needs to be some guidance when selecting programs to advance policing practice.

#### 5. Training and Education

Pillar five highlights the need for expanded and effective training for law enforcement in light of the increased scope of law enforcement responsibility in today's world.<sup>24</sup> The pillar acknowledges the breadth of issues law enforcement is expected to address, including international terrorism, evolving technologies, rising immigration, and the growing mental health crisis.<sup>25</sup> It also encourages law enforcement to partner with

NIJ's Comprehensive School Safety Initiative, NATIONAL INSTITUTE OF JUSTICE, http://nij.gov/topics/crime/school-crime/Pages/school-safety-initiative.aspx (last modified Oct. 21, 2015)

<sup>23.</sup> CrimeSolutions.gov, NATIONAL INSTITUTE OF JUSTICE, http://www.crimesolutions.gov (last visited Feb. 2016).

<sup>24.</sup> PRESIDENT'S TASK FORCE FINAL REPORT, supra note 1, at 51-60.

<sup>25.</sup> Id. at 51.

community members with multi-disciplinary expertise to provide training throughout an officer's career.<sup>26</sup>

It is imperative that these training curricula be designed with an understanding of the current state of knowledge in any particular area. Just as effective policies must be rooted in an evidence base, training curricula should focus on what science has demonstrated is effective or promising and should be continuously updated as new scientific developments occur.

Additionally, it is crucial that training programs, both individual curriculum and training academy curricula as a whole, be evaluated for their impact on actual behavior, practice and measureable outcomes in the field. For example, NIJ recently funded an experimental evaluation of a Seattle Police Department training program designed to promote officer's use of procedural justice through supervisory modeling of LEED principles (listen and explain with equity and dignity). The study examined a host of outcomes, and results suggest that participating officers were both less likely to resolve incidents through an arrest and less likely to be involved in a use-of-force incident.<sup>27</sup>

Without such evaluations, it cannot be determined if the right kinds of training are being implemented and whether these trainings result in the desired impact. With training resources growing increasingly limited, investing in reliable and effective programs is key. Admittedly, much more work is needed in this area. Few training models work in all settings, and police departments need a range of options to accommodate and respond to the unique aspects of each community. Further, the full spectrum of these programs must be evaluated to ensure utility and impact.

#### 6. Officer Wellness & Safety

Pillar six emphasizes that promoting officer safety and wellness is a multi-partner effort and calls on the U.S. Department of Justice to enhance officer safety and wellness initiatives.<sup>28</sup> Additionally, the pillar highlights the need for agencies to implement scientifically supported programs to increase wellness and safety and increase data collection on officer deaths, injuries, and "near misses.<sup>29</sup>"

The law enforcement profession is one wrought with physical and emotional hazards, and NIJ has long been committed to using science to mitigate these risks. For example, traffic-related incidents are a leading

<sup>26.</sup> Id. at 54.

EMILY G. OWENS, ET AL., FINAL REPORT TO THE NIJ: PROMOTING OFFICER INTEGRITY THROUGH EARLY ENGAGEMENTS AND PROCEDURAL JUSTICE IN THE SEATTLE, NATIONAL INSTITUTE OF JUSTICE (May 2015).

<sup>28.</sup> PRESIDENT'S TASK FORCE FINAL REPORT, supra note 1, at 61–68.

<sup>29.</sup> Id. at 63-68.

cause of officer injuries and deaths, and NIJ has partnered with law enforcement and other first responder agencies to increase officer safety on the road. Studies on factors influencing collision rates and the severity of injuries associated with these collisions are informing the development of model policies and procedures for safer vehicle operations.<sup>30</sup> Additional research on warning light visibility has determined which light intensities, colors, and patterns are most effective at various times of day, and studies on emergency vehicle visibility have identified the most effective placement for retroflective material.<sup>31</sup>

Social science research has also found that 10-hour shifts for law enforcement officers offer a number of benefits over the traditionally used 8-hour shifts and compressed 12-hour shifts.<sup>32</sup> Conducted by the Police Foundation, this project found that officers working 10-hour shifts reported a significantly higher quality of work life, made fewer errors, exhibited no decrease in performance, and got more sleep than those on different shift lengths.<sup>33</sup> This study was released on the heels of an NIJ study finding sleep disorders are twice as prevalent among police officers as the general public.<sup>34</sup>

### III. THE DIVERGENT WORLDS OF RESEARCHERS AND PRACTITIONERS

While there is a critical need for evidence-based practices in law enforcement agencies today, there still remains much work to be done on bridging the gap between academics and practitioners to generate that evidence base. Why and how practitioners need science, in many ways, runs counter to how researchers create and use knowledge. In order to impact practice, policing scholars must not only promote scientific innovation and contribute to methodological advancements, but also convey practical information on evidence-based policies that directly respond to the needs of the field. In turn, law enforcement executives must not only be

Scott E. Wolfe et al., Characteristics of Officer-Involved Vehicle Collisions in California 38 POLICING: AN INT'L J. OF POLICE STRATEGIES & MGMT 458 (2015).

<sup>31.</sup> FEMA, U.S. FIRE ADMINISTRATION, EMERGENCY VEHICLE VISIBILITY AND CONSPICUITY STUDY (Aug. 2009), https://www.usfa.fema.gov/downloads/pdf/publications/fa\_323.pdf; MICHAEL J. FLANNAGAN, et al., UNIVERSITY OF MICHIGAN TRANSPORTATION RESEARCH INSTITUTE, EFFECTS OF WARNING LAMP COLOR AND INTENSITY ON DRIVER VISION (2008), http://www.sae.org/standardsdev/tsb/cooperative/warninglamp0810.pdf.

KAREN L. AMENDOLA, et al., IMPACT OF SHIFT LENGTH IN POLICING ON PERFORMANCE, HEALTH, QUALITY OF LIFE, SLEEP, FATIGUE, AND EXTRA-DUTY EMPLOYMENT, (Jan. 2011), (A report submitted to the National Institute of Justice) https://www.ncjrs.gov/pdffiles1/nij/grants/ 237330.pdf.

<sup>33.</sup> Id.

Shantha M. W. Rajanratnam, et al., Sleep Disorders, Health, and Safety in Police Officers, 306 J. Am. MED. ASS'N, No. 23 (Dec. 21, 2011).

consumers of research in order to oversee effective agencies, they must also acknowledge the role practitioners can play with regards to data collection and retention (and researcher access thereto) and informing research priorities moving forward.

The "bridging" of researchers and practitioners can present some challenges given their own institutional pressures and the preference for how research is presented and disseminated. For example, faculty members seeking tenure and promotion at universities must demonstrate a record of excellence in scholarship, which is often characterized by a significant number of high-quality, peer-reviewed journal articles and/or scholarly books published by university or academic presses. The success of their careers in the academy is measured by the consistent contributions in toptier refereed criminology and criminal justice journals. Given that many of these journals are restricted access and that much of the content is often focused on methodology, these publications are poor vehicles in which to broadly communicate the possible impact of research results to police practitioners.

Further, in order to increase their chances of having their work appear in high-quality, high-impact score journals, scientists may overwhelmingly use the "gold standard" of methodological approaches in their work, producing greater rigor but also making their work less transferable, with lengthier project timelines. For practitioners, the focus and priority is on the immediate applicability of research evidence in their respective agency. They are less concerned with type of methodological approach that is employed, the rigor associated with it, and certainly not consumed with the prestige of the journal that published the work. For them, immediate, quick turnaround of results from research projects is not only ideal but vital in their work environment

Also, researchers working closely with policing agencies are for the most part doing so in large, urban jurisdictions with sizable police forces. This is in part necessitated by the larger sample size these agencies offer, but it is problematic in two respects. First, it limits the transferability of these results to small, rural and tribal agencies, which make up the majority of agencies in this country. Second, it tailors results to agencies that generally tend to have more resources available for data capture and analysis in the first place, leaving small, rural and tribal agencies underserved by science.

In sum, law enforcement executives need knowledge that is relevant, timely, and accessible to the police practitioners. If researchers are to truly make an impact and produce results that can be infused in policy and practice, there must be a culture shift in the scientific community. While emphasis on novel methodologies and scientific rigor has its place in academic currency, so too should the applicability of results to real world

problems and a researcher's commitment to mindfully communicating those results to the communities they impact.

#### IV. BRIDGING THE RESEARCH AND PRACTICE GAP

As previously noted, the true value of policing research is inextricably linked to the extent to which it addresses the needs of the field. While the Task Force Report is a useful resource for understanding high priority policing concerns, it cannot be the sole source of information on the challenges the field faces and what information is necessary to improve policies and practices. Ensuring that research not only advances policing science but also addresses operational concerns is a responsibility borne by both researchers who design and conduct experiments and practitioners who inform them.

One of the most valuable methods of ensuring research is both relevant and implementable is through researcher-practitioner partnerships. For decades, law enforcement agencies have been partnering with researchers to incorporate findings into practice and inform research priorities moving forward. As the field of policing increasingly values evidence-based practices, many national initiatives (e.g., Ceasefire, Project Safe Neighborhoods) require law enforcement to partner with the research community to evaluate efforts and understand impact.

In 2012, NIJ published the results of a research project by Drs. Geoffrey Alpert and Jeff Rojek examining the prevalence of such partnerships and exploring which factors help and hinder the success of these partnerships.<sup>35</sup> In their nationally representative survey, these researchers found that 77.7% of law enforcement agencies reported using research findings to inform their decisions on policies and operations sometimes or very often.<sup>36</sup> However, while many agencies reported using research, not surprisingly, they did not report a strong connection to the research community, and less than one-third of agencies reported participating in a partnership with a researcher in the past five years.<sup>37</sup> Only 10% of agencies reported participation in a long-term, formal partnership with a researcher.<sup>38</sup>

This imbalance between law enforcement's use of research and law enforcement's participation in partnerships to advance research is concerning. As described above, there are many factors that influence both

<sup>35.</sup> GEOFFREY P. ALPERT, *ET AL.*, BUILDING BRIDGES BETWEEN POLICE RESEARCHERS AND PRACTITIONERS: AGENTS OF CHANGE IN A COMPLEX WORLD (2013) (A report submitted to the National Institute of Justice), https://www.ncjrs.gov/pdffiles1/nij/grants/244345.pdf.

<sup>36.</sup> Id. at 231.

<sup>37.</sup> Id. at 233.

<sup>38.</sup> *Id*.

researcher and practitioner willingness to enter into robust partnerships. Despite these obstacles, we have seen in recent years robust examples of how fostering formal collaboration between law enforcement agencies and researchers can improve the quality of research and result in valuable, actionable information for departments and agencies.

Take, for example, the work of Dr. Anthony Braga with the Boston Police Department. Former Commissioner Ed Davis had previous experience working with Dr. Braga and brought him in through a formal partnership after being sworn in as Commissioner.<sup>39</sup> Dr. Braga worked very closely with the Boston Police Department and served as its chief policy analyst while also holding a faculty position at an academic institution.<sup>40</sup> In the 2012 Alpert and Rojek study, the researchers noted that Commissioner Davis reported multiple benefits to the partnership, including "the pragmatic goal of reducing crime." 41 "research provided the Commissioner evidence for proposing [promising initiatives] to the mayor and police union, which provided a basis for arguing [the program would be effective]."42 Commissioner Davis also noted that Dr. Braga was an invaluable resource with regards to strategic planning, allowing the Commissioner to focus on the day-to-day crises while Dr. Braga focused on policies and practices that would be beneficial in the long run.<sup>43</sup>

Although navigating the day-to-day challenges of police agencies can be overwhelming for researchers, the experience can also be tremendously rewarding and can advance their professional trajectories. For example, Dr. Braga noted following about his experience:

I wanted to see theories and ideas on crime prevention implemented, and I wanted to be part of trying to make communities safer. Rather than just, you know, sitting back in my office collecting data, shaking them up and producing knowledge that way. I wanted to get out of my office and be involved. 44

It is important to note that there is no one model for successful researcher and practitioner partnerships. Each respective party should assess and consider the benefits and limitations of various types of collaborations. In fact, research has shown that even short-term collaboration can be effective, particularly with regards to answering specific high-priority research questions. For example, Prince George's

<sup>39.</sup> Id. at 213-14.

<sup>40.</sup> Id.

<sup>41.</sup> Id. at 214.

<sup>42.</sup> Id.

<sup>43.</sup> *Id*.

<sup>44.</sup> *Id.* at 215.

County Police Department partnered with a Ph.D. candidate from the University of South Carolina to explore the impact of department policy and accountability on officer-involved collisions. The Department received a detailed analysis tailored to their own specific needs and environment, while the student gained access to a rich data set and was able to produce a dissertation that was both scientifically rigorous and immediately impactful in the field. He

It is also important to note that the classification between "researcher" and "practitioner" to achieve the goal of research-informed practice (and vice versa) need not be static in nature. For example, in partnership with the International Association of Chiefs of Police, NIJ recently launched the LEADS Scholar program<sup>47</sup> (Law Enforcement Advancing Data and Science) to further the professional development of research-minded law enforcement practitioners. This program supports a diverse group of practitioners—some of whom received doctorates themselves—in their use of and contribution to policing research in the course of their careers. The LEADS program is not only creating an intellectual community comprised of police officers who see the critical need and value of science in their day-to-day activities but also enhancing the infusion of science in police agencies throughout the country. In many ways, the program is not only advancing the professional development of those future law enforcement executives but also advancing the mission of their police agencies.

One additional area of collaboration that is ripe for further exploration in the U.S. is the full-time embedding of a police practitioner in a research institution. While staffing and resource concerns may prove problematic, the potential benefit of assigning an officer to a research institute to shape and prioritize policing research portfolios could ultimately pay dividends. In Australia, the Queensland Police have assigned a sworn officer the Australian Research Council Centre of Excellence in Policing and Security (CEPS), administered by Griffith University. The office serves as a liaison between the Centre of Excellence and the Queensland Police Department, helping to frame research questions and negotiate access to data<sup>48</sup>.

<sup>45.</sup> Hank Stawinski, Deputy Chief, Prince George's Cty Police Dep't, Building the Evidence in Your Jurisdiction: Models for Partnerships between Law Enforcement Agencies and Researchers, Panel presentation at the International Association of Chiefs of Police Conference (Oct. 24, 2015).

<sup>46.</sup> Id.

<sup>47.</sup> See NATIONAL INSTITUTE OF JUSTICE, OFFICE OF JUSTICE PROGRAM, http://www.nij.gov (last visited Feb. 2016). For more information on the LEADS Program, please visit www.nij.gov, keyword: LEADS.

Jason Saunders, Inspector, Queensland Police, Queensland, Austl. Building the Evidence in Your Jurisdiction: Models for Partnerships between Law Enforcement Agencies and Researchers, Panel presentation at the International Association of Chiefs of Police Conference (Oct. 24 2015).

# V. THE WAY FORWARD: SUPPORTING PROFESSIONAL DEVELOPMENT AND BREAKING DOWN SILOS TO DEVELOP INTEGRATED SOLUTIONS TO COMPLEX PROBLEMS

Supporting the professional development of researchers and police practitioners alike can help bridge the gap between the two, leading to increased relevance and impact of research on policing practice. By encouraging a researcher to positively effect change in policing, and by advancing police practitioners who demonstrate a commitment to infusing science in policy and practice, professional development opportunities are instrumental in effecting the types of culture change addressed in this article.

With regard to the professional development of research-minded practitioners, police agencies can do more to ensure that police officers who are committed to advancing the policing profession via science are supported and allowed to assume a leadership role in designing and implementing evidence-based practices in their departments. Police departments can also provide routine training to officers on an array of relevant topics (e.g., evaluations of policing strategies, crime analyses) and seek out partnerships with external researchers.

Within institutions of higher learning, academic units can have far more robust relationships with criminal justice agencies in their communities. Law enforcement executives should be routinely invited to campus forums and presentations and be heavily entrenched in the educational training of the future criminal justice workforce. This can be achieved by having students take part in internships in police agencies and by having police executives teach courses for academic units. Academic institutions can also create a culture that reflects the critical need to link science with practice as well as create indicators in the tenure and promotion review process that reward applied research endeavors. In fact, universities can create metrics that evaluate academic programs based on the extent to which faculty and student are imbedded within the community they aim to support.

NIJ has recently prioritized these types of activities, resurrecting prior professional development opportunities and instituting new ones (such as the previously mentioned LEADS Scholars Program). In addition to LEADS, NIJ has reinstituted its Visiting Fellows program, supporting researchers and practitioners alike through an in-residency program that allows them to make important scholarly and policy contributions with practical application to the criminal justice field, while also working closely with the NIJ Director, staff, and relevant stakeholders to help shape NIJ's research priorities. NIJ also recently launched a New Investigator program, aimed at funding research from principle investigators who are both early in

their career and committed to developing science that advances criminal justice policy and practice.

Another key aspect of advancing both the policing and research professions is to broaden the aperture through which they view policing issues, inviting a multi-disciplinary approach that draws heavily from related disciplines. Too often, researchers and practitioners alike address pervasive problems as if they are unique to policing, approaching research questions through a purely criminological lens. This myopic approach chills the development of holistic solutions to complex problems and ignores the multifaceted reality in which crime exists. The need to work across silos exists both across scientific disciplines (e.g., collaborations across the physical and social sciences) and fields of study. For example, at NIJ, scientists and program managers from multiple scientific disciplines (to include social scientists, forensic scientists, engineers, and physical scientists) come together under the NIJ Policing Working Group to increase collaboration across all scientific disciplines to produce relevant policing research, as well as to raise the profile of policing research in the field.

NIJ is also committed to learning lessons from and encouraging research contributions from multiple fields of study, including but not limited to public health, education, and urban development. For example, NIJ joined forces with the Centers for Disease Control and Prevention (CDC) to produce a book on the principles of gang prevention. In *Changing Course: Preventing Gang Membership*, the agencies came together to provide practitioners and policymakers with an overview of the latest research on why kids join gangs and what strategies effectively prevent them from doing so. This collaboration drew heavily on the agencies' unique strengths, leveraging the CDC's focus on violence prevention alongside NIJ's commitment to advancing public safety.<sup>49</sup>

In sum, the development of knowledge does not automatically translate into more effective policing policies and practices. In order to infuse science in policing, it is incumbent on scholars to regard police executives as the primary users of the knowledge and to tailor that knowledge accordingly. It is equally incumbent on police practitioners to maintain awareness of cutting edge research results and explore the role of data and analysis in advancing their profession. And perhaps most importantly, it is the responsibility of law enforcement agencies and academic institutions to support and advance the professional development of police officers and young scholars who are committed to bridging the gap between research and practice.

NAT'L INST. FOR JUSTICE & CTRS. FOR DISEASE CONTROL, CHANGING COURSE: PREVENTING GANG MEMBERSHIP (Thomas R. Simon, Nancy M. Ritter, & Reshma R. Mahendra, eds. 2013), https://ncjrs.gov/pdffiles1/nij/239234.pdf.

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