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Improving Police Use of Force:
A Closer Look at Data Collection

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The National Association for Civilian Oversight of Law Enforcement (NACOLE)

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Introduction

I want to thank the National Association for Civilian Oversight of Law Enforcement for inviting me to submit my comments on methods to improve police interactions with the public as it relates to use of force. I approach the issue from a knowledge perspective, one where use of force data and information become an embedded part of police management and are used to routinely examine policies and practices relative to legal principles and community sentiment as a matter of performance. It has been said that "Measurement is the first step that leads to control and eventually to improvement. If you can't measure something, you can't understand it. If you can't understand it, you can't control it. If you can't control it, you can't improve it."[1] The intent is to control police use of force through training, supervision and policy development, which is likely to reduce its incidence as well as prevent organizational accidents[2] related to it by capturing, analyzing and reporting on data to ensure a more complete picture emerges about trends and patterns across the nation that can inform local policies and practices.

So, What is The Problem?

If we wish to improve police-citizen interaction as it relates to use of force, then we must have accurate and timely data about its circumstances. At present, we do not have a good national understanding of police use of force because we do not have good measures.[3] U.S. policing is a fragmented and decentralized system with approximately 18,000 law enforcement agencies operating

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[1] Attributed to U.S. businessman H. James Harrington.

[2] Doyle, J. M. (2010). Learning from error in American criminal justice. *The Journal of Criminal Law & Criminology*, 109-148; Shane, J. M. (2013). *Learning from Error in Policing: A Case Study in Organizational Accident Theory*. Springer.

[3] Schmidt, M. S. (April 8, 2015). Scant Data Frustrates Efforts to Assess Number of Shootings by Police. *New York Times*. Retrieved on April 1, 2016 from http://www.nytimes.com/2015/04/09/us/us-has-limited-data-on-shootings-involving-police.html.

and reporting independently.[4] Most of what is known about use of force is the result of sporadic and piecemeal research funded by the National Institute of Justice, the Bureau of Justice Statistics and the research agendas of a few scholars involving single cities or a few cities.

The lack of data and information has led to a fundamental public misunderstanding about police use force, which is a defining feature of the police role.[5] As a result, emotional arguments, filled with red herrings, ad hominem attacks and non sequiturs replace logic and reasoning that is grounded in fact. Compounding the problem is the present use of force data system compiled by the FBI Uniform Crime Report entitled Justifiable Homicide is meager and relies on summary data. The UCR data are measured at the aggregate level and the statistics that flow from it summarize a set of observations in order to communicate the largest amount of information as simply as possible, but they do not measure the fine details.[6] The aggregation problem can be defined as the "information loss which occurs in the substitution of aggregate, or macro-level, data for individual, or micro-level, data,"[7] which limits its utility, for example:

1. Aggregate data can summarize average characteristics for a group, but it cannot assume those characteristics apply to every member of the group. It is inappropriate to assume that relationships at the aggregate level will also hold at the individual level. It is entirely possible to find a relationship at the national level that does not hold at the local level. The reverse is also true, which is reaching a group conclusion (e.g., national level picture) based on exceptional cases (e.g., individual local cases).[8] Both of these errors point to traps in everyday reasoning, which leads to stereotyping and hasty judgements. We need to determine empirically what individual use of force incidents look like, not just rely on group averages.

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[4] Reaves, B. A. (2008). Census of State and Local Law Enforcement Agencies, 2008. Washington, D.C.: Bureau of Justice Statistics. NCJ# 233982.

[5] Bittner, E. (1970). The functions of police in modern society. Washington, D.C.: U.S. Government Printing Office.

[6] For example: 2008 Contacts Between Police and The Public http://www.bjs.gov/content/pub/pdf/cpp08.pdf; 1997 Police Use of Force Collection of National Data http://bjs.ojp.usdoj.gov/content/pub/pdf/puof.pdf; 2013 FBI UCR Expanded Homicide Data, Justifiable Homicide, Table 14, http://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2013/crime-in-the-u.s.-2013/offenses-known-to-law-enforcement/expanded-homicide/expanded_homicide_data_table_14_justifiable_homicide_by_weapon_law_enforcement_2009-2013.xls; Brown, J. M., & Langan, P. A. (2001). *Policing and homicide, 1976-98: Justifiable homicide by police, police officers murdered by felons.* US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.

[7] Clark, W. A., & Avery, K. L. (1976). The effects of data aggregation in statistical analysis. *Geographical Analysis*, *8*(4), 428-438; see also King, G. (2013). *A solution to the ecological inference problem: Reconstructing individual behavior from aggregate data.* Princeton University Press.

[8] The first error of reasoning is termed "ecological fallacy." The second error of reasoning is termed "exception fallacy."

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2. Aggregate data typically do not allow easy manipulation of variables, so there may be a tendency to overlook influences that may affect individual incidents. By relying on aggregate data, you lose the opportunity to use the data to generate additional hypotheses and it makes testing theory difficult.

3. Aggregate data will show averages, but not individual attributes. Summary data mask incident-level details that are necessary to identify trends and patterns, as well as the factors that may be correlated with use of force across similar cities and various contexts, such as age, sex, race of the officer and the offender, officer assignment, years of service, neighborhood composition, offender resistance, type of incident responded to, organizational composition and geographical location. In short, context is *absolutely* essential, but is concealed by aggregate data—a shortcoming that is, at times, exploited by those who use such data to support an oversimplified or emotional argument.

The limitations of the current aggregate system described here have been discussed in policing research dating to at least 1979[9] and the empirical interest in measuring police use of force dates to at least 1963.[10]

One Proposed Solution

U.S. law enforcement needs a more flexible, in-depth data system. The system should be comprehensive and incident-based—that is, disaggregated—with micro-level details about use of force and available to law enforcement executives, researchers, legislators, criminal justice students and the general public. The best comparison I can offer is the FBI Uniform Crime Report (UCR) vs. the National Incident-Based Reporting System (NIBRS). The UCR data is a summary of crime that occurs across the U.S., whereas NIBRS presents incident-level information about crime.

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[9] Sherman, L. W., & Langworthy, R. H. (1979). Measuring homicide by police officers. *Journal of Criminal Law & Criminology*, *70*, 546; see also Fyfe, J. J. (1988). Police use of deadly force: Research and reform. *Justice Quarterly*, *5*(2), 165-205; Geller, W. A., & Scott, M. (1992). Deadly Force: What We Know: A Practitioner's Desk Reference to Police-Involved Shootings. Washington, D.C.: Police Executive Research Forum; Police Executive Research Forum. (2016). Guiding Principles on Use of Force. PERF: Washington, D.C. (see p. 6 for the limitations of the current use of force data collection effort).

[10] Robin, G.D. (1963). *Justifiable Homicide by Police Officers*, 54 J. Crim. L.C. & P.S. 225; see also Harding, R.W. & Fahey, R.P., *Killings By Chicago Police, 1969-70: An Empirical Study*, 46 S. CAL. L. Rev. 284 (1973); Jacobs, D. & Britt, D., *Inequality And Police Use of Deadly Force: An Empirical Assessment Of A Conflict Hypothesis,* 26 Soc. Prob. 403 (1979); Kania, R. & Mackey, W.C., *Police Violence as a Function of Community Characteristics,* 15 Criminology 27 (1977); Kobler, A.L., *Police Homicide In A Democracy,* 31 J. Soc. Issues 163 (1975); Uelman, G., *Varieties of Police Policy; A Study of Police Policy Regarding the Use of Deadly Force in Los Angeles County*, 6 Loy. L.A.L. Rev. 1 (1973); Fyfe, J.J., *Shots Fired: A Typological Examination of New York City Police Firearms Discharges* (1978) (unpublished Ph.D. Dissertation, State University of New York at Albany); Milton, C.H., Halleck, J.W., Lardner, J., & Abrecht, G.L., *Police Use of Deadly Force* (1977) (Washington, D.C.: The Police Foundation).

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NIBRS enables interested parties to examine crime from its lowest level, which unmasks relationships between victims, offenders, locations and other incident-level details. NIBRS data is superior to UCR data for inferential purposes and has been widely used to uncover relationships and patterns involving:

1. Sexual assault of young children[11]
2. Prostitution of juveniles[12]
3. Predictors of homicide clearance[13]
4. Kidnapping of juveniles[14]
5. Child pornography[15]
6. Intimate partner violence[16] and
7. Violent crime[17] among the many.

A similar system would provide the ability to link and analyze detailed incident-level information so we can understand and control the sequence of events that lead to police use of force—that is, the *who, what, where, how, when* and *why* of use of force transactions.[18]

How Would The System Work?

Participation should be mandatory for all U.S. law enforcement agencies at all levels. Full participation is required for a national outlook, but also because police use of force is a very low-frequency event that any single agency—even large agencies such as New York, Los Angeles, Houston, Philadelphia—will not likely produce enough data in one year to make statistically reliable comparisons, or to identify patterns and trends. Use of force data would be captured at the point of origin (i.e., the agency where it occurred). The data would be entered into a national database

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[11] Snyder, H. N. (2000). Sexual Assault of Young Children as Reported to Law Enforcement: Victim, Incident, and Offender Characteristics. A NIBRS Statistical Report.

[12] Finkelhor, D., & Ormrod, R. (2004). *Prostitution of Juveniles, Patterns from NIBRS*. US Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.

[13] Roberts, A. (2007). Predictors of homicide clearance by arrest: An event history analysis of NIBRS incidents. *Homicide Studies*, *11*(2), 82-93.

[14] Finkelhor, D., & Ormrod, R. (2000). *Kidnaping of Juveniles: Patterns from NIBRS* (p. 4). US Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.

[15] Finkelhor, D., & Ormrod, R. (2004). *Child pornography: Patterns from NIBRS*. US Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention.

[16] Thompson, M. P., Saltzman, L. E., & Bibel, D. (1999). Applying NIBRS data to the study of intimate partner violence: Massachusetts as a case study. *Journal of Quantitative Criminology*, *15*(2), 163-180; Vazquez, S. P., Stohr, M. K., & Purkiss, M. (2005). Intimate partner violence incidence and characteristics: Idaho NIBRS 1995 to 2001 data. *Criminal Justice Policy Review*, *16*(1), 99-114.

[17] Reaves, B. A. (1993). *Using NIBRS data to analyze violent crime*. US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.

[18] Terrill, W. (2005). Police use of force: A transactional approach. *Justice Quarterly*, *22*(1), 107-138.

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following uniform specifications similar to the National Crime Information Center (NCIC) through a web-based application, housed at, and maintained by the FBI; legacy data could eventually be migrated to the Inter-university Consortium for Political and Social Research (known as ICPSR) for archival. Standardized measurement such as this is imperative for evaluating changes over time, comparing dissimilar police agencies to each other and testing policies and programs. Data would become public record as soon as legally practical, which would give interested parties easily-accessible and downloadable data on use of force incidents without having to wait for the FBI to compile and release the data at year's end. Such an open system would be consistent with the core mission of:

1. The *National Police Research Platform*,[19] funded by the National Institute of Justice;

2. The *National Data Collection Committee*[20] of the Division of Policing at the American Society of Criminology;

3. The findings from a joint report issued by the *National Sheriff's Association* and the *Treatment Advocacy Center* on justifiable homicides by law enforcement officers involving the mentally ill;[21]

4. The findings from the *Police Executive Research Forum* on being proactive about preventing use of force situations;[22] and

5. The *Police Foundation's* report titled "5 Things You Need to Know About Open Data in Policing.[23]

What is the Intended Outcome?

An indispensable tool for managing a police agency is a steady flow of information that indicates performance.[24] In this case, it is the ability to identify the circumstances when use of force

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[19] http://www.nij.gov/topics/law-enforcement/administration/policing-platform/Pages/welcome.aspx and http://nationalpoliceresearch.org/. Retrieved on March 31, 2016.

[20] http://www.ascpolicing.org/home/committees/. Retrieved on March 31, 2016.

[21] National Sheriffs' Association & Treatment Advocacy Center. (2013). Justifiable Homicides by Law Enforcement Officers: What is the Role of Mental Illness? NCJ# 248116, p. 9.

[22] Police Executive Research Forum. (2012). An Integrated Approach to De-Escalation and Minimizing Use of Force. Critical Issues in Policing Series. Washington, D.C: PERF, (comments of Sheriff Doug Gillespie, Las Vegas Metropolitan Police Department, p. 11).

[23] http://www.policefoundation.org/5-things-you-need-to-know-about-open-data-in-policing/. Retrieved on April 1, 2016.

[24] Moore, M. H., & Braga, A. (2003). The "Bottom Line" of policing: What citizens should value (and measure!) in police performance. In *Washington, DC: Police Executive Research Forum* http://www. policeforum. org/library/policeevaluation/BottomLineofPolicing. pdf. Retrieved on March 31, 2016; Shane, J. M. (2010). Performance management in police agencies: A conceptual framework. *Policing: An International Journal of Police Strategies &*

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is likely to take place, what form it is likely to take and the characteristics of the officer, the offender, the location and the situation. Armed with such information, law enforcement executives can proactively manage community expectations and reactions, improve training, supervision, agency policy and make a stronger case to acquire the resources it needs to be more efficient and effective at delivering service. The organization concurrently becomes more self-reflective as it learns from its own experiences and those of others across the region and country. Police and the community can use the data to confirm or dispel any doubts and answer mutually important policy questions such as:

1. Where does the perception of "widespread" or "epidemic of" police killings of citizens originate? Media? Community rumor? Outright lies? How can we control those perceptions?

2. What can the police and community members do together to reduce hostility and misunderstandings between the police and the community?

3. What can the police and community members do together to reduce violent crime and anti-social behavior, which often occasions negative police-citizen interaction?

4. What can the police and community do to maintain open communication about police use of force, particularly involving officers and citizens of different racial or ethnic groups, which is a perennial source of tension?[25]

5. Unarmed does not necessarily mean not dangerous, so what are the implications for the community when an officer resorts to deadly force after perceiving a dangerous threat from an unarmed person? What are the implications for the officer?[26]

An incident-driven use of force reporting system is such a tool because it will produce more detailed, accurate and meaningful data than that produced by traditional summary data systems.

Management, *33*(1), 6-29; Sparrow, M. K. (2015) Measuring Performance in a Modern Police Organization. New Perspectives in Policing Bulletin. Washington, D.C.: U.S. Department of Justice, National Institute of Justice. NCJ 248476.

[25] Modified from "Examining the Prevalence of Deaths from Police Use of Force" an unpublished presentation by Dr. Richard Johnson, University of Toledo. Retrieved from www.forcescience.org/forcepresentation.ppt on March 31, 2016.

[26] The police practice community has its share of examples of unarmed offenders attacking and overpowering armed police officers: female police officer assaulted into unconsciousness during a traffic stop https://www.youtube.com/watch?v=ojvHyQCHhVc; April 6, 1984, professional wrestlers Ken Patera and Masanori Saito assaulted two Waukesha, WI police officers who were "overmatched by the stature of Saito and Patera" (Schenectady Gazette, June 15, 1985, p. 31); Elyria, OH, May 5, 2011, man attacked a police officer inside the police station, during the attack the officer "realized that he needed to stop the assault due to the increasing fatigue of Officer Witt, the much younger age of the suspect Thomas and the thought that Thomas was looking for a weapon to cause serious physical harm to Officer Witt" https://www.youtube.com/watch?v=ec2yfx80T1g; April 22, 1996, Macon, GA, police sergeant is assaulted during a traffic stop https://www.youtube.com/watch?v=wxq9xH-s34E.

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Moreover, such a system would provide neighboring communities the opportunity to compare information on emerging use of force patterns, trends and triggering conditions that extend beyond local boundaries. Comparison has a significant effect on human beings' ability to make sound decisions through the concept of *relativity:* the process by which people assign value to something else. Humans typically have two minds when making decisions: the *heart* and the *head*. Most decisions occur at the *heart* level (emotional) based on incomplete information, which affects attitudes, perceptions, trust and confidence. However, the *head* can step in and overrule heart's decisions, provided sufficient information exists. When people make decisions in isolation— without sufficient information—the heart fills in the blanks with attributes that are easy to evaluate (e.g., age, race, sex, vicarious experiences, neighborhood characteristics, social class, one's own definitions),[27] rather than those that are relevant (e.g., specific articulable facts). When a person evaluates something in isolation it is difficult to determine whether that thing is good (e.g., the use of force rate). However, when people can make comparisons, the head will readily have a more complete picture to judge the value of things.[28] Since people do not possess an intrinsic ability to judge the value of something in isolation, value is determined by comparing one thing to another— in our case, use of force incidents. People make judgments and decisions against a backdrop of available information, the quality of that information and how that information relates to something specific. Data on police use of force is that backdrop and can easily become part of an agency's

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[27] Brown, R. A., Novak, K. J., & Frank, J. (2009). Identifying variation in police officer behavior between juveniles and adults. *Journal of Criminal Justice*, *37*(2), 200-208; Hurst, Y. G., McDermott, M. J., & Thomas, D. L. (2005). The attitudes of girls toward the police: Differences by race. *Policing: An International Journal of Police Strategies & Management*, *28*(4), 578-593; Jones-Brown, D. D. (2000). Debunking the myth of officer friendly: How African American males experience community policing. *Journal of Contemporary Criminal Justice*, *16*(2), 209-229; Leiber, M. J., Nalla, M. K., & Farnworth, M. (1998). Explaining juveniles' attitudes toward the police. *Justice Quarterly*, *15*(1), 151-174; Myhill, A., & Beak, K. (2010). Public confidence in the police; Rosenbaum, D. P., Schuck, A. M., Costello, S. K., Hawkins, D. F., & Ring, M. K. (2005). Attitudes toward the police: The effects of direct and vicarious experience. *Police Quarterly*, *8*(3), 343-365; Schuck, A. M., Rosenbaum, D. P., & Hawkins, D. F. (2008). The influence of race/ethnicity, social class, and neighborhood context on residents' attitudes toward the police. *Police Quarterly*, *11*(4), 496-519; Weitzer, R., & Tuch, S. A. (2004). Race and perceptions of police misconduct. *Social Problems*, *51*(3), 305-325; Weitzer, R., & Tuch, S. A. (2005). Determinants of public satisfaction with the police. *Police Quarterly*, *8*(3), 279-297; Weitzer, R., & Tuch, S. A. (2005). Racially biased policing: Determinants of citizen perceptions. *Social Forces*, *83*(3), 1009-1030.

[28] Hsee, C. K. (1996). The evaluability hypothesis: An explanation for preference reversals between joint and separate evaluations of alternatives. *Organizational behavior and human decision processes*, *67*(3), 247-257; Hsee, C. K. (2000). Attribute evaluability and its implications for joint-separate evaluation reversals and beyond; Hsee, C. K., Loewenstein, G. F., Blount, S., & Bazerman, M. H. (1999). Preference reversals between joint and separate evaluations of options: A review and theoretical analysis. *Psychological Bulletin*, *125*(5), 576-590.

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performance management framework, where the focus is on improving individual and collective performance.[29]

Some Final Thoughts

The media frequently seizes on isolated use of force episodes, which distorts the public's perception about the justifiability and rate of use of force. Only with sufficient and reliable data can we estimate the incidence and prevalence of use of force and only after we have a factual understanding of the nature and extent of use of force can terms such as "crisis," "epidemic," "widespread," "discrimination" and "disparate treatment" be applied in the public discourse. To do so beforehand—as has been done in the recent past—is irrational, irresponsible and counterproductive to promoting desirable police-community relationships. As a nation we are best served by experts who act and opine from the *head* based on attributes that are directly relevant, by those who have devoted themselves to understanding the complexities of police work and who can guide rational discussion toward a productive outcome. We are not well served by dilettantes who act and opine from the *heart* based on attributes that are easy to evaluate, or with incomplete information.

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[29] Shane, J. M. (2010). Performance management in police agencies: A conceptual framework. *Policing: An International Journal of Police Strategies & Management*, *33*(1), 6-29.

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