# The Self-Reported Use of Social Equity Indicators in Urban Police Departments in the United States and Canada

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overnments at every level have relied on performance measurement over the last few decades as a way to evaluate the delivery of services to the public (see, for example, Hatry 2006; Berman and Wang 2000; Rivenbark and Kelly 2004; Dougherty, Lindquist, and Bradbury 2006; Krane 2008). Moreover, a host of different measures have been devised to evaluate government performance and ultimately service quality (Hatry 1980). However, the literature reveals that measures or indicators of performance often focus on efficiency and effectiveness, key values that have dominated public administrative practices. Consequently, other important measures of performance that are valued by governments and the citizenry are ignored and go undetected. One such value is social equity.

This exploratory study examines the extent to which police departments across the United States and Canada report that they have factored social equity into their performance measurement programs. The results of a survey administered to 148 randomly selected police departments and a content analysis of their public documents provide a preliminary look at the degree to which social equity is reported to be an indicator of performance. Also examined are the potential

factors that lead police departments to adopt social equity indicators.

This article begins with a brief review of the reliance on performance measurement in the public sector generally and then looks specifically at performance measures in policing. The area of policing was selected given the importance of values such as social equity to this profession and the social repercussions if such values are ignored. The evaluation of the extent to which social equity indicators are present is followed by a systematic analysis of the factors that help explain variations in the use of these indicators as performance measures.

#### Performance Measurement

Performance measurement is but one tool in a government's cache to improve performance, service delivery, and ultimately its accountability to the general public. Holzer and Yang (2004, 16) characterize performance measurement as an "opportunity to present evidence that the public sector is a public bargain, to highlight the routine but important services that public servants quietly provide and to answer the public's sometimes angry questions and implicit suggestions on a dispassionate basis." Today, performance

measurement systems are mainstays of governments, particularly at the municipal level (Public Performance Measurement and Reporting Network 2008; Andrews, Boyne, and Walker 2006; Hatry 2006; Poister and Streib 1999).<sup>1</sup>

One of the persistent criticisms of performance measurement systems is that they continually focus on outputs as opposed to process.<sup>2</sup> Moreover, the emphasis has been on the measurement of efficiency, which has its roots in private business and is not concerned with democratic values, a sine qua non for government. Private firms are not held accountable to the general public for values such as equity, fairness, and due process (Rosenbloom 2005; Frederickson 1980, 1990). Because these values are critical in the public sector, there has been a growing concern that by focusing on the improvement of efficiency and effectiveness of service delivery, the democratic constitutional values of fairness, justice, due process, and equity sometimes referred to collectively as social equity—may be sacrificed (Jennings 2005; Brunet 2006).

Social equity has taken on a host of meanings. Early on, Frederickson (1971, 311) defined social equity as "activities designed to enhance the political power and economic well being of these minorities." Today, the focus continues to be on the tenets set forth by Frederickson: treating citizens from different social groups equitably or fairly, thus reflecting the democratic constitutional values of fairness, justice, equal opportunity, and equality (see, for example, Rosenbloom 1977; Jennings 2005; Brunet 2006).

The issue of social equity has received very little attention in the literature on performance measurement. Consequently, it is unclear whether social equity is captured in performance measurement systems in the public sector. One area in which the pursuit of social equity seems essential is policing (Brunet 2006). This study thus examines the different types of indicators in policing and whether social equity is among them.

# **Performance Measures in Policing**

The literature on performance measurement suggests that the most prominent dimensions of performance pertain to efficiency and effectivenes.3 According to Harry Hatry (1976, 23; 2006, 7), a pioneer of performance measurement, efficiency is the amount of input (usually monetary expenditures or amount of employee time) required for the amount of output produced. On the other hand, effectiveness refers to "the impacts and quality of the service delivery, whether the service achieves its purpose, and how responsive it is to community needs" (Hatry 1980, 312). Some studies have shown that one measure may be improved at the expense of the other (see, for example, Grizzle 2002, 368). Performance measures for efficiency include crime arrests per sworn officer, cost per patrol officer hour, and unit cost of police vehicles. Effectiveness measures include crime rate, number of arrests, and clearance rates. However, there has been a growing concern that heavy reliance on efficiency and effectiveness measures in policing may result in the democratic constitutional values of procedural fairness, due process, and equity-values that are central to policing—being overshadowed (Brunet 2006; Jennings 2005; Young 1991). As Collier (2001, 37) found, when police officers believe that their performance is assessed solely by "the numbers," they "may be tempted to give less regard to human rights issues, either to suspects or to the victims of crime."

# Importance of Social Equity Indicators

As noted previously, the concept of social equity has several meanings, but it generally has been viewed (especially in criminal justice) as being related to procedural fairness, justice, due process, equality, and equity (Brunet 2006; Jennings 2005; Young 1991; Collier 2006). In the context of policing, it involves providing services that different communities need in an equitable fashion. Social equity is viewed as an important public value, but it is sometimes eclipsed by other important

government norms such as efficiency and effectiveness. A plethora of literature illustrates the conflict between and among these values (see, most notably, Rosenbloom 1983). However, as Frederickson (1980) and others have called for repeatedly, the value of social equity should be held to the same level of importance as efficiency and effectiveness (see also Brunet 2006). Ignoring social equity can lead to greater costs for taxpayers (e.g., in terms of court costs) and ultimately hinder the overall delivery of public services.

Beginning in the 1980s, social and environmental changes led to a shift in policing, resulting in an increased desire to develop social equity indicators of performance. Brunet (2006, 5) points out that the "new approach to policing was based on closer, more sustained interactions with the community. The police were to strike up partnerships with citizens, businesses, and other governmental actors to solve community problems. The trust relationship between police and community became a primary focus. New measures, especially ones that focused on fairness and equal treatment, were in order."

Redshaw, Mawby, and Bunt (1997, 284) buttress this point, arguing that policing not only involves the "prevention and detection of crime and the maintenance of public order" but . . . also "embraces a social service role such as welfare and the prevention of crime." Some have argued that a disregard for social equity indicators of performance can negatively affect communities in general. For example, Liederbach et al. (2008, 285) point out that "the negative assessments of traditionally disenfranchised groups—even within the context of positive overall ratings-need to be recognized as significant concerns. Dissatisfaction among a comparatively small proportion of residents can work to block programmatic success, especially when that dissatisfaction emanates from within neighborhoods that have been the target of community-oriented reforms because they have historically been antagonistic to the police."

Some research has shown that positive public images of the police with respect to issues such as equity may correspond with higher performance ratings for police officers (Weitzer and Tuch 2004). Wells (2007, 618) found a strong positive correlation between citizens' perceptions of procedural justice and outcome-focused behaviors and overall ratings of police officers' performance. In short, higher standing in the public's eye with respect to social equity can ultimately lead to better performance ratings for police officers.

Despite the calls for greater reliance on social equity indicators in policing (see Moore and Braga 2003), very little research has examined the extent to which police departments have actually incorporated such indicators into their performance management systems (see Van Ryzin, Muzzio, and Immerwahr 2004). Charbonneau and Riccucci (2008) provide an exhaustive search of the literature on performance measurement in policing. Their findings corroborate those of others who have examined the use of social equity indicators in policing: namely, that much more attention is given to efficiency and effectiveness (see, for example, Wolfle and Heaphy 1975; Chandek 1999; Ho and Ni 2005; Pollanen 2005). Their research shows that out of 128 indicators cited in studies of police departments, 96 (75 percent) are related to effectiveness, 18 (14.1 percent) pertain to efficiency, and 14 (10.9 percent) correlate with social equity.

Social equity indicators take the form of effectiveness indicators, itemized by demographic and socioeconomic categories, which allows for the assessment of variations between categories. The collection of disaggregated data has been recognized as being essential to the basic question of equity in health (Scollay and Everson 1985) and education (Public Administration Select Committee 2003). Social equity indicators are usually either citizen satisfaction measures or more traditional effectiveness measures such as response times for different groups (Charbonneau and Riccucci 2008).

# Potential Determinants of Decisions to Use Social Equity Indicators

As noted, the first goal of this research is to examine the extent to which social equity indicators are incorporated into police departments' performance reports. The second goal is to explore factors that can possibly explain the presence or absence of social equity indicators. Factors related to community characteristics, police chief characteristics, and policy and management practices are hypothesized to be important predictors.

## **Community Characteristics**

Cities that have more ethnically and racially diverse populations are predicted to be more likely to use social equity indicators (see, for example, Behr 2004; Santoro 1995). A good deal of research suggests that there is a positive correlation between the diversity of a workforce and the overall diversity of the general citizenry (see, for example, Saltzstein 1986; Riccucci 1987; Kellough 1990). In addition, studies of representative bureaucracy rely on the percentage of targeted groups (e.g., African Americans) in the general population as a measure of the progress those groups make in public employment (see, for example, Meier 1993).4 Thus, this demographic variable is critical to studies that address determinants of a government's social equity policies.

Apart from demographics, region may be an important predictor of the use of social equity indicators in policing. A number of studies have suggested that some regions of the United States are more progressive than others when implementing policies that relate to race and gender (see, for example, Saltzstein 1986; Stein 1985; Kellough 1990). Regions in the South, for example, have historically been more conservative whereas regions in the North have been viewed as more liberal (see, for example, Valentino and Sears 2005).<sup>5</sup> Thus, region may be an important predictor in the self-reported use of social equity indicators, with the South reporting less use of such indicators.

#### **Police Chief Characteristics**

Social equity indicators in policing are more likely to be found in American police departments with an African-American or Latino (as opposed to white) police chief and in Canadian police departments with a minority police chief. It is reasonable to expect that a minority police chief would seek to promote values of social equity within a community. A number of studies have examined the importance of having a minority police chief in order to cultivate diversity among the rank and file (see, for example, Stein 1985; Slack 1987). In the American context, Lewis (1989) found that the presence of an African-American police chief was vital to the presence of African Americans in the sworn ranks of police. Thus, a minority police chief may be likely to push for the use of social equity indicators in policing.<sup>6</sup>

In a related manner, it might be expected that cities with female police chiefs would rely more on social equity indicators in policing than would cities with male police chiefs. Some studies show that the percentage of women in government workforces is higher when women are agency heads or mayors (see, for example, Saltzstein 1983, 1986). Because women are likely to have experienced inequities in the workplace or society in general, women police chiefs may make a greater effort to promote the value of social equity in policing (see also Harrison et al. 2006).

# **Policy and Management Practices**

Social equity practices in policing in North American cities might vary because of differences between the legal obligations of the U.S. Constitution's Bill of Rights and the Canadian Charter of Rights and Freedoms. Demonstrating which country is more concerned with equity toward people of color (or minorities in the case of Canada) in local policing is beyond the scope of this study. However, the main document that provides the demographic and socioeconomic categories used by all levels of government—the census—is an acceptable resource. Both the American and the Canadian censuses keep

track of the gender, race, ethnicity, and ancestry of citizens. The United States also has a long history of collecting racial statistics, beginning with the first census in 1790 (Lee and Tafoya 2006, 234), which might suggest that the collection of performance measures in policing on demographic bases is more prevalent in the United States than in Canada.

Although performance measurement has become a popular tool in city governments as a way to improve public services, there is variation among cities in terms of how intensively they use performance measurement. Thus, we might expect those police departments that are more engaged in overall performance measurement to be more likely to integrate social equity indicators into those programs.

Citizens are placing greater demands on governments to improve their performance. As Van Ryzin and Immerwahr (2004) have found, police services in particular have emerged as important drivers of citizen satisfaction for both whites and nonwhites. That is, citizens who are concerned with policing may well demand greater access to performance information. In an effort to demonstrate their commitment to values such as procedural justice and due process, police departments are thus more likely to incorporate social equity indicators into their performance measurement programs to the extent that citizens demand performance information from those departments.

Governments at every level, often at the behest of the citizenry, have made greater efforts to promote transparency and public accountability in the production and distribution of services (Yang and Holzer 2006). At the same time, citizens have demanded a bigger role in the governance of their communities, particularly with regard to protective services. Moreover, citizens place high expectations on police departments to operate fairly and reliably. As such, as citizens become more involved in their police departments, the departments in turn are more likely to collect and report on social equity indicators in policing.

It is also likely that social equity indicators would be used in policing when the ties between local residents and police departments are strong. Disseminating social equity data when police-citizen relationships are strained might contribute to the further deterioration of the relationship. In the United States, there is a long history of poor police-citizen relations within various communities, particularly African-American and Latino communities. Over the past several decades, however, communities across the country have worked to improve those relations. There is a substantial body of research showing that good policecitizen relations promote greater legitimacy of the police and, moreover, that legitimacy is positively correlated with citizens' attitudes toward police use of procedural justice (see, for example, Tyler 1990; Hinds 2007). Thus, to the extent police-citizen relations are strong, indicators of social equity such as procedural justice would be incorporated into police departments' performance measurement systems.

Police departments that engage in outreach efforts also may be likely to develop social equity indicators for policing. In the last several decades, police have engaged in greater outreach efforts in those communities that traditionally have been excluded. The purpose is to better serve those communities and in some cases, work to alleviate potential criminal behaviors such as youth crime (Barton and Teagel 2007). Although race relations between police departments in the United States and certain communities traditionally have been very strained, as police departments engage minority communities in purposeful dialogue, they are more likely to rely on social equity indicators in their performance measurement and improvement programs.

The more intensively a police department relies on computers and sophisticated information technology (IT), the more likely it may be to employ social equity indicators.<sup>8</sup> It has been suggested that police departments that rely on large-scale IT systems are more likely to improve police services (Brown 2001).

Sound information systems and advanced communication techniques lead to better police performance. In a survey administered to police officers at the Charlotte-Mecklenburg Police Department, Brown (2001) found that the availability of information on community services and ethnicity and cultural needs was very relevant to effective job performance. However, the department did not provide sufficient information to police officers on these vital issues: about 70 percent of the officers found that the information was insufficient. It is expected that police departments that rely on computers and large-scale IT systems are more likely to track matters concerning race, ethnicity, and gender and include social equity indicators in their performance management programs.

### **Data and Measures**

This study focuses on U.S. and Canadian cities with populations exceeding 100,000. Evidence suggests that smaller cities tend not to adopt performance measurement programs (Poister and Streib 1999, 328). Canadian cities are included in this study in order to enable comparison and offer wider generalization of the findings. There were 258 American cities and 48 Canadian cities with populations exceeding 100,000. The sample was derived from a random sample of 100 American cities and all 48 Canadian cities (n = 148).

For each city in the sample, the most recent police performance report was obtained from the respective police department's Web site. The content of these reports, crime statistics, and crime maps were then content analyzed in order to determine the extent to which the departments reported response times, clearance rates, arrests, and crimes separately by race, nationality, gender, age, and neighborhood.

In addition, an online survey was sent to the 100 U.S. and 48 Canadian police chiefs. Prior to administering the electronic survey itself, notification letters were mailed, then pre-notification e-mails were sent.<sup>9</sup> Two reminder e-mails were sent, and follow-up phone calls were made in an attempt to boost the response rate. Approximately 80 percent of the police chiefs in the sample were successfully contacted. Of those, 34 percent completed the questionnaire for a total of 40 surveys returned (25 surveys from U.S. police departments and 15 surveys from Canadian departments).

A response rate of between 25 percent and 35 percent has been found to be the norm in recent Web surveys concerning government performance measurement (see Rivenbark and Kelly 2004, 54; Lindblad 2006, 652; Robbins, Simonsen, and Feldman 2008, 570). However, there remains some potential for nonresponse bias in these survey results, particularly if the nonresponding cities had less interest in or commitment to social equity issues. Thus, the survey results may somewhat overestimate the use of social equity indicators. Nonetheless, given that this study is exploratory, the research remains important. Also, there is substantial variation in the sample in the self-reported use of social equity indicators that can be usefully explained by the regression analysis.

The dependent variable for the explanatory part of this study is an index composed of five questions representing the use of social equity indicators in policing (see Table 1). These five questions are a reduced set of items that were selected based on a factor analysis of all 10 survey items that asked about the use of performance measurement. The five items are summed to form a scale (Cronbach alpha = .85), and the scale scores are transformed to a 0 to 100 range (0 = minimum use of social equity indicators, 100 = maximum use of social equity indicators; see Table 2 for the descriptive statistics).

Based on the theoretical considerations, community characteristics are the first set of independent variables to be included in the analysis. They comprise census data on percentage black and percentage Hispanic and geographic characteristics to do with country (United States or Canada) and region of the United States. Policy and management factors captured by the survey are then considered,

including how intensively the department uses performance measures in general, the representation of citizens in department decisions, how good the department's relationship is with the community, how much pressure the department receives from the community to provide information, how much effort the department makes to reach out to citizens or community groups, and how intensively the department uses IT. Finally, police chief characteristics were considered, including the ethnic/linguistic background and gender of the chief. The complete question wording and descriptive statistics for these variables can be found in Table 2.

# **Analysis and Results**

The content analysis of publicly available performance reports revealed that very few cities (fewer than 5 percent) publicly reported police performance measures by race, nationality, and gender. Breakouts by age are more often seen (in 10 percent of the cities), but these relate primarily to juvenile crimes, which have a distinct legal status and thus may not be social equity indicators per se. A distinctly higher percentage of cities reported performance measures by neighborhood (57 percent), although again, this finding cannot be interpreted entirely as a social equity indicator. However, given the racial and ethnic segregation common in U.S. and Canadian urban areas, such neighborhood statistics can perhaps function as at least a proxy measure for social equity.

Interestingly, respondents reported that their departments claim that they "report or analyze" crime statistics by race, gender, age, and nationality much more frequently than is evidenced in their publicly available performance reports. Respondents were asked about the same categories of social equity reporting that were used in the content analysis of the public reports. Higher percentages across all categories were found, suggesting either social desirability bias in the survey or perhaps that social equity measurement and analysis happens mostly internally within police departments and is not reported externally to the public. As seen in Table 1, police departments do express having a fairly active commitment to social equity indicators in various activities or tasks. For example, more than 80 percent of the cities often hold managers accountable for treating citizens equally, and a similarly high proportion strive to improve relations with various groups and neighborhoods within their city boundaries. The data further show that over half often monitor for possible discrimination, 45 percent often assess the fairness of service delivery, and nearly 40 percent often target services to specific demographic groups.

To explain variation in the self-reported use of social equity indicators, a stepwise regression analysis was conducted with the five-item social equity index as the dependent

Table 1. Descriptive Statistics of the Items Composing the Social Equity Index

Please indicate how frequently, if at all, you use performance measures to do the following:	Often	Sometimes	Rarely	Never
Target services to specific social or demographic groups in your city	38.7	22.6	16.1	22.6
Assess the extent to which services are being delivered fairly to all neighborhoods	45.1	29.0	16.1	9.7
Hold managers accountable for treating all citizens equally	80.7	3.2	3.2	12.9
Monitor for possible discrimination against groups in the delivery of services	51.6	25.8	9.7	12.9
Improve relations with various groups and neighborhoods in your city	80.7	12.9	0	6.5

Note: Numbers are percentages. N = 31.

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Table 2. Question Wording and Descriptive Statistics for Variables in the Model

Block	Variable	Definition or Wording	Min	Мах	u	Mean	SD
Social equity index							
Demographic characteristics	EQUINDEX	Sum of questions composing the social equity index (see Table 3)	0.00	100.00	31	74.84	27.20
	BLACK	Percent black (non-Hispanic)	0.48	81.60	39	14.99	20.47
Geographic characteristics	5		-	)	) T	i :	
-	COUNTRY	United States = 1, $Canada = 0$	0.00	1.00	40	0.63	0.49
	<b>MIDWEST</b>	Midwestern region of United States = 1	0.00	1.00	40	0.13	0.33
	WEST	Western region of United States = 1	0.00	1.00	40	0.08	0.23
Policy and management	SOUTH	Southern region of United States = 1	0.00	1.00	40	0.38	0.49
	USEPM	Performance measures are data or statistics that track what a police department does and what it accomplishes, such as crime rates, clearance rates, etc. How intensively would you say your police department, in general, uses performance measures? (very intensively $= 4$ , somewhat intensively $= 3$ , not that intensively $= 2$ .					
		not intensively at all = 1)	1.00	4.00	37	3.43	69.0
	CITPART	Does your police department have a citizen advisory group or other similar representation of citizens in the department's decisions? (yes = 1, no = 0)	0.00	1.00	37	0.68	0.47
	POLCOMREL	In general, how would you describe the relationship the police department has with the community you serve? (very good = $4$ , fairly good = $3$ , not so good = $2$ , not good at all = $1$ )	3.00	4.00	32	3.81	0.40
	CITDEMAND	CITDEMAND How much pressure does your department get from citizens or community groups to provide information on the performance of the police? (a great deal of pressure = 4, a fair amount of pressure = 3, only a little pressure = 2, no pressure at all = 1)	1.00	4.00	32	2.66	0.97
	OUTREACH	How much effort, in general, does the police department make to reach out to citizens or community groups? (a great deal of effort = $4$ , a fair amount of effort = $3$ , only a little effort = $2$ , no effort at all = $1$ )	3.00	4.00	32	3.81	0.40
	ITUSE	Police departments use computers and information technology (IT) for various things, ranging from routine office tasks (such as e-mail and word processing) to sophisticated information systems that record, track, and map crime statistics on a daily or even hourly basis. How intensively would you say your police department, in general, uses computers and IT? (very intensively = 4, somewhat intensively = 3,	(	9	C	, 1 0	Ç
Police chief characteristics		nof that intensively = $2$ , not intensively at all = 1)	7.00	00.4	32	5.70	.0 .4
	CHIEFMIN CHIEFGEN	Ethnic/linguistic characteristics of police chief (minority = 1, majority = 0) Gender of police chief (female = 1, male = 0)	0.00	1.00	32 35	0.16	0.37

variable (using pairwise substitution in SPSS 16 to accommodate missing data). A stepwise approach was employed because of the small sample size and the large number of potential independent variables (Wolstenholme 1992), as has been done in other small-sample studies in the field (Van De Walle, Kampen, and Bouckaert 2005, 538). Race and ethnicity variables were first entered into the equation (see Table 3). None of these variables are statistically significant. A stepwise procedure (with p < .25 for entry and p > .30 for removal) was next used to test the geographic dummy variables, including country and U.S. region. Only the country variable was selected by the stepwise procedure and is marginally significant. Three policy and management factors were then selected: citizen participation, intensity of IT use, and police-community relations (the former two are significant; the latter falls short of statistical significance). Finally, ethnicity and gender of police chiefs were considered, but neither variable met the criterion for entry into the model. Thus, the

final model—representing the most important factors in the survey that explain variation in the use of social equity indicators, as represented by the index—includes country, citizen participation, and IT use.

#### Conclusion

This exploratory study found that very few urban police departments in the United States and Canada report crime or other indicators of performance by race, gender, and ethnicity. 10 However, fairly high levels of commitment to social equity in management practices were found. When potential predictors of the self-reported use of social equity indicators were examined, policy and management factors and, to an extent, national context were found to be the most significant. That is to say, commitment to the use of social equity indicators in American and Canadian urban police departments seems to be in part a function of country as well as management and policy choices. Because these are preliminary

Table 3. Regression Analysis of Self-Reported Use of Social Equity Indicators

Characteristic	Model 1	Model 2	Model 3	Model 4
Demographic (entered)				
BLACK	-0.090	-0.289	-0.237	-0.237
HISP	0.117	-0.068	-0.165	-0.165
Geographic (selected stepwise)				
COUNTRY (U.S. = 1)		0.428*	0.608**	0.608**
MIDWEST		_	_	_
WEST		_	_	_
SOUTH		_	_	_
Policy and management (selected stepwise)				
USEPM			_	_
CITPART			0.426**	0.426**
POLCOMREL			0.261	0.261
CITDEMAND			_	_
OUTREACH			_	_
ITUSE			0.381**	0.381**
Police chief (selected stepwise)				
CHIEFMIN				_
CHIEFGEN				_
Model summary				
<i>R</i> <sup>2</sup>	0.019	0.119	0.452	0.452

<sup>\*</sup>p < .10 \*\*p < .05 \*\*\*p < .01 (two-tailed test)

Note: Table shows standardized coefficients. -= not selected.

findings from a small exploratory study and the response rate is low, further research is needed to verify the results.

As the data show, it is in the United States, the country that has had the longest history of racial discrimination in policing, that social equity indicators are currently being used more. Further research is needed in order to ascertain why Canadian cities are less likely than their American counterparts to measure disparities in police treatment. As the August 2008 racial riots in Montréal-Nord showed. there is a strong need for social equity indicators in Canadian police departments. Indeed, comparative studies of the commitment to social equity indicators of government performance across various national contexts would seem to be a fruitful avenue for future research.

Another important finding here is that police departments that formally involve citizens in their management processes are more likely to use social equity indicators. It may be that citizens desire these indicators to be part of the performance measurement activities of police departments. Of course, it also may be the case that the same factors that lead to the reliance on social equity indicators (e.g., liberal community culture) also lead to greater citizen participation. Further research in the form of citizen surveys or interviews is needed in order to establish this finding more clearly.

The results also indicate that greater IT capacity makes possible the collection and analysis of data required to compute differences in police services for different groups. Police departments need the tools to collect and report disaggregated data from crime reports. This finding suggests that police departments that seek to record social equity indicators should ensure that the necessary IT technology is available. It also suggests that as IT technology continues to advance at a rapid pace, the use and reporting of social equity indicators may increase. Again, future research is needed to verify this relationship between IT capacity and the use of social equity indicators.

Finally, the five-item scale of the self-reported use of social equity indicators that was developed for this study can be applied generally (it is not limited to policing) and has good internal reliability. This scale may be helpful to other researchers interested in studying the use of and commitment to social equity indicators in a variety of public administration contexts.

Additional research could seek to determine if there is a link between the use or presence of social equity indicators and increased social equity in practice. Case studies as well as interviews with public officials, particularly police chiefs, are strongly encouraged. These approaches would provide a fuller picture of the use of social equity indicators in police departments.

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#### Notes

- 1. See, for example, the New York City Police Department's experience with CompStat, instituted in 1994, which is intended to reduce crime, improve the management of human resources, and ultimately increase the accountability of the city's police force.
- See, for example, Radin (2006), who provides a systematic criticism of performance measurement and management initiatives at the federal level.
- 3. Concerning the efficiency and effectiveness aspects of performance, an indicator can be an output/outcome measure or possibly an effectiveness/efficiency measure. These two dimensions are different but not mutually exclusive. For example, clearance rate for serious crimes can be an outcome measure (Willoughby 2004, 28; Ho and Ni 2005, 67) and an effectiveness measure (Ammons 1997, 11; Carrington et al. 1997, 20). Moreover, in the academic literature, authors do not agree on the output/outcome nature of certain measures. Some authors consider clearance rate to be an output (Thanassoulis 1995, 645) whereas others consider it to be an outcome (Wang 2002, 812). Also, some measures fall outside the dimensions of output/outcome or effectiveness/efficiency. Wilson (1993, 160) considers clearance rate to be, among other things, a process measure. Charbonneau and Riccucci (2008) provide an objective review of the academic literature on the subject.
- 4. Another predictor would be the percentage of women and people of color in police departments. These variables are not included because the data are available only for U.S. cities.
- 5. In terms of region, future research may wish to explore the potential importance of the racial and gender makeup of police departments and police chiefs in the South. In the context of this study, performance reporting is aimed more at citizens than employees.
- 6. It should be noted that in Canada, individuals and groups may be categorized according to ethnicity but also by language. In Canada, the variable for the minority status of police chiefs was coded 1 when (a) the police chief in a Francophone city was Anglophone, (b) the police chief in an Anglophone city was Francophone, and (c) the police chief was from First Nation or a cultural community.

- 7. In the U.S. census, gender, race, ethnicity, and ancestry are assessed respectively in the 3rd, 5th, 12th, and 12th questions; in the Canadian census, they are assessed in the 2nd, 19th, 19th, and 17th questions. The ordering of questions points to important distinctions between the two countries. First, if the order reflects preferences and values, it could be inferred that race is considered to be a more important characteristic in the United States than in Canada. Second, and more importantly, ethnicity is coupled with ancestry in the United States whereas it is associated with race in Canada.
- 8. This study does not examine actual use of computer technology by police officers in squad cars, for example. Rather, it looks at IT as a measure of the sophistication of performance reporting.
- An electronic rather than paper survey format was chosen because of the international aspect of the study (i.e., the Canadian sample). Mail correspondence can be delayed for weeks before being cleared and released by customs officials. International boundaries have been recognized as being significant barriers to conducting surveys (Dillman 2000, 352).
- 10. Multicultural policies were established relatively early on in the United States and Canada. Both the U.S. Constitution and the Canadian Charter of Rights and Freedoms recognize that (1) "minority" is a classification or social construct and (2) minorities should not be discriminated against. These models are distinct from the more assimilationist models of Western countries such as France. In France, there are no minorities under the law because all citizens are considered to be solely French (Institut National de la Statistique et des Études Économiques 1999). The French central government forbids the collection of statistics on racial origin or religious affiliation (Laborde 2005, 312). Égalité, the second element of the French motto, is meant quite literally. Equality in the North American context is fundamentally different: it encompasses the notion that minorities should not be discriminated against. Accordingly, performance measures aggregated by subgroups rather than for the population as a whole need to be compiled in order to provide information about the state of equality in the United States and Canada. It could be argued that nowhere is this more important than in policing, where the law of the land is enforced on citizens.

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