

An Assessment of Cost Reduction Strategies in a New Economy

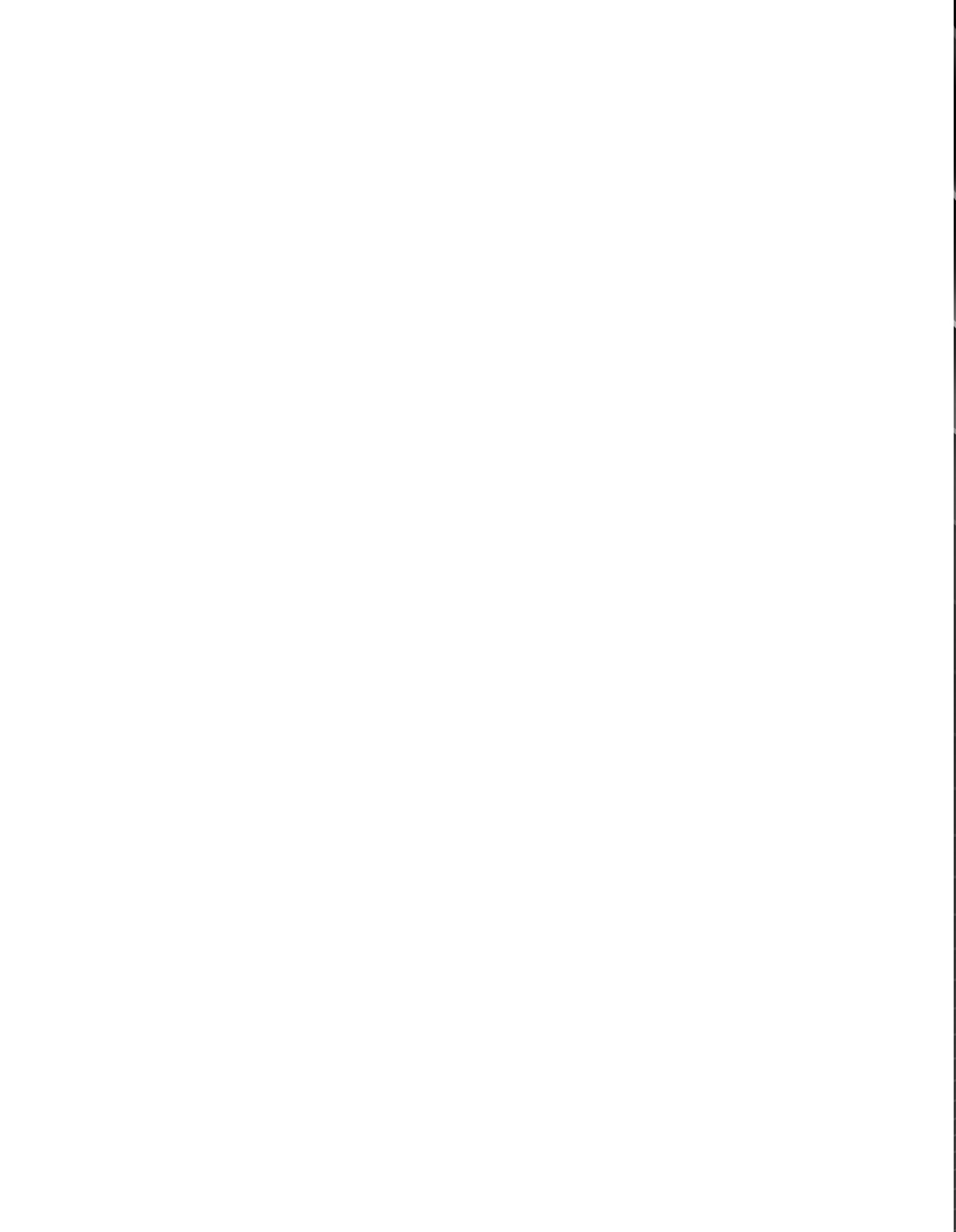
TECHNICAL REPORT AND SURVEY MONOGRAPH

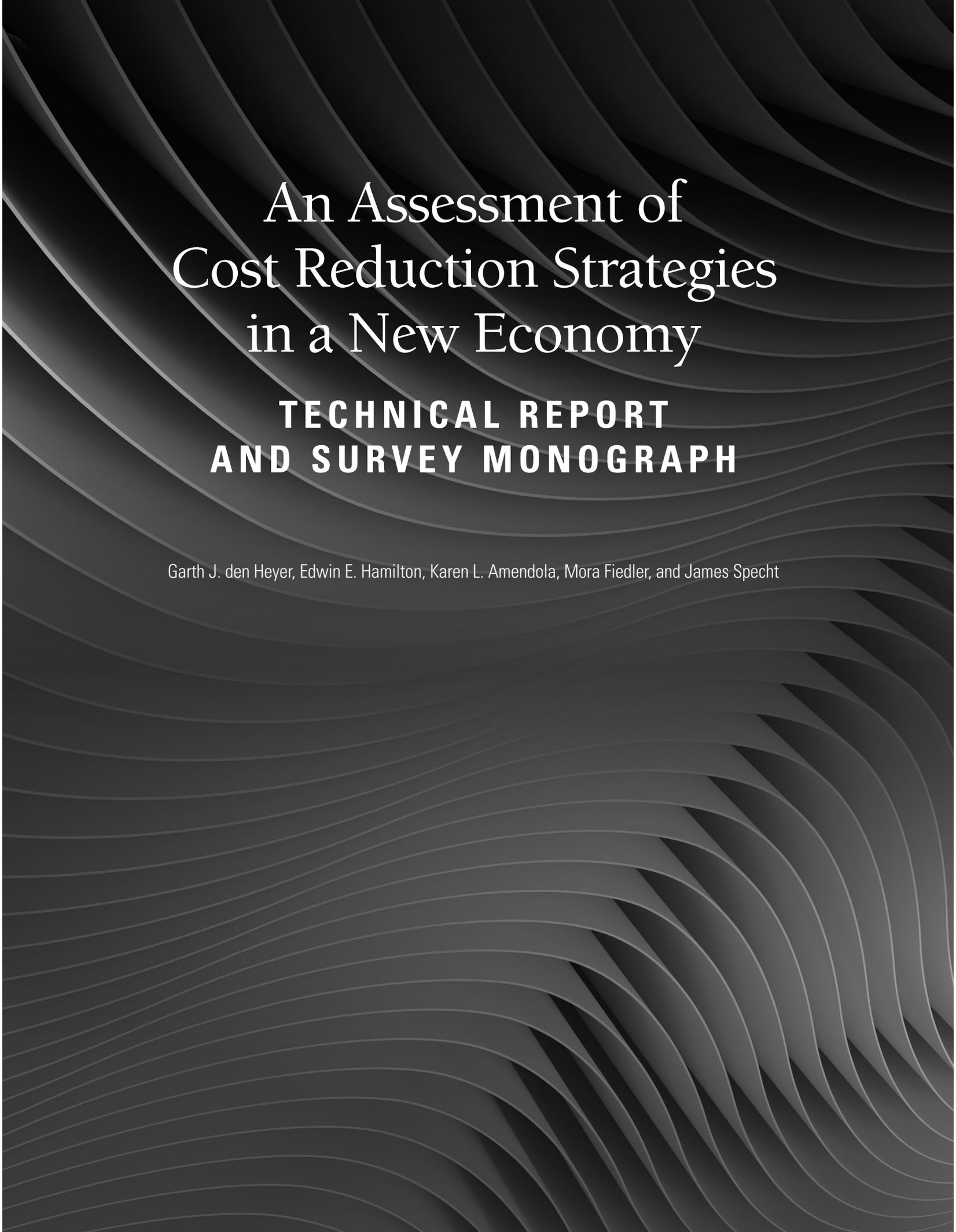
Garth J. den Heyer, Edwin E. Hamilton, Karen L. Amendola, Mora Fiedler, and James Specht



COPS
Community Oriented Policing Services
U.S. Department of Justice







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This project was supported by cooperative agreement number 2012-CK-WX-K017 awarded by the Office of Community Oriented Policing Services, U.S. Department of Justice. The opinions contained herein are those of the author(s) and do not necessarily represent the official position or policies of the U.S. Department of Justice or the Police Foundation. References to specific agencies, companies, products, or services should not be considered an endorsement by the author(s) or the U.S. Department of Justice. Rather, the references are illustrations to supplement discussion of the issues.

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Recommended citation:

den Heyer, Garth J., Edwin E. Hamilton, Karen L. Amendola, Mora Fiedler, and James Specht. 2017. *An Assessment of Cost Reduction Strategies in a New Economy: Technical Report and Survey Monograph*. Washington, DC: Office of Community Oriented Policing Services.

Published 2017

Contents

Acknowledgments	v
Executive Summary	vi
Research objectives	vii
Findings	viii
Conclusions	x
Introduction and Problem Statement	1
Methodology	2
Literature Review	4
Resource management	4
Police structure and management	4
Organizational service delivery effectiveness.	5
Organizational structure	5
Efficiency and effectiveness.	6
Goals, Objectives, and Rationale for the Research.	8
Goals.	8
Objectives.	8
Rationale.	8
Survey Methods	9
Survey content	9
Survey implementation and distribution process	9
Survey Results	11
Agency and population demographics	11
Changing fiscal or resource conditions.	19
Impact of economics on community policing activities	24
Cost reduction strategies	31
Revenue allocation	54
Revenue generation	58
Critical issues	61
Follow-up Interviews and Information Clarification.	63
Interviews with agencies	63
Agency size.	63
Overall data.	64
Conclusions	72
Adoption and implementation of new governance philosophies	72
Comprehensive approaches to maintaining delivery with decreasing resources.	74
Increase service delivery effectiveness and organizational capacity	75
Organizational structures and approaches used by police agencies.	76
Effect of these structures and approaches.	76
Promising practices to reduce operating costs	76



Appendix A. Letter to agency executives	78
Appendix B. Survey instrument	79
Impact of changing economic conditions on policing	79
Appendix C. Relevant management theories	93
The theory of government reform	93
The theory of government finance	96
The theory of modern police reform.	98
The theory of “New Public Management”	99
The theory of local government reform, regionalization, and mergers.	101
The theory of police agency regionalization and mergers	104
Appendix D. The nine police New Public Management features	108
Appendix E. The advantages and disadvantages of local police agency amalgamations, regionalization, or mergers	109
Advantages	109
Disadvantages	109
Appendix F. Advantages, disadvantages, and reasons for not implementing regional police services	110
Appendix G. Comparison of Bayley’s (2001; 2006) Democratic Policing and Gillespie’s (2006) NPM principles	112
Appendix H. Possible realizable benefits of mergers, shared services, contracting, outsourcing, civilianization, internal consolidation, and regionalization.	113
Appendix I. The impact of internal organizational consolidation	114
Appendix J. Organizational structures and approaches used by agencies to reduce operating costs	115
References	116
Dissemination	122
Publications—papers submitted	122
Presentations	122
About the Police Foundation.	123
About the COPS Office.	124

Acknowledgments

This report was made possible through the leadership of the Office of Community Oriented Policing Services, U.S. Department of Justice, particularly from Ronald L. Davis, former Director; Matthew Scheider, Assistant Director, Research and Development; Deborah L. Spence, Assistant Director, Partnerships and Technical Assistance; and Jessica M. Scullin, Supervisory Social Science Analyst, who was our program manager on this project.

The Police Foundation would like to recognize that this work would not have been possible without the cooperation of the 51 responding agencies, who provided invaluable information as to various cost reduction strategies they employed.

The development of the survey and creation of this report were led by the following members of the Police Foundation project team: James Bueermann, President; Garth den Heyer, Senior Research Associate; Edwin E. Hamilton, former Research Manager; Karen L. Amendola, Chief Behavioral Scientist; James Specht, former Communications Manager; and Mora Fiedler, former Senior Policy Analyst. A special thanks to Blake Norton, Vice President/Chief Operating Officer; James Burch, Vice President, Strategic Initiatives; and Judy Kirby of the National Crime Prevention Council for their insightful reviews and assistance in the writing and formatting of this report.

Executive Summary

The focus of this project is to examine cost reducing strategies that selected international police agencies (in Australia, Canada, and the United Kingdom) have implemented since or in response to the global financial crisis of 2007–2008. The goal is to assist U.S. law enforcement agencies by identifying and examining a range of cost reducing strategies and unique approaches employed elsewhere to better address increasing economic challenges while continuing to maintain or enhance service quality and community policing efficiency and effectiveness.

The results of this project are presented in two volumes, this being volume II. The first is a practitioner guide that summarizes potentially useful strategies for law enforcement leaders and practitioners. This is the accompanying technical report and survey monograph containing significantly more background information, support documents, and the responses to all questions in the report. It is designed more as a research report geared toward academicians or those who wish to learn more about the technical aspects of the project and survey.

Researchers focused on international police agencies that may have approached the problem of diminishing operating budgets from a somewhat different perspective than their U.S. police agency counterparts. The investigators analyzed the strategies that were implemented by police agencies in Canada, the United Kingdom, and Australia to reduce their costs and increase the efficiency and effectiveness of their service delivery.

The specific goals of this project were to (1) review the scientific literature to identify potentially useful management models that may broadly address efficiency and cost savings for U.S. law enforcement agencies, (2) identify and analyze specific cost reducing strategies and provide information about their adoption in other agencies as well as any successes associated with them, and (3) provide a resource guide along with this broader monograph as a tool for local law enforcement agencies throughout the United States who are grappling with ways to balance the increasing demands for public services within the context of greater fiscal restraints.

This project was also designed to gather in-depth information related to successes with various strategies (when available) as well as potentially more comprehensive approaches and management strategies that would reduce costs or improve efficiency while maintaining community-oriented policing services and service quality. The methods employed included a review of the literature and the development and implementation of a comprehensive survey followed by in-depth interviews with a subset of the survey respondents.

The surveys were sent to 162 agencies and responses were received from 51 agencies (31.5 percent). While response rates below 50 percent make it difficult to estimate population parameters, in this case the goal was not to make such estimates but rather to identify unique and promising strategies. It is possible that the nonresponding agencies had not adopted unique cost reduction strategies or any cost reduction approaches and thus found the survey to be irrelevant to their agencies. Consistent with the demands of increasing efficiency and reducing costs, it is possible that nonresponding agencies did not have the resources to dedicate to completing surveys and providing information.

The findings may not be generalizable to U.S. agencies given the low response rate and the fact that the responding agencies from Australia, Canada, and the United Kingdom operate within different political, legal, and cultural contexts. Nevertheless, the goal of the research was to identify unique and promising strategies that may be useful to U.S. agencies wishing to reduce costs and operate with greater efficiency and effectiveness. In addition, this guide does not provide data on the efficiency or effectiveness of strategies implemented because most agencies had not evaluated these in relation to the strategies they employed.

Research objectives

The objectives of this project were to

- examine the various cost reduction strategies employed across agencies;
- determine the extent to which strategies were adopted across agencies;
- present a comprehensive overview of the approaches taken by international police agencies to maintain community service delivery with declining budgets;
- isolate strategies that could be adapted for use by U.S. agencies;
- assess the ways agencies balanced cost reduction and efficiency enhancement strategies;
- gain insights into the management models that have been used to improve efficiency in service delivery or administrative management;
- learn about challenges or roadblocks to adopting specific strategies;
- evaluate how agency size may influence cost reduction strategies or efficiency improvements;
- identify unique ways in which agencies have adapted to financial constraints or increased service demand;
- develop guidance for U.S. agencies wishing to adopt specific strategies.

The questionnaire was composed of 14 major sections and 29 principal questions. The 29 questions were organized into 113 subquestions, which enabled participants to make comments. In order to provide context for responses provided to the survey, validate the information obtained in the survey, and examine the approaches that the agencies had implemented to increase their organizational efficiency in more detail, the investigators contacted 15 agencies from the sample of 51 agencies that had completed the postal and electronic survey. Nine of the 15 agencies (60 percent) that were contacted agreed to a follow-up interview and three more agencies agreed to provide further information on the cost reduction strategies that their agencies had adopted resulting in a participation rate for the follow ups of 80 percent.

Findings

The largest number of agencies that responded to the survey were those at the local or county level serving more than 50,000 people. The size of the agencies varied from employing one full-time officer to employing more than 5,000 full-time officers.

Budgets. Nearly two-thirds of the responding agencies, regardless of their size, had experienced a decrease in their operating budgets since 2007 while the majority of respondents had experienced a change in their source of funding and in the amount of funding received. Most responding agencies had experienced less than a 5 percent decrease in their operating budgets, but one agency had experienced a 20 percent decrease. The largest change in source of funding was from federal sources. The agencies that experienced the largest decreases in federal funding were agencies that employed fewer than 500 full-time officers.

Reduced outreach. In response to the decrease in their operating budgets, the majority of agencies that responded to the survey had changed their attendance at neighborhood, community, or business meetings; a number had decreased or were considering decreasing their attendance still further. This finding was very similar across agencies involved with schools, faith-based organizations, and immigrant communities.

Staffing and scheduling. One strategy that just less than half of the responding agencies had adopted to reduce operating costs was to leave sworn officer vacancies unfilled, but in less than a quarter of the agencies sworn staff were laid off to reduce costs. Approximately one-third of the responding agencies had also instituted a hiring freeze on sworn officers and just less than 30 percent of the respondents had introduced a similar policy for civilian staff. Nearly one-half of the agencies that completed the survey had increased their use of civilians in previously sworn officer functions. In addition, more than one-third of respondents had changed or altered work times or shift schedules.

These results were also very similar to agency spending on academy classes and in-service and specialist training, as well as technology.

Technology and equipment. More than two-thirds of the responding agencies had not reduced their spending on technology, and more than half stated that they had increased their reliance on new technology. However, more than one-half of the respondents noted that they had reduced or were planning to reduce their acquisition of new motor vehicles or were deferring the replacement of new motor vehicles.

Call response and station access. Many agencies responding to the survey were also starting to look at other areas within their organizations to reduce costs. While less than 20 percent had implemented a program that limited the types of calls from the public to which an officer was dispatched, another 25 percent of those respondents were planning to implement such a policy. A similar result was found with the introduction of alternative call handling methods; nearly one-half of the responding agencies had implemented such methods and more than another quarter of the respondents were considering introducing this strategy. While two-thirds of the agencies that provided survey responses had not reduced access hours at police stations, approximately one-third of respondents had done so, and more than one-third had consolidated or closed stations.

Structural changes. Agencies that responded to our survey were also starting to examine their structures and how they delivered their services. In relation to specialized units and work schedules, nearly one-third of the responding agencies had reduced the number of specialized units in their agencies. Nearly two-thirds of survey participants had changed or were planning to change their management or organizational structures, and nearly two-thirds were sharing or planning to share their services with another agency. One agency had merged with another agency, and three agencies were planning mergers while fully one-half of the responding agencies had or were planning to contract services with another agency. Finally, regionalization and outsourcing were also strategies that agencies had adopted. Just less than two-thirds of survey respondents were participating or were planning to participate in a regionalized police service or shared functions and nearly one-half had or were planning to outsource or privatize some of their services.

Organizational strategies. To ensure that agencies were using a comprehensive approach when examining methods to reduce operating costs, agencies were asked about organizational strategies. To begin, agencies were asked whether they had hired a consulting firm or research organization to assist with identifying potential areas that could increase the efficiency of service delivery or with reducing organizational costs. Only 23 agencies—approximately 45 percent of respondents—had hired or

were planning to hire a consulting firm or research organization. However, nearly two-thirds of the agencies that completed the survey stated that they had used or were planning to use evidence-based research methods to assist with identifying possible cost reduction strategies. Furthermore, nearly three-quarters of the respondents had developed or planned to develop a strategic plan, and almost two-thirds of agencies had conducted or planned to conduct a performance review of their agency.

Finally, the three most critical issues that the responding police agencies reported facing were as follows:

1. Funding shortages or budget cuts
2. Staffing or recruiting attrition
3. Managing demand and public expectations

Conclusions

The findings of the survey provide some understanding of the approaches taken by agencies and may potentially add to the theory of police organizational reform during periods of austerity. The findings from this study indicate that it is not sufficient to examine individual service delivery cost reduction strategies in isolation from each other. An examination of the variety of approaches that agencies have implemented should be considered as a comprehensive and complete package. Although we were not able to evaluate the effectiveness or the efficiency of each cost reduction strategy that each responding agency used, we have been able to identify a trend in the type of strategies adopted by the respondents to our survey. In this study, these methods consist of strategies that reduce costs associated with human resources, equipment, and administrative costs.

Despite these steps forward, this survey—like the limited number of other studies examining the effect that the 2007–2008 financial crisis had on police agencies—does not provide us with information about why various approaches to reducing police agency operational costs were employed by different agencies. The only way to understand these differences is through further systematic and qualitative analysis and evaluation, including cross-sectional analysis, randomized trials, and longitudinal and time series studies of the various approaches. Nevertheless, we were able to probe these issues during our secondary information gathering from a dozen agencies that provided supplemental information or participated in follow-up interviews.

Identifying the rationales for different approaches to reducing operating costs may be difficult, but it is important for police agencies and the community to understand them. Police agencies readily acknowledge that levels of crime and violence and socioeconomic variables can affect their styles of service delivery. The different variables can also affect the results of police organizational research. How can this and other similar research be used? In the “Conclusions” section, six ideas are explored:

1. What were the comprehensive approaches adopted by police agencies to maintain community service delivery with a decreasing level of resources?
2. Could the adoption and implementation of new governance philosophies such as new public management, consolidation, regionalization, and outsourcing improve the effectiveness of policing in the United States?
3. How can agencies develop the knowledge that will increase the service delivery effectiveness and the organizational capacity of law enforcement agencies nationwide?
4. What were the organizational structures and approaches used by police agencies to reduce operating costs?
5. What effect did these structures and approaches have on the delivery of police services?
6. What were some of the most promising strategies, organizational structures, and approaches to cost reduction that U.S. police agencies could consider for implementation to reduce their operating costs?

The six areas provide a foundation for police chiefs, commissioners, and sheriffs, as well as city and county managers, researchers, and academics to develop police agency organizational cost reduction strategies that could improve service delivery efficiency and effectiveness. The adoption or acceptance of the cost reduction strategies identified and discussed in this study may provide the foundation for police agencies to become organizationally dynamic by increasing flexibility and adaptability to changing circumstances in their operating environments.

Introduction and Problem Statement

In late 2007 and into 2008, the United States suffered the worst economic and financial crisis in 70 years (Hilsenrath, Ng, and Paletta 2008). This crisis subsequently placed pressure on state and municipal budgets, which resulted in cuts to police agency budgets (PERF 2009; PERF 2011). The ongoing challenge facing law enforcement agencies nationwide is balancing resources and service delivery levels within budgetary constraints and community demands and expectations. This balance is crucial when managing and allocating resources in an environment where the public demand for police services is rising and increased expenditure of resources is not feasible (Stockdale, Whitehead, and Gresham 1999). Communities, wanting public funds to be spent wisely, are placing pressure upon law enforcement agencies to make more effective decisions and to manage their resources more efficiently (Butterfield, Edwards, and Woodall 2004; Brunetto and Farr-Wharton 2005) while maintaining expected levels of service.

As such, this project focused on addressing the following two research questions:

1. Since the global financial crisis of 2007–2008, what have selected police agencies from other countries done to reduce costs—especially while maintaining or improving service delivery and effectiveness?
2. How could some of the cost reduction strategies and approaches adopted by international agencies be applied to U.S. law enforcement agencies?

There are a number of ways that law enforcement agencies can respond to the demands made upon them to increase efficiency and service delivery effectiveness. We designed a survey to identify approaches taken by select international agencies focused on a variety of strategies from simple operational strategies to large-scale structural changes to examine those that may be translated to U.S. law enforcement agencies.

Methodology

The project was designed to be implemented in four stages: (1) literature review, (2) survey development and distribution, (3) in-depth interviews, and (4) analysis. To further the understanding of the policing approaches needed in the new economy, an exploratory and developmental process was undertaken using surveys, case study analysis, and semistructured interviews. The goal was to use international survey data to develop a “snapshot” of the approaches adopted by law enforcement to maintain service delivery levels in the current fiscal environment. For comparative purposes, the validation phase included an analysis of strategies that had been implemented to reduce costs and increase the efficiency and effectiveness of service delivery by police agencies in the United Kingdom, Canada, and Australia—where economics, governance, and police practices are similar enough to those in the United States that it is reasonable to believe cost reduction strategies adopted there may be relevant and useful for United States–based agencies.

Stage 1. Literature review. The first stage of the research was exploratory and encompassed a snapshot of the literature, a review of the manner in which services are currently delivered, and what strategies agencies had implemented in the current fiscal environment to maintain services or to increase service delivery efficiency and effectiveness. The review examined police agency approaches to civilianization, increased use of technology, streamlining of processes and administration, outsourcing of services, mergers, and regionalization.

An extensive literature search of both published and unpublished sources, documents, journals, and books was undertaken initially, followed by a comprehensive Internet search for documents and related databases. The document search drew on information from research institutes, universities, government departments and ministries, and not-for-profit organizations.

The completion of this phase formed a foundation on which to develop a snapshot of the current delivery of service, performance management frameworks, and the resource allocation and organizational structures that international police agencies have adopted to institutionalize community policing. These served as the basis for our development of a survey instrument.

Stage 2. Survey development and distribution. To assess the current cost reducing strategies, methods, and processes adopted by local police agencies, a comprehensive postal and electronic survey was distributed to 111 Canadian police

agencies, 43 UK police services, seven Australian police forces and services, and the New Zealand Police (from which no response was received). This process was designed to validate the information obtained from the literature and Internet searches and to form the basis to identify promising practices for reducing costs while maintaining or increasing service delivery and effectiveness.

Stage 3. In-depth interviews. To validate the information obtained in the postal and electronic survey and to examine the approaches that agencies had implemented to increase their organizational efficiency in more detail, a series of comprehensive semi-structured, in-depth, face-to-face interviews with 12 police executives from agencies that had completed the postal and electronic survey was conducted. Of 15 agencies that were contacted, follow up interviews or information came from 12 (80 percent). The interviews explored the major efficiency and effectiveness initiatives and the specific fiscal environmental issues that the agencies faced.

Stage 4. Analysis. The literature review provided the information necessary to develop measures that would enable an analysis of the data obtained in the survey and aided in the development of the interview questions. The international survey formed the first phase in identifying and quantifying promising practices that may be adapted for U.S. agencies. The face-to-face interviews provided some validation of the survey responses and context for interpreting the results as well as providing more in-depth information about the strategies and approaches adopted. The fourth phase consisted of a review, analysis, and integration of the information that was obtained from the international survey and the face-to-face interviews. This phase included an assessment of the ways the various strategies could be used to advance community policing. The information gathered during this phase formed the basis for developing promising practice strategies, procedures, and models that could be used to improve organizational community policing efficiency and effectiveness while containing costs.

Literature Review

Resource management

Law enforcement agencies can structure their organizations to enable transparent strategic resource allocation decisions to be made in order for their resources to generate the best returns for specific communities and for society as a whole (den Heyer et al. 2008). The four components of managing law enforcement resources efficiently and effectively within an environment of fiscal restraint are (1) the management approach, (2) resource allocation strategy, (3) performance management and measurement, and (4) the organizational structure (den Heyer 2009). However, there is a limited understanding as to how these four components link together and how they may improve the organizational efficiency and effectiveness of law enforcement agencies.

Police structure and management

In the current climate of austerity with decreasing levels of resources and increased public demand for services, it is important to examine how policing is structured and what different organizational models can deliver (Innes 2011). The change in the economic operating environment of policing has been viewed by most agencies and commentators as being temporary. Therefore, there has been no fundamental strategic change regarding how police agencies deliver services. By not making fundamental strategic changes to an agency's service delivery procedures, agencies can make only short-term budgetary savings. The current methods of change used by agencies do not deal comprehensively with the changing environment and may be perceived as tinkering at the margins rather than being structural in nature.

Therefore, we examined these components of organizational strategic management including the methods that police agencies use to allocate their resources, the performance frameworks and organizational structures that they use, and how these facets link together to meet community policing goals and improve outcomes. It is hoped that the results of this project will expand existing knowledge of how police agencies are structured, as well as their frameworks and processes, in addition to enabling more efficient and effective service delivery.

Goldstein (1990) identified that in most cases police resources are not used rationally to achieve public safety. One way to understand how police resources are used, their impact on police activity, and how police numbers affect the level of crime is by measuring organizational effectiveness. An accepted method for measuring organizational effectiveness is the extent to which an agency's outputs and outcomes

meet stated or desired organizational and governmental strategies or social goals. It is for these reasons that the Audit Commission of Local Authorities and the National Health Service in England and Wales (1991) concluded that public debate needs to move away from the assumption that more police officers and expenditures will result in higher quantity and quality of police outputs (Audit Commission 1991, 12).

Organizational service delivery effectiveness

Evaluating the performance of law enforcement institutions is a contentious issue (Kelling 1992), as the role of law enforcement in any given society is not clearly defined. Police officers are required to perform a variety of functions (Walker and Katz 2008), and many of the tasks that the police undertake—such as crime prevention, community policing, and order maintenance—are difficult to enumerate and assess. In addition, as Weisburd and Eck (2004) observed in their review of the existing empirical literature, there is no evidence of the effect that police have on public order. It is for these reasons that the delivery of law enforcement services, performance measures, and organizational structure cannot be viewed in isolation.

The organization of police agencies and their performance frameworks should be linked directly with the managerial approach, budget, and strategies that have been adopted by the law enforcement agency. The strategies and the management approach should be derived from the overall vision or direction that has been established for the individual organization and should indicate how the organization will be structured, how its resources will be allocated, and how its performance will be measured. For law enforcement agencies to be able to measure the efficiency and effectiveness of their performance, any assessment framework should be a combination of both service delivery output and outcome objectives.

Organizational structure

The structure of a law enforcement agency is dependent upon the service delivery output that the agency produces and the outcome that the government wishes to achieve (den Heyer et al. 2008). The performance of a law enforcement agency is judged on whether it produces the service outputs agreed upon and whether it achieves these outputs in an efficient and effective manner (Boston 1991).

There are seven alternative structural approaches that police agencies may adopt to increase their service delivery efficiency and effectiveness. The use of such a structural approach is often referred to by economists as process, procedure, or organizational “consolidation” and includes (1) the sharing of services between

agencies, (2) local mergers, (3) regionalization, (4) the contracting of services, (5) outsourcing, (6) civilianization, and (7) internal consolidation. The consolidation of police agencies may take place at a number of different levels within an organization or may include the entire agency.

Efficiency and effectiveness

A sharp focus on efficiency and effectiveness will remain vital to any government's approach to improving the overall level of law enforcement for the benefit of the community. However, the issue of police effectiveness is not well understood by researchers, as most of the previous studies use the term "effectiveness" interchangeably with "productivity" and "efficiency." In the economic literature, productivity is generally measured in terms of output obtained for a given input and is widely defined as encompassing both effectiveness and efficiency (Hatry 1975; Cloninger and Sartorius 1979). Pollard (1979) suggests that the terms effectiveness and efficiency are frequently misused in relation to police work with police officers attempting to prove their effectiveness by pointing to their efficiency in specific areas.

The major issues that law enforcement agencies face when improving their efficiency is that they work in an entirely different environment than most other public sector agencies, and it is the municipal government or the elected officials that set the objectives that they expect the police to achieve (Loveday 1995a). The provision of law enforcement services and the achievement of government outcomes in an environment of fiscal restraint should be a balance between the demands of the community and the organization retaining its flexibility so that it may respond to emerging incidents. Law enforcement agencies need to allocate their resources and structure their organizations to be able to meet the outcomes that governments require. Police agencies also need to operate within their allocated budgets, remain accountable for their actions, and meet imposed effectiveness and efficiency standards.

American police agencies need to be cognizant of the extensive changes in the economic and wider operating environments and the effects that these changes are having on the delivery of core police services in neighborhoods, towns, and cities. Police need to adapt their core services to cope with the changes in the economic and operating environments. The nationalization and internationalization of gangs, transportation and dealing of drugs, money laundering and financial crime, human trafficking, firearms sales, and terrorism all form the new policing operational environment (PERF 2009; PERF 2011; Bayley and Perito 2010; Casey 2009).

As Farmer (1978) notes, the future of American policing will be made in an incremental and highly politicized fashion. However, the realities of the 21st century exert pressure on previous approaches taken in police reform. Adopting alternative public management and consolidation approaches by police services or agencies offers a number of realizable financial and system benefits. This research will examine these benefits and how they may be used to increase service delivery efficiency and effectiveness.

Goals, Objectives, and Rationale for the Research

Goals

The goals of the literature review were to engage in a critical examination of police agency strategic structures, processes, and resource allocation to identify a number of appropriate strategic and structural frameworks and methods for agencies that can help them reduce operating costs while maintaining community service delivery levels.

Objectives

The objectives of the research were to (a) examine how effective the adoption and implementation of new governance philosophies, such as new public management (NPM), consolidation, regionalization, and outsourcing, would be in the American policing context; (b) present a comprehensive international overview of police agencies' approaches to maintaining community service delivery with a decreasing level of resources; (c) develop the knowledge that will increase the service delivery effectiveness and the organizational capacity of law enforcement agencies nationwide; (d) examine the organizational structures and approaches used by police agencies to reduce operating costs; (e) explore the effects that these structures and approaches would have on policing; and (f) determine the promising practice structures and approaches that police agencies could consider for implementation to reduce their operating costs.

Rationale

The rationales for considering the research objectives in the context of police and government theoretical reform are discussed in appendix C.

Survey Methods

The survey was designed to capture some of the approaches currently adopted by police agencies that may reduce organizational and operational costs and to provide information about how these strategies have been implemented and, in some cases, interpreted and evaluated. The survey allowed for the identification of agencies that had undertaken extensive changes in programs to maintain their service delivery levels or to increase service efficiency and effectiveness while facing budget constraints.

The survey instrument was developed with guidance from an advisory panel of selected academics and law enforcement practitioners. The research team established a number of questions of importance to be addressed in the survey as well as the provision of insight in regard to the format and distribution of the surveys. To serve as a pilot, the surveys were given to a small sample of international police chiefs to ensure that the questions were understood and that the format of the survey was clear and concise.

Survey content

The police service delivery efficiency and effectiveness survey instrument included questions designed to elicit the following:

- The agency's approach to reducing organizational costs
- The agency's organizational structure and performance evaluation framework
- The agency's approach to maintaining service delivery within an environment of budget constraints
- The agency's adoption of such change programs as increased civilianization, rationalization, outsourcing, mergers, and regionalization
- The agency's method for allocating resources

Survey implementation and distribution process

For ease of access by police executives, the survey was both mailed and e-mailed to the 162 police agencies. Respondents were able to return the survey by regular mail, by e-mail, or through the web-based Survey Monkey survey site.

Both the postal and e-mail survey invitations had a survey packet that included the survey questionnaire and a letter from the president of the Police Foundation, which introduced the objectives of the study and encouraged the participation of the selected agency. The packet also outlined the options available for completing the survey (i.e., web-based, postal, e-mail, or facsimile). In addition, a series of steps were implemented to achieve a high response rate from the international agencies:

- Two weeks after the initial mailing, a postcard reminder was sent to all agencies about the survey. In addition, an e-mail reminder was sent to agencies that included the survey as an attachment.
- Four weeks after the initial mailing, another paper copy of the survey with a reminder letter was mailed to the agencies that had not completed the survey. Another e-mail notice was also sent to these agencies with the survey attached.

To maximize the chances of cooperation, agencies were assured that their responses would not be associated with their identities. However, for the in-depth interviews, participating agencies were asked later if their agency name could be identified for the purposes of demonstrating their unique case study and in case other agencies wanted to ask questions about their approaches.

A total of 162 police agencies (43 in the United Kingdom, 111 in Canada, and 7 in Australia and 1 in New Zealand) were mailed a research survey packet, which included the letter from the president of the Police Foundation (see appendix A). A hard copy of the research survey questionnaire (see appendix B), supported by an e-mail of the electronic copy of the packet sent to the chief or commissioner of the agency, was also included in the letter. Upon completion of the questionnaire, it was returned to the Police Foundation.

The response rate to the survey was just 31.5 percent. However, it should be noted that the survey was designed to capture unique methods rather than to estimate population parameters. Given that follow-ups to international agencies can be more difficult than in the United States, the fact that 51 international agencies responded should provide U.S. agencies with some information about what international agencies have done when facing economic challenges.

Survey Results

The results of the survey of international agencies constitute the largest section of this report. While we asked numerous questions (see appendix B for survey instrument), not all are detailed in this report. For example, when we asked questions about whether or not economics had impacted various services, the yes/no questions did not capture the specifics as to whether the impacts were increases or decreases, so for reporting purposes we only included details on the way services were impacted.

Agency and population demographics

Of the 162 police agencies contacted as part of this research, only 51 returned a completed survey questionnaire. This is approximately a 31.5 percent response rate. Although this is not a particularly high response rate, the responding agencies were spread across three of the four nations that were included in the survey.

Responding agencies by country

Table 1 on page 12 presents the number of agencies that were sent the survey questionnaire and the number that responded to the survey by country. It is important to note that the purpose of this project was not to establish population parameters for international policing agencies (hence the reliance on just Canadian, UK, and Australian agencies) but rather to elicit information about unusual approaches and identify patterns and more common approaches to aid U.S. law enforcement agencies in considering approaches used by other agencies facing economic or service delivery challenges.

Canadian agencies were overrepresented in our survey. As shown in table 1, the highest proportion of responses came from Canadian police agencies, followed by the United Kingdom and Australia. The proportion of Australian police agencies participating in the survey dropped from 5 percent of the survey sample to 2 percent of the responding agencies. The rate of response from Australia is disappointing, as police agencies from Australia have implemented a number of extensive change management programs since the late 1980s to improve the effectiveness and efficiency of their service delivery, as shown in the following sections.

Table 1. Surveyed and responding agencies by country

Country	Number of agencies sent survey (n)	Percent of agencies sent survey (%)	Number of agencies that returned survey (n)	Response rate (%)	Percent of responses making up entire sample (%)
Canada	111	68.5	41	36.9	80.4
United Kingdom	43	26.5	9	20.9	17.6
Australia	8	4.9	1	12.5	2
Total	162	99.9*	51	31.5	100

* Rounding may cause totals not to add up to exactly 100%.

Types of responding agencies

To ensure that any differences or anomalies were identified and taken into account when interpreting the survey results, agencies were asked to classify their agency into one of five different categories. Table 2 presents the number of participating agencies responding by agency category. None of the responding agencies identified themselves as belonging in the fifth category, "national." Most of the responding agencies categorized themselves as being local or county police agencies, while a reasonable aggregate number of agencies categorized themselves as being regional, provincial, or territorial police agencies. Five agencies classified themselves as belonging to the "other" type of agency, and all five served municipalities.

Table 2. Responding agencies by type (n = 51)

Type of agency	Number of agencies (n)	Percent (%)
Regional or provincial	7	13.7
United Kingdom territorial	2	3.9
Local or county	37	72.5
National	0	0
Other type	5	9.8
Total	51	99.9*

* Rounding may cause totals not to add up to exactly 100%.

Responding agencies by population served

In table 3 on page 13, we include the distribution of responding agencies by population served. The population rates ranged from less than 2,500 to more than one million. Nearly half (24 agencies) of the responding agencies serve populations of less than 100,000, and just less than one-third of the agencies (16 agencies) serve populations of between 100,000 and one million. More than 20 percent of agencies serve populations of one million or more.

Table 3. Responding agencies by approximate population served (n = 51)

Approximate population served by agency	Number of agencies	Percent of agencies
Less than 2,500	1	2
2,501 to 9,999	4	7.8
10,000 to 24,999	5	9.8
25,000 to 49,999	5	9.8
50,000 to 99,999	9	17.6
100,000 to 249,999	9	17.6
250,000 to 499,999	2	3.9
500,000 to 999,999	5	9.8
1,000,000 or more	11	21.6
Total	51	99.9*

* Rounding may cause totals not to add up to exactly 100%.

Responding agencies by full-time sworn officers

The agencies were asked to provide the number of sworn officers, civilian staff, auxiliary personnel, and volunteers working in their agencies. The number of actual full-time equivalent (FTE) and the authorized number of sworn officers by responding agency is presented in table 4. Most participating agencies had either fewer than 100 or between 101 and 500 actual sworn officers, and two-thirds of the responding agencies had fewer than 500 actual sworn officers. The third-largest group of responding agencies was those with more than 1,000 actual sworn officers. This group represented more than one-quarter of the participating agencies.

Table 4. Respondents by number of full-time sworn officers, actual and authorized (n=51)

Number of full-time sworn officers	Number of agencies—actual FTE (n)	Percent (%)	Number of agencies—authorized FTE (n)	Percent (%)
100 or fewer	17	33.3	16	31.4
101 to 500	16	31.4	16	31.4
501 to 999	4	7.8	4	7.8
1,000 or more	14	27.5	9	17.6
No answer	0	—	6	11.8
Total	51	100	51	100

The difference between the actual number of sworn officers and the authorized number of sworn officers was minimal, except in the “no answer” category. In the section “actual FTE,” all 51 responding agencies identified their actual strengths. However, in the section “authorized FTE,” almost 12 percent of agencies did not answer the question. It is unknown whether this is because these agencies do not

have an authorized number of sworn officers (i.e., the maximum number of sworn officers that they are politically able to employ or for which they are budgeted), because they did not know their authorized strength, or because they refused to answer.

Responding agencies by part-time, auxiliary, civilian, and volunteer personnel

To conclude the discussion on the sworn staffing of agencies, agencies were asked to provide the number of part-time sworn officers that they employed. This question did not require clarification as to the role of part-time officers or as to the reason why the agency employed part-time officers. A number of European and Australian agencies allow sworn officers to work within a flexible employment arrangement so officers may undertake university study or recover from injury or medical procedures.

Agencies employing part-time officers

As shown in table 5, 20 of the 51 responding agencies provided information on part-time sworn officers, although it is unknown if the remaining 31 did not employ part time officers or just chose not to respond. As indicated, respondents from the smallest agencies (those with 100 or fewer sworn personnel) made up half of those who reported employing part-time sworn officers. However, 30 percent of those respondents reporting the employment of part-time sworn officers were from the largest agencies (1,000 sworn officers or more).

Table 5. Responding agencies employing part-time sworn officers by agency size (20 responses)

Number of part-time sworn officers	Number of agencies with part-time sworn officers (n)	Percent
100 or fewer	10	50
101 to 500	2	10
501 to 999	2	10
1,000 or more	6	30
Total	20	100

As there were 44 agencies (86 percent) that categorized themselves as either serving a region or provincial or a local area or county—in other words, covering large geographic areas—these findings seem logical. A number of the provincial or county agencies were smaller but did not employ a large number of full-time sworn officers. By employing part-time sworn officers, these smaller agencies cover greater geographical patrol areas and are able to provide better service and coverage through extended patrol hours.

Agencies employing auxiliary personnel

To understand the involvement of sworn officers or enforcement staff in policing, agencies were asked if they also employed any auxiliary staff and, if so, how many. Agencies were not asked to clarify the roles of auxiliary staff or whether they were voluntary or paid, nor were they asked how often they worked. In table 6 is the information pertaining to auxiliary staff. More than half the agencies (28 agencies, or 55 percent) reported that they employ 50 or fewer auxiliary staff and that this number was both their actual FTE and their authorized level. The fact that most of the agencies that employ auxiliary staff are ensuring that the actual number of these personnel is maintained at the authorized level may be an indication that agencies are using auxiliary personnel to assist with providing patrol services to keep within their agency budgets or to maintain patrol services while not replacing full-time sworn officers who have left the organization. All but one of the 28 agencies that employed 50 or fewer auxiliary staff also employed fewer than 500 full-time sworn officers (the other agency employed between 501 and 999 full-time sworn officers).

As police agencies in the United Kingdom have a tradition of employing auxiliaries (often known as “specials”) to support their sworn officers, it was hypothesized that the majority of agencies responding to this question would be police forces in the United Kingdom. However, upon further analysis it was found that 21 agencies were in Canada while seven were in the United Kingdom.

Table 6. Number of auxiliary staff actually employed by agency (35 responses)

Number of auxiliary staff	Number of agencies—actual FTE (n)	Percent (%)	Number of agencies—authorized FTE (n)	Proportion (%)
50 or fewer	28	54.9	28	54.9
51 to 100	1	2	3	5.8
101 to 200	2	3.9	2	3.9
201 to 500	2	3.9	1	2
501 or more	2	3.9	0	—
No answer	16	31.3	17	33.3%
Total	51	99.9*	51	99.9*

* Rounding may cause totals not to add up to exactly 100%.

Agencies employing full-time civilian staff

In table 7 on page 16, we present an analysis of the number of full-time civilian staff members working in an agency. The majority of agencies (59 percent) identified that they employed fewer than 100 actual full-time civilian staff while only nine agencies

(18 percent) employed more than 1,000 actual full-time civilian staff members. As noted earlier, these findings reflect the fact that the majority of responding agencies are smaller or medium-sized agencies.

Table 7. Number of full-time civilian staff members in agency

Number of full-time civilian staff	Number of agencies	Percent
100 or fewer	30	58.8
101 to 500	7	13.7
501 to 999	5	9.8
1,000 or more	9	17.6
No answer	0	—
Total	51	99.9*

* Rounding may cause totals not to add up to exactly 100%.

Examining the effectiveness of service delivery of police agencies during periods of austerity is a major focus of this research. One component that needs to be examined to determine the effectiveness of service delivery is the extent to which police work is shared between sworn officers and civilian staff.

Ratio of sworn officers to civilian staff

The traditional view is that civilian staff members principally undertake support roles and sworn staff members principally undertake law enforcement roles, but this demarcation between roles has become less clear-cut with civilian staff often undertaking roles in security, guarding prisoners, and scene examination. The ratio of sworn officers to single civilian staff members is presented in table 8. The majority (65 percent) of civilian staff members support fewer than two or three sworn officers.

Table 8. Ratio of actual sworn officers to one full-time civilian staff member by actual number of full-time sworn officers

Ratio of sworn officers to full-time civilian staff members	Fewer than 100 sworn officers (n)	101 to 500 sworn officers (n)	501 to 999 sworn officers (n)	More than 1,000 sworn officers (n)	Total
Fewer than 2.0:1	5	0	1	7	13
2.1 to 3.0:1	6	8	1	5	20
3.1 to 4.0:1	0	4	1	2	7
4.1 to 5.0:1	1	1	1	0	3
5.1 to 7.0:1	3	3	0	0	6
More than 7.0:1	2	0	0	0	2
Total	17	16	4	14	51

Part-time civilian staff

The number of part-time civilian staff members employed by agencies is similar to that found in agencies employing full-time civilian staff. As shown in table 9, more than two-thirds (34 agencies or 67 percent) of the agencies employed 50 or fewer part-time civilian staff members and only five (10 percent) agencies employed more than 501 part-time civilian employees.

Table 9. Number of part-time civilian staff members in agency (42 responses)

Number of part-time civilian staff	Number of agencies (n)	Percent of agencies (%)
50 or fewer	34	66.7
51 to 100	1	2
101 to 200	2	3.9
201 to 500	0	—
501 or more	5	9.8
No answer	9	17.6
Total	51	100

Agencies with volunteer staff

The staffing of police agencies by volunteers was the final category of staffing to be examined. Agencies were asked if they used volunteers and, if so, how many. Agencies were not asked to clarify the roles of volunteers or how long or how often they worked for the agency. Among the 34 respondents, 20 agencies (59 percent) use 50 or fewer volunteers and 10 agencies (30 percent) use more than 200 volunteers. Seventeen agencies did not answer this question. This information is presented in table 10.

Table 10. Number of volunteers in agency (34 responses)

Number of volunteers	Number of agencies	Proportion
50 or fewer	20	58.8
51 to 100	3	8.8
101 to 200	1	2.9
201 to 500	7	20.6
501 or more	3	8.8
Total	34	100

The size of the police agency did not influence the number of volunteers employed nor did the country of origin of the police agency. The number of volunteers employed as a percentage of the number of full-time sworn officers was between 2 and 192, with two Canadian agencies employing more volunteers than sworn officers. It appears that Canadian agencies make extensive use of volunteers; nearly half of

all responding Canadian agencies reported using volunteers, and seven of these agencies use volunteers at more than 50 percent of their full-time sworn numbers. The responding agencies from the United Kingdom also made extensive use of volunteers with all but one agency using volunteers.

It is believed that the reason that approximately one-third of the agencies did not answer the question pertaining to the use of volunteers may be related to agencies not being able to access this information. It is acknowledged that with the introduction of community policing and the subsequent implementation of decentralized organizational structures, this information may not be known at an agency's headquarters.

Ratio of full-time sworn personnel to full-time support staff

To complete the analysis of police agency staffing, we provide the ratio of full-time enforcement staff to the full-time support staff in table 11. The table presents an analysis of the number of full-time sworn officers of an agency relative to the total number of full-time civilian staff, auxiliaries, and volunteers. The majority of agencies (36 agencies, or 71 percent) have a ratio of less than 2:1, meaning that for each full-time civilian, auxiliary, or volunteer, there are fewer than two full-time sworn officers; in 11 agencies (21 percent), for each support staff member there is less than one full-time sworn officer.

Table 11. Ratio of actual full-time sworn officers to full-time civilian staff, auxiliary, and volunteer members, by actual number of full-time sworn officers

Ratio of sworn officers to full-time nonsworn employees	Fewer than 100 sworn officers	101 to 500 sworn officers	501 to 999 sworn officers	More than 1,000 sworn officers	Total
Fewer than 1.00:1	4	3	0	4	11
1.01 to 1.50:1	4	5	1	5	15
1.51 to 2.00:1	4	2	1	3	10
2.01 to 3.00:1	2	4	0	2	8
More than 3.01:1	3	2	2	0	7
Total	17	16	4	14	51

Table 11 also indicates how the staffing levels of police agencies have changed with the introduction of community policing and indicates how diverse the employment of police agency personnel has become. This change appears to have occurred across all agencies, whether small, medium, or large, with a number of large agencies meeting a ratio of less than 1.00 full-time sworn officer per full-time civilian, auxiliary, or volunteer member.

Changing fiscal or resource conditions

The second section of the survey focused on changes in the type or source of funding and whether agencies had experienced a decrease in their operating budgets.

Changes in local, provincial, and federal funding sources during the past five years

Shown in table 12 are the results of the first series of questions relating to whether agencies had experienced any changes in the amount of funding from local, provincial, or federal sources. While agencies were asked to identify the percentage decrease in their operating budgets, they were not asked to divulge the percentage by which their funding had increased.

Table 12. Changes in funding during the past five years by funding sources

	Local sources n (%)	Provincial sources n (%)	Federal sources n (%)
Increase	32 (62.7)	17 (33.3)	5 (9.8)
Decrease	8 (15.7)	10 (19.6)	21 (41.2)
No change	7 (13.7)	11 (21.6)	9 (17.6)
N/A	4 (7.8)	13 (25.5)	16 (31.4)
Total	51 (99.9*)	51 (100)	51 (100)

* Rounding may cause totals not to add up to exactly 100%.

The majority of responding agencies (32 agencies, or 62.7 percent) experienced an increase in funding from local sources. In comparison, only 17 agencies (33 percent) received an increase in funding from provincial sources. Nevertheless, almost 16 percent experienced a decrease in funding from local sources. Twenty-one agencies (41 percent) experienced a decrease of funding from federal sources, about twice as many as from provincial sources and close to three times as many from local sources.

The results also show that within each of the three sources of funding, a number of agencies did not experience a decrease from their respective sources. Seven agencies with local sources, 11 agencies with provincial sources, and nine agencies with federal sources did not experience any form of change in their sources of funding.

Local source funding by agency size

In table 13 on page 20, we show the change in funding levels from local sources by agency size. The largest number of agencies experiencing increases in local funding were the small and medium-sized agencies, with only five of the 14 large agencies (28.6 percent)

experiencing increases in their levels of funding from local sources. All of the small and medium-sized agencies experiencing increases were in Canada and the four large agencies were in the United Kingdom.

More large agencies than small or medium-sized agencies experienced decreases in their levels of local funding. Three agencies experiencing decreases in their levels of local funding were in Canada, and of the five large agencies that experienced decreases, four were in the United Kingdom and one was in Canada. Seven agencies, all in Canada, reported that they had not experienced any change in their levels of local funding.

Table 13. Change in local source funding during the past five years by number of full-time sworn officers (47 responses)

Number of full-time sworn officers	Increase in local funding (n)	Decrease in local funding (n)	No change in local funding (n)	No answer (n)	Total
100 or fewer	10	3	4	0	17
101 to 500	13	0	1	2	16
501 to 999	4	0	0	0	4
1,000 or more	5	5	2	2	14
Total	32	8	7	4	51

Provincial source funding by agency size

As shown in table 14 on page 21, the number of agencies experiencing an increase in the level of provincial funding was lower than the number of agencies experiencing an increase in local funding (see table 13 for comparison). Only 17 of the responding agencies (about 33 percent) experienced an increase in provincial funding, while 10 (about 20 percent) experienced a decrease. Eleven agencies also identified that they had not experienced any change in the levels of provincial funding.

Of those participating agencies reporting increases in their levels of provincial funding, one was in Australia, one in the United Kingdom, and 15 in Canada. Eight Canadian agencies and two UK agencies experienced decreases in their levels of funding. The analysis was similar among the agencies that did not experience any change in the levels of provincial funding—nine were in Canada and two were in the United Kingdom.

Table 14. Change in provincial source funding during the past five years by number of full-time sworn officers (38 responses)

Number of full-time sworn officers	Increase in provincial funding	Decrease in provincial funding	No change in provincial funding	No answer	Total
100 or fewer	5	3	2	7	17
101 to 500	5	3	6	2	16
501 to 999	2	2	0	0	4
1,000 or more	5	2	3	4	14
Total	17	10	11	13	51

Federal source funding by agency size

The levels of federal funding appear to have had the most impact on responding police agencies. Table 15 shows the changes in agencies' levels of federal funding during the past five years. A much greater proportion of responding agencies experienced a decrease in their levels of federal funding compared to those agencies that experienced an increase. The biggest group experiencing a decrease in their levels of federal funding was the large agencies. Ten of those agencies (83 percent of the 12 responding large agencies) experienced decreases whereas across all sizes of agency, 60 percent of responding agencies experienced decreases.

Only five agencies, all Canadian, experienced increases in their levels of federal funding. Of the agencies that experienced a decrease in such funding, nine were in the United Kingdom and 12 were Canadian. All of the agencies that reported that they had not experienced any change in their levels of federal funding were also in Canada.

Table 15. Change in federal source funding during the past five years by number of full-time sworn officers (35 responses)

Number of full-time sworn officers	Increase in federal funding	Decrease in federal funding	No change in federal funding	No answer	Total
100 or fewer	0	5	4	8	17
101 to 500	2	4	4	6	16
501 to 999	2	2	0	0	4
1,000 or more	1	10	1	2	14
Total	5	21	9	16	51

Decreases in operating budgets

To support the analysis of any change experienced in agencies' source of funding, agencies were asked if they had experienced a decrease in their operating budgets in the past five years. The responses to this question are presented in table 16 on

page 22. Thirty-one agencies (61 percent) reported that they had not experienced a decrease in their operating budgets in the past five years. This is not to say, however, that these agencies have not experienced a decrease in any other section of their budgets—for example, in their personnel budgets.

Table 16. Agencies that had reduced operating budgets in the past five years

Reduced operating budget	Number of agencies (n)	Percent (%)
No	31	60.8
Yes	19	37.3
Budget process in progress	1	2
Total	51	100.1*

* Rounding may cause totals not to add up to exactly 100%.

Nevertheless, more than one in three responding agencies (37 percent) had experienced a decrease in their operating budgets in the past five years. Among those, nine were in the United Kingdom and ten were in Canada. In table 17, we take the analysis one step further and present the agencies that experienced budget decreases by agency size.

Table 17. Agencies with reduced operating budgets in the past five years by number of full-time sworn officers

Number of full-time sworn officers	Decrease in funding	Total
100 or fewer	5	17
101 to 500	4	16
501 to 999	1	4
1,000 or more	9	14
Total	19	51

Proportion of operating budget decreases

All but one of the 19 agency respondents that reported experiencing a decrease in their operating budgets were able to identify the budget decrease percentages that they had experienced in the past five years. The percentage of the decrease experienced is presented in table 18 on page 23. Eleven of the 19 respondents (about 58 percent) experienced a decrease of 5 percent or less while four of the agencies (about 21 percent) experienced between a 5 and 10 percent decrease. One agency experienced a decrease in its budget of between 16 to 20 percent and another agency experienced a decrease of more than 20 percent. Thirty-two agencies did not respond to this question, and two did not know the amount of the decrease.

Table 18. Percentage of operating budget decrease experienced (19 responses)

Percentage decrease	Number of agencies (n)	Percent (%)
Less than 5 percent	11	57.9
5 to 10 percent	4	21.1
11 to 15 percent	0	—
16 to 20 percent	1	5.3
More than 20 percent	1	5.3
Do not know	2	10.5
Total	19	100.1*

* Rounding may cause totals not to add up to exactly 100%.

Proportion of operating budget decreases by agency size

The information relating to the percentage of the decrease contained in table 18 was compared to the number of full-time sworn officers presented in table 4 to identify which sizes of agency experienced the largest decreases in their operating budgets. We present these results in table 19.

Table 19. Proportion of decreases in operating budgets in the last five years by number of full-time sworn officers (n=17)*

Number of full-time sworn officers	Less than 5% decrease in operating budget (n)	5 to 10% decrease in operating budget (n)	11 to 15% decrease in operating budget (n)	16 to 20% decrease in operating budget (n)	More than 20% decrease in operating budget (n)	Total
100 or fewer	5	0	0	0	0	5
101 to 500	2	1	0	0	0	3
501 to 999	0	1	0	0	0	1
1,000 or more	4	2	0	1	1	8
Total	11	4	0	1	1	17

*Although 19 agencies reported decreases in their operating budgets in tables 16 and 17, two did not identify the percentage by which their operating budgets had decreased.

Eleven of the 17 agencies (65 percent) that specified the percentage of the decrease in their operating budgets experienced less than a 5 percent decrease. This level of budget decrease was experienced mainly by the smallest and largest agencies. Four medium-sized and large agencies experienced decreases of between 5 and 10 percent while one large agency experienced a decreases of between 16 and 20 percent with another large-sized agency experiencing a decrease of more than 20 percent.

Impact of economics on community policing activities

The first two sections of the survey related to the responding agencies' demographics and to their changes in funding and operating budgets in the past five years. The tables in this section address how the change in economic conditions has affected agencies' community engagement activities during that same time period.

Impact of economics on neighborhood meetings and community partnerships

The impact of economics on attendance at neighborhood meetings and police relationships with community residents and businesses is the subject of the first set of tables. The survey asked two questions: (1) whether economics had impacted agencies' participation in various activities over the past five years and (2) how economics had impacted participation. We present the results of the second question, as it provides the specifics with regard to whether agencies increased or decreased these activities as a result of economics. As shown in table 20a, 18 agencies (35 percent) reported that economics had increased their attendance at neighborhood meetings, but 13 agencies (25 percent) noted that their attendance had decreased based on economics.

Table 20a. Change in attendance at neighborhood association meetings based on economics (31 responses)

	Number of agencies (n)	Percent (%)
Increase	18	35.2
Decrease	13	25.5
No answer	20	39.2
Total	51	99.9*

* Rounding may cause totals not to add up to exactly 100%.

Table 20b. Change in partnerships or collaborations with community residents based on economics (37 responses)

	Number of agencies (n)	Percent (%)
Increase	28	54.9
Decrease	9	17.6
No answer	14	27.5
Total	51	100

Table 20c. Change in partnerships or collaborations with businesses based on economics (30 responses)

	Number of agencies (n)	Percent (%)
Increase	21	41.2
Decrease	9	17.6
No answer	21	41.2
Total	51	100

We also asked agencies how economics affected their partnerships or collaborations with community residents (table 20b on page 24). Twenty-eight agencies (55 percent) reported that economics had increased their partnerships or collaborations with community residents and nine agencies (18 percent) reported that their partnerships or collaborations had decreased. A large number of agencies (20 agencies, or about 39 percent) did not answer the question relating to the attendance at neighborhood meetings, and 14 agencies (about 27 percent) did not answer the question relating to partnerships with community residents.

With regard to police agency partnerships or collaborations with businesses (table 20c), 21 (about 41 percent) reported that their partnerships or collaborations had increased with businesses, compared to nine agencies (about 18 percent) that believed that their partnerships or collaborations had decreased. As with neighborhood meetings and collaborations with residents, many agencies (21 agencies, or about 41 percent) did not answer the question, perhaps in part because they had not experienced any changes.

Impact of economics on police relationships with specific subgroups

In this set of tables, we address how economics impacted police relationships with schools, faith-based organizations, and immigrant communities. As shown in table 21a on page 26, 24 agencies (about 47 percent) claimed that economics had increased their partnerships or collaborations with schools, and eight agencies (about 16 percent) believed that economics had decreased their partnerships or collaborations with schools. Nineteen agencies (about 37 percent) did not respond to the question as to how economics affected their relationships with schools.

With regard to the impact of economics on police partnerships or collaborations with faith-based organizations (table 21b on page 26), 17 agencies (about 33 percent) stated that economics had increased their partnerships or collaborations with faith-based organizations, and six agencies (12 percent) claimed that their partnerships or collaborations had decreased. As with the question relating to partnerships or

collaborations with schools, there was a large number of agencies that did not answer this question. Twenty-eight agencies (55 percent) did not answer the question in relation to involvement.

Table 21a. Change in partnership with schools based on economics (32 responses)

	Number of agencies (n)	Percent (%)
Increase	24	47.1
Decrease	8	15.7
No answer	19	37.3
Total	51	100.1*

* Rounding may cause totals not to add up to exactly 100%.

Table 21b. Change in partnerships or collaborations with faith-based organizations based on economics (23 responses)

	Number of agencies (n)	Percent (%)
Increase	17	33.3
Decrease	6	11.8
No answer	28	54.9
Total	51	100

Table 21c. Change in outreach to immigrant communities based on economics (27 responses)

	Number of agencies (n)	Percent (%)
Increase	22	43.1
Decrease	5	9.8
No answer	24	47.1
Total	51	100

Table 21c shows how economics affected agencies' outreach to immigrant communities. Twenty-two agencies (43 percent) maintained that their outreach to immigrant communities had increased, compared to only five agencies (10 percent) that stated that their outreach had decreased. As with schools and faith-based organizations, a number of agencies (24 agencies or 47 percent) did not answer the question pertaining to outreach to immigrant communities.

Impact of economics on police outreach, problem solving, and deployment

In table 22 on page 27, we present the effects that economics has had on (a) police outreach to underserved populations, (b) problem solving, and (c) the geographic deployment and allocation of patrol officers. Fully 33 percent of responding agencies (17 agencies) claimed that economics had increased their outreach to underserved

populations, and three agencies (6 percent) reported that economics had decreased their outreach to such populations. However, 31 agencies did not answer the question—perhaps indicating no known changes.

Table 22a. Change in outreach to underserved populations based on economics (20 responses)

	Number of agencies (n)	Percent (%)
Increase	17	33.3
Decrease	3	5.9
No answer	31	60.8
Total	51	100

Table 22b. Change in engagement in problem-solving efforts based on economics (36 responses)

	Number of agencies (n)	Percent (%)
Increase	27	52.9
Decrease	9	17.6
No answer	15	29.4
Total	51	99.9*

* Rounding may cause totals not to add up to exactly 100%.

Table 22c. Change in geographic or place-based assignment of officers based on economics (23 responses)

	Number of agencies (n)	Percent (%)
Increase	14	27.5
Decrease	9	17.6
No answer	28	54.9
Total	51	100

In terms of how economics had affected the agencies engagement in problem-solving efforts, more than half the agencies (27 agencies, or about 53 percent) believed that economics had increased their engagement in problem-solving efforts, and nine agencies (about 18 percent) claimed that their engagement had decreased. As with the question relating to the outreach to underserved populations, there was a large number of agencies that did not answer this question.

Finally, when considering the impact of economics on deployment of patrol officers, 14 agencies (about 27 percent) reported that their geographic or place-based assignment of patrol officers had increased, compared to nine agencies (18 percent)

that said such deployments had decreased. Similar to the responses related to underserved populations, a majority of agencies (28 agencies, or about 55 percent) did not answer the question.

Impact of economics on victim interaction, mediation, and station hours

As shown in table 23a, 18 agencies (35 percent) claimed that economics had increased their outreach to victim services, and four agencies (8 percent) identified that economics had decreased such outreach.

Considering the economic impact of outreach to mediation services (table 23b), just less than one-third of the agencies (15 agencies, or about 29 percent) stated that economics had increased their outreach to mediation services, and only one agency claimed that its outreach had decreased. As with the question relating to the outreach to victim services, there was a substantial number of agencies that did not respond to this question.

Table 23c on page 29 relates to how economics had affected the opening hours of agencies' neighborhood or community substations. While just eight agencies (about 16 percent) reported that the opening hours of these stations had increased, 13 agencies (about 26 percent) claimed that opening hours for such stations had decreased. Similar to the previous two questions in this section, a majority of agencies (about 58 percent) did not respond to the question.

Table 23a. Change in outreach to victim services based on economics (22 responses)

	Number of agencies (n)	Percent of agencies (%)
Increase	18	35.3
Decrease	4	7.8
No answer	29	56.9
Total	51	100

Table 23b. Change in outreach to mediation services based on economics (16 responses)

	Number of agencies (n)	Percent (%)
Increase	15	29.4
Decrease	1	2
No answer	35	68.6
Total	51	100

Table 23c. Change in hours of police stations based on economics (21 responses)

	Number of agencies (n)	Percent (%)
Increase	8	15.7
Decrease	13	25.5
No answer	30	58.8
Total	51	100

Impact of economics on citizen surveys, involvement programs, and dissemination of information to the community

Presented in table 24a are the effects that economics had on citizen involvement programs and surveys as well as the dissemination of information on agency initiatives. Fourteen agencies (about 28 percent) maintained that economics had increased their involvement in citizen programs, and six agencies (12 percent) claimed that economics had decreased their involvement in such programs. However, the majority of agencies did not answer the question as to how economics affected their level of involvement in such programs.

Table 24b on page 30 shows how economics affected agencies' undertaking of citizen surveys. Fourteen agencies (27 percent) stated that economics had increased the undertaking of citizen surveys, and nine agencies believed that their participation in such programs had decreased. A large number of agencies did not answer the question relating to their involvement in community programs, possibly indicating that there had not been any changes.

Table 24c on page 30 shows how economics affected the dissemination of information about agency initiatives. A large number of agencies (30 agencies, or about 59 percent) reported that the dissemination of information about agency initiatives had increased, compared to seven agencies (about 14 percent) that maintained that the dissemination of information about agency initiatives had decreased. Similar to the previous two questions in this section, many agencies (in this case, 14 agencies or about 27 percent) did not respond to the question.

Table 24a. Change in citizen involvement programs based on economics (20 responses)

	Number of agencies (n)	Percent of agencies (%)
Increase	14	27.5
Decrease	6	11.8
No answer	31	60.8
Total	51	100.1*

* Rounding may cause totals not to add up to exactly 100%.

Table 24b. Change in citizen surveys based on economics (23 responses)

	Number of agencies (n)	Percent (%)
Increase	14	27.5
Decrease	9	17.6
No answer	28	54.9
Total	51	100

Table 24c. Change in dissemination of agency initiatives based on economics (37 responses)

	Number of agencies (n)	Percent (%)
Increase	30	58.8
Decrease	7	13.7
No answer	14	27.5
Total	51	100

Impact of economics on dissemination of specific types of information to the community

How economics has affected community engagement activities in relation to the dissemination of crime information is presented in table 25a. Nearly two-thirds of the agencies (33 agencies, or about 65 percent) stated that economics had increased the dissemination of their crime problem information, and only three agencies (about 6 percent) maintained that economics had decreased the dissemination of this information. Fifteen agencies (about 29 percent) did not respond to the question as to how economics affected their level of the dissemination of such information.

Table 25b on page 31 shows how economics affected agencies' dissemination of crime prevention tips. Thirty-one agencies (about 61 percent) reported that economics had increased their dissemination of crime prevention tips, and five agencies claimed that their dissemination of this information had decreased. As with the question relating to agency dissemination of crime problem information, 15 agencies did not answer this question.

Table 25a. Change in dissemination of crime problem information based on economics (36 responses)

	Number of agencies (n)	Percent of agencies (%)
Increase	33	64.7
Decrease	3	5.9
No answer	15	29.4
Total	51	100

Table 25b. Change in dissemination of crime prevention tips based on economics (36 responses)

	Number of agencies (n)	Percent (%)
Increase	31	50.8
Decrease	5	9.8
No answer	15	29.4
Total	51	100

Table 25c. Change in dissemination of crime maps based on economics (29 responses)

	Number of agencies (n)	Percent (%)
Increase	25	49
Decrease	4	7.8
No answer	22	43.1
Total	51	99.9*

* Rounding may cause totals not to add up to exactly 100%.

Table 25c shows how economics affected agencies' dissemination of crime maps. Twenty-five agencies (about 49 percent) reported that the dissemination of crime maps had increased, compared to four agencies (about 8 percent) that maintained that the dissemination of crime maps had decreased. Similar to the previous two questions in this section, a number of agencies (22 agencies, or 43 percent) did not answer the question.

Cost reduction strategies

Cost reduction strategies—personnel

The next section of the survey covered questions about the cost reduction strategies agencies had adopted. The first set of tables shows answers to questions about whether agencies had implemented any personnel cost reduction strategies in the past five years.

Sworn vacancies left unfilled

Table 26a on page 32 addresses whether agencies had left sworn vacancies unfilled. The answers appear to be evenly spread between agencies that have not left sworn vacancies unfilled (25 agencies, or about 49 percent) and those that have left sworn vacancies unfilled (24 agencies, or about 47 percent).

Reductions in force / layoffs

Table 26b on page 32 concerns the reduction in the size of an agency's force. The answers to the question relating to staff layoffs identify that the majority of agencies (36 agencies, or 71 percent) had not laid off any staff, while 11 agencies (22 percent) had. It is unknown whether the personnel laid off have been sworn officers or civilian staff members. We did not seek clarification from agencies on this point.

Table 26a. Sworn vacancies left unfilled

	Number of agencies (n)	Percent of agencies (%)
Yes	24	47.1
No	25	49
Planned	2	3.9
No answer	0	—
Total	51	100

Table 26b. Reduction in force size through staff layoffs (50 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	11	21.6
No	36	70.6
Planned	3	5.9
No answer	1	2
Total	51	100.1*

* Rounding may cause totals not to add up to exactly 100%.

Sworn officer pay changes

The second set of tables relates to the salaries and pay increases of sworn officers. Agencies were asked whether they had reduced the salaries of sworn officers and whether they had reduced or eliminated pay increases for sworn officers. As shown in table 27a, the majority of agencies (43 agencies, or about 84 percent) stated that they had not reduced the salaries of sworn officers, which was a similar result to the responses to the question of whether agencies had reduced or eliminated pay increases for sworn officers (table 27b on page 33). Thirty-four agencies (about 67 percent) claimed that they had not reduced or eliminated pay increases for sworn officers.

Table 27a. Reduction of sworn staff salaries

	Number of agencies (n)	Percent of agencies (%)
Yes	4	7.8
No	43	84.3
Planned	1	2
Mandated	2	3.9
No answer	1	2
Total	51	100

Table 27b. Elimination of sworn staff pay increases

	Number of agencies (n)	Percent of agencies (%)
Yes	4	7.8
No	34	66.7
Planned	6	11.8
Mandated	7	13.7
No answer	0	—
Total	51	100

Civilian staff pay changes

Shown in tables 28a and 28b are answers to questions regarding civilian staff pay changes. The agencies were asked whether they had reduced the pay of existing civilian staff and whether they had reduced or eliminated pay increases for civilian staff. In both cases, as with the application of these questions to sworn staff, the majority of agencies had not reduced existing civilian staff pay nor reduced or eliminated civilian pay increases. Forty-three agencies (about 84 percent) maintained that they had not reduced existing civilian staff pay while 34 (about 67 percent) had not reduced or eliminated civilian pay increases.

Table 28a. Reduction of civilian staff pay (48 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	3	5.9
No	43	84.3
Planned	2	3.9
Mandated	0	—
No answer	3	5.9
Total	51	100

Table 28b. Elimination of civilian pay increases (49 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	3	5.9
No	34	66.7
Planned	5	9.8
Mandated	7	13.7
No answer	2	3.9
Total	51	100

Hiring freezes as a cost reduction strategy

As shown in tables 29a and 29b on page 34, about a third of agencies had initiated a hiring freeze on sworn staff, and just more than a quarter had done the same for civilian staff. In both cases, more than half of the agencies had not implemented a hiring freeze: 28 agencies (55 percent) for sworn officers and 29 agencies (57 percent) for civilian staff.

In table 30, we present a more refined analysis of the hiring freezes by showing the freezes by agency size. Of the 17 agencies implementing a hiring freeze on sworn staff, the greatest proportion (42 percent) was among the largest agencies. Similarly, of the 14 agencies implementing a civilian officer freeze, 44 percent were from the largest agencies.

Table 29a. Hiring freezes of sworn officers (48 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	17	33.3
No	28	54.9
Planned	2	3.9
Mandated	1	2
No answer	3	5.9
Total	51	100

Table 29b. Hiring freezes of civilian staff (48 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	14	27.5
No	29	56.9
Planned	5	9.8
Mandated	0	—
No answer	3	5.9
Total	51	100.1*

* Rounding may cause totals not to add up to exactly 100%.

Table 30. Agencies that introduced hiring freezes on sworn (17 responses) and civilian (14 responses) staff by number of full-time sworn officers

Number of full-time sworn officers	Number of agencies introducing hiring freeze on sworn staff		Number of agencies introducing hiring freeze on civilian staff	
	Number of agencies (n)	Percent of agencies (%)	Number of agencies (n)	Percent of agencies (%)
100 or fewer	4	23.5	2	14.3
101 to 500	4	23.5	4	28.6
501 to 999	2	11.8	2	14.3
1,000 or more	7	41.2	6	42.9
Total	17	100	14	100.1*

* Rounding may cause totals not to add up to exactly 100%.

Personnel reductions through attrition or unpaid furloughs

Shown in tables 31a and 31b are the number of agencies reducing staffing via attrition and putting staff on unpaid furloughs. As with the previous questions related to personnel cost reduction strategies, the majority of agencies had not implemented either of these strategies. Twenty-eight agencies (about 55 percent) claimed that they had not reduced staffing levels through attrition, and 41 agencies (about 80 percent) had not put staff on unpaid furloughs. However, 19 agencies (37 percent) reported that they had reduced staffing levels through attrition.

It is unknown to what level staff numbers will be reduced and whether the post-attrition level will become an agency's new authorized or maximum strength.

Table 31a. Reducing staff through attrition (50 responses)

	Number	Proportion
Yes	19	37.3
No	28	54.9
Planned	3	5.9
No answer	1	2
Total	51	100.1*

* Rounding may cause totals not to add up to exactly 100%.

Table 31b. Placing staff on unpaid furlough (44 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	3	5.9
No	41	80.4
Planned	0	—
No answer	7	13.7
Total	51	100

Cost reduction strategies—employee benefits

This section addresses the extent to which agencies had implemented any employee benefit restrictions as part of their cost reduction strategies during the past five years. The answers are presented in tables 32–35.

Early retirement approaches

We first queried agencies regarding the adoption of early or enhanced retirement schemes—for example, the buyout of service or an accelerated pension factor (see table 32a on page 36). Agencies were not asked to clarify as to the form or type of scheme instituted. More than 61 percent (31 agencies) of responding agencies reported that they had not instituted an early retirement scheme. However, 15 agencies (about 29 percent) had instituted such a scheme, while four agencies

(approximately 8 percent) planned to do so, and a further one agency was mandated to institute such a scheme. In aggregate, this means that almost 40 percent of agencies had either instituted some form of early retirement scheme or were considering instituting such a scheme.

Table 32a. Early retirement schemes and Restricted Overtime Compensation

	Number of agencies (n)	Percent of agencies (%)
Yes	15	29.4
No	31	60.8
Planned	4	7.8
Mandated	1	2
Not Answered	0	—
Total	51	100

Table 32b. Restricted overtime compensation (47 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	22	43.1
No	21	41.2
Planned	2	3.9
Mandated	2	3.9
No answer	4	7.8
Total	51	99.9*

* Rounding may cause totals not to add up to exactly 100%.

Restriction on overtime compensation

Another question concerning staff benefits related to the implementation of any form of overtime compensation restriction. However, clarification was not sought from agencies as to whether the restriction was placed on sworn officer or civilian overtime (see table 32b). The number of agencies that have restricted overtime (22 agencies, or 43 percent) is slightly larger than the number of agencies that have not implemented overtime restrictions (21 agencies, or 41 percent). However, when the number of agencies that plan to implement overtime restrictions (two agencies) are added to the number of agencies that have been mandated to implement restrictions (two agencies), 26 agencies (51 percent) have introduced or will introduce restrictions.

Changes to retirement policies or plans

The next set of tables deals with retirement policies or plans. Table 33a on page 37 shows whether agencies had introduced any changes to their retirement policies. However, agencies were not asked to clarify whether the alterations were to retirement policies for sworn officers or for civilian staff. Just less than two-thirds of agencies (33 agencies, or 65 percent) claimed that they had not made any changes to their retirement policies. In comparison, a total of 16 agencies (about 31 percent) claimed that they had made or would be making alterations to their retirement policies:

Four agencies (about 8 percent) had made alterations, six agencies (about 12 percent) planned to make alterations, and another six agencies were mandated to make changes.

Table 33a. Changes to retirement policies (49 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	4	7.8
No	33	64.7
Planned	6	11.8
Mandated	6	11.8
No answer	2	3.9
Total	51	100

Table 33b. Reductions to retirement or pension plans (48 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	4	7.8
No	32	62.7
Planned	6	11.8
Mandated	6	11.8
No answer	3	5.9
Total	51	100

As shown in table 33b, the number of agencies (32 agencies, or 63 percent) that had not reduced their retirement or pension plans was almost the same as the number of agencies (33 agencies, or 65 percent) that had not changed their retirement policies. In addition, the number of agencies that had reduced their retirement or pension plans is the same as those that had changed their retirement policies. A total of 16 agencies (about 31 percent) had either reduced their retirement or pension plans or planned or were mandated to do so.

Reductions in contributions to pensions or health insurance

Another set of tables concerning cost reduction strategies related to employee benefits focuses on agency contributions to pensions and health insurance (see table 34a on page 38). Thirty-eight agencies (about 75 percent) reported that they had not implemented this cost reduction strategy while a total of 10 agencies (about 20 percent) had implemented it or were planning or mandated to do so.

On the question of whether employees' share of health insurance payments had been increased, a large number of agencies had not implemented this form of budget relief (see table 34b on page 38). Just less than two-thirds of agencies (33 agencies, or about 65 percent) had not increased employees' shares of the payment of health insurance. However, a total of 10 agencies (about 20 percent) had increased payments or were planning or mandated to do so.

Table 34a. Reduced employer contribution to pension (48 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	2	3.9
No	38	74.5
Planned	4	7.8
Mandated	4	7.8
No answer	3	5.9
Total	51	99.9*

* Rounding may cause totals not to add up to exactly 100%.

Table 34b. Increased employee share of health insurance premium (43 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	5	9.8
No	33	64.7
Planned	4	7.8
Mandated	1	2
No answer	8	15.7
Total	51	100

Cuts in peer counseling and health and fitness programs for employees

With regard to whether agencies had cut or eliminated peer support or counseling programs or were planning to do so, the vast majority responded that they had not and would not implement this type of budget reduction. Specifically, 45 agencies (about 88 percent) reported that they had not cut or eliminated peer support or staff counseling programs (see table 35a).

Presented in table 35b on page 39 is the extent to which the agencies were maintaining staff health and fitness support services. Forty agencies (about 78 percent) claimed that they had not reduced health or fitness services while five agencies (about 10 percent) had done so or were planning to do so.

Table 35a. Reduction in support or counseling programs (48 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	3	5.9
No	45	88.2
Planned	0	—
No answer	3	5.9
Total	51	100

Table 35b. Reduction in health or fitness services (45 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	4	7.8
No	40	78.4
Planned	1	2
No answer	6	11.8
Total	51	100

Cost reduction strategies—training and technology

In this section, we present the results of the survey related to cost reduction over the past five years in the areas of training and technology.

Academy, specialist, and in-service training

Agencies were asked if they had reduced the number of academy recruit classes (see table 36a). The responses were fairly evenly spread between those agencies that had reduced the number of classes and those agencies that had not. Twenty-one agencies (about 41 percent) reported that they had not reduced the number of recruit classes while 20 agencies (about 39 percent) maintained that they had or were planning or mandated to do so. Ten agencies (about 20 percent) did not respond to the question.

Table 36b on page 40 relates to reductions or cuts in specialty training. Agencies were not asked to clarify which type of specialty training was eliminated or reduced. Thirty-one agencies (about 61 percent) maintained that they had not cut or reduced specialty training while 19 agencies (about 34 percent) reported that they had eliminated or reduced specialty training or were planning or mandated to do so.

Table 36c on page 40 shows whether agencies had eliminated or reduced in-service training in the past five years. Agencies were not asked to clarify whether the cuts or reductions related to sworn officers or civilian staff. Of the 51 agencies that responded to the survey, 28 (about 55 percent) of the agencies had not eliminated or reduced in-service training. Twenty-two agencies (about 43 percent) reported that they had eliminated or reduced in-service training or were planning or mandated to do so.

Table 36a. Reduction in number of academy classes (41 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	17	33.3
No	21	41.2
Planned	1	2
Mandated	2	3.9
No answer	10	19.6
Total	51	100

Table 36b. Reduction in specialty training (50 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	17	33.3
No	31	60.8
Planned	1	2
Mandated	1	2
No answer	1	2
Total	51	100.1*

* Rounding may cause totals not to add up to exactly 100%.

Table 36c. Reduction in in-service training (50 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	20	39.2
No	28	54.9
Planned	1	2
Mandated	1	2
No answer	1	2
Total	51	100.1*

* Rounding may cause totals not to add up to exactly 100%.

Technology

The next set of tables relates to the purchase of new technology or the replacement of existing technology during the past five years. Table 37a shows whether agencies had reduced the amount spent on purchasing technology. The question was intended to be generic and as a result did not specify the type of technology. As displayed in the table, 35 agencies (about 69 percent) stated that they had not reduced their acquisition of new technology in the past five years while 15 agencies (about 29 percent) reported that they had reduced their acquisition of new technology or were planning to do so.

Table 37a. Reduced acquisition of technology (50 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	14	27.5
No	35	68.6
Planned	1	2
Mandated	0	—
No answer	1	2
Total	51	100.1*

* Rounding may cause totals not to add up to exactly 100%.

Table 37b. Leasing rather than purchasing technology (47 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	8	15.7
No	35	68.6
Planned	4	7.8
Mandated	0	—
No answer	4	7.8
Total	51	99.9*

* Rounding may cause totals not to add up to exactly 100%.

Table 37c. Increasing reliance on new technology (50 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	28	54.9
No	13	25.5
Planned	8	15.7
Mandated	1	2
No answer	1	2
Total	51	100.1*

* Rounding may cause totals not to add up to exactly 100%.

Table 37b, which shows whether agencies were leasing rather than purchasing new technology, is similar to table 37a. Thirty-five agencies (about 69 percent) reported that they had purchased technology rather than entering into a lease for technology. In comparison, 12 agencies (about 24 percent) stated that they had leased (or were planning to) rather than purchased new technology.

Table 37c shows whether agencies had increased their reliance on new technology. However, agencies were not asked to clarify how or why they increased their reliance on technology. Thirty-seven of the 51 agencies (about 73 percent) stated that they had increased or were planning or mandated to increase their reliance on new technology while 13 agencies (about 25 percent) had not increased their reliance on new technology.

Cost reduction strategies—vehicles and equipment

The next set of tables on cost reduction strategies contained a series of questions about whether agencies had implemented cost reduction strategies related to the purchase and replacement of vehicles and equipment in the past five years (tables 38–40).

Acquisition of new vehicles

First, agencies were asked if they had reduced their acquisition of or ceased to purchase new motor vehicles. The responses shown in table 38a were fairly evenly spread between those agencies that had reduced their acquisition of new motor vehicles and those agencies that had not. Twenty-three agencies (about 45 percent) had not reduced their acquisition of new motor vehicles while 24 agencies (about 47 percent) reported that they had. Another four agencies (about 8 percent) were planning a reduction.

Table 38a. Reduced acquisition of motor vehicles

	Number of agencies (n)	Percent of agencies (%)
Yes	24	47.1
No	23	45.1
Planned	4	7.8
Total	51	100

Deferred replacement of vehicles

Table 38a dealt only with agencies' purchase of new motor vehicles, but agencies were also asked if they had deferred the replacement of their motor vehicles. As shown in table 38b, again the responses were fairly evenly divided between those agencies that had deferred the replacement of motor vehicles and those that had not. Twenty-five agencies (about 49 percent) reported that they had deferred the replacement of motor vehicles and another two agencies (about 4 percent) planned to do so. Twenty-four agencies (about 47 percent) maintained that they had not deferred the replacement of motor vehicles.

Table 38b. Deferred replacement of motor vehicles

	Number of agencies (n)	Percent of agencies (%)
Yes	25	49
No	24	47.1
Planned	2	3.9
Total	51	100

Deferred maintenance of motor vehicles

Table 38c on page 43 shows whether agencies had deferred maintenance of motor vehicles in the past five years. None of the agencies reported that they had deferred vehicle maintenance, but one agency did report that it was planning to do so.

Table 38c. Deferred maintenance of motor vehicles

	Number of agencies (n)	Percent of agencies (%)
Yes	0	—
No	50	98
Planned	1	2
Total	51	100

Acquisition and leasing of new equipment

The next set of tables relates to equipment other than motor vehicles. Table 39a shows whether agencies had reduced their acquisition or spending on new equipment. Twenty-nine agencies (about 57 percent) reported that they had not reduced their expenditures on new equipment while 19 agencies (about 37 percent) claimed that they had. A further three agencies identified that were planning to reduce their expenditures on new equipment.

As with the deferral of replacement motor vehicles, agencies were asked if they had deferred replacing equipment (table 39b). Thirty agencies (about 59 percent) claimed that they had deferred the replacement of equipment, and one agency was planning to do so. Twenty agencies (about 39 percent) had not deferred the replacement of equipment.

Table 39a. Reduced acquisition of new equipment

	Number of agencies (n)	Percent of agencies (%)
Yes	19	37.3
No	29	56.9
Planned	3	5.9
Total	51	100.1*

* Rounding may cause totals not to add up to exactly 100%.

Table 39b. Deferred replacement of equipment

	Number of agencies (n)	Percent of agencies (%)
Yes	30	58.8
No	20	39.2
Planned	1	2
Total	51	100

Table 39c. Leased equipment rather than purchasing

	Number of agencies (n)	Percent of agencies (%)
Yes	9	17.6
No	36	70.6
Planned	6	11.8
Total	51	100

Table 39c shows agencies' response to the question about leasing equipment rather than purchasing it in the past five years. Most agencies (about 71 percent) reported that they had not leased equipment, and only about 18 percent of agencies (9 agencies) were leasing. However, another six agencies (about 12 percent) were planning to change from purchasing their equipment to leasing their equipment.

Safety equipment and take-home vehicles

Table 40 pertains to the purchase of safety equipment and to motor vehicle policies. While table 40a shows answers pertaining to deferral of safety equipment purchases, we did not specify the type of safety equipment or whether the safety equipment was for sworn officers or civilian staff. The answers appear to indicate that the majority of agencies are maintaining a safety conscious environment with 42 agencies (about 82 percent) reporting that they had not deferred the purchase of improved safety equipment while eight agencies (about 16 percent) reported that they had done so.

Table 40a. Deferred purchase of improved safety equipment (50 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	8	15.7
No	42	82.4
Planned	0	—
No answer	1	2
Total	51	100.1*

* Rounding may cause totals not to add up to exactly 100%.

Table 40b. Unable to add new safety features to vehicles (50 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	6	11.8
No	44	86.3
Planned	0	—
No answer	1	2
Total	51	100.1*

* Rounding may cause totals not to add up to exactly 100%.

Table 40c. Discontinued take-home vehicle policy (28 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	5	9.8
No	21	41.2
Planned	2	3.9
No answer	23	45.1
Total	51	100

Table 40b on page 44 shows agencies' answers about their ability to add new safety features to motor vehicles. Again, it appears that even within this period of austerity agencies have been able to make room in the budget for their staff members' safety. Forty-four agencies (about 86 percent) reported that they were able to add new safety features to their motor vehicles, while six agencies (about 12 percent) were unable.

Table 40c explores whether agencies were continuing with the policy of allowing staff to take vehicles home. The question did not distinguish whether staff members were sworn officers or civilian staff. Twenty-one agencies (about 41 percent) reported that they have maintained their policy of allowing staff to take vehicles home while five agencies (about 10 percent) have discontinued the policy, and another two agencies (about 4 percent) were planning to discontinue the policy. It is very possible that the 23 nonresponding agencies failed to answer because they do not offer take-home vehicles currently.

Cost reduction strategies — service delivery and other deployment practices

Reductions or changes in patrol, specialty units, and shift schedules

This is the first of three sets of tables examining the procedural changes agencies have made to maintain or improve their service delivery in the past five years. Table 41a on page 46 shows whether agencies had reduced the amount of time officers spend on routine patrol. Agencies were not, however, asked how or why they had reduced the amount of routine patrol. The majority of agencies (48 agencies, or about 94 percent) had not reduced routine patrol while three agencies (about 6 percent) had. Table 41b on page 46 refers to reductions in numbers of specialized units. Almost two-thirds of the agencies (33 agencies, or about 65 percent) claimed that they had not reduced their number of specialized units. Fifteen agencies (about 29 percent) stated that they had reduced their number of specialized units, and two additional agencies were planning to do so.

Table 41a. Reduction of routine patrol

	Number of agencies (n)	Percent of agencies (%)
Yes	3	5.9
No	48	94.1
Planned	0	—
No answer	0	—
Total	51	100

Table 41b. Reduction in number of specialized units (50 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	15	29.4
No	33	64.7
Planned	2	3.9
No answer	1	2
Total	51	100

Table 41c. Altered shift times or work schedules

	Number of agencies (n)	Percent of agencies (%)
Yes	20	39.2
No	25	49
Planned	6	11.8
No answer	0	—
Total	51	100

Table 41c shows whether agencies had considered improving the efficiency and effectiveness of how they delivered their services. Specifically, we asked agencies if they had altered shift times, work schedules, or rosters. Agencies were not requested to specify whether altered work schedules affected sworn officers or civilian staff. Nearly one-half of the agencies (25 agencies, or 49 percent) reported that they had not altered the shift times, work schedules, or rosters of staff. However, a total of 26 agencies (about 51 percent) had either altered their work shift times, schedules, or rosters (20 agencies, or about 39 percent) or were planning to do so (6 agencies, or about 12 percent).

Limited call types for dispatch or used alternative approaches

The second set of tables in this section relates to call handling methods and possible reductions in dispatched services. Table 42a on page 47 relates to whether agencies had imposed limitations on the types of calls in response to which officers would be dispatched. In other words, had agencies implemented a call priority system that depended upon the nature and seriousness of the call for dispatching an officer? Twenty-eight agencies (about 55 percent) maintained that they did not limit the type of call leading to the dispatch of an officer. Nine agencies (about 18 percent) did limit the type of calls, and 13 agencies (about 25 percent) were planning to introduce this approach.

We also asked whether agencies had implemented alternative methods or processes for handling calls from the public for assistance. For example, an alternative method might have been introducing an online reporting system for residential burglaries. Agencies were not asked to specify the details of the alternative call method introduced. As shown in table 42b, 13 agencies (about 25 percent) reported that they had not introduced any alternative call handling method; 24 agencies (about 47 percent) had introduced an alternative call handling method, and an additional 14 agencies (about 27 percent) were planning to do so.

Table 42a. Limited types of calls for officer dispatch (50 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	9	17.6
No	28	54.9
Planned	13	25.5
Not Answered	1	2
Total	51	100

Table 42b. Introduced alternative call handling methods

	Number of agencies (n)	Percent of agencies (%)
Yes	24	47.1
No	13	25.5
Planned	14	27.5
No answer	0	—
Total	51	100.1*

* Rounding may cause totals not to add up to exactly 100%.

Changes in use of volunteers and civilians

The next set of tables deals with whether agencies had changed the way they used volunteers and civilian staff to improve organizational efficiency.

Table 43a. Increased use of volunteers in nonenforcement functions (46 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	17	33.3
No	21	41.2
Planned	8	15.7
No answer	5	9.8
Total	51	100

Table 43b. Increased use of volunteers in some sworn functions (46 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	4	7.8
No	38	74.5
Planned	4	7.8
No answer	5	9.8
Total	51	99.9*

* Rounding may cause totals not to add up to exactly 100%.

Table 43c. Increased use of civilians in some sworn functions (50 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	23	45.1
No	22	43.1
Planned	5	9.5
No answer	1	2
Total	51	100

Table 43a on page 47 shows whether agencies were increasing their use of volunteers especially in support, community, or administrative roles. Twenty-one agencies (about 41 percent) maintained that they had not increased their use of volunteers in nonenforcement roles. However, in aggregate, the number of agencies that reported that they had increased their use of volunteers (17 agencies, or about 33 percent) and that were planning to increase their use of volunteers (8 agencies, or about 16 percent) exceeded those that had not increased their use of volunteers.

Table 43b shows whether agencies had increased their use of volunteers in some sworn functions. Agencies were not asked to identify in which sworn functions they had increased their use of volunteers. The majority of agencies (38 agencies, or about 75 percent) had not increased their use of volunteers in any sworn function. Only four agencies (about 8 percent) reported that they had increased the use of volunteers in some sworn functions while an additional four agencies planned to increase their use of volunteers in sworn functions.

Table 43c is the same as table 43b but relates specifically to civilian staff. The question asked agencies whether they had increased the use of civilian staff in some sworn functions. Those agencies that had increased the use of civilian staff in some sworn functions (23 agencies, or about 45 percent) together with those that planned to increase their use of civilian staff (five agencies, or about 10 percent) were more than those agencies that had not increased their use of volunteers (22 agencies, or about 43 percent).

Public access to services

The final set of tables relating to agency service delivery practices examines whether agencies had implemented any changes to their accessibility to the public. Table 44a is about hours of access to the public at the police stations. Nearly two-thirds of agencies (33 agencies, or about 65 percent) had not reduced the hours that they were open to the public. Eleven agencies (about 22 percent) had reduced their access hours, and five more (about 10 percent) were planning to reduce hours.

Table 44a. Reduced public access hours at stations (49 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	11	21.6
No	33	64.7
Planned	5	9.8
No answer	2	3.9
Total	51	100

Table 44b. Consolidated or closed some stations (42 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	11	21.6
No	24	47.1
Planned	7	13.7
No answer	9	17.6
Total	51	100

Table 44b deals with another limitation of public access to the police: whether stations have been consolidated or shut down altogether thereby limiting one form of community policing. The majority of agencies (24, or about 47 percent) had not consolidated or closed any stations or patrol bases while 11 agencies (about 22 percent) had, and seven agencies (about 14 percent) were planning to do so. Nine agencies (about 18 percent) did not respond to this question.

Cost reduction strategies—structural changes

This set of tables examines the changes that agencies have made to maintain or improve their service delivery in the past five years and relates to structural changes in the organization and the consolidation of services (see tables 45 and 46). Table 45 on page 50 shows whether the agencies had made changes to their organizational structure—for example, if they had removed levels or ranks or introduced flatter management structures. Agencies were not asked to clarify the exact nature of any changes they had implemented.

The majority of agencies (28 agencies, or about 55 percent) reported that they had changed their organizational structure in some form while four more agencies (about 8 percent) were planning to make changes to their structures. Eighteen agencies (about 35 percent) had not changed or did not plan to change their organizational structures.

Table 45. Number of agencies that have changed their organizational structures (50 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	28	54.9
No	18	35.3
Planned	4	7.8
Not Answered	1	2
Total	51	100

Changed structures by size

In table 46, we present an analysis of the 28 agencies that reported that they had altered their organizational structures. It appears from this analysis that the majority of larger organizations have altered their structures, and the majority of smaller organizations have not. This result is similar whether the analysis is based on the size of the agency in the group of 28 agencies that have implemented changes or on the number of agencies in that size category. For example, 12 large agencies, or 43 percent of the 28 agencies, had made changes to their structures. With respect to the largest agencies in the survey (14 agencies), the percentage of large agencies that have implemented changes to their structures is 86 percent (12 of the total 14 agencies). For agencies with between 101 and 500 full-time sworn officers, the level is approximately 56 percent (9 of the 16 total agency respondents of that size), and for agencies with between 501 and 999 full-time sworn officers, it is 75 percent (three of the four total agencies). In comparison, for the small agencies (those with fewer than 100 full-time sworn officers), the level is approximately 24 percent (four of the 17 total agencies of that size).

Table 46. Agencies that have changed their organizational structure by number of full-time sworn officers

Number of full-time sworn officers	Number of agencies changing structure (n)	Percent of agencies that changed structure at each agency size (%)	Number of agencies in total sample (n)	Percent of all agencies in sample (%)
100 or fewer	4	14.3	17	33.3
101 to 500	9	32.1	16	31.4
501 to 999	3	10.7	4	7.8
1,000 or more	12	42.9	14	27.5
Total	28	100	51	100

Shared services with another agency or merged

Table 47a is the first in a series that examines whether agencies have considered alternative strategic structures to decrease organizational costs. It shows whether responding agencies share any services with another police agency. Agencies were not asked to clarify what this shared service was. More than half the agencies (27 agencies, or about 53 percent) said they share services with another agency. This figure is increased by another five agencies (about 10 percent) when the agencies that are planning to establish a shared service arrangement are included. Notably, 18 agencies (about 35 percent) do not share services with another police agency.

Table 47b shows whether responding agencies had merged with another police agency in the past five years. The majority of agencies (about 92 percent) had not merged, but one agency had and another three agencies were planning to do so.

Table 47a. Shared services with another police agency

	Number of agencies (n)	Percent of agencies (%)
Yes	27	52.9
No	18	35.3
Planned	5	9.8
Mandated	1	2
Total	51	100

Table 47b. Merged with another police agency

	Number of agencies (n)	Percent of agencies (%)
Yes	1	2
No	47	92.2
Planned	3	5.8
Mandated	0	—
Total	51	100

Contracting services from another agency or transferred some functions

The next set of tables examines two further forms of sharing agency services. Table 48a on page 52 shows whether responding agencies had contracted services with another police or law enforcement agency. The question was generic and did not specify the form of the services contracted. There were more agencies that had not engaged in contracting of services than there were agencies that had. Twenty-six agencies (about 51 percent) had not contracted services with another agency while still more than one-third (18 agencies, or about 35 percent) had, and another 7 agencies (about 14 percent) were planning to do so.

Table 48b relates to enforcement and investigations and asked agencies whether they had moved their enforcement or investigation functions to another policing agency. Approximately 80 percent (41 agencies) of the agencies had not moved any of their enforcement or investigative functions to another agency, but six agencies (about 12 percent) had moved these functions to another agency, and one was mandated to do so. Another two agencies were planning to move some functions to another agency.

Table 48a. Contracted services with another agency and Moved Functions

	Number of agencies (n)	Percent of agencies (%)
Yes	18	35.3
No	26	51
Planned	7	13.7
Mandated	0	—
No answer	0	—
Total	51	100

Table 48b. Moved enforcement or investigative functions to another agency (50 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	6	11.8
No	41	80.4
Planned	2	3.9
Mandated	1	2
No answer	1	2
Total	51	100.1*

* Rounding may cause totals not to add up to exactly 100%.

Regionalization and outsourcing

The last set of tables in this series about alternative strategic structures relates to organizational structural change. Table 49a shows whether agencies had participated in regionalized police services or functions. Agencies were not asked to specify which services or functions had been regionalized. The majority of agencies (about 51 percent) had participated in a regionalized arrangement, and another five agencies (about 10 percent) were planning to do so. Nineteen agencies (about 37 percent) reported that they had not regionalized any services or functions.

Table 49a. Participated in regionalized police services or functions (50 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	26	51
No	19	37.3
Planned	5	9.8
No answer	1	2
Total	51	100.1

* Rounding may cause totals not to add up to exactly 100%.

Table 49b. Outsourced or privatized services

	Number of agencies (n)	Percent of agencies (%)
Yes	18	35.3
No	27	52.9
Planned	6	11.8
No answer	0	—
Total	51	100

In table 49b, agencies were asked whether they had outsourced or privatized any of their services. They were not asked to clarify whether the outsourced service was administrative or enforcement related. Twenty-seven agencies (about 53 percent) stated that they had not outsourced or privatized any services while 18 agencies (about 35 percent) had, and another 6 agencies (about 12 percent) were planning to do so.

Cost reduction strategies—efficiency improvements

The final set of tables relating to cost reduction strategies concerns improvements to organizational efficiency.

In table 50a, agencies were asked whether they had hired a consulting firm or research organization to assist with identifying potential areas that could increase the efficiency of service delivery or with reducing organizational costs. Twenty-six agencies (about 51 percent) stated that they had not hired a consulting firm or research agency; 22 agencies (about 43 percent) had, and one other agency was planning to do so.

Table 50a. Hired consulting firm or research organization (47 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	22	43.1
No	26	51
Planned	1	2
No answer	2	3.9
Total	51	100

Table 50b. Used evidence-based research

	Number of agencies (n)	Percent of agencies (%)
Yes	29	56.9
No	17	33.3
Planned	5	9.8
No answer	0	—
No but planned*	1	2
Total	51	100

*One respondent said no at the time of the survey but indicated that they planned to do so in the future.

In table 50b on page 53, agencies reported whether they had used evidence-based research to change the way the agencies conduct their business. Seventeen agencies had not based their organizational changes on evidence-based research, while 34 agencies (67 percent) had or were planning to. One agency claimed that it had not based its previous organizational changes on evidence-based research but was planning to in the future.

Revenue allocation

The next section dealt with whether agencies had reallocated different forms of income to operational areas and whether they had leased or hired facilities from other agencies.

Citation revenue

Table 51a shows whether agencies had allocated a larger percentage of their citation revenue, from, for example, traffic or parking fines, to their operational budgets. The majority of agencies (about 63 percent) stated that they had not reallocated a larger percentage of their citation revenue. Only six agencies (about 12 percent) reported that they had reallocated a larger percentage of their citation revenue while another two agencies were planning to do so. A number of agencies (11 agencies, or about 22 percent) did not answer the question.

Table 51a. Allocate greater percentage of citation revenue (40 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	6	11.8
No	32	62.7
Planned	2	3.9
No answer	11	21.6
Total	51	100

Table 51b. Reallocate percentage of forfeiture funds (36 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	8	15.7
No	28	55
Planned	0	—
No answer	15	29.4
Total	51	100.1*

* Rounding may cause totals not to add up to exactly 100%.

Table 51c. Leased facilities from another agency (47 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	9	17.6
No	36	70.6
Planned	2	3.9
No answer	4	7.8
Total	51	99.9*

* Rounding may cause totals not to add up to exactly 100%.

Forfeiture funds

Table 51b on page 54 shows whether agencies had reallocated a percentage of their forfeiture funds for operational needs. Of the 51 agencies in the survey, 28 agencies (about 56 percent) reported that they had not reallocated any forfeiture funds to operational budgets. Eight agencies (about 16 percent) had reallocated forfeiture funds. As in table 51a, a number of agencies (15 agencies, or about 29 percent) did not answer the question.

Leased facilities

Table 51c shows whether agencies had leased facilities from another agency. The majority of agencies (about 71 percent) had not leased facilities from another agency; nine agencies (about 18 percent) had leased facilities and another two agencies (about 4 percent) were planning to do so.

Long term planning

The final set of tables in this section examines whether agencies were taking a more holistic view of the austerity environment (see tables 52–54) in terms of long term strategic planning, agency performance indicators, generating additional revenue via a police foundation, or any combination of these strategies.

Strategic planning

Table 52a on page 56 shows whether agencies had developed a strategic plan. The majority of agencies (35 agencies, or about 69 percent) reported that they had developed a strategic plan, and a further two agencies (about 4 percent) were planning to. Only 14 agencies (about 27 percent) had not developed a plan.

Table 52a. Developed an agency strategic plan

	Number of agencies (n)	Percent of agencies (%)
Yes	35	68.6
No	14	27.5
Planned	2	3.9
No answer	0	—
Total	51	100

Table 52b. Conducted a review of agency performance (46 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	28	54.9
No	13	25.5
Planned	5	9.8
No answer	5	9.8
Total	51	100

Table 52c. Created a police foundation (43 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	5	9.8
No	36	70.6
Planned	2	3.9
No answer	8	15.7
Total	51	100

Agency performance review

Shown in table 52b is the number of agencies that had conducted a review of their performance. Agencies were not asked how the review was conducted nor were they asked how their performance was measured. More than half of the agencies (28, or about 55 percent) had conducted a review of their performance, and another five agencies (about 10 percent) were planning to do so. Just one-quarter of agencies (about 25 percent) had not reviewed their performance.

Revenue generation through police foundation

Table 52c shows whether agencies had created a police foundation to support or offset their personnel needs. The majority of agencies (36 agencies, or about 71 percent) had not created a police foundation while only five agencies (about 10 percent) had, and two other agencies were planning to do so.

Development of a strategic plan

In table 53 we present an analysis by size of the 35 agencies that had reported that they had developed a strategic plan. When examining the second and third columns, it appears that the size of an agency was not important when developing a strategic plan. This result is similar whether the analysis is based on the size of the agency in the group of 35 agencies that had developed a strategic plan or whether the analysis is based on the number of agencies in the category (the fourth and fifth columns). For example, 12 large agencies, or 34 percent of the 35 agencies, had developed a strategic plan. In the category of the largest agencies, the proportion of agencies that have developed a strategic plan is 86 percent (12 of the total 14 agencies). For agencies with fewer than 100 full-time sworn officers it is 59 percent, and for agencies with between 101 and 500 full-time sworn officers it is 56 percent. All of the agencies with between 501 and 999 full-time sworn officers have developed a strategic plan.

Table 53. Agencies that developed a strategic plan by number of full-time sworn officers (35 responses)

Number of full-time sworn officers	Number of agencies developing strategic plan (n)	Percent of agencies that developed strategic plan at each agency size (%)	Number of agencies in total sample (n)	Percent of all agencies in sample (%)
100 or fewer	10	28.6	17	33.3
101 to 500	9	25.7	16	31.4
501 to 999	4	11.4	4	7.8
1,000 or more	12	34.3	14	27.5
Total	35	100	51	99.9*

* Rounding may cause totals not to add up to exactly 100%.

Conducted an agency-level review of performance

Similar to table 53, the analysis presented in table 54 on page 58 focuses on the 28 agencies that had conducted a review of their performance. It appears from this analysis that a higher percentage of the larger agencies than of the smaller organizations had conducted a review of their agency's performance. This result is similar whether the analysis is based on the size of the agency in the group of 28 agencies that have conducted a review of their performance or whether the analysis is based on the number of agencies in the category of agencies of that size. For example, 10 large agencies, or 36 percent of the 28 agencies that had conducted performance reviews, had conducted a performance review. In the largest agencies category, the percentage of agencies that have conducted a review of their

performance is 71 percent (10 of the total 14 agencies). For agencies with between 101 and 500 full-time sworn officers the level is 56 percent, and for agencies with between 501 and 999 full-time sworn officers it is 75 percent. Among the small agencies, the level is approximately 35 percent.

Table 54. Agencies that conducted a review of agency performance by number of full-time sworn officers (28 responses)

Number of full-time sworn officers	Number of agencies that conducted performance review (n)	Percent of agencies that conducted review at each agency size (%)	Number of agencies in total sample (n)	Percent of all agencies in sample
100 or fewer	6	21.4	17	33.3
101 to 500	9	32.1	16	31.4
501 to 999	3	10.7	4	7.8
1,000 or more	10	35.7	14	27.5
Total	28	99.9*	51	99.9*

* Rounding may cause totals not to add up to exactly 100%.

Revenue generation

The next section of the survey examined whether agencies had implemented any initiatives to generate further revenue to ease budgetary pressures.

The first set of tables examines three possible methods to increase agency revenue.

Fees for recruit training

Table 55a shows whether agencies had introduced the payment of fees for providing recruit training—in other words, whether recruits were required to pay for their own training. The majority of agencies (39 agencies, or about 76 percent) had not instituted fees for recruit training while six agencies (about 12 percent) had instituted fees, and one agency was planning to do so.

Table 55a. Instituted fees for recruit training (46 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	6	11.8
No	39	76.5
Planned	1	2
No answer	5	9.8
Total	51	100.1*

* Rounding may cause totals not to add up to exactly 100%.

Table 55b. Leased facilities to groups (49 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	5	9.8
No	42	82.4
Planned	2	3.9
No answer	2	3.9
Total	51	100

Table 55c. Instituted new fees for police services

	Number of agencies (n)	Percent of agencies (%)
Yes	26	51
No	20	39.2
Planned	5	9.8
No answer	0	—
Total	51	100

Leased facilities to others

Table 55b shows whether agencies said they had leased their facilities to community groups or other organizations. The majority of agencies (42 agencies, or about 82 percent) had not leased their facilities to groups or organizations while five agencies (about 10 percent) had, and two agencies were planning to do so.

Instituted fees for services

Table 55c shows whether agencies had introduced a required payment of new fees for police services. Agencies were not asked to specify what the fees were for. More than half of the agencies (26 agencies, or about 51 percent) had introduced payment of new fees for services and another five agencies (about 10 percent) were planning to do so. Twenty agencies (about 39 percent) had not instituted any new fees for service regime.

Generated alternative public and private source revenue

The next set of tables shows whether agencies had sought revenue from alternative public and private sources. Table 56a on page 60 shows whether agencies had sought funding directly from private sources, but the agencies were not asked to identify the source of the funding or how the funding was to be used. More than two-thirds of the agencies (35 agencies, or about 69 percent) had not sought funding from private sources while a number of agencies (14 agencies, or 27 percent) had, and a further two agencies were planning to do so.

Table 56a. Sought funding from private sources

	Number of agencies (n)	Percent of agencies (%)
Yes	14	27.5
No	35	68.6
Planned	2	3.9
No answer	0	—
Total	51	100

Table 56b. Increased taxes for specific police purposes (46 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	8	15.7
No	37	72.5
Planned	1	2
No answer	5	9.8
Total	51	100

Table 56c. Held public auctions (49 responses)

	Number of agencies (n)	Percent of agencies (%)
Yes	30	58.8
No	19	37.3
Planned	0	—
No answer	2	3.9
Total	51	100

Increased taxes for policing

Table 56b shows whether their local governments or councils had increased taxes specifically for policing purposes. Just less than three-quarters of agencies (37 agencies, or about 73 percent) reported that there had not been a tax increase. Eight agencies (about 16 percent) reported that there had been an increase, and one further agency reported that there were plans to introduce an increase.

Public auctions

Table 56c shows whether agencies had held public auctions to dispose of unclaimed stolen or found property or old equipment. Thirty agencies (about 59 percent) stated that they have held such auctions while 19 agencies (about 37 percent) claimed that they had not.

Critical issues

In the concluding section of the survey, agencies were asked for their comments in relation to two critical issues. The first issue was any broad-based strategies that agencies had engaged in to increase efficiency, effectiveness, or service delivery. Twenty-eight agencies (about 55 percent) identified that they had engaged in a large number of broad-based strategies. The strategies that the agencies identified have been categorized into 27 sections and are presented here in alphabetical order:

- Efficiency strategies
 - Budget reduction
 - Business planning
 - Centralized support functions
 - Civilianization
 - Collaboration
 - CompStat
 - Cost-reduction strategy
 - Fundamental review
 - New revenue streams
 - Online reporting
 - Outsourcing
 - Partnering or relationship
 - Prevention and early intervention
 - Priority budgeting
 - Realignment of positions
 - Reduction in staff
 - Regionalization or amalgamation
 - Restructuring of support functions
 - Technology
- Effectiveness strategies
 - Business planning
 - Community outreach

- CompStat
- Continuous improvement
- Directed tasking of staff
- Fundamental review
- Leadership/culture change
- Partnering or relationship
- Prevention and early intervention
- Regionalization or amalgamation
- Technology
- Service delivery strategies
 - Community service hub
 - Online reporting
 - Reform to demand
 - Regionalization or amalgamation
 - Review of staff and deployment
 - Technology

Broad-based strategies

The strategies presented in the list show that agencies have considered a wide range of strategies to increase organizational efficiency, effectiveness, or service delivery. Though a number of these are traditional in the sense that they have been successfully used in the past, agencies appear also to be looking at nontraditional strategies that have the potential to fundamentally change how the agency delivers its services.

Most critical issues facing agency

The second question in this section asked agencies to list the three most critical issues facing their agencies. Forty-six agencies (about 90 percent) responded to this question, and a large number of critical issues were identified. These issues were analyzed to identify three major issue themes and are presented in descending order of importance:

1. Funding or budgets
2. Staffing or recruiting attrition
3. Managing demand and public expectations

Follow-up Interviews and Information Clarification

Interviews with agencies

The second information-gathering step in the research was to interview a representative from each of 15 agencies that had responded to the postal and electronic survey and that had identified that it had implemented an individual cost reducing initiative or a program of such initiatives or strategies to increase its organizational efficiency. Care was taken to ensure that all three geographical areas that formed the basis of the postal and electronic survey were included in the follow-up phase. In this section we present the information and the results obtained from the 15 police agencies with which we conducted follow-ups.

Agency size

As shown in table 57, the majority of agencies in the follow-up were large; nine of the 15 (60 percent) were from agencies with 1,000 or more full-time sworn officers whereas just one agency with 101–500 full-time sworn personnel and one with 501–999 full-time sworn personnel were included. Finally, four of the 15 agencies (27 percent) had 100 or fewer full-time sworn personnel. The proportion of agencies from each of the size categories varied substantially as well. Of the 14 agencies in the main sample with 1,000 or more full-time sworn officers, nine (64 percent) were part of the follow-up. Of the 16 agencies in the main sample with 101–500 full-time sworn officers, only one (6 percent) was part of the follow-up. Of the four agencies in the main sample with 501–999 full-time sworn officers, only one (25 percent) was part of the follow-up. Finally, of the 17 agencies in the main sample with 100 or fewer full-time sworn officers, four (24 percent) were part of the follow-up.

Table 57. Follow-up agencies by number of full-time sworn officers (n=15)

Number of full-time sworn officers	Number of agencies in follow-up group	Percent of agencies in follow-up group	Number of agencies in main sample	Percent of agencies in main sample that participated in follow-up
100 or fewer	4	26.7	17	23.5
101 to 500	1	6.7	16	6.3
501 to 999	1	6.7	4	25
1,000 or more	9	60	14	64.3
Total	15	100.1*	51	29.4

* Rounding may cause totals not to add up to exactly 100%.

Overall data

Presented in this section are the details about the 15 agencies that were asked to participate in the follow-ups. Twelve of the 15 agencies agreed to interviews, and the remaining three provided additional information but did not complete an interview. The final column details the efforts at cost reduction or efficiency and effectiveness improvements made by the 15 agencies. In addition, details are provided on the type, size, and location of the follow-up agencies. These agencies consisted of six from the United Kingdom, eight from Canada, and one from Australia.

Agency 1. United Kingdom

Type of agency: city/rural

Sworn officers: 1,800

Agreed to interview request: yes

Initiatives made by this agency include the following:

- Implementing a priority-based budgeting process.
- Collaborating with other police forces in administration and core service delivery (including the investigation of major crime).
- Has reduced the number of divisions and local policing areas from four to three and 20 to 13 respectively.
- Has centralized a number of support functions.
- Has implemented a policy of reductions in each departmental budget.

Agency 2. United Kingdom

Type of agency: city/rural

Sworn officers: 3,800

Agreed to interview request: yes

Initiatives made by this agency include the following:

- Collaborating with other forces to reduce management layers and numbers dedicated in back office functions.
- Implemented a policy of continuous improvement.
- Adopted a systems thinking approach to managing change.
- Is re-enforcing neighborhood policing.
- Adopted the JUST TALK/JUST THINK/JUST LEAD leadership and culture strategy.

Agency 3. Canada

Type of agency: rural

Sworn officers: 56

Agreed to interview request: yes

Initiatives made by this agency include the following:

- Using “gaps” in hiring but not reduced staff numbers in an effort to keep costs down. May also reduce staffing via attrition as they exploit more technology to increase efficiencies.
- Expanding organization vertically by adding an additional layer of supervision to enhance “road supervision” and to mitigate risk management issues.
- Implemented efficiency improvements through the exploitation of technology including e-ticketing, e-traffic collision reporting, and e-disclosure.

Agency 4. Canada

Type of agency: municipal/rural

Sworn officers: 2,700

Agreed to interview request: yes

Initiatives made by this agency include the following:

- Cost recovery from services delivered has caused the police service to re-evaluate opportunities for additional cost recovery.
- Cost reduction was sought by changing a sworn position into a civilian position. Further sworn positions have been downgraded and redeployed to front line policing.
- The agency is leading a community safety model to engage other municipal agencies to address community issues.

Agency 5. Canada

Type of agency: municipal

Sworn officers: 1,600

Agreed to interview request: yes

Initiatives made by this agency include the following:

- Civilianized a number of sworn positions.
- Reduced the span of control for the chief from 12 to six, implemented a strong accountability framework for executives tied to performance pay, increased professional preparation of budget and business cases, implemented an integrated

risk management framework to develop a risk-based approach to running the agency, implemented a policy of reviewing all services and programs yearly with risk and value assessments. Any available position is considered for redeployment to other areas of greater need.

- Dynamic strategy and annual public and internal policing plan. All performance is measured and reported on. Increased use of metrics and established a business intelligence competency center framework.
- Implemented priority-based budgeting and value assessment process that includes risk analysis, strategy development, and cost benefit.
- Adopted an integrated risk-management approach to management.
- Restructuring of IT and introduction of a governance framework aligned to COBIT (a system for maintaining a balance between realizing benefits and optimizing risk levels and resource use).
- Long-term strategic infrastructure plan (30–40 year time frame).
- Adopted a five-year strategic resources plan.

Agency 6. Canada

Type of agency: municipal/rural

Sworn officers: 160

Agreed to interview request: yes

Initiatives made by this agency include the following:

- Re-engineering business practices and scheduling in record services and investigative services.
- Implemented a re-structuring program in 2012.

Agency 7. United Kingdom

Type of agency: city

Sworn officers: 750

Agreed to interview request: yes

Initiatives made by this agency include the following:

- Some specialist units have been joined so individual units might no longer exist, but the function is still performed. For example, road policing was a specialist unit that is now part of uniform response policing.
- Commenced a force-wide leadership/cultural change program to enhance performance.

Agency 8. Canada

Type of agency: rural

Sworn officers: 80

Agreed to interview request: yes

Initiatives made by this agency include the following:

- Adopted the CompStat model of policing. This has led to a decline in reported crime; however, calls for service are increasing year over year.
- Instituted civilianization and a reduction in one ranked position in an effort to work more efficiently.

Agency 9. United Kingdom

Type of agency: city/rural

Sworn officers: 4,100

Agreed to interview request: yes

Initiatives made by this agency include the following:

- Developed and implemented a productive strategy, which is a rolling plan of red-amber-green graded initiatives to reduce costs across the agency's budget.
- Other core strategies, such as ICT and HR are being used to promote smarter ways of working to increase efficiencies and reduce costs.
- Collaborating and sharing services with other forces in the region.

Agency 10. United Kingdom

Type of agency: city/rural

Sworn officers: 1,800

Agreed to interview request: yes

Initiatives made by this agency include the following:

- Root and branch review of all business processes related to a fundamental rethink of what the organization is here to do. This has led to a shift in emphasis toward prevention and early intervention, focusing on emerging threats, harm caused, risk to the public, and a particular focus on protecting vulnerable members of the community.

Agency 11. United Kingdom

Type of agency: city/rural

Sworn officers: 2,600

Agreed to interview request: yes

Initiatives made by this agency include the following:

- Undertaken a fundamental review of the agency's operating model and strategic service improvement programs.

Agency 12. United Kingdom

Type of agency: city/rural

Sworn officers: 1,250

Agreed to interview request: yes

Initiatives made by this agency include the following:

- Undertaken a restructure of management.
- Collaborating numerous services with five other police forces.

Agency 13. Canada

Type of agency: city

Sworn officers: 110

Agreed to interview request: no

Initiatives made by this agency include the following:

- Has begun a resource reduction strategy through Lean Six Sigma management efficiency method and attrition.
- With the appointment of a new chief, the force will be restructuring to increase efficiencies and effectiveness to ensure they are meeting the city's initiatives and mandates.
- The force has introduced a citizens on patrol / traffic watch program comprised entirely of volunteers.
- Some positions previously held by sworn members have been filled by civilian staff. For example, media.
- Implemented a corporate improvement and innovations team police project change program. This includes on-line reporting, document imaging, and the civilianization of media relations.
- Implemented a strategic plan to guide the department into the future.

Agency 14. Canada

Type of agency: rural

Sworn officers: 130

Agreed to interview request: no

Initiatives made by this agency include the following:

- Collision reporting center (CPC): The CPC is a private company that leases office space from the police. It completes the reporting on most motor vehicle collisions for the agency. This is a source of revenue for the agency and has greatly reduced calls for service.
- Online reporting: Citizens can report incidents such as minor property crimes via the Internet. They are then emailed the occurrence number. This has reduced calls for service.
- Alternate reporting center: Citizens can make telephone reports of less serious matters. The calls are answered by a sworn police officer. This has reduced calls for service.
- Community engagement – partnerships: The agency actively seeks out community engagement in problem solving community-based and social issues. This includes establishing partnerships. The agency has conducted a number of initiatives with partners that have become community-led initiatives instead of police-led. This has decreased the agency's staffing requirements for these projects.
- Voice-to-text transcription: The agency is currently implementing the ability for officers to dictate reports that will be directly transcribed into the records management system. This will greatly reduce the staffing requirements for transcriptionists.
- Alarms response: The agency implemented a fee-based response regime for burglar alarms. This has not been a significant source of revenue; however, it has greatly reduced the number of calls for service for false alarms.

Agency 15. Australia

Type of agency: city/rural

Sworn officers: 5,700

Agreed to interview request: no

Initiatives made by this agency include the following:

- Initiated a new reform program to reposition the agency to deal with current and future demands, while ensuring a continued, quality core policing service. This process is designed to consider all services provided and will systematically identify options available to deliver the right services to the community in the most efficient and effective ways possible.

Summary

As shown in these descriptions, there were five types of responding agencies: city, city/rural, rural, municipal, and municipal/rural. The size of these agencies ranged from 56 to 5,700 sworn officers. All of the agencies had either implemented more than one cost reduction initiative or had implemented one initiative and were developing further initiatives.

The initiatives presented have been summarized or grouped into 10 types of initiatives and are presented in table 58 on page 71 in descending order of the frequency of their adoption. Ten of the 15 agencies (66 percent) had adopted a method to improve the effectiveness in the management of the organization. For example, the 3,800-officer United Kingdom service (agency 2) had implemented continuous improvement and systems thinking while the 160-officer Canadian agency (agency 6) had re-engineered its business practices and the 110-officer Canadian agency (agency 13) had begun to develop a resource strategy based on the Lean Six Sigma management analysis. The second-most frequent initiatives were the restructuring of an organization, changes in personnel, and the enhanced use of technology.

As presented in table 58 on page 71, the majority of agencies identified that they had included or were including more than one of the 10 strategies in an effort to reduce operating costs. This approach to reducing costs indicates that agencies are developing comprehensive programs to improve the efficiency and effectiveness of their agencies and are not just relying on one specific strategy. Such an approach signifies that police managers are learning from the experiences of other police agencies and indicates that these managers are looking to ensure that their agencies are better placed for any future environmental shocks.

Table 58. Form and frequency of cost reduction initiatives adopted by follow-up agencies

Cost reducing initiative	Number of follow-up agencies adopting initiative (out of 15)
Management effectiveness improvement	10
Restructure of organization, including restructure of management	7
Personnel strategy, including civilianization	7
Technology enhancement or changes	7
Collaboration with other police agencies	5
Change to or re-enforce community or neighborhood policing service delivery	5
Strategic perspective, including performance management	4
Other budget or financial initiatives	3
Change in form of budgeting, including adopting priority-based budgeting	2
Centralization of services	1

Conclusions

This project focused on two questions:

1. What should the general shape and character of police agencies and services look like to ensure that American policing is flexible and adaptable to operational fiscal restraints?
2. In particular, how should police agencies be composed, structured, and organized?

These two questions formed the context for the development of the postal and electronic survey and the follow-up interviews and data gathering. The questions provided the basis for establishing the six objectives that were outlined in the original proposal:

1. Examine how effective the adoption and implementation of new governance philosophies, such as new public management (NPM), consolidation, regionalization, and outsourcing, would be in the American policing context.
2. Present a comprehensive international overview of police agencies' approaches to maintaining community service delivery with a decreasing level of resources.
3. Develop the knowledge that will increase the service delivery effectiveness and the organizational capacity of law enforcement agencies nationwide
4. Examine the organizational structures and approaches used by police agencies to reduce operating costs.
5. Explore the effects that these structures and approaches would have on policing.
6. Determine the promising practice structures and approaches options that police agencies could consider for implementation to reduce their operating costs.

The six objectives have been reworded and are used as headings to discuss the conclusions of this research.

Adoption and implementation of new governance philosophies

Could the adoption and implementation of new governance philosophies—such as New Public Management (NPM), consolidation, regionalization, and outsourcing—improve the effectiveness of policing in the United States? The simple answer to this question is yes, any or all of these new organizational philosophies could improve the effectiveness of policing in the United States. Any structural or process change that enables an improvement in how an organization is structured or managed and that releases resources, both physical and financial, to increase the delivery of services must be capable of providing a platform for increasing the effectiveness of an organization.

Features of New Public Management

There are a number of benefits to be gained from the use of NPM and its associated performance framework. It allows police to encapsulate high-level objectives and relevant performance indicators. The adoption of this approach by police agencies yielded significant achievements when it was used in conjunction with a compilation of a strategic plan, an annual business plan, and a comprehensive suite of performance indicators. The adoption of NPM by countries such as New Zealand, Scotland, and England and Wales, enabled their police agencies to measure their performance and to measure the performance of their organizations with the performance of other police organizations and enabled comparisons to be made over time (den Heyer 2011). In appendix D we provide the nine principal features of NPM.

Advantages and disadvantages of amalgamation, regionalization, and mergers

There are also a number of possible benefits to be gained from police agencies merging or from establishing collaborations or amalgamating. Such approaches to reducing costs or increasing efficiencies do not need to be large and can be as small as merging a support service such as file management.

The regionalization of smaller local police agencies is also believed to reduce operational and administrative duplication, add to agency professionalism, and increase the efficient use of limited resources. Similarly, the amalgamation or regionalization of bigger police agencies can create “new operational efficiencies and make possible complex but expensive specialized services or technologies” (Murphy 2004, 10). Murphy (2004) advocates that the amalgamation or regionalization of police agencies or specific police services “promises a more rational, managed, and resource-efficient model of police service” (10). Appendix E summarizes the advantages and disadvantages of local police agency amalgamations, regionalization, and mergers. As is shown, it appears such approaches have more advantages than disadvantages. Appendix F focuses on regionalization specifically in terms of service delivery effectiveness.

Comprehensive approaches to maintaining delivery with decreasing resources

What were the comprehensive approaches adopted by police agencies to maintain community service delivery with a decreasing level of resources? The main approaches adopted by the 51 police agencies from Canada, the United Kingdom, and Australia were methods to improve the effectiveness in the management of the organization. These methods included an extensive analysis of the organization's business processes based on such approaches as systems thinking and Lean Six Sigma, the development of risk-based frameworks for delivering services, re-engineering business practices, leadership change programs, and a fundamental review of the agency's operating model.

New Public Management

The first strategy adopted by the police agencies of the three countries was NPM. This strategy provided the structure for the majority of the other adopted initiatives and for maintaining comprehensive service delivery level philosophies such as intelligence-led and community- and problem-oriented policing. The strength of NPM is that it has the same core principles as democratic or community-oriented policing. The four core principles of democratic policing identified by Bayley (2001; 2006) are presented in appendix G alongside the equivalent component of NPM, which has been identified by Gillespie (2006). That chart shows that the adoption and implementation of NPM can form the basis to enable progress to be made toward maintaining community-oriented policing approaches.

Other alternatives

The second set of initiatives adopted by police agencies included the seven forms of organizational consolidation: (1) shared services, (2) contracting services, (3) outsourcing, (4) merger, (5) regionalization, (6) civilianization, and (7) internal consolidation. The majority of the police agencies surveyed and interviewed stated that they had implemented one or more of the consolidation approaches or were considering doing so. The principal reason given by the agencies for adopting this form of initiative was to save money and thereby maintain their community policing service delivery levels.

The consolidation of police services or agencies may offer a number of realizable organizational financial and systems benefits (Pachon and Lovrich 1977; Loveday 1995a; Loveday 1995b; Loveday 2006; Krimmel 1997). The principal benefits that may be realized by consolidation type are presented in appendix H. The benefits

include decreases in administrative overheads and an improvement in the efficient management of resources. Appendix I expands the analysis of the benefits that may be gained by presenting a before and after impact of consolidation on the individual elements of a police agency.

All of the approaches that are presented in appendix H should enable agencies to make savings and allow them to concentrate on their core activities (Cordero 2011). Mergers or regionalization may, however, provide better options (New Jersey Association of Chiefs of Police 2007). These forms of consolidation need to be balanced with local accountability but may enable agencies to realize savings by decreasing duplication in administrative support services and systems and increase organizational flexibility and effectiveness through the availability of more operational staff (Her Majesty's Inspectorate of Constabulary 2013). Street (2011) claimed that in the first year of the merger of two UK police forces, those in Bedfordshire and Hertfordshire, \$4.5 million in annual year-on-year savings were made with an increase in police service to both communities. These savings were achieved without decreasing the number of police officers (Street 2011).

Increase service delivery effectiveness and organizational capacity

One of the project's goals was to develop the knowledge that will increase the service delivery effectiveness and the organizational capacity of law enforcement agencies nationwide. Both the postal and electronic survey and the interviews identified that police agencies are examining a range of possible cost reducing strategies and initiatives. The adoption of a cost reducing strategy or initiative depends upon the circumstances of the specific agency and what it hopes to achieve. For example, because of the large budget cuts in the United Kingdom police agencies have implemented extensive and fundamental cost reduction strategies that include implementing new forms of operating or service delivery models and organizational restructuring.

In the postal and electronic survey, agencies were asked to describe any broad-based cost reducing strategy that their agencies had engaged in to increase efficiency, effectiveness, or service delivery. Twenty-eight agencies (55 percent) identified that they had engaged in a large number of broad-based strategies. The strategies that the agencies identified were categorized into 27 sections and have been presented in alphabetical order on page 61; they range from implementing business planning to the implementation of technology. These findings are supported by the extensive list obtained during the interview phase of the research, which has been presented beginning on page 63. This information provides the foundation for developing the knowledge that will increase the service delivery effectiveness and organizational capability of law enforcement agencies in the United States.

Organizational structures and approaches used by police agencies

What were the organizational structures and approaches used by police agencies to reduce operating costs? The major organizational structures and approaches used by agencies to reduce operating costs are presented in appendix J. The principal approaches used by agencies are presented in table 58 on page 71. As can be seen, agencies are using a number of structures and approaches to reduce costs. The major point from this analysis, as identified previously, is that agencies do not use just one of these approaches but have in the majority of cases adopted three or four initiatives—with nine agencies having implemented extensive change programs comprising between four and seven approaches.

Effect of these structures and approaches

What effect did these structures and approaches have on the delivery of police services? Our study did not reveal any data on the effectiveness of strategies that were derived from outcome data, but it did reveal some anecdotal evidence. All of the agencies that responded to the postal and electronic survey and the responses in the follow-up interviews identified that the structures and approaches have improved service delivery levels and the commitment to community policing and in the majority of cases their effectiveness in providing service delivery. However, none of the agencies has undertaken an evaluation of the implementation of the structure or approach or the effect that it has had on service delivery.

The dearth of evaluations of police reform is one of the major shortcomings in the design of structures or approaches to assist police agencies with improving their effectiveness. The lack of scientific analysis of how different structures affect police organizations compounds this issue and encourages experimentation with initiatives that may not improve the effectiveness of an agency's service delivery.

Promising practices to reduce operating costs

What were the promising practice structures and approaches that police agencies could consider for implementation to reduce their operating costs? Promising practice structures and approaches that police agencies may consider implementing to reduce operating costs are as follows:

- Collaboration with other police agencies
- Sharing of services with other police agencies
- Reduction in the layers of management

- Merging of specialist units
- Reduction in divisions or policing areas

A number of different-sized agencies in all three countries had implemented these promising practices structures, and all identified that the practices had reduced costs and improved the effectiveness of service delivery.

Appendix A. Letter to agency executives

This appendix has been slightly modified to adhere to COPS Office publication standards.

Dear police executive:

As law enforcement agencies throughout the world continue to face challenges brought about by the current economic climate, the importance of providing efficient delivery of services to the community cannot be overstated.

The Police Foundation, a U.S.-based nonprofit organization whose mission is to advance policing through innovation and science, is conducting a survey of international police services to examine the ways in which they have responded to the economic downturn of the past few years. The goal of the project is to provide a better understanding about the changes that have come about and the role that economic conditions may have played in police staffing, operational practices, and community policing. Most important, we are seeking to identify innovative and strategic approaches developed by agencies to promote promising and more cost-effective police service delivery practices.

Funded by the U.S. Department of Justice, Office of Community Oriented Policing Services, our hope is to translate some of the most promising or best practices employed in international agencies to the United States. We are hoping that you will agree to participate in this important study by completing the attached survey. The survey can be [mailed, faxed, or e-mailed to us]. In addition, you can complete the survey online.

Please be assured that your responses to the survey are **strictly confidential** and the responses provided will only be reported in aggregate form (individual and agency identities can not be determined).

If you have any questions, please contact our director of professional services [by phone or e-mail]. We hope that your agency will participate in this important study, as it will serve to provide assistance to law enforcement agencies in thriving in the current economy.

Sincerely,

Chief James Bueermann (ret.)

Appendix B. Survey instrument

This appendix has been slightly modified to adhere to COPS Office publication standards.

Impact of changing economic conditions on policing

Introduction/Respondent information

The purpose of this survey is to examine if and how current fiscal conditions are affecting law enforcement agencies internationally and to identify approaches adopted by agencies to maintain effective and efficient delivery of services. We hope you will agree to participate by completing this survey online or alternatively this paper version that you can e-mail, fax, or send by postal carrier.

Responses to the survey are strictly confidential and the data provided will only be reported in aggregate form (individual and agency identities cannot be determined). We request that the agency's chief executive or a designated command-level staff member complete the survey if at all possible.

1. Are you the agency chief executive or a designated command-level staff member?
(please check one)

Yes

No

2. Respondent rank/title: _____

3. Name and title of agency head: _____

4. Name of agency: _____

5. Please fill in the information called for below. This information will only be used for follow-up contact by the study research staff.

Name of person completing survey: _____

Address: _____

Address 2: _____

City/Town: _____

State/Province: _____

Zip/Postal code: _____

Country: _____

Agency demographics

1. Type of agency: (Check one)
 - Regional/Provincial
 - United Kingdom Territorial
 - National
 - Local/County Police
 - Other (please specify): _____
2. Number of sworn full-time personnel (exclude volunteer and auxiliary personnel)
Actual: _____
Authorized: _____
3. Number of sworn part-time personnel (exclude volunteer and auxiliary personnel)
Actual: _____
Authorized: _____
4. Number of civilian full-time personnel
Actual: _____
Authorized: _____
5. Number of civilian part-time personnel
Actual: _____
Authorized: _____
6. Number of auxiliary personnel (if applicable)
Actual: _____
Authorized : _____
7. Number of volunteers (if applicable)
Actual: _____
Authorized: _____
8. Approximate population served: _____

Changing fiscal/resource conditions

1. During the past five years, has your agency experienced any change in the amount of funding you receive from... (Check all that apply)

	Yes (INCREASE in funding)	Yes (DECREASE in funding)	No	Not applicable
Local sources?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Territorial, provincial, or regional sources?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Federal sources?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Please describe any other funding sources and indicate whether they have increased or decreased.

3. During the past five years, has your agency experienced a decrease in its operating budget? (Check one)

- Yes
- No

4. If your agency has experienced a decrease in its operating budget, by approximately how much has it decreased per year? (Check one)

- Less than 5%
- 5–10%
- 10–15%
- 15–20%
- More than 20%
- Don't know

Community engagement activities

1. Community engagement activities: (for each item check all that apply)

Within the past five years, have economics impacted the following activities?

	Yes	No	N/A
Attendance at neighborhood association meetings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Partnership/collaboration with residents of the community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Partnership/collaboration with businesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Partnership/collaboration with schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Partnership/collaboration with faith-based organizations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outreach to immigrant communities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outreach to underserved populations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Engagement in problem solving efforts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geographic/place-based assignment of patrol officers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outreach to victims' services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outreach to mediation services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Neighborhood/community substations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Citizen involvement programs (e.g., citizen academy, citizen operation review)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Citizen surveys	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dissemination of information on agency initiatives to the community (e.g., via newsletters, web)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dissemination of information on crime problems to the community (e.g., via newsletters, web)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dissemination of information on crime prevention tips to the community (e.g., via newsletters, web)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dissemination of crime maps to the community (e.g., via newsletters, web)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Please describe any other community engagement activities impacted by economic changes.

3. Community engagement activities: (for each item check all that apply)

Within the past five years, how has your involvement in these activities changed?

	Increased	Decreased	N/A
Attendance at neighborhood association meetings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Partnership/collaboration with residents of the community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Partnership/collaboration with businesses	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Partnership/collaboration with schools	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Partnership/collaboration with faith-based organizations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outreach to immigrant communities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outreach to underserved populations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Officers actively engage in problem solving efforts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Geographic/place-based assignment of patrol officers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outreach to victims' services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outreach to mediation services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Neighborhood/community substations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Citizen involvement programs (e.g., citizen academy, citizen operation review)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Citizen Surveys	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disseminations of information on agency initiatives to the community (e.g., via newsletters, web)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dissemination of information on crime problems to the community (e.g., via newsletters, web)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dissemination of information on crime-prevention tips to the community (e.g., via newsletters, web)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dissemination of crime maps to the community (e.g., via newsletters, web)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Please describe any other community engagement activities and if your involvement in them has increased or decreased.

Cost reduction strategies

1. Personnel: (for each item check all that apply)

Within the past five years, have the following cost reduction strategies been implemented (yes or no)? If not implemented, are they being considered or planned to reduce costs? Were they governmentally mandated (local/provincial/regional/federal) to reduce costs?

	Yes	No	Considering or planning to do	Government mandated	N/A
Sworn vacancies left unfilled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hiring freeze for sworn personnel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hiring freeze for civilian personnel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduction in force (i.e., layoffs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reducing staffing levels through attrition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unpaid furloughs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cut existing sworn pay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cut existing civilian pay	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cut sworn pay increase	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cut civilian pay increase	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Please describe all other personnel cost reduction strategies implemented or considered/planned.

3. Benefits: (for each item check all that apply)

Within the past five years, have the following cost reduction strategies been implemented (yes or no)? If not implemented, are they being considered or planned to reduce costs? Were they governmentally mandated (local/provincial/regional/federal) to reduce costs?

	Yes	No	Considering or planning to do	Government mandated	N/A
Instituted early retirements (e.g., buyouts)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changed retirement policies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced retirement/pension plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Restricted overtime compensation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced employer contribution to pension	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased employee share of health insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cut peer support/counseling program(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced health/fitness services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

4. Please describe all other benefit cost reduction strategies implemented or considered/planned

5. Training and technology: (for each item check all that apply)

Within the past five years, have the following cost reduction strategies been implemented (yes or no)? If not implemented, are they being considered or planned to reduce costs? Were they governmentally mandated (local/provincial/regional/federal) to reduce costs?

	Yes	No	Considering or planning to do	Government mandated	N/A
Reduced number of academy classes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cut/reduced specialized training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cut/reduced in-service training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced acquisition of new technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leased (versus bought) technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased reliance on new technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6. Please describe all other training or technology cost reduction strategies implemented or considered/planned.

7. Equipment and vehicles: (for each item check all that apply)

Within the past five years, have the following cost reduction strategies been implemented (yes or no)? If not implemented, are they being considered or planned to reduce costs? Were they governmentally mandated (local/provincial/regional/federal) to reduce costs?

	Yes	No	Considering or planning to do	Government mandated	N/A
Reduced acquisition of new equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Deferred replacement of equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leased (versus bought) equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Deferred purchase of improved safety equipment/gear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced acquisition of new vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Deferred vehicle replacement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Deferred vehicle maintenance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unable to add new safety features to vehicles (e.g., enhanced lights, sirens)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Discontinued take-home vehicles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Please describe all other cost reduction strategies (related to equipment, vehicles, or technology) implemented or considered/planned.

9. Service delivery practices: (for each item check all that apply)

Within the past five years, have the following service delivery practices been implemented to reduce costs (yes or no)? If not implemented, are they being considered or planned to reduce costs?

	Yes	No	Considering or planning to do	N/A
Reduced routine patrol	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced specialized units	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Limited types of calls for officer dispatch	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alternative call handling (e.g., Internet)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased use of volunteers in nonenforcement functions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased use of volunteers in some sworn functions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased use of civilians in some sworn functions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced public access hours at stations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Consolidated/closed some stations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Altered work shift times/schedules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10. Please describe all other service delivery practices implemented or considered/planned to reduce costs.

11. Structural changes: (for each item check all that apply)

Within the past five years, have the following structural changes been implemented to reduce costs (yes or no)? If not implemented, are they being considered or planned to reduce costs? Were they governmentally mandated (local/provincial/regional/federal) to reduce costs?

	Yes	No	Considering or planning to do	Government mandated	N/A
Changed organizational structure (i.e., flattened organization)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shared services with another police agency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Merged with another police agency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Participated in regionalized police services/functions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contracted services with another agency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outsourced and privatized of services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Moved enforcement/investigative functions to another agency (e.g., arson investigations to fire department, parking enforcement)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. Please describe all other structural changes implemented or considered/planned to reduce costs.

13. Efficiency improvements: (for each item check all that apply)

Within the past five years, have the following efficiency improvements been implemented to reduce costs (yes or no)? If not implemented, are they being considered or planned to reduce costs?

	Yes	No	Considering or planning to do	N/A
Hired consulting firm/research organization to assist with increased efficiency or cost reductions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Used evidence-based research to change the way the agency does business	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Allocate (greater) percentage of citation revenue (e.g., red light cameras, parking fines) to police	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reallocated percentage of forfeiture funds for operational needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leased facilities from another agency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Created a police foundation to support/offset personnel needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Developed an agency strategic plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Conducted a review of the performance of the agency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

14. Please describe all other efficiency improvements implemented or considered/ planned to reduce costs.

Revenue generation

1. Revenue generation: (for each item check all that apply)

Within the past five years, have the following revenue generation strategies been implemented (yes or no)? If not implemented, are they being considered or planned?

	Yes	No	Considering or planning to do	N/A
Leased out facilities to groups, etc.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Instituted new fees for police services (e.g., false alarms, subscription services)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Instituted fees for recruit training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sought funding from private sources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Increased taxes for specific police purposes (e.g., hiring, capital equipment)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Held public auctions (e.g., stolen property, old equipment)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Please describe all other revenue generating strategies implemented or considered/planned.

Critical issues

1. Please describe any broad-based strategies your agency has engaged in to increase efficiency, effectiveness, or service delivery.

2. Please list three of the most critical issues facing your agency.

1. _____

2. _____

3. _____

3. If we need to clarify any of your responses, or learn more about innovative strategies you have adopted, how may we contact you?

By phone: _____(number)

By e-mail: _____(address)

Please do not contact us.

*If you would like to receive a copy of the final report, please provide e-mail address (for this purpose only).

Survey completed

Thank you for taking the time to complete this survey.

Appendix C. Relevant management theories

The following theories have been examined over recent decades and provide context for the study.

The theory of government reform

The economy of a western democracy by convention is divided between the private and public sectors (Hughes 1994). Although the private and public sectors are usually perceived as being distinct and separate, Hughes (1994) claims that the division of the economy into two mutually exclusive sectors may be artificial. This is due to the modern capitalist economy being a “thoroughly mixed system in which public and private sector forces interact in an integral fashion” (Hughes 1994, 90) and to the fact that the economic system is “neither public nor private, but involves a mix of both sectors” (Hughes 1994, 90).

The public sector is usually perceived as that part of the economy that exists to provide advice to the government, coordinate government transactions, and provide goods and services to the public (Boston 1991). According to Hughes (1994), the public sector is “engaged in providing services (and in some cases goods) whose scope and variety are determined not by the direct wishes of the consumers, but by the decisions of government bodies, that is, in a democracy, by the representatives of the citizens” (90). The sector performs a multitude of roles and handles a large number of different problems. However, the roles of government agencies are often quite separate from one another and frequently conflict with the policy of the government or private industry.

The majority of western democracies are “mixed economies,” with a large proportion of their gross national product being derived from the public sector (Boston 1991). The composition of the “mix” or the extent to which governments provide goods and services and the makeup of the mix vary from country to country and across time.

According to Rutherford (1983), developed mixed economies comprise four basic types of public sector organizations:

1. Central or federal governments—responsible for delivering the redistributive function of the state, managing the economy, and supervising and coordinating public agencies. They are also responsible for providing services that must be or can most efficiently be provided at the national level. These are usually public goods, such as national defense and the administration of justice. (9)

2. Local governments—responsible for providing a flexible system that is capable of responding to local requirements in relation to the level and nature of the services requested. (9–10)
3. Regional or national agencies—established to provide a single service or a very limited range of services. (10)
4. State-owned enterprises—industrial concerns, run along commercial lines but under state control. (10)

For as long as there have been public organizations, there have been calls for examination of their policies and procedures. Although these calls have usually been made for political reasons, they are often the result of financial mismanagement by agency executives or because the sector has become too large or threatening to elected representatives. The call for government agency reform has led to the rational systems perspective: Financial management should be the concern of employees of the agency whether they are financial specialists or not (Boston 1991).

The statement that all government employees should be responsible for their agencies' financial management is supported by law in many countries. For example, New Zealand government agency executives and senior managers have a statutory responsibility to ensure that their organizations are controlled in such a way to ensure that all expenditures of public money are made with due regard to economy and in the avoidance of waste and extravagance (Pallot 1991). According to Pallot (1991), the responsibility for management of an agency's services is a component of the management of its financial affairs.

There are three common reasons why public sector agencies may be viewed as needing to undertake reform:

1. Service or policy incompleteness—problems reflecting that the agency's system is incomplete in some form or area. However, incompleteness does not suggest inherent difficulties.
2. Policy or process implementation—problems to do with how the system has been implemented.
3. Inherent—problems inherent in the agency's structure but not necessarily in other parts or systems of the agency (adapted from Gill 2000, 55).

There are two perspectives that need to be borne in mind when calling for the reform of an agency. The first is that it is expected that any public sector management system will be criticized over time (Gorringer 2001). This perspective is not founded on

the underlying government service model being broken but results from trends within a society, from the identification of more efficient service delivery methods, and because individual tastes can change.

The second perspective is that the call for public sector reform is invariably a cyclical process (Ayto 2001). Ayto (2001) describes a cyclical process as “due to the absence of any universally agreed founding [of public sector management] principles or values” and that “over time, government attention continually shifts between various objectives that can pose irresolvable dilemmas” (4). Inevitably, as the government solves or alleviates one problem, “others are exacerbated and new challenges are identified” (4). The continual circle of new challenges means that “[p]ublic sector management is a race without a finish line” (Gill 2000, 65). Gill (2000) supports the view of Ayto (2001) and explains that as one management issue is resolved, it is replaced by a new “generation of even more complex issues” (Gill 2000, 65). This continual cycle may be similar to that as experienced in the private sector, but the public sector has one further complicating element—political interference.

The issue of political interference, together with an absence of foundational principles or values (Ayto 2001), is the primary reason for public sector debate on the form of management that should be adopted. The debate is based on whether public sector management should consist of the same character and objectives as private sector management or whether public sector management is different (Ackroyd, Hughes, and Soothill 1989).

Ackroyd, Hughes, and Soothill (1989) maintain that the supporters of the view that public sector management is the same as private sector management, have not “fully [considered] the forces shaping public service management as a set of distinctive practices or the prospects for refining and developing them” (604). What is also not appreciated is that public sector management is actually “a very different set of activities from private sector management” (604).

An examination of public sector organizations reveals that their individual structures, processes, and policies have been developed as an adaption to successful practice (Ackroyd, Hughes, and Soothill 1989). The claim of Ackroyd, Hughes, and Soothill (1989) is that the structure of a public service agency signifies and represents the confluence of two relationships. The first relationship is between the receiver or customer of the government service and the government agency providing it. For example, the New Zealand government assumed the dual role of purchaser and supplier of public goods and services (Gorringer 2001). The second relationship is between the elected political controller and the agency management (Ackroyd, Hughes, and Soothill 1989).

One method to characterize public sector management is in terms of identifying an agency's structural concepts or elements. These concepts or elements are the building blocks of managing or reforming a government agency. According to Gill (2000) there are six public agency concepts or elements, and these can be described as the three "Ss" and three "Ps":

1. Strategy
2. Structure
3. Systems
4. People
5. Performance
6. Politics

This public management model is designed on the principles of clarity and simplicity and has strengths in unity of vision, coherence, and an encompassing nature (Gill 2000). The concept of strategy is the key component of the model as it "drives" the other concepts including financial management. The value of conceiving the public service as being composed of these six elements is that they can be used as the building blocks of organizational reform.

In comparison to private sector management, public sector management is different, and as a result there is no silver bullet to improving public agency service delivery and public agency reform is "only going to come from coherent, mutually reinforcing strategies, and not from piecemeal reactions or big pushes" (Gill 2000, 66).

The theory of government finance

Government expenditure refers to the spending by a government sector that includes the purchase of final goods and services, or gross domestic product, and transfer payments. Government expenditures are used to fund a government sector. The government sector uses the allocation of funds to undertake key functions that enable the sector to operate and deliver a product or service.

Public sector financial management is an area of the rational systems school of management in which the emphasis is placed on the achievement of acceptable financial outcomes (Palot 1991). The rational systems school is founded on the

perspective that organizations are instruments that attain specific goals (Baron and Greenberg 1990). Within the rational systems, finance is a management process model that comprises three objectives to ensure that an agency's budget is

1. made available at the appropriate time so that managers can manage;
2. made available for the annual budget period;
3. used in the most effective, efficient, and economical way. This means that the resources are allocated to the most beneficial programs and utilized to their optimum level in order to provide the greatest benefit for the least cost or to provide quality, cost-effective services (adapted from Pallot 1991).

A government's financial system consists of a number of components. These components assist in enabling a government agency to translate strategy into deliverable actions, to promote informed decision making and to hold those decision makers accountable, and to deliver a responsive and efficient service (The Treasury 1996). The system coordinates the individual system components through the implementation of the agency's strategic plan and annual business plan. The annual business plan describes the agency's outputs and the expense involved in delivering individual outputs.

According to Rutherford (1983), there are five main areas of expenditure in delivering agency outputs:

1. Current expenditure on inputs, including labor and raw materials, to be used in the production of goods and services
2. Capital expenditure on fixed assets needed in the production of goods and services
3. Grants and subsidies paid in cash to individuals and corporations
4. Loans to individuals and corporations, normally at noncommercial rates of interest for purposes that are regarded as having social benefits
5. Interest on the state's outstanding debt

The final element of the financial system is accountability. Public agencies tend to be structured to ensure accountability for specific activities (Rutherford 1983). Accountability is usually an aspect of the legal framework that establishes detailed and prescriptive rules about how an agency is to operate and the authority given to an individual manager. However, the legal framework is often restrictive in "both the objectives that may be pursued and the methods that may be used" (Rutherford 1983, 9).

The theory of modern police reform

Profound organizational and structural changes in policing since the early 1980s have been linked to broader social and political structural developments. In particular, these changes have been in

- the role of modern governmental thinking (Rose and Miller 1992);
- recurring state fiscal crises (Spitzer and Scull 1977);
- urban geography (Jones and Newburn 1999; Shearing and Stenning 1983);
- the natural proclivities of capitalism (Rigakos 2000; Rigakos 2002);
- globalization and increase in transnational crime, terrorism, and policing (den Heyer 2011).

The early 1980s were a time of great domestic and international upheaval with extensive economic, political, and social changes occurring simultaneously across a number of countries (Gorringe 2001; Manning 2006; Casey 2009). The economic policies of U.S. President Ronald Reagan (“Reaganomics”) and the New Right government of Prime Minister Margaret (later Baroness) Thatcher were the major initiators of the change in the environment. The political emphasis placed upon the public sector was to do more with less. In response, public sector managers critiqued their structures, budgets, and service delivery processes (Gorringe 2001). At that time, there was also increasing pressure from the public for the public sector to be more accountable for the use of public funds and for more focused services to be delivered (Loveday 1995a; Gillespie 2006).

In 2006, the United Kingdom Treasury released a report on the finance of police that noted that the way “police forces manage both budgets and people remains short of best current practice in both private and public sectors” (Her Majesty’s Treasury 2006, 2). The report, however, also observed that in the case of policing, “the relationship between value for money and operational performance is two sides of the same coin and is too often not understood” (Her Majesty’s Treasury 2006, 2).

According to Loveday and McClory (2007), the inefficient use of resources by police originates “from a wider failure to develop a system of benchmarking the effective deployment of resources and gauging the individual productivity of police officers and nonsworn staff” (15). The efficient and effective delivery of services is the most important performance benchmark for a police agency. Effectiveness is the extent to which a particular resource is accomplishing its purpose and is often assessed without regard to costs or other inputs. Efficiency, on the other hand, indicates the degree to which police hours or other input resources that have been designated to perform a particular activity in fact do so (den Heyer 2011).

Distinguishing between effectiveness and efficiency is a necessity—a police organization may well be efficient, but unless its activities accomplish the desired output or outcome it cannot be regarded as being fully effective. Similarly, the organization may be deemed effective but it may not be operating at the least possible cost; or if its inputs are being wasted on conversion to output, it cannot be regarded as being efficient (den Heyer 2009).

The theory of “New Public Management”

During the early to mid-1980s, governments across Western nations explored various methods to increase the efficiency and effectiveness of public sector organizations as an ever-increasing amount of resources were required to fund police organizations. New Public Management (NPM), which focuses on organizational inputs, outputs, and outcomes, was introduced to a number of Western nations during the late 1980s and formed the basis of police reform initiatives that were introduced in these countries from the 1990s through to the present day. While demand for resources grew during this time, it was generally perceived that the police were providing a diminished level of service (Manning 2006).

The NPM approach arose from thinking about what is meant by the terms allocation of resources, organizational performance, and accountability. The basic thrust of the new management approach was to improve the incentives for the police to perform efficiently and to provide a framework to establish efficient and effective police organizations. The comprehensive reform of police during this period has been identified as the era of a “new policing order” (Cope, Leishman, and Starie 1997; Gillespie 2006).

The new era saw an emphasis placed upon the police to become more accountable to the community and to achieve government outcomes. A realignment of police structures and processes emerged to meet the concept of community accountability, which was seen as being the central component of democratic governing of policing (Gillespie 2006, 1).

The theory of community policing assisted the United Kingdom, New Zealand, and Australian police to understand and accept this new management approach. Using the performance framework of the NPM approach enabled law enforcement agencies to encapsulate high-level objectives and to use relevant performance indicators as a basis for an organizational structure and for allocating resources. The ability of law enforcement agencies to set key objectives ensured that they focused their resources and their service delivery priorities on specific geographical areas and crimes (Loveday 1995a) and achieved the social outcomes that the government considered important. The social outcomes usually consisted of programs that increased the public’s living

standards by decreasing poverty and decreasing the occurrences of crime as in, for example, the “broken windows” theory as adopted by the New York City Police Department (NYPD).

The adoption of this approach by police was a significant achievement when it was used in conjunction with a compilation of specific performance indicators at the individual officer, unit, and station levels. The adoption of the new management approach by countries such as New Zealand, Scotland, and England enabled their police agencies to measure their performance against the performance of other police organizations and also enabled them to make comparisons within their own organizations over time.

Modern NPM was introduced to a number of western nations during the 1980s to increase the efficiency and effectiveness of government agencies’ service delivery. The introduction of NPM formed the basis of police reform initiatives that were introduced in the 1990s. As Bayley and Shearing (1996) observed, there has been a revolution in the organization and administration of police agencies. This revolution has had a compounding effect on the management of the public sector and in particular the police and has included the transformation of police services into a commodity and even into privatization (Lithopoulos and Rigakos 2005).

The introduction of NPM into police agencies by the New Zealand, United Kingdom, and Australian governments was a strategy that sought to improve leadership and management practice and to provide an accountability and performance framework (Loveday 1995b; den Heyer 2011). NPM is fundamental to the system of an organization and the methods and administration of how an organization delivers its services. For an organization to be able to successfully implement NPM, police executives and managers need to identify the core service delivery functions of their agencies.

Identifying an agency’s core functions enables a “social market” approach to be created between the purchaser (government) and the provider (police agency). “The social market approach seeks to ensure that the consumer of services rather than the provider of services determines what is produced, by whom, and when” (Loveday 1995b, 289). A social market structure ensures that NPM, as a comprehensive organizational approach, can work with police service delivery procedures such as community-oriented policing.

The central components of the social market approach include

- a rational financial framework;
- clearly defined service delivery outputs;
- a purchaser/provider split;
- a contract between the provider and purchaser;
- customers' choice and input into an agency's service delivery direction and outputs;
- a performance management framework;
- appropriately trained and qualified management personnel;
- an independent inspection and audit process (adapted from Loveday 1995b, 287–288).

Any police organization that is implementing NPM and the social market approach should clearly define measurable outputs that link the organization's financial system to the government's desired outcomes.

The theory of local government reform, regionalization, and mergers

The oldest local government reform school of thought is known as traditional reform (Trueblood and Honadle 1994). This school of thought can be traced back to the late 1800s, when its supporters examined the tendency of American cities to create suburbs that led to "fragmented" government (Trueblood and Honadle 1994). Since the early 1960s, the public choice government reform school of thought has dominated the reform debate (Trueblood and Honadle 1994).

Public choice theory has had a huge influence on modern thinking and the development of political science, public policy, and public administration (Boston 1991). A number of different terms have been used to describe public choice theory including social choice theory, rational choice theory, the economics of politics, and the Virginia School. The main principle of the theory was that people were believed to be rational and that they were dominated by self-interest (Gorringe 2001). The theory also sought to minimize the role of the state, limit the discretionary power of politicians, and curb the functions of government (Boston 1991). It was believed that because politicians had abused their power, this power could be minimized through the restructuring of budgets and performance arrangements (Pallo 1991). As a result, government departments that have implemented NPM have separated their policy making functions from the delivery of their service.

Modern research, based on public choice theory, has identified that any government reform program must consider the following: “(1) the preferences of citizens and other actors in the system; (2) the nature of the good or service desired; and (3) the structure of the institutions through which demands are expressed and production decisions made” (Bish 2001, 5).

These three elements form the parameters for any proposal of regionalization of local government or of any reform plan. While these elements may determine that an amalgamation of municipalities or government agencies is the appropriate option, this, according to Bish (2001), is “flawed nineteenth-century thinking and a bureaucratic urge for centralized control” (1). The opposing regionalization argument is supported by groups that oppose government regionalization who “contend that the merits of centralized government have been overstated” (La Grange 1987, 9).

Historically, only large, professionally organized government agencies were viewed as being able to provide efficient public services and govern appropriately, while, small governments and government agencies were considered unprofessional, uncoordinated, and inefficient (Bish 2001). However, smaller municipalities and agencies are often more efficient and flexible in delivering services than larger agencies, which casts doubt on “the financial assumptions typically used to defend amalgamations” (Bish 2001, 1).

Bish (2001) proclaims that “when there is a multiplicity of small municipalities in metropolitan areas, the costs of governance are lower, not higher” (1–2). While the cost of producing one service unit is lower in a small municipality, this does not necessarily translate to small municipalities being more efficient producers of services than large municipalities (Bish 2001). The costs of production appear to rise with the size of municipality or agency for three reasons:

1. Large cities provide more services. For example, they provide daytime services for commuters and shoppers and evening services for entertainment.
2. Larger municipalities often undertake more activities than smaller ones. For example, they may provide more welfare or support type services.
3. There are diseconomies of scale in producing some services (adapted from Bish 2001, 18).

Bish (2001) maintains that two conclusions may be drawn from the research between the cost to size theory. First, the size of a municipality is “not the primary determinant of costs” (Bish 2001, 18). This is because governments may outsource areas of their service delivery requirements to the private industry. For example, while the municipality may be responsible for trash collection, the trash is physically collected

by a local private trash company. Second, while larger municipalities may “cost more, it is not clear as in what proportion the various cost-increasing influences contribute” (Bish 2001, 18).

La Grange (1987) claims there is no guarantee that any proposed consolidation or regionalization of agencies will increase the coordination and efficiency of service delivery in a geographical area and also notes that the inefficiency of larger agencies can often be caused by internal disputes and arguments over budgets and resources.

The other argument against regionalization and amalgamation is that large monopoly councils or agencies that are responsible for a large geographical area are often not capable “of dealing with the diverse range of issues” required of them (Bish 2001, 1–2). Bish (2001) also claims that the governance incapability of large monopoly councils is because of the diversity of metropolitan areas and the need for “close links to citizens and the ability to handle a wide variety of activities on a small scale” (1–2). Current research indicates “that no single organization can accomplish these tasks” (Bish 2001, 1–2).

The supporters of regionalization and amalgamations, however, claim that small individual councils and agencies are inefficient and more expensive to administer than larger councils and agencies. The supporters base these claims on five main propositions:

1. A consolidated government is more efficient and effective than several smaller governments. This is because costs can be managed in large agencies and perhaps reduced through the elimination of duplicative services, personnel, and equipment. Furthermore, the larger unit may also be able to take advantage of economies of scale or lower per-unit costs of government services.
2. Consolidation helps eliminate spill-overs or externality effects. Many government services benefit citizens in adjoining geographical areas who neither pay for the service nor share in the effort involved in its delivery. These spill-over effects can be eliminated if the taxing jurisdiction is coterminous with the service jurisdiction.
3. The environment for decision making and long-range planning is improved. A single government in an area is better able to coordinate policies and decisions than several separate governments.
4. Consolidated governments with only one governing body are easier for citizens to understand, use, and contact.

5. Consolidation matches area needs with area resources. Tax burdens within a community are equalized through the creation of a government that more clearly corresponds to regional area needs (adapted from Trueblood and Honadle 1994, 4).

Two methods have been identified that will determine the scale at which a local government activity is produced most efficiently. However, neither of the two methods provides a definitive answer upon which a planning decision can be based (Bish 2001). The first method is the engineering/accounting approach. This approach consists of calculating unit costs for each of the agency's outputs, with the optimum agency size being "determined in relation to different levels of capital investment" (Bish 2001, 12).

The second method of determining scale is the statistical estimation of the "average cost of production curve to determine the lowest cost range" (Bish 2001, 12). There are, however, a number of problems with this method. First, the studies assume that the agencies included in "the sample are themselves producing efficiently" (Bish 2001, 12). Second, agency service delivery "outputs are often difficult to quantify in terms of quality and quantity" and as a result, "most studies resort to population-served output measures" (Bish 2001, 12).

In the case of police agencies, these studies are usually developed on more than basic population measures (Bish 2001). The studies usually assess the structure of an agency by using a number of different qualitative and quantitative evaluation methods. For example, one evaluation method examined the conversion of an individual agency's inputs into outputs to assess the different methods of organizing policing in metropolitan areas (Parks 1985).

While both determination of scale methods have mainly been used previously to determine economies of scale at the organization level, they have also been used within an organization to identify economies of scale. Both determination methods "indicate that economies of scale exist for a particular [internal] activity" (Bish 2001). However, the local conditions of the particular or specific organizational activity or service "are much more important than the inherent characteristics of the particular activity" (Bish 2001, 14).

Organizational economies of scale are only one half of the service delivery efficiency equation. The second half of the equation is that organizations have an incentive to be efficient (Bish 2001). Not many agencies in the public sector will implement efficiency strategies unless there is an incentive offered by government. Normally an efficiency drive is imposed on an agency in response to a government allocating a decreased level of funding.

The theory of police agency regionalization and mergers

Councils and municipality governments often consider regionalizing or consolidating their police agencies and services to ease economic burdens. However, the regionalization or consolidation of police agencies or services is not the only strategic option for every municipality experiencing financial problems as regionalization can take a number of forms and sizes and “can vary from community to community” (Krimmel 1997, 500). Although the regionalization of police agencies can be adapted to suit specific communities, the concept of having varying levels of economies of scale appears to depend on the size of the municipality. For example, Morris and Tweeten (1971) found a U-shaped cost curve with the lowest point being with municipalities with populations between 250,000 and 500,000, while Beaton (1974) found economies of size only for very small cities with populations of less than 2,000.

Challenges of regionalization and consolidation

The major problem with police agency or service consolidation is political and usually centers on the question as to how to merge several smaller agencies into one large agency (La Grange 1987). It is often the fear held by local politicians that they may lose control of local police agencies that derail any attempts to regionalize police agencies (Krimmel 1997). The reasons for the hesitance to consolidate differs with each individual community, because every police agency is subtly different and there is not a cookie-cutter approach or a one-size-fits-all police agency model to assist in determining how to structure an agency (New Jersey State Association of Chiefs of Police 2007, 2).

The problem with evaluating whether consolidated police agencies are actually more efficient and effective than nonconsolidated police agencies is that there has not been any research into this area of police management. Lithopoulos and Rigakos (2005) claim that “[t]o suggest that these benefits have been realized would be a difficult claim to substantiate” (339). The second complicating issue when attempting to identify the benefits of consolidation is that the majority of consolidation proposal reports “were produced after amalgamation was a fait accompli and tended to rationalize rather than criticize its impacts” (Lithopoulos and Rigakos 2005, 339).

Krimmel (1997) was able to complete a comprehensive evaluation of the consolidation of eight police agencies in the 1972 Northern York County Regional Police Department, Pennsylvania (NYCRPD), and found that the NYCRPD had 28 percent less total costs and 25 percent less cost per officer than the same police agencies before consolidation. However, the cost per officer was 13 percent higher in the NYCRPD (Kimmel 1997). Kimmel (1997) also noted that the cost per crime incident was 50 percent less and the cost per call was 70 percent less. The establishment of the consolidated police agency was also supported by the police chief of the

NYCRPD, who “stated that the regionalized approach has provided citizens with a more effective delivery of police services simply by eliminating duplication of effort” (Krimmel 1997, 504).

A number of reasons can be found in the literature as to why local communities should not consider regionalizing their police departments. La Grange (1987) considers the principle reason as to why police agency consolidation is not an option for all communities is that not all mergers provide benefits to small rural communities. Earlier research suggests that the “quality of police service provided in numerous small to medium-size departments is actually better than the quality of service provided in many of the larger departments” (Ostrom, Parks, and Whittaker 1973; Parks 1985; Rogers and Lipsey 1974).

There are four major areas of contention when regionalizing police agencies:

1. The community will have less input into its local police agency.
2. There will be fewer patrol officers in the community.
3. Larger police agencies are not more efficient or economical.
4. Public satisfaction with urban police services varies inversely with the size of the municipality (adapted from Lithopoulos and Rigakos 2005; Pachon and Lovrich 1977).

However, supporters of regionalizing police agencies and services usually argue that larger police agencies offer better services through the following:

- Reduced agency operational costs
- Equitable distribution of police resources
- Increased cooperation between officers in contiguous jurisdictions
- Increased specialization of officers
- Better trained officers with higher levels of professionalization
- Lower personnel turnover
- Operational economies of scale
- Elimination of duplication of effort by several smaller police agencies

- Ability of a larger agency to take advantage of centralized record keeping systems, crime laboratories, or other specialized services not readily available to smaller police departments
- Increased purchasing power
- More efficient hiring of officers (adapted from Pachon and Lovrich 1977; Krimmel 1997; Lithopoulos and Rigakos 2005)

Evaluation of consolidation programs

A number of issues are evident when attempting to analyze or evaluate police consolidation programs. The problems range from previous contradictory research, the shallowness of the research, and the lack of robust theory and substantial empirical analysis. Furthermore, performance measures that will enable policy makers and researchers to measure whether police are delivering services that are socially efficient and effective are yet to be identified (Rutherford 1983).

The conclusions of a number of comprehensive consolidation evaluation reports have been both positive and negative; however, critics still fail to recognize two important elements that have an impact on consolidation programs. The first is that larger municipalities generally subsidize suburban policing services, and the second is that larger central city areas have different policing issues than smaller towns and rural areas (Pachon and Lovrich 1977).

Pachon and Lovrich (1977) emphasize that the difference in police expenditures between a central city and a suburb is “more a reflection of the differing socioeconomic characteristics of these two inter-dependent metropolitan subsystems than a result of their relative sizes,” and there is even some evidence to suggest that “if all things were equal” in cities and suburbs of differing sizes, the larger jurisdictions would produce more economical and more satisfying police services” (45).

In essence, each consolidation is different and small police agencies do not “ensure inefficiency and waste any more than centralized (large) government ensures proficiency and parsimony” as noted in the seminal article by La Grange (1987, 12), which appears relevant even today.

Police agencies in the future will differ in structure and process from that which exists today. According to Hughes (1994), there will be more police agency consolidations and “more services will be contracted out” (118). To ensure that police agencies are able to adapt to the changing environment, police managers need to adopt flexible structures and processes and establish service delivery approaches that maintain public confidence.

Appendix D. The nine police New Public Management features

1. Decentralization of managerial control
2. Controls focused on outputs and outcomes rather than on inputs and procedures
3. Development of a strategic plan that is linked to the annual corporate planning process
4. Defining and setting of organizational and individual aims and objectives on an annual basis
5. Development of personal and organizational performance indicators
6. Development and implementation of a comprehensive corporate planning framework
7. Development and implementation of a personal or individual staff appraisal process
8. Linking of organizational strategy and delivery objectives to positions
9. Development and implementation of management reviews and performance evaluation frameworks

Adapted from Boston (1991); Butterfield, Edwards, and Woodall (2004)

Appendix E. The advantages and disadvantages of local police agency amalgamations, regionalization, or mergers

Advantages

- Improved safety of the public and officers
- Standardization of equipment and supplies
- Standardization of the communications and information system
- Centralization of the dispatch systems
- Improved crime analysis, solution, and prevention
- Rationalization of office space requirements and capital expenditures
- Ability to do more strategic regional planning and to keep abreast of innovations and technology
- Better ability to achieve employment equity goals and to provide bilingual services
- Ability to offer high and uniform standard of training
- Establishment of a single court liaison section at the courthouse
- Reduction in a number of police services boards
- Clarification of accountability and liability
- Increased capability to create specialist squads, e.g., drugs, gangs

Disadvantages

- Cost to undertake amalgamation
- Often a period of management restructuring
- Management of personnel issues
- Alleged loss of local identity
- Alleged difference in policing styles or organizational cultures
- Need to establish an appropriate accountability and reporting structure to city or county

Appendix F. Advantages, disadvantages, and reasons for not implementing regional police services

Advantages of regional police services

- Improvement in the uniformity and consistency of enforcement
- Improvement in the coordination of law enforcement services
- Improvement in the recruitment, distribution, and deployment of police personnel
- Improvement in training and personnel efficiency
- Improved management and supervision
- Reduced costs
- Improved career enhancement opportunities
- Should provide better and improved quality of services
- Elimination of jurisdictional issues

Disadvantages of regional police services

- Loss of local services
- Loss of local control
- Loss of citizen contact
- Initial establishment costs
- Increased costs for less service

Reasons for not implementing regional police services

- Small police agencies are often content with their operation, the services provided, and the quality of their personnel.
- Citizens view regionalization as increasing their taxes.
- Regionalization has commenced in some areas with merging of jails, communications, etc.
- Increased technology is viewed as being too expensive.
- Population demographics are in a state of rapid change.

Adapted from Kirschner (2012), Pennsylvania Governor's Center for Local Government Services (2012 9–11), and Tulley (2012, 1–5).

Appendix G. Comparison of Bayley's (2001; 2006) Democratic Policing and Gillespie's (2006) NPM principles

Democratic principle	NPM component
Police must give top operational priority to servicing the needs of individuals and private groups.	Increased emphasis on achieving results rather than administering processes
Police must be accountable to the law rather than to the government.	The identification of core competencies The externalization of non-essential responsibilities
Police must protect human rights, especially those that are required for the sort of unfettered political activity that is the hallmark of democracy.	The encouragement of inter-agency co-operation The re-designation of clients as "customers"
Police should be transparent in their activities.	Setting of explicit targets and performance indicators to enable the auditing of efficiency and effectiveness

Source: den Heyer (2011)

Appendix H. Possible realizable benefits of mergers, shared services, contracting, outsourcing, civilianization, internal consolidation, and regionalization

Forms of consolidation	Principle forms of realizable benefits
Shared services	Decrease in support staff and systems
Contracting services	Rationalization of building and equipment
Outsourcing	Rationalization of information and technology support systems Decrease in administration Decrease in payroll and benefits costs Decrease in human resources activities, e.g., recruitment and appointments Reduced capital outlay
Local merger	Decrease in support staff and systems
Regionalization	Rationalization of building and equipment
Civilianization	Increase in purchasing power
Internal consolidation	Decrease in senior management and executive officers Reduction in duplication of work processes Rationalization of information and technology support systems Decrease in administration Decrease in payroll and benefits costs Reduced capital outlay Decrease in human resources activities, e.g., recruitment and appointments Centralization of training structures

Source: den Heyer (2013)

Appendix I. The impact of internal organizational consolidation

Element	Before	After
Structure	Functional silos	Service delivery oriented
External relationships	Independent; many territorial agencies	Interdependent
Organizational integration	Vertical	Virtual—Information technology and other mechanisms permit integration without ownership
Flow of information	Little or no information management	Information real time—forms basis of strategic and operational decisions
Processes	In-house	In-house for key processes, others outsourced for flexibility, integrated and synchronized to match organizational demand
Management	Reactive, defined by unit specialization, no or little forecasting	Proactive, flexible
Resources	High, bureaucratic	Targeted use
Deployment	Inflexible	Flexible, capacity to target
Operations	Separate agencies	Single agency with resourcing

Source: den Heyer (2013)

Appendix J. Organizational structures and approaches used by agencies to reduce operating costs

Cost-reducing initiative (presented in table 58 on page 71)	Organizational structure approach adopted by agencies
Restructure of organization, including restructure of management	<ul style="list-style-type: none"> Reduced number of divisions and local policing areas Added a supervision layer Increased span of control Merged specialist groups/units Removed management positions Restructure of management
Collaboration with other police agencies	<ul style="list-style-type: none"> Collaboration Sharing of services Outsourcing
Change to or re-enforce community or neighborhood policing service delivery	<ul style="list-style-type: none"> Continuous improvement of services and processes Systems thinking Risk-based approach to service delivery Re-engineering business practices Cultural change program Review of operating model Lean Six Sigma Changed burglary alarm response priority Extensive organizational wide reform program

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Dissemination

Publications—papers submitted

den Heyer, Garth. Forthcoming (accepted December 2015). "Police Cost Reduction Strategies: An International Survey." *Journal of Policing, Intelligence, and Counter Terrorism*.

Presentations

den Heyer, Garth. 2014. "An International Examination of Police Cost Reduction Strategies." Presented at the 7th International Conference on Evidenced-Based Policing at Cambridge, United Kingdom, July 7–9.

About the Police Foundation

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

About the COPS Office

The **Office of Community Oriented Policing Services (COPS Office)** is the component of the US Department of Justice responsible for advancing the practice of community policing by the nation's state, local, territorial, and tribal law enforcement agencies through information and grant resources.

Community policing begins with a commitment to building trust and mutual respect between police and communities. It supports public safety by encouraging all stakeholders to work together to address our nation's crime challenges. When police and communities collaborate, they more effectively address underlying issues, change negative behavioral patterns, and allocate resources.

Rather than simply responding to crime, community policing focuses on preventing it through strategic problem-solving approaches based on collaboration. The COPS Office awards grants to hire community policing officers and support the development and testing of innovative policing strategies. COPS Office funding also provides training and technical assistance to community members and local government leaders, as well as all levels of law enforcement.

Since 1994, the COPS Office has invested more than \$14 billion to add community policing officers to the nation's streets, enhance crime fighting technology, support crime prevention initiatives, and provide training and technical assistance to help advance community policing. Other achievements include the following:

- To date, the COPS Office has funded the hiring of approximately 129,000 additional officers by more than 13,000 of the nation's 18,000 law enforcement agencies in both small and large jurisdictions.
- Nearly 700,000 law enforcement personnel, community members, and government leaders have been trained through COPS Office-funded training organizations.
- To date, the COPS Office has distributed more than eight million topic-specific publications, training curricula, white papers, and resource CDs and flash drives.
- The COPS Office also sponsors conferences, roundtables, and other forums focused on issues critical to law enforcement.

COPS Office information resources, covering a wide range of community policing topics such as school and campus safety, violent crime, and officer safety and wellness, can be downloaded via the COPS Office's home page, www.cops.usdoj.gov. This website is also the grant application portal, providing access to online application forms.

Many public sector agencies including the police were faced with the need to reduce costs as a result of the global financial crisis of 2007–2008. In an effort to obtain information about potential cost reducing strategies for U.S. agencies, researchers surveyed 51 international agencies on their various strategies employed to reduce costs or increase efficiency to maintain their level of service delivery and community policing. Numerous strategies had been adopted by the agencies, and those identified as most promising include (1) collaboration with other police agencies, (2) sharing of services with other police agencies, (3) reduction in the layers of management, (4) merging of specialty units, and (5) reduction in divisions or policing areas.



COPS

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U.S. Department of Justice

U.S. Department of Justice
Office of Community Oriented Policing Services
145 N Street NE
Washington, DC 20530

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1201 Connecticut Avenue NW #200
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