RESEARCH SUMMARY

Exploring How to Calculate Police Expenditures by Offence



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Around half of police expenditures are devoted to responding to crime. Rates vary depending on how reactive and proactive policing are defined.

BACKGROUND

Determining costs-of-service trends is a critical concern for law enforcement agencies. It continues to be a constant challenge in Canadian society to balance the rising cost of police services while law enforcement agencies struggle with budget cuts. Main reasons for the mounting costs of policing include increased training requirements, expanded duties that create more overtime and higher occupational costs, and the absence of an agreed upon metric to ascertain costs of policing. A more efficient method of estimating costing is needed.

Although data on costs of crime and criminal justice system are available in Canada, they are aggregated primarily at the macro-level, which cannot be categorized into activityor crime-specific information. For instance, for policing, the only official national cost information is the total annual policing expenditures in Canada collected through the Police Administration Survey conducted annually by the Canadian Centre for Justice Statistics at Statistics Canada. Micro-level information is required to undertake efficiency, planning and cost-benefit studies of various approaches to criminal justice and policing interventions.

It is therefore apparent that data limitations are a major obstacle for the credibility of cost of crime estimates and a barrier to further studying the expenditure of police resources on various types of criminal justice interventions. In April 2013, Justice Canada and Public Safety made a cooperative presentation at the Police Information and Statistics Committee (POLIS), which covers multiple topics — policing spending, cost drivers, performance measures, and possible research ideas. At that meeting, the current project was endorsed by the members of the committee. Improving the quality of per-incident cost estimate is not only important in understating the costs of individual

crimes, but also essential in policing performance management aiming to better control service delivery costs and to generate improved outcomes.

METHOD

The basic tangible costs (i.e., police officer and civilian hours and salaries) per offence type from two POLIS member police services (Waterloo and Ontario) were reported separately. The Waterloo Regional Police Service (WRPS) included calls for service data for 2012 and 2013. The Ontario Provincial Police (OPP) data included investigative, administrative, traffic and operational costs for 2009 to 2013. In addition, a mean cost for the police services was calculated and reported.

When possible, the mean cost for overall offence types (i.e., violent crimes, property crimes, etc.) was calculated for comparison purposes. The police costs per crime incident that was calculated included all police activities when possible, including police activities that were not related to combating, responding to, or investigating criminal activities (e.g., responding to phone calls, patrolling, traffic regulations, etc.). By obtaining tangible costs in this manner, the current study provided improved estimated proportions of the cost of crime versus non-crime expenditures.

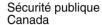
Additional analyses were run to determine how changing the metric, in this case definitions of personal and property crime using the Unified Crime Codes (UCR) and General Social Survey victimization categories (GSS), impacted cost estimates.

FINDINGS

The range of mean cost for calls for service in Waterloo in 2012 and 2013 show that while range of cost of crime can differ from year to year; the average cost of crime tends to be the same. For example, the









mean cost of property crime remained the lowest across both years.

Analysis of WRPS data reveal the proportion for cost of crime is 52.49% and 54.5% of total cost for reactionary and preventative policing in 2012 and 2013 respectively. Primary costs for calls for service in Waterloo are attributable to preventative police activities such as STEP programs and vehicle stops.

The OPP data was aggregated prior to analysis, therefore frequencies per offence could not be calculated yet cost of crime compared to non-crime police activities could be estimated. Results show little variation in crime expenditures until 2013. The OPP crime related costs are higher than non-criminal activity expenditures, showing an average cost of crime per year of 75.95% for 2009 to 2012. Factoring in patrol costs in 2013 reduced the average cost of crime related expenditures to 45%.

Comparisons of UCR and GSS victimization categories for personal and property crimes showed considerably different costing outcomes across both WRPS and OPP data per year. These findings demonstrate that the metric chosen to define an offence type can alter the estimate significantly.

IMPLICATIONS

A more micro-level analysis by cost of offence type offers a more informative estimate of policing expenditures. Cost of crime is not as large of a proportion as first thought based on previous research. Meanwhile proactive/preventative policing is a large expenditure in police costs. This can be seen most directly in the OPP analysis that shows how patrol time (a preventative policing activity) shifts the proportion of crime compared to non-crime costs significantly.

Although the difference in costs can be significant, such as when patrol time is added, it cannot be calculated if this difference is *statistically* significant. To create a better estimate that can be more statistically informative, sample sizes could be used. For example, if the number of officers per incident were included, it could be used to determine if the differences in costs per offence type or activity, such as reactive, preventative, and investigative, is statistically significant.

More granular estimates for policing costs expenditures would be beneficial to create more informative assessments. Furthermore, comparing non-crime activities to different crime activities, such as reactive to preventative to investigative policing, could provide more informative results.

SOURCE

Ellingwood, H. (2015). A Better Estimation of Police Costs by Offence Types. Ottawa: Public Safety Canada.

For more information on research at the Community Safety and Countering Crime Branch, Public Safety Canada, to get a copy of the full research report, or to be placed on our distribution list, please contact:

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