POLICING THE BEAT: THE EXPERIENCE IN TOOWOOMBA, QUEENSLAND

by

Christine E. W. Bond Research and Co-ordination Division, Criminal Justice Commission

and

David John Gow Department of Government, University of Queensland

Abstract: Modern beat policing, or foot patrol, programs have expanded the role of the beat officer beyond the traditional surveil-lance function of "walking the beat." Today, beat officers are also expected to liaise with the community and solve community problems. Thus, the beat officer's role has become a popular way of incorporating preventive and reactive functions into the day-to-day duties of a police officer. This paper reports the major findings of an evaluation of a two-year beat policing pilot project established in Toowoomba, AUS. The results showed that the Toowoomba project-increased beat residents' levels of satisfaction with policing services; had little effect on beat residents'feelings of safety; had some success in tackling chronic problem addresses in the beat areas

and helped to reduce, or at least contain, the incidence of certain types of crime. Implications of the Toowoomba evaluation for police management are discussed.

INTRODUCTION

Modern beat policing reappeared in the late 1970s with the implementation of foot patrol programs in Flint, MI and Newark, NJ (Trojanowicz and Bucqueroux, 1994). Today, however, beat officers are expected to perform more than their traditional surveillance role of walking the beat (Rosenbaum and Lurigio, 1994). The modern beat officer now has a broader range of policing tasks to perform. For instance, the original program in Newark simply relied on foot patrols in clearly defined geographical areas (Police Foundation, 1981); the 1983-84 Newark-Houston project included other strategies in addition to foot patrols (Pate et al., 1986). In fact, development of the beat officer function has become a relatively popular way of incorporating preventive and reactive aspects of policing into the role of a single officer.

Current expectations of the beat officer's functions include responding to citizens' calls for service, identifying and resolving community problems, attending community meetings, liaising with relevant government agencies to address community needs, and, on some occasions, investigating minor criminal incidents (see for instance, Hornick et al., n.d., on the beat policing program in Edmonton CA). Perhaps the most innovative aspect of this reengineering of the beat officer's role is the inclusion of problem solving as an integral part of the officer's duties. Problem solving requires officers to "go beyond individual crimes and calls for service, and take on the underlying problems that created them" (Eck and Spelman, 1987:xv; Goldstein, 1990).

There are several features of beat policing that make the incorporation of problem solving into the duties of beat officers attractive. In particular, these officers are less isolated from their communities and are in a better position than other police officers to acquire and utilize local knowledge in identifying problems, and in formulating and implementing problem-solving strategies.

Evaluations of beat policing programs have reached varied conclusions. Undoubtedly, this is a reflection of the differences in policing strategies incorporated into the programs. Generally, most such evaluations have found that the programs enhanced residents' perceptions of safety, improved police/community rela-

tions and increased officer job satisfaction (Trojanowicz and Bucqueroux, 1994; Hornick et al., n.d.). Notwithstanding these benefits, systematic evidence about crime reduction effects continues to be mixed (Rosenbaum and Lurigio, 1994; Trojanowicz and Bucqueroux, 1994; Esbensen, 1987).

This paper reports the main results of a systematic evaluation of an innovative beat policing program established in Toowoomba, AUS. This project had several distinctive features including the provision of residences for the police officers and their families in the beat area, and the promotion of problem solving as an integral part of beat policing. The implications of this research for the implementation of future beat policing programs specifically, and for police management generally, are also discussed.

TOOWOOMBA BEAT POLICING PILOT PROJECT

In May 1993, the Queensland Criminal Justice Commission (CJC) and the Queensland Police Service (QPS) established a beat-style project in Toowoomba. A provincial city with a population of about 84,000, Toowoomba is located approximately 65 miles (100 kilometres) west of Queensland's state capital, Brisbane. Toowoomba was chosen as the site of the project because it is typical of numerous provincial towns throughout the state of Queensland and is readily accessible by administrative and evaluation staff located in Brisbane.

The purpose of the project was to demonstrate how non-conventional policing strategies could become part of the duties of operational police officers. The two-year pilot project was designed around two adjacent beats located in suburban Toowoomba. Each beat area covered approximately 5,000 residents who lived in a predominantly residential setting characterised by single-family dwellings. The beat areas measured approximately 1 mile by 1 mile (1.5 by 1.5 kilometres).

Two senior constables, each of whom had over eight years policing experience, were assigned to one of the two beats. Each officer and his family was provided with a residence, which was located within the officer's beat area and which had an attached office that functioned as a "mini" police station. The residential component was designed to: enhance the beat officer's sense of "ownership" of his beat area and the problems that arose therein; increase the visibility, availability, and accessibility of the beat

officers; and encourage the integration of the officers into their respective neighbourhoods.

The beat officers' duties were to: answer calls for service in their beats whenever possible; focus on solving problems in their beats; provide feedback to residents by following up citizens' calls for service; patrol their beats predominantly on foot; and, when practical, investigate minor criminal incidents. To enhance flexibility and responsiveness to the changing needs of the community, the officers set their own work rosters, including the days and hours they worked, although they tended to work primarily during the day. When the officers were not on duty, calls for service from within the beat area were generally to attended to by general- duties officers from the local Toowoomba police station unless the caller indicated that he or she was willing to wait until the next day to see the beat officer.

Four relief beat officers were also chosen from the general-duties staff at the Toowoomba station. Use of relief beat officers was designed to ensure that the beats would continue to be "policed" in the same way whenever the beat officers were away. The relief beat officers also played an important role by informally sharing information and experiences about beat policing and problem solving with other general-duties officers at the local station.

KEY EVALUATION QUESTIONS

The Toowoomba project was designed as a demonstration project that served several distinct roles. These roles ranged from highlighting how beat policing could be implemented to illustrating how calls for service could be used to inform problem-oriented policing. A fuller discussion of the issues addressed in the evaluation can be found in the main evaluation report (CJC, 1995). Here we focus on four key evaluation questions:

(1) Did the beat project increase service users' satisfaction with the quality of the police response?

A major objective of the project was to improve residents' levels of satisfaction with and confidence in the beat-area police. Police services are often judged in terms of response time, yet the time taken to respond to citizens' calls for service means that the quality of that response is frequently overlooked. A key issue for

the evaluation was the assessment of service quality by residents who had actual contact with the police ("service users").

(2) Did the beat project reduce fear of crime in the beat areas?

There was an expectation among the beat officers that the project could have a positive impact on beat residents' perceptions of safety. The evaluation examined residents' fear of crime, perceived levels of local crime, and perceived risks of victimisation; however, only the findings in relation to fear of crime are reported in this paper.

(3) Did the beat project reduce the number of calls generated by chronic problem addresses in the beat areas?

The pilot project was designed to encourage problem solving by the beat officers. Measuring the extent and success of problem-solving is not an easy task. For instance, global measures of the number of calls for service, reported crime levels, or arrest statistics can be inappropriate indicators as the rationale of problem-oriented policing is that officers identify the sources of continuing policing problems. As a result, the solutions and their measures of success should be tailored to the attributes of each individual problem. Furthermore, measures of the level and quality of problem-solving activity by the beat officers are required. The project's impact on the number of calls generated by chronic problem addresses was one of the performance indicators adopted by the evaluation in an attempt to find suitable ways of gauging the extent of problem solving.

(4) Did the beat project reduce the level of crime in the beat areas?

The Toowoomba project was not designed to reduce the level of crime in the beat areas; however, crime reduction has been used as a traditional measure of police performance and for that reason it was incorporated into the evaluation. Since the City of Toowoomba has a moderate-to-low crime rate in comparison to other major urban centres in Queensland, the scope for achieving significant reductions in crime levels is limited. Moreover, the beat areas are not isolated from the rest of Toowoomba, and consequently crime affecting beat residents could be influenced by factors outside the beat areas. Finally, the small scale of the project — only one beat officer was assigned to each beat area — re-

stricted the amount of coverage that could be provided by the beat officers.

Police reports of criminal offenses and arrest records were not used in the evaluation because of their well-known shortcomings in providing an adequate gauge of both non-crime-related and crime-related incidents and policing activities. Instead, calls-for-service data were used to capture levels of reported incidents. Such data provide a broader picture than crime statistics of events in the beat areas, as calls for service include many incidents that do not result in criminal offense reports or arrests. In addition, crime victimization surveys were used to address the problem of unreported crime.

EVALUATION DESIGN

The evaluation design called for pre-intervention observations of the two beat areas and four matched (or comparison) areas that are also located in suburban Toowoomba. The four comparison areas were carefully selected through analysis of census and calls-for-service data to broadly match the characteristics of the two beat areas in socioeconomic composition and their calls-for-service profiles. The only constraint in selecting the comparison areas was that two of the comparison areas were to be adjacent to the beats in order to assess any displacement effects from the beats to adjoining areas, and the remaining two comparison areas were in other parts of the city. This evaluation design is similar to a non-equivalent, pretest-posttest, control-group design (Campbell and Stanley, 1966).

Technically, the comparison groups were not strictly "control groups" because there was no control over, or monitoring of, the type and extent of policing activities in these areas. It was assumed that there was little change in the delivery of general-duties policing in these areas during the two-year pilot project.

Data Sources

Five major data sources were used to address the four evaluation questions posed previously: community surveys; a service user's survey; calls-for-service data; interviews with relevant police personnel; and documents such as patrol logs and beat officer weekly activity schedules. The details of each data source are provided below.

Community Surveys

Two community surveys were undertaken: the first in April 1993, immediately prior to the commencement of the project, and the second in June 1994, approximately one year later. Both surveys, which were conducted by a commercial market research company, drew on samples of 200 residents in each of the two beat areas and of 100 residents in each of the four comparison areas, yielding a total of 800 respondents. The survey instrument included such items as respondents' experiences of crime, their willingness to report offenses to the police, their perceptions of fear and risk of crime, and their satisfaction with police performance.

The samples used for the two community surveys do not constitute a panel study where interviews are conducted at different times with exactly the same respondents. For reasons of cost and a concern that responses might be contaminated by knowledge of the earlier survey, a new sample was drawn for the second (follow-up) survey using the same sampling procedure and sample size that was adopted for the first survey. As a result, changes over time can only be measured at the aggregate level.

Service Users' Survey

A survey of users of policing services provided assessments of the quality of service that service-users had received. In December 1993, 191 telephone interviews were conducted, consisting of 91 beat-area respondents whose calls had been attended to by a beat officer and 100 respondents from the comparison areas whose calls had been handled by general-duties officers. Police officers from outside the Toowoomba Police District were used as interviewers. These officers received brief training before undertaking the interviews, the conduct of which was overseen by a supervisory officer. (See CJC, 1994, for a discussion of the implications of using police officers as interviewers.)

Calls-For-Service Data

These data consisted of information on residents' requests for police assistance made via the '000' emergency phone number, or by telephoning directly to the Toowoomba Police Station. The calls-for-service data used in this evaluation covered the period May 1993 to January 1995, during which time there were more

than 30,000 calls recorded. These data were initially obtained from the original index cards (or "job cards") used by the Toowoomba Police to manually record calls, and then coded for data entry. With the Toowoomba station's adoption of a computer-based dispatching system (known as IMS) in mid-1994, the data were obtained in machine-readable form. Analysis of the calls-for-service data was complicated by data quality problems, such as missing data and misspellings of addresses. These problems are similar to those experienced by other researchers using calls-for-service data (Sherman, 1989).

Interviews

Interviews were conducted with several key stakeholders in the Toowoomba project, including senior police management, police supervisors, beat officers and general-duties officers from Toowoomba station. Interviewees were asked about the performance of the project, problems in its operation, and the way in which the beat officers worked.

FINDINGS AND DISCUSSION

Our discussion of the analysis of these various data sources is organised around the four key evaluation questions posed above.

Satisfaction with Policing Services

In the Service Users' Survey, residents who had contacted the police were asked several questions about the quality of the service they had received and their levels of satisfaction with that service. In comparison to respondents whose calls were handled by general-duties officers, respondents whose calls were attended by a beat officer were significantly more likely to have been informed about matters such as the estimated time of arrival of the police (51% compared with 32%), and to have been given feedback on the outcome of the action taken by police (43% compared with 25%).

Respondents rated beat officers more highly than generalduties officers on responsiveness to the problem (see Table 1) in three significant ways. First, respondents in the beat areas were significantly more likely than respondents in the comparison areas to report that the police responded "quickly enough." Eighty-five per cent of the beat-officer sample agreed that the police came quickly enough, a significantly higher proportion than that found in the general-duties sample (70%).

Second, beat-area respondents felt reassured that something would be done about their complaint or inquiry. In the beat sample, 75% of respondents reported feeling confident that the police would be able to do something about the incident. In contrast, 52% of the respondents in the general-duties sample reported feeling confident.

Third, respondents in the beat areas were significantly more likely to report subsequent contact with the police about the same incident. Of the beat-officer sample, 56% of the respondents indicated that they had been contacted again by the police about their initial call, whereas 38% of the general-duties sample reported subsequent police contact about the matter.

Over all, more beat-area respondents (94%) were satisfied with the service they received from the police than respondents who had been attended to by general-duties officers (83%). To some extent, these positive findings are attributable to the personal qualities of the beat officers themselves. However, several project features — such as foot patrols, more time for beat officers to interact with the community, and beat officers' local knowledge — also contributed to the increased levels of satisfaction found in the beat areas.

Fear of Crime in the Beat Areas

The second evaluation question relates to the beat project's impact on the level of fear of crime. Table 2 presents the level of fear of crime reported by respondents in the Community Surveys. Respondents in the 1993 and 1994 surveys were asked two items about personal safety: how safe they felt walking alone in their neighborhood after dark, and how safe they felt while being alone at home at night. The responses were recorded on a four-point scale ranging from 1 ("very safe") to 4 ("not at all safe"). The results in Table 2 show that respondents generally felt fairly safe at home, and midway between fairly safe and not very safe when walking in their neighbourhoods alone after dark.

Table 1: Responsiveness of Officers As Reported by Service Users

	Beat Officer Sample (%)	General Duties Sample (%)	
Response quick enough	85	70	**
Thought could do something	75	52	**
Further contact on same matter	56	38	**

Source: Service Users Survey (1993).

- (a) Respondents were asked three questions: "Did they come quickly enough"; "After talking with the police, did you think they would be able to do something about the incident?"; and "Other than your call, did you have any other contact with the police about this incident?"
- (b) A total of 91 respondents were surveyed about the beat officers and 100 were surveyed about the general duties officers. Forty-nine respondents who answered "not applicable" or "no response" were excluded in "response was quick enough." There were also five respondents in the general duties sample and one respondent in the beat officer sample who reported that the police did not arrive. "Thought could do something" figure excludes seven non-responses, and "further contact on same matter" excludes two non-responses.
- (c) ** Statistically significant at the 0.05 level.
- (d) Percentages have been rounded.

Table 2: Respondents' Reported Feelings of Fear

	Beat Area Average Score 1993 1994 (N=395) (N=400)				son Area e Score 1994 (N=400)	
Walking alone after dark	2.55	2.72	**	2.51	2.64	**
Alone at home after dark	1.72`	1.87	**	1.79	1.84	

Source: Community Surveys (1993, 1994).

- (a) Respondents were asked two questions: "Which of these categories best describes how safe you feel walking alone in this neighborhood after dark?"; and "Which of these categories best describes how safe you feel when you are alone in your home at night?"
- (b) Scale ranges were: "very safe" (1), "fairly safe" (2), "not very safe" (3), and "not at all safe" (4).
- (c) **Statistically significant at the 0.05 level using a between-groups test.

There was no appreciable difference between the respondents in either beat or comparison areas in the extent to which they felt safe at home at night (see Table 2). In the 1994 Community Survey, the mean score for beat-area respondents (1.87) was not statistically different from that reported by the comparison-area respondents. In addition, during the initial year of the project there was a statistically significant decrease in the proportion of respondents who felt safe walking alone after dark in both beat and comparison areas. The respondents' average level of fear increased from 2.55 to 2.72 in the beat areas, and from 2.51 to 2.64 in the comparison areas. Over all, the analysis indicates that the beat project has not enhanced residents' feelings of safety when walking alone at night or while being home alone at night.

The increase in the levels of fear in the beat areas is in striking contrast to the findings of previous beat policing evaluations that have found enhanced perceptions of safety (Trojanowicz and Bucqueroux, 1994). There are several possible explanations for the Toowoomba project's failure in this regard. First, the beats were located in a community that generally felt fairly safe, which may have limited the gains that could be made. On most measures, both beat- and comparison-area respondents did not report high levels of fear prior to the introduction of the project. Second, the increase in the level of fear of walking alone at night in the comparison areas indicates that there may be factors influencing fear of crime throughout the City of Toowoomba, such as media coverage of crime-related issues. Third, other activities undertaken by the beat officers, such as crime prevention and problem solving, may activate or heighten rather than allay residents' fear of crime (Rosenbaum, 1986). For instance, the activities of the beat officers included informing residents about crime in their area and improving the security of their property, which may have heightened residents' feelings of vulnerability. Finally, the strategies that were expected to have an impact on perceptions of safety largely depended on project coverage. Beat officers generally worked during the day, whereas these questions concerned behaviors occurring "at night" or "after dark" — times when the officers were generally unlikely to be engaged in policing activities or visible to residents.

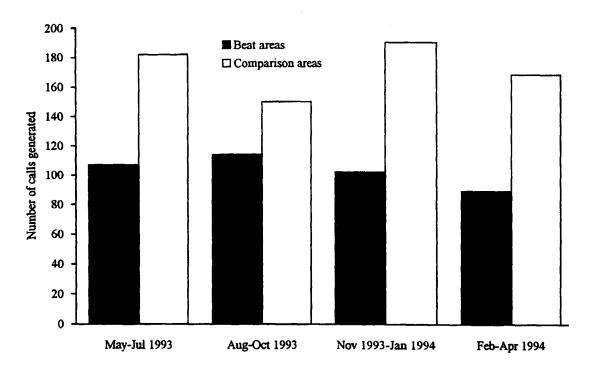
Calls from Chronic Problem Addresses in the Beat Areas

The trends in the number of calls generated by the top ten addresses in the beat and comparison areas for May 1993 to April 1994 are summarised in Figure 1. It should be noted that the top ten addresses in the comparison areas have consistently generated a greater number of calls than those in the beat areas.

Figure 1 shows a downward trend in the number of calls generated by the top ten addresses in the beat areas. In the first six months after the pilot project commenced, the number of calls for service generated by these addresses increased slightly, but then fell over the next six months to a level about 13% below that of May through July 1993. The comparison areas show a different pattern. Although there was some fluctuation in the number of calls during the 12-month period, there is no evidence of a downward trend in the number of calls generated by the top ten addresses. These results are consistent with the interpretation that the beat officers may have successfully designed and implemented problem-solving strategies directed at some of the chronic problem addresses.

These results provide evidence that the Toowoomba project has had an impact on chronic repeat addresses. However, even during the 12 months examined in the evaluation, the ability of the beat officers to identify and deal with problem addresses has been constrained by inadequate information systems. Initially, police recorded details about calls for service on job cards, which were then entered into a data base for analysis purposes. The analysis was conducted by the CJC and the results sent back to Toowoomba. The time entailed in undertaking these activities made it difficult to provide timely information to the officers. The introduction of the IMS computerised dispatching system did not overcome these problems. Unfortunately, IMS is not designed to easily retrieve the type of information required to track "problem" addresses." Consequently, it has not been used by officers in Toowoomba for the purpose of identifying addresses that may be suitable locations for problem-solving strategies.

Figure 1: Number of Calls Generated by the Top 10 Addresses (Beat and Comparison Areas, May 1993-April 1994)



Source: Calls for Service data.

Notes:

Figure shows only those calls that could be matched to streets within the beat areas. Some addresses could not be included due to insufficient information.

Because of the problems in providing beat officers with timely and easily interpretable data, repeat calls for service were not in practice the primary means by which the beat officers identified problems in their areas. Interviews showed that many problems were identified on the basis of previous experience, and of residents' concerns brought to the attention of the beat officer. In fact, interview data provided much better information about the extent and nature of the problem-solving activities undertaken by the beat officers.

Impact on Crime Levels

The final evaluation question relates to the impact of the beat policing program on the level of crime. In the 1993 and 1994 Community Surveys, residents in the beat and comparison areas were asked whether they had been victims of particular offenses in Toowoomba during the last 12 months (see Table 3).

Table 3: Proportion of Respondents Reporting Property and Personal Victimization in Previous 12 Months

	Beat Areas		Comparison Areas		
	1993 (n=393)	1994 (n=400)	1993 (n=405)	1994 (n=400)	
% of respondents victims of personal crime	5	4	5	4	
% of respondents victims of property crimes	31	34	27	34	**

Source: Community surveys (1993, 1994).

Notes:

- (a) Victims of personal crimes refer to respondents who reported being a victim at least once of the following personal crimes: weapon deliberately used on the respondent; attacked or assaulted, sexually or otherwise; item stolen from the person. Victims of property crime refer to respondents who reported being a victim at least once of the following property crimes: house broken into; item stolen from outside home, house/garden vandalised; motor vehicle stolen; motor vehicle vandalised.
- (b) ** Statistically significant at the 0.05 level using a between-groups test.
- (c) Percentages have been rounded.

Table 3 shows that there was no statistically significant change in the levels of property crime in the beat areas (31% of beat respondents reported being victimised in 1993, compared with 34% in 1994). By contrast, there was a statistically significant increase in the comparison areas (from 27 to 34%). These data suggest that although the pilot project did not actually reduce the incidence of property crime, it may have helped to insulate the beat areas from rises in property crime that occurred elsewhere in Toowoomba.

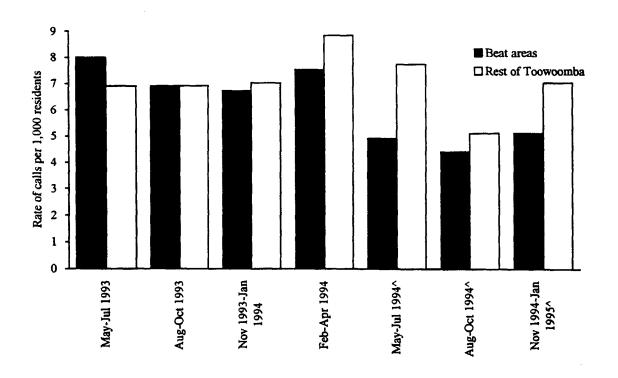
There was no statistically significant change from 1993 to 1994 in the beat or comparison areas in the proportion of respondents who reported being victims of personal crime (see Table 3). The proportion of residents in either area who were victims of any kind of personal crime, even of a minor nature, was very low. Moreover, unlike much property crime, the incidents may have occurred outside the beat areas (for example, at a nightspot), or have been committed "privately" behind closed doors (such as in the case of a domestic assault). These factors together would make it very difficult for the beat officers to have an impact on crimes of a personal nature.

The calls-for-service data provide stronger evidence of a crime control effect in relation to property-type offenses. Figures 2 and 3 show trends in calls for service originating from the beat areas and the rest of Toowoomba for May 1993 to January 1995 for stealing and property-related offenses. To facilitate comparison, the figures show the approximate rates per 1,000 residents. It should be noted that the shift to the computerized dispatching system (IMS) resulted in a significant decline in data quality, which may account for the marked decrease in both offense categories from August to October 1994.

Although caution must be exercised in interpolating trends from the data, there appear to be some significant differences between the beat areas and the rest of Toowoomba. From May 1993 to January 1995, the number of calls per 1,000 residents in the beat areas for stealing offenses fell from eight per 1,000 in a three-month period to five per 1,000 (see Figure 2). Calls relating to property offenses in the beat areas declined from just under 18 to less than 14 per 1,000 residents (see Figure 3). By contrast, the number of calls relating to stealing offenses per 1,000 residents remained stable in the rest of Toowoomba, while calls regarding property offences rose from 16 to 20 per 1,000 residents in the rest of Toowoomba.

The reductions found by the calls-for-service analysis are particularly significant given that the 1994 Community Survey found that respondents in the beat areas were more likely than those in the comparison areas to report property offenses to the police (54% as opposed to 40%).

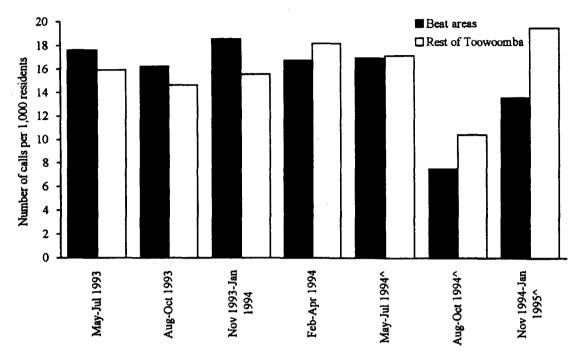
Figure 2: Reported Stealing Offenses, Rate per 1,000 Residents (Beat Areas and Rest of Toowoomba, May 1993-January 1995)



Source: Calls for Service data, 1991 census data. Notes:

- (a) Due to data quality, it was not possible to identify all calls originating in the beat and adjacent comparison areas. Only addresses that could be matched to Toowoomba were included in the figures. Missing data was a problem, particularly after the introduction of the IMS system in mid-1994.
- (b) The symbol (^) indicates where data was collected under the IMS system.
- (c) The estimated population figures used were 9,300 for the beat areas and 66,400 for the rest of Toowoomba.
- (d) Stealing offenses include stealing, shoplifting and unlawful use of a motor vehicle. Incidents of theft with violence have been excluded. The classification of types of calls was made by police at the time of the call, based on information provided by the caller.

Figure 3: Reported Property-Related Offenses, Rates per 1,000 Residents (Beat Areas and Rest of Toowoomba, May 1993 - January 1995)



Source: Calls for Service data; 1991 census data.

- (a) Due to data quality, it was not possible to identify all calls originating in the beat and adjacent comparison areas. Only addresses that could be matched to Toowoomba were included in the figures. Missing data was a problem, particularly after the introduction of the IMS system in mid-1994.
- (b) The symbol (^) indicates where data was collected under the IMS system.
- (c) The estimated population figures used were 9,300 for the beat areas and 66,400 for the rest of Toowoomba.
- (d) Property-related offenses include break and enter, break and enter in progress, willful destruction, and alarm and prowler related calls. The classification of types of calls was made by police at the time of the call, based on information provided by the caller.

One possible effect of reducing particular crimes in the beat areas may have been to shift some, or even all, of that activity to adjacent areas. Preliminary analysis indicates that there was not a significant displacement effect, at least in terms of property-related offenses. The number of calls relating to property offenses dropped by over 20% in the beat areas between May

through July 1993 and November 1994 through January 1995. Although not as large, there was also a decrease (8%) in the number of property-offense calls in the immediately adjacent comparison areas in the same period (not shown in Figure 3).

It cannot be said with confidence that these divergent trends are attributable to the pilot project: particularly at the local level, crime rates can fluctuate quite substantially from one year to the next for reasons that may be unrelated to the style of policing employed. However, these results are certainly in the expected direction and are broadly consistent with the findings of the Community Surveys. The findings indicate that carefully designed beat policing projects may offer an effective strategy for controlling certain types of crime.

The features that may have enabled the project to have some impact on crime levels include greater police visibility and targeted patrolling as a result of the beat police acquiring local knowledge, increased community awareness of security and safety issues, improved flow of information from residents to local police about suspicious incidents in the area, and the use of problemsolving approaches to some crime problems such as vandalism in the local schools.

IMPLICATIONS FOR POLICE MANAGEMENT

Over all, the evaluation found that the Toowoomba project was a substantial success. These findings illustrate that small, well-planned and supported policing projects can have a significant impact on the problems they are designed to address. The success of the Toowoomba project supports the view that small, incremental changes may be more effective in producing lasting reforms in police services than large-scale, "all-at-once" reforms. Many large organisation-wide projects fail to be implemented fully or evaluated carefully. The benefits of small projects for generating change are numerous. For instance, the number of personnel involved and the scope of the project mean that it is more easily monitored and kept on track. However, perhaps more importantly, the achievements of such projects can be used to sell the expansion of the project's strategies to other sites.

The Toowoomba evaluation also has some implications for the design and implementation of future beat policing projects. First, the evaluation found that the Toowoomba project helped to reduce, or at least contain, the incidence of certain types of crime.

Although a crime control effect was found, it is important to remember that this result was for a particular category of offense, property-related crime. This means that the designers of future beat policing initiatives should carefully consider the types of crimes on which they can realistically expect to have an impact, given the problems of the selected area. For instance, beat policing appears better suited to reducing property and street disorder offenses than personal crimes that occur in non-public settings. The development of more specific crime-related goals will result in the implementation of more focused and targeted policing strategies, which are more likely to have a measurable impact. A broad-based crime reduction goal provides insufficient guidance for determining the priorities and activities to be undertaken in the program.

Second, further research is needed to determine the best locations for beat policing. Obviously, beat policing is not the optimal strategy for all locations; for instance, placing beats in areas of low demand for police services is unlikely to be cost-effective.

Finally, the project highlights the importance of incident-based, rather than crime-based, information systems that can provide beat officers with accurate, timely and useable information about the demand for policing services in their beats, particularly problem addresses and "hot spots." Of the various sources of information available to beat officers, possibly one of the most important is calls-for-service data. Such data provide a more comprehensive picture of the demand for policing services in an area than do other measures such as recorded crime or arrests.

The usefulness of calls-for-service data is not limited to beat-policing projects. As calls from the public drive, to a large extent, the workload of operational police (Sherman, 1989), information about those calls is a vital tool for operational and corporate management of police services. Unfortunately, police organisations do not make full use of calls for service; this situation is probably a result of inadequate information systems. One byproduct of the Toowoomba project is that the QPS has recently commenced redesigning the IMS system to improve access to timely, accurate and useable information. By using calls-for-service data, police officers can start to plan activities that will reflect more accurately the demands that the public makes on them (CJC, 1996).

NOTES

1. The full results of the evaluation are reported in *Toowoomba Beat Policing Pilot Project: Main Evaluation Report*, copies of which can be obtained from the Research and Co-ordination Division, Criminal Justice Commission, PO Box 137 Brisbane, Albert Street, QLD 4002 Australia.



Acknowledgments: The research reported in this paper was undertaken as part of an evaluation conducted by the Research and Co-ordination Division of the Queensland CJC. We would like to thank Dr. David Brereton, Director of the Division, for his feedback and assistance. However, the views expressed in this paper are those of the authors and do not necessarily represent the position of the CJC on these issues. We would also like to acknowledge the support provided to the Toowoomba project by the Assistant Commissioner of Southern Region, QPS, Ron McGibbon, and his staff, as well as the valuable work of the two beat officers, Senior Constables Henry Kockelak and Russell McKee.

REFERENCES

- Campbell, D.T. and J.C. Stanley (1966). Experimental and Quasi-Experimental Designs for Research. Chicago, IL: Rand McNally.
- Criminal Justice Commission (1995). *Toowoomba Beat Policing Pilot Project: Main Evaluation Report*. Brisbane, AUS: author.
- ——(1996). *Utilising Calls for Service Data*. Brisbane, AUS: author.
- Eck, J. E. and W. Spelman (1987). *Problem-Solving: Problem-Oriented Policing in Newport News*. Washington, DC: Police Executive Research Forum.
- Esbensen, F. (1987). "Foot Patrols: Of What Value?" *American Journal of Police* 6:45-65.
- Goldstein, H. (1990). *Problem-Oriented Policing*. New York, NY: McGraw-Hill
- Hornick, J. P., B. A. Burrows, I. Tjosvold and D. M. Phillips (n.d.). *An Evaluation of the Neighbourhood Foot Patrol Program of Edmonton Police Service*. Canadian Research Institute of Law and the Family.

- Pate, A.M., M.A. Wycoff, W.G. Skogan and L.W. Sherman (1986). *Reducing Fear of Crime in Houston and Newark: A Summary Report*. Washington, DC: Police Foundation.
- Police Foundation (1981). *The Newark Foot Patrol Experiment*. Washington, DC: Police Foundation.
- Rosenbaum, D.P. (1986). "The Theory and Research Behind Neighbourhood Watch: Is it a Sound Fear and Crime Reduction Strategy?" *Crime 8s Delinquency* 33:103-134.
- ——and J. Lurigio (1994). "An Inside Look at Community Policing Reform: Definitions, Organizational Changes, and Evaluation Findings." *Crime & Delinquency* 40:299-314.
- Sherman, L.W. (1989). "Repeat Calls for Service: Policing the 'Hot Spots'." In: D. J. Kenney (ed.), *Police and Policing: Contemporary Issues*. New York, NY: Praeger.
- Trojanowicz, R. and B. Bucqueroux (1994J. *Community Policing: How to Get Started*. Cincinnati, OH: Anderson.