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PARLIAMENT OF TASMANIA

AUDITOR-GENERAL SPECIAL REPORT No. 50

POLICE RESPONSE TIMES

December 2003

Presented to both Houses of Parliament in accordance with the provisions of Section 57 of the Financial Management and Audit Act 1990

By Authority:

Government Printer, Tasmania

8 December 2003

President
Legislative Council
HOBART

Speaker
House of Assembly
HOBART

Dear Mr President
Dear Mr Speaker

PERFORMANCE AUDIT NO. 50
POLICE RESPONSE TIMES

This report has been prepared consequent to examinations conducted under section 44 of the Financial Management and Audit Act 1990, for submission to Parliament under the provisions of section 57 of the Act.

Performance audits seek to provide Parliament with assessments of the effectiveness and efficiency of public sector programs and activities, thereby identifying opportunities for improved performance.

The information provided through this approach will, I am sure, assist Parliament in better evaluating agency performance and enhance Parliamentary decision making to the benefit of all Tasmanians.

Yours sincerely

D W R Baulch
ACTING AUDITOR-GENERAL

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EXECUTIVE SUMMARY

INTRODUCTION

Annually, police respond to more than 160 000 calls for assistance across the state. Although incidents requiring an urgent response only occur in about 12% of cases, Tasmania Police must organise its resources to be ready when an urgent call is received - irrespective of time of day or location.

As a consequence, ensuring efficiency and effectiveness in responding to calls for police assistance can be expected to have a major impact on the Police Service as a whole.

The Command and Control System (CACS) is a database used to log incidents reported, allocate resources and ensure that incidents are expeditiously managed to finality. Operators at the police Radio Dispatch Service (RDS) have a critical role in processing incoming calls in CACS and ensuring that an appropriate response is assigned to incidents.

Because of the extensive level of data that it contains, we used CACS as a tool from which to derive performance data on response times.

OBJECTIVE

The audit's objective was to assess the effectiveness and efficiency of the management of police response times.

SCOPE

The audit was concerned with the handling of urgent incidents advised to Tasmania Police.

The audit did not consider the appropriateness of the response, the ongoing management of the incident or its ultimate resolution.

AUDIT OPINION

Adequacy of guidelines

Adequacy of existing guidelines could be enhanced by:

- o Specification of urgency gradings; and

- o Reinforcement of a requirement for sufficient comments to be recorded in the Command and Control System (CACS).

Effectiveness of CACS

While CACS was effective for the purposes of dispatch the reporting capability with regard to response was limited due to:

- o A lack of reliable recorded urgency gradings;

- o A lack of reporting features; and

  o A tendency for police units not to notify radio dispatch operators (RDS) operators upon arrival at the scene.

Performance measurement

Although informal measures can be made, Tasmania Police does not have a framework in place to formally evaluate response times.

Actual performance

We were not able to form a definitive opinion as to Tasmania Police's responsiveness to calls for assistance because benchmarks had not been set. However, we concluded that response times were 'reasonable' with a fair degree of confidence.

Available data also indicated that, for the most part, police response was unaffected by geographical location, time of day or day of the week.

MANAGEMENT RESPONSE

I am pleased that the Report has concluded with a 'fair degree of confidence' that response times by Tasmania Police to the public were 'reasonable'. This provides reassurance to the people of Tasmania that Tasmania Police aims to provide a timely and appropriate response to their requests for assistance. Whilst it is imperative for police to attend urgent incidents with the minimum of delay, the safety of both police and the public is paramount.

The recommendations that have been made will be considered for implementation and the Report will provide a useful reference point in the process of review and development. All incidents are prioritised when received at Radio Dispatch Services and urgency is reflected in the tasking of police responses. Unlike other policing jurisdictions, our radio operators both take the initial call and transmit by radio to police. Other jurisdictions have separate call takers and call dispatchers. With respect to recommendation 6, Tasmania Police has considered developing a performance framework around response times; but our Corporate Management Group reporting process and surveys to the public have been our priority. A quality assurance program focusing on the Command and Control System (CACS) has commenced within the Radio Dispatch Services and ongoing training is a high priority.

As a Department, accountability is at the forefront of all our activities and I welcome the opportunity for external as well as internal scrutiny. I would also like to thank the staff of the Tasmanian Audit Office concerned for the way in which they undertook the audit.

R McCreadie

Secretary

Department of Police and Public Safety

SUMMARY OF RECOMMENDATIONS

The following table reproduces the recommendations contained in the body of this report.

AUDIT CRITERION	RECOMMENDATION
Adequacy of guidelines	1. The Tasmania Police requirement for sufficient comments regarding an incident to be recorded in the Command and Control System (CACS) should be reinforced to Radio Dispatch Service (RDS) operators to ensure accurate communication of urgency.
Effectiveness of CACS	2. Tasmania Police should define and record urgency gradings. In doing so, consideration should be given to redefining incidents types to reflect levels of urgency.
	3. Tasmania Police should develop and refine a reporting capability within CACS to facilitate analysis of response times.
	4. Tasmania Police should encourage notification and recording of attendance at the scene of an incident to improve the integrity of response data.
Performance measurement	5. Tasmania Police should consider developing a performance framework around response times that would include goal setting, monitoring and analysis.
	6. Tasmania Police should consider appropriate dissemination of reports regarding timeliness of response to the Command level so that deployment of resources can be optimised.
	7. Tasmania Police should publish a 'Guarantee of Service' or similar clearly indicating commitments that will be met in terms of responding to incidents.
Actual performance	8. Tasmania Police should continue to monitor peaks in response times.

LIST OF ACRONYMS AND ABBREVIATIONS

'At-scene-time'	The first time at which a police unit is logged at the scene of an incident
CACS	Command and Control System
RDS	Radio Dispatch Service

Introduction

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INTRODUCTION

BACKGROUND

The long-term strategic vision, 'Tasmania *Together*', has as its second goal:

'Have a community where people feel safe and are safe in all aspects of their lives.'

Public perception of crime and its potential to impact people's quality of life are mirrored in the strategic direction taken by Tasmania Police. Current management priorities include providing assurance to the community as an implicit part of service delivery and by intervening effectively.

At the national level, the Productivity Commission has identified four service delivery areas where the performance of police forces in Australian jurisdictions can be evaluated and compared, viz:

- o Community safety and support;
- o Crime investigation;
- o Road safety and traffic management; and
- o Services to the judicial process.

To undertake these functions in 2002 – 2003, Tasmania Police employed approximately 1100 police officers and 430 administrative staff.

Responding to calls for assistance

Annually, police respond to more than 160 000 calls for assistance across the state. Although incidents requiring an urgent response only occur in about 12% of cases, Tasmania Police must organise its resources to be ready when an urgent call is received - irrespective of time of day or location.

As a consequence, ensuring efficiency and effectiveness in responding to calls for police assistance can be expected to have a major impact on the Police Service as a whole.

Command and Control System (CACS)

CACS is a database used to log incidents reported, allocate resources and ensure that incidents are expeditiously managed to finality. Operators at the Radio Dispatch Service (RDS) have a critical role in processing incoming calls in CACS and ensuring that an appropriate response is assigned to incidents.

Incidents can be automatically allocated to an appropriate and available police resource by CACS. Otherwise, the RDS

operator contacts a likely police officer in order to assign the active incident to them. Ongoing communications throughout the course of the incident allow operators to add new information to aid management and resolution of the incident.

Because of the extensive level of data that it contains, we used CACS as a tool from which to derive performance data on response times.

MANDATE

Under the provisions of section 44(b) of the *Financial Management and Audit Act 1990* the Auditor-General may:

> 'Carry out examinations of the economy, efficiency and effectiveness of Government departments, public bodies or parts of Government departments or public bodies'.

The conduct of such audits is often referred to as performance auditing.

STANDARDS APPLIED

This audit has been performed in accordance with Australian Auditing Standard AUS 806 ('*Performance Auditing*') which states that:

> 'The objective of a performance audit is to enable the auditor to express an opinion whether, in all material respects, all or part of an entity's activities have been carried out economically, and/or efficiently and/or effectively.'

The audit has included such tests and other procedures considered necessary in the circumstances.

OBJECTIVE

The audit's objective was to assess the effectiveness and efficiency of the management of police response times.

SCOPE

The audit was concerned with the handling of urgent incidents advised to Tasmania Police.

The audit did not consider the appropriateness of the response, the ongoing management of the incident or its ultimate resolution.

CRITERIA

Four audit criteria were applied:

1. Adequate guidelines have been developed and effectively implemented;

2. CACS is effective as a system of dispatch;

3. There are methods used to measure performance; and

4 How actual performance rated?

AUDIT METHODOLOGY

The audit opinion was formed as a result of:

- o Discussions with managers and line staff;

- o Examination of relevant policies, business plans and reports; and

- o Analysis of CACS data.

The latter task focused on 15-months of CACS data covering the period 1 January 2002 to 31 March 2003. Analysis involved comparing the time that calls were logged ('Receipt') and the first police attendance ('At-scene') recorded in CACS. Where there was no 'at-scene-time' data, alternative sources of information were accessed where possible.

STAKEHOLDER INPUT

In line with the Audit Office's established practice for the conduct of performance audits, an advisory committee was convened to reflect stakeholder views. The committee provided input to the audit's methodology and reviewed the draft report upon its completion.

Nevertheless, the views expressed in this report are those of the Auditor-General, and are not necessarily shared by other members of the committee.

The Auditor-General chaired the committee and its members were drawn from the following areas:

- o Department of Police and Public Safety; and

- o Tasmanian Audit Office.

TIMING

Planning for the performance audit commenced in January 2003. Field-testing commenced in August 2003 and was completed in October 2003 with the report being finalised in November 2003.

RESOURCES

The total cost of the audit excluding report production costs was approximately $57 000.

REVIEWS AND AUDITS IN OTHER JURISDICTIONS

The Office of the Auditor-General of New South Wales published a performance audit report titled *Police Response to Calls for Assistance* in March 1998. Principal findings were:

- o There had not been sufficient information to support measurement of response times or satisfaction levels and this represented a lack of accountability;

- o Existing communications arrangements and the allocation of responsibilities within the Police Service weakened managers' capacity to manage;

- o While central communications units were responsible for broadcasting calls to police cars, these units had no authority over the cars;

- o Local police management had limited knowledge of what their response resources were doing, and little useful management information regarding what had been done over prior periods;

- o Current systems of response failed to distinguish adequately between calls of various types. All tended to be allocated for response by a police car, even where the caller's needs may have been equally well met by alternatives which were less resource intensive.

1   Adequate guidelines

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FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This section of the report deals with our findings, conclusions and recommendations made in relation to the previously stated audit criteria.

1 ADEQUATE GUIDELINES

We considered whether guidelines for response existed and specified:

> o **Urgency gradings; and**
> o **Communication of urgency.**

1.1 URGENCY GRADINGS

We wanted to establish whether guidelines existed in relation to grading the urgency of incidents reported to police. The *Tasmania Police Manual* stated the following in relation to standards when dealing with customers:

> 'Respond in a timely and appropriate manner.'

We found that the majority of other jurisdictions made use of response/urgency gradings for determining the timeliness and appropriateness of response. This was not the case for Tasmania Police where urgency tended to be communicated contextually both for management and for operational purposes. We noted, however, that RDS operators used default incident priorities (that were not communicated or stored) but that were used for the dynamic assignment of tasks to units.

Nevertheless, we believe that the department should consider developing basic rankings for urgent and non-urgent categories in order to:

> o Ensure there is a common understanding of the type of response required; and
>
> o Facilitate monitoring of response times and appropriateness according to urgency.

Please refer to Recommendation 2 in section 2.1.

1.2 COMMUNICATION OF URGENCY

Guidelines did not specify explicit instructions for communicating urgency to police units. Instead, communication of general information regarding urgency did occur via:

> o Contextual details recorded as comments that were conveyed by the RDS operator (including reference to tone

of voice, background sounds and circumstantial information); and

o   Assignment of a priority and a loose timeframe for response in CACS by the operator.

RDS operators work in a group environment and any operator could assume responsibility for communicating and recording information. The *Radio Dispatch Services User Manual* required that sufficient comments be entered so that any other operator who had no knowledge of the incident could accurately transmit response details.

Despite this, we found that of all incidents included in the database no comments had been documented for 38% of records. As such, communication of urgency may have been hampered in some of these cases if an RDS operator who was handling dispatch was not fully informed due to a lack of comments.

Operators explained that callers could sometimes (either deliberately or unintentionally) inaccurately describe the seriousness of an incident. In such cases, operators determined the priority for response based on their understanding of the incoming message. Thus, determination of the appropriate timeframe for response to an incident (and hence accurate communication of urgency) hinged on the experience, interpretative skills and judgement of the RDS operator. While well-defined urgency gradings would be helpful for this purpose, more prescriptive instructions could not take the place of on-the-job experience.

Continual quality control of the operators' work is therefore the most appropriate means for ensuring appropriate judgment is applied in communicating urgency. In practice, this was partially achieved through a combination of management of responses by a number of operators and oversight by the RDS shift sergeant. Recently a quality control arrangement had been introduced that involved periodic checking of the effectiveness of operators in performing the dispatch function.

Recommendation 1

The Tasmania Police requirement for sufficient comments regarding an incident to be recorded in CACS should be reinforced to RDS operators to ensure accurate communication of urgency.

Tasmania Police response:

'A quality assurance program has been commenced with the Radio Dispatch Services to improve the quality of information received and recorded within CACS to ensure the accurate communication of urgency. In support of the recommendation, this program is ongoing and further training is planned to be delivered to radio operators when required.'

1.3   CONCLUSION

Adequacy of existing guidelines could be enhanced by:

- o   Specification of urgency gradings; and

- o   Reinforcement of a requirement for sufficient comments to be recorded in CACS.

2   Effectiveness of CACS (Command and Control System)

2 EFFECTIVENESS OF CACS (COMMAND AND CONTROL SYSTEM)

To determine the effectiveness of CACS, we examined:

- o **Recording of urgency gradings by CACS;**
- o **Effectiveness of CACS for dispatch;**
- o **Interaction with calls made to local stations;**
- o **Reporting;**
- o **Availability of field units;**
- o **Information on response; and**
- o **Taping of calls.**

2.1 RECORDING OF URGENCY GRADINGS

As previously outlined in section 1.1, CACS did not make use of urgency gradings and, as a result, the urgency of incidents was not recorded. Incident-type descriptions were found to be an inaccurate measure of urgency because of the large variation in seriousness inherent in many incident types.

A potential solution to this situation that would be minimally disruptive to the current operation of CACS – and therefore not require re-configuring the system – would be to re-define the incident types.

Based on a review of incident types recorded in other jurisdictions, Tasmania Police could undertake more explicit recording of urgency information, for instance by splitting general incident type descriptions into categories. As an example, the existing incident 'Disturbance' could be broken into two different urgency levels - 'Disturbance' and 'Disturbance Serious' or something similar.

Recommendation 2

Tasmania Police should define and record urgency gradings. In doing so, consideration should be given to redefining incidents types to reflect levels of urgency.

Tasmania Police response:

'Further research will be conducted to ensure best practice. The recommendation is supported.'

2.2   EFFECTIVENESS OF CACS FOR DISPATCH

In terms of performing the dispatch function we found that, CACS did assign a default priority once the incident code had been entered. Operators were continually monitoring assigned priorities and these could be adjusted depending on both the seriousness of the incident and the stage of the response. We therefore considered that CACS was effective for the purpose of dispatching police resources in real time.

2.3   INTERACTION WITH LOCAL STATIONS

Local (i.e. country and suburban) police stations receive calls depending on time of day and geographical location. Such calls are handled locally and do not get logged in CACS. The emergency number '000' was mainly used for incidents of a more serious nature with calls to a local station normally having a lower level of importance. In addition, calls to the local station were automatically switched through to RDS after hours or if the station was otherwise unattended. RDS operators could use the radio to communicate with officers at the station regarding arrangements for a response and other routine matters.

CACS codes indicated whether a police unit was at a station, in a vehicle, on a motorbike or on foot. The operator also had information on the task(s) being attended by the various units. This information was used to assign the most appropriate resource for attendance at an incident - sometimes the best unit for response was at a station.

From these observations of the dispatch process we considered that interaction between RDS and local stations was effective.

2.4   REPORTING

Tasmania Police did not produce reports from CACS for retrospective analysis of responses to incidents as the system was not designed for this purpose. Production of such reports is particularly helpful for analysis of incidents with a slow response where there was no response at all. While we consider that available 'priority' information associated with a response was absent (see section 2.1), we believe that the data currently collected in relation to response times enabled some exception reporting of slow responses. Moreover, with further development of reporting features, production of a range of reports for more informative monitoring of response times should be possible.

However, we found that exception reporting for the purpose of dynamically assigning tasks was effective. This was the case because failure to respond in accordance with assigned priorities was automatically flagged through a system of on-screen colour coding.

Recommendation 3
Tasmania Police should develop and refine a reporting capability within CACS to facilitate analysis of response times.

Tasmania Police response:

'There are a number of enhancements planned for CACS and the reporting capability is one that has been considered. Our information technology services will explore this recommendation and provide advice.'

2.5   INFORMATION ON RESPONSE

While information was readily available from CACS on the unit assigned, information on the time of arrival or the 'at-scene-time' represented only approximately half of all incidents recorded in CACS. This was due to either communications problems or the tendency of units not to notify once they have arrived at the scene. Collective analysis of response times was more problematic, however, due to the lack of a well-defined notion of 'response' (see section 4.1.1).

As tasks were assigned, however, the 'updated times' field provided time stamps when information exchange occurred. This time-stamped information, combined with the entered comments allowed for full incident replays to be produced if required. Analysis of other stages of the response (e.g. the time the incident was assigned to the unit or the time the unit proceeds to the incident) was therefore possible.

However, as these times did not provide for measurement of the accepted notion of response time (i.e. time from assignment of the incident to first attendance at the scene) there was a need for police officers to be encouraged to notify as soon as they had attended a scene (or its equivalent). Radio operators should also be encouraged to record notification of the arrival of a unit at the scene. This would assist in improving the integrity of data on response times as well as enhancing knowledge in the radio room of the whereabouts of police units.

> **Recommendation 4**
>
> **Tasmania Police should encourage notification and recording of attendance at the scene of an incident to improve the integrity of response data.**

Tasmania Police response:

'It is apparent that a directive from my office … together with an amendment to… the Police Manual are required. This will be highlighted with a new training regime for operational police.'

2.6   AVAILABILITY OF FIELD UNITS

RDS operators were aware of the approximate location of response units at a particular point, but this was not updated in real time. Through the task status assigned to resources and incidents, operators could gauge the availability of response units. Operators therefore had a general awareness of the workload and proximity of various units and they would assign tasks to ensure the most appropriate distribution of resources.

The extent to which operational units generated information to update CACS was variable and affected in part by limitations of the communications system. It was not always possible for units to establish a radio link with operators for the purpose of notifying an 'at-scene-time' or conveying other relevant information. This was the case because of jamming problems that were sometimes experienced when there was a high volume of radio traffic. Tasmania Police has advised that concerns associated with the effectiveness of radio communication were being formally investigated.

2.7   TAPING OF CALLS

All calls were taped and available for analysis. Taped calls can be rewound if an operator cannot initially understand a caller allowing a further opportunity to replay the message or part thereof.

2.7   CONCLUSION

While CACS was effective for the purposes of dispatch the reporting capability with regard to response was limited due to:

o   A lack of reliable recorded urgency gradings;

o   A lack of reporting features; and

o   A tendency for police units not to notify RDS operators upon arrival at the scene.

3 Performance measurement

3 PERFORMANCE MEASUREMENT

We considered whether appropriate measures had been set to allow police management to assess response times.

3.1   MEASUREMENT OF PERFORMANCE

National Level

The Productivity Commission's *Report on Government Services 2002 - 2003* contained comparative data on police services in Australia. Information for the report came from the *National Survey of Community Satisfaction with Policing*. That survey attempted to collect information on community perceptions of police in terms of services provided and personal experiences of contact with the police.

However, as the Productivity Commission observed in its report, care needs to be taken in interpreting any survey data. Statistical reliability is highly dependent on key elements of the survey method including the:

- o   Survey instrument;
- o   Collection method; and
- o   Sample size and design.

Attitudinal data in particular may be influenced in the short term by rare, but significantly adverse or highly publicised events (such as a mass murder or a police corruption incident). Thus, point-in-time responses may vary from people's true underlying (or longer-term) satisfaction with police and perceptions of safety and crime levels.

An example of the limitations of survey information was found with *Project Samaritan,* an initiative that aimed to prevent repeat burglaries by providing residential victims with advice on crime prevention. Tasmania Police conducted a review for offences reported in the two-month period 1 February to 31 March 2003.

A part of the review ('Satisfaction with time taken for police to visit') found that 6.1% of survey respondents (21 of a population of 341) were not satisfied with the time it had taken police to arrive. Significantly, complaints about response time did not necessarily impact adversely on perceptions of overall satisfaction with the police response to the burglary. Revealingly, people who felt that the response was not quick enough still rated themselves as 'very satisfied'.

Although not currently compiled at the national level, the Productivity Commission has advocated development of performance measures around response capability. Public satisfaction is only one measure and should not take the place of police monitoring their own timeliness when responding to incidents.

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State Level

Tasmania Police's Corporate Management Group has a role to oversight the organisation's effectiveness. To date, 100 performance indicators and 41 benchmarks have been developed to analyse performance in areas such as crime, traffic and marine enforcement. In addition to the obvious feedback that such measures provide, senior management was also aiming to establish a 'performance culture' that would see the review process become an integral part of the organisation.

The monthly *Corporate Performance Report* measured some operational activities but timeliness in responding to calls for assistance was not included.

We appreciate that introducing a performance framework for response times could have unintended consequences as police endeavor to attain targets. These possible effects should be considered when devising performance benchmarks so that factors such as safety (of police and the public) are not compromised.

Recommendation 5

Tasmania Police should consider developing a performance framework around response times that would include goal setting, monitoring and analysis.

Tasmania Police response:

'The issue of developing a performance framework around response times has previously been discussed by the Corporate Management Group. The recommendation reinforces our future direction.'

Local Level

In order for Commanders and local level managers to account for the efficiency and effectiveness of their response times they should be provided with regular performance information. Provision of that data would enable timely and informed decisions to be made and assist in efficient and effective deployment of resources.

To better support local management, ways should be investigated to improve the capacity to generate reports concerning response times and job types attended.

Recommendation 6

Tasmania Police should consider appropriate dissemination of reports regarding timeliness of response to the Command level so that deployment of resources can be optimised.

Tasmania Police response:

'Currently CACS does not have the reporting capability in respect to response times. The recommendation will be considered in consultation with our Information Technology Services.'

3.2 CUSTOMER SERVICE CHARTER

Other Australian police services either published, or intended to publish, a 'Guarantee of Service' that involved time estimates for arrival. In Western Australia for example a police internal audit report advised that performance evaluation was a major issue affecting response capacity. In particular, the report identified the need for a Guarantee of Service.

NSW had such a document that stated the following in relation to response times:

> 'Police will provide you with an estimated time of arrival depending on the nature of your call. In emergency situations your call will always receive top priority. In less urgent situations, response may have to be deferred because of emergencies. If the estimated time you were given is to be changed, you will be contacted to arrange another suitable time.'

According to the *Tasmania Police Manual:*

> 'Members of the Service are expected to achieve the following standards when dealing with customers:
>
> - Advise customers of waiting/response times for service or assistance.'

We could not identify where RDS operators were routinely providing information to callers on the timeframe for response.

Recommendation 7

Tasmania Police should publish a 'Guarantee of Service' or similar clearly indicating commitments that will be met in terms of responding to incidents.

Tasmania Police response:

'The recommendation is supported and appropriate directions will be given to Radio Dispatch Services operators, particularly in respect to urgent incidents.'

3.3 CONCLUSION

Although informal measures can be made, Tasmania Police does not have a framework in place to formally evaluate response times.

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4 ACTUAL PERFORMANCE

We reviewed incidents recorded in CACS to ascertain whether:

- o **Urgent calls were responded to within a reasonable time;**
- o **Priority was assigned according to the urgency of the incident; and**
- o **Response times were not unreasonably affected by geography, region, day of the week or time of the day.**

4.1 BACKGROUND TO URGENT CALLS

4.1.1 What constitutes a 'police response'?

By using downloaded CACS data to measure actual response times, our audit methodology relied on comparing the time stamping of an incident's creation with the time that police arrived at the scene.

However, there were limitations with this approach.

- o Only 53% of incidents had an 'at-scene-time' recorded in CACS;
- o Some incidents were deferred and stood out because the response times seemed unduly long;
- o The point at which the 'at-scene-time' was notified may have been at the conclusion rather than the beginning of the response; and
- o Not all incidents had a 'scene'.

In the first category (i.e. no 'at-scene-time') there were several possible explanations, such as pressures and priorities in dealing with the incident, communications problems or simple oversight.

The second group (i.e. deferrals) occurred when callers requested that police officers attend later, at a time more convenient to the caller. Such an example was someone reporting a minor matter but not being available to speak to police officers until the end of the working day. Another example that we noted was that of incidents requiring additional police resources such as forensic services or CIB that had to be scheduled later and who subsequently provided the 'at-scene-time'.

The third case emerged during analysis of some incidents in greater detail. From reviewing CACS 'Full Incident Replays', it was apparent that the 'at-scene-time' was reported after police had already been at the scene for some time. For example, police may have responded and advised RDS that they were at the scene once the matter was resolved and as they were about to depart. Thus, the calculated response time would not be an accurately reflect actual response.

The final category (i.e. incidents with no scene or where the 'at-scene-time' was misleading) was diverse and is best illustrated by examples that we noted:

> o Person involved, motor vehicle or offender had left the scene and was at another (or unknown) location;
>
> o Missing persons, boats, lost children; and
>
> o Incidents where it would be unsafe for police to attend immediately (e.g. hostage/siege, bomb threats, armed person).

In each of these instances the initial police response was not at the 'scene'.

4.1.2   Which incidents are urgent?

As noted in section 1.2, urgency gradings were not recorded. Instead, we attempted to use incident types as a proxy for urgency. In the CACS data that we obtained from Tasmania Police, there were 181 types of incident that ranged in gravity from lost property to murder. We sought advice from the police as to which incidents would be unequivocally treated as urgent in terms of appropriate response. Consequently, 45 incident types were extracted and these formed the basis of our examination. The total number of urgent incidents for which there was adequate data for us to calculate response times was 16 071.

To make it easier to comprehend the relatively large number of urgent incidents, we grouped them into broad categories, as shown below:

> o 'Non-offences':
>> Self-harm; and
>> People at risk.

    o 'Offences':

        Property;

        Traffic;

        Against the person; and

        Numerically predominant (there were three categories viz. motor vehicle accidents, alarm-duress, disturbance)

The rationale for our classification was that incidents in the 'offences' group were likely to result in prosecution while 'non-offence' incidents appeared mainly to be issues of public safety or welfare rather than criminality. Figure 1 illustrates the distribution of urgent incidents in the above categories.

Figure 1: Grouping of Urgent Incidents
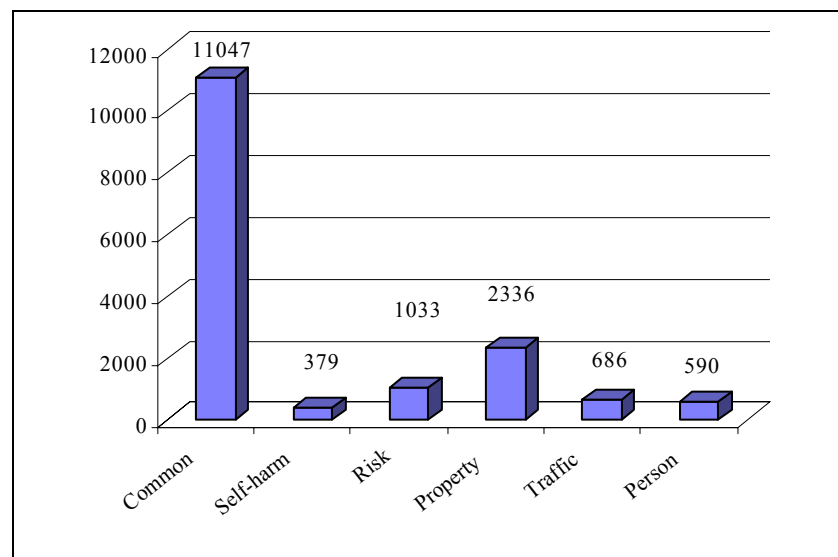
4.2 WERE URGENT CALLS RESPONDED TO WITHIN A REASONABLE TIME?

To be able to apply a consistent methodology in reviewing response times (for those urgent incidents that had an 'at-scene-time'), we focussed on 'quartile analysis'. While median percentile scores would provide a single indicator of performance, the quartile analysis identified variations in performance that would not have been evident by looking only at median scores. In essence, this approach divided the response times into four quartile ranges: 0-25%, 26-50%, 51-75%, and 76-95% - we chose 95% rather than 100% as a way of eliminating statistical outliers.

The response time displayed in Tables 1 – 6 (see below) for each quartile was the slowest time in the group. For example,

the incident type 'Motor vehicle accidents' reported in Table 1 had the following quartile data:

Time in Minutes			
25%	**50%**	**75%**	**95%**
7	12	20	47

The table can therefore be interpreted as meaning that:

- o A quarter of incidents were responded to in 7 minutes or less; and

- o For half the incidents the response time was 12 minutes or less, etc.

It was observed for many individual incident types, at 95% there was a large increase in response times. We undertook limited sampling of incidents in that category and found that 'Full Incident Replays' from CACS gave a satisfactory explanation for our sample. The reasons for delayed 'at-scene-times' were as noted in section 4.1.1. Accordingly, caution needs to be used interpreting the figures in Tables 1 – 6, as they represent a 'worst case'. However, we decided to report this data because it gave some indication of police performance and there was no better alternative.

Table 1: Response Times Quartiles for Most Common Incident Types

Incidents	No	Time in Minutes*			
		25%	**50%**	**75%**	**95%**
MOST COMMON (68.7%)					
Accident - MV	5 217	7	12	20	47
Alarm-duress	1 510	6	9	14	31
Disturbance	4 320	4	7	13	31

Table 2: Response Times Quartiles for Self-Harm Incident Types

Incidents	No	Time in Minutes*			
		25%	**50%**	**75%**	**95%**
SELF-HARM (2.4%)					
Drug overdose	95	7	10	16	30
Suicide	79	8	15	29	58
Suicide-attempt	205	7	10	18	40

Table 3: Response Times Quartiles for People at Risk Incident Types

Incidents	No	Time in Minutes*			
		25%	50%	75%	95%
PEOPLE AT RISK (6.4%)					
Accident MV - tractor	6	1	9	39	62
Aircraft in danger	4	6	9	15	32
Boat in danger	68	13	22	45	139
Child lost	54	8	16	25	64
Distress flare	13	16	25	34	40
Drowning	4	5	11	18	19
Explosion	32	8	11	17	62
Explosive	18	11	19	42	145
Mentally-disturbed person	663	8	14	26	66
Missing boat at sea	1	66	66	66	66
Missing walker	4	10	19	208	414
Person in danger	20	4	12	20	42
Police in danger	73	1	2	4	15
Suspect article	73	11	19	40	93

Table 4: Response Times Quartiles for Property offences

Incidents	No	Time in Minutes*			
		25%	50%	75%	95%
PROPERTY OFFENCES (14.5%)					
Alarm-hold-up	594	3	5	7	13
Alarm-intruder	813	6	10	17	41
Burglary-in-progress	834	5	7	11	30
Robbery	95	7	11	19	55

Table 5: Response Times Quartiles for Traffic Incident Types

Incidents	No	Time in Minutes*			
		25%	50%	75%	95%
TRAFFIC (4.3%)					
Accident MV - fatal	44	9	14	22	28
Accident MV - pedestrian	230	4	8	14	30
Accident MV - police	104	1	3	8	35
Accident MV - serious	81	7	12	17	36
Driving under the influence	223	5	10	18	58
Pursuit	4	1	2	5	14

Table 6: Response Times Quartiles for Offences Against the Person

Incidents	No	Time in Minutes*			
		25%	50%	75%	95%
OFFENCES AGAINST THE PERSON (3.7%)					
Abduction	20	8	20	42	98
Abduction-attempt	20	10	15	20	41
Armed hold-up	29	3	6	11	31
Armed person	114	6	9	14	32
Bomb	9	1	9	17	53
Bomb threat	46	9	14	24	44
Escapee	11	2	9	20	35
Hostage/Siege	3	6	6	9	69
Intruder	194	6	9	17	37
Murder	3	3	3	3	4
Rape	56	13	20	40	83
Riot	2	6	6	12	12
Siege	1	26	26	26	26
Terrorism threat	2	2	2	15	15
Wounding	80	5	8	15	31

Because Tasmania Police had not set timeliness benchmarks, it was not possible to form a definitive opinion as to the adequacy of response times in the above tables. From the viewpoint of the man-in-the-street, however, the response times appeared reasonable - especially when the limitations of the 'at scene time' information is considered.

To be able to rely on CACS as a source of performance data on timeliness, it is essential that 'at-scene-time' information is more consistently logged. This would require operational police to be encouraged to routinely advise the information and for RDS operators to seek it and record it during their exchanges with police. [Refer to Recommendation No 6].

4.2.1 Slow response and no response

The limitations with 'at-scene-times' described in section 4.1.1 were responsible for triggering cases that initially appeared to be slow- or no-response to urgent incidents in our test database.

We took samples of urgent incidents that had either slow response times or had no 'at-scene-time' recorded. For every

incident tested, we obtained a complete transcript from CACS. From this information we found that either the incidents had been cancelled or that the police response again seemed reasonable from the layperson's perspective.

4.3 APPROPRIATE PRIORITY ASSIGNED TO INCIDENTS?

There was no formal urgency grading used for calls for assistance. Rather, as stated in section 1.2, the system relied on RDS operators to convey urgency by other means. However, without a method of formally allocating urgency, it was not possible for management to review the system's performance.

In the absence of an urgency grading system, we were unable to form an opinion as to whether appropriate priorities had been assigned to incidents

4.4 RESPONSE TIME EQUITY ISSUES

We sought to ascertain that response to calls for assistance was not unduly affected by:

- o Geographic location;
- o Day of the week; or
- o Time of the day

Analysis, again by quartiles, was based on the 16 000 urgent incidents in our test database that had an 'at-scene-time'. Here, too, it should be noted that due to the incomplete nature of our sample (caused by the lack of 'at-scene-time' data) the following figures should be viewed as indicative only.

Geographic location

Figure 2 illustrates the geographic distribution of urgent incidents across the four command areas in Tasmania.

Figure 2: Geographic Distribution of Urgent Incidents
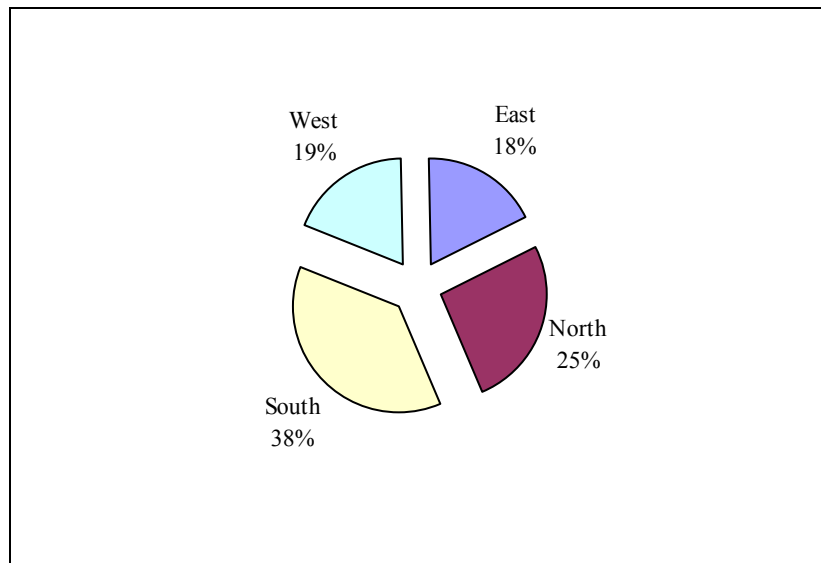
Analysis of urgent incidents by quartiles is shown in Figure 3. For the first three quartiles, there was not much to separate the four commands in Tasmania. In the final grouping (i.e. at 95%) the Southern Command was markedly better than the others (35 minutes against 45 minutes). A possible explanation was that although the volume of incidents there was much larger, the higher level of resourcing would enable easier re-deployment of police units from routine to urgent tasks.
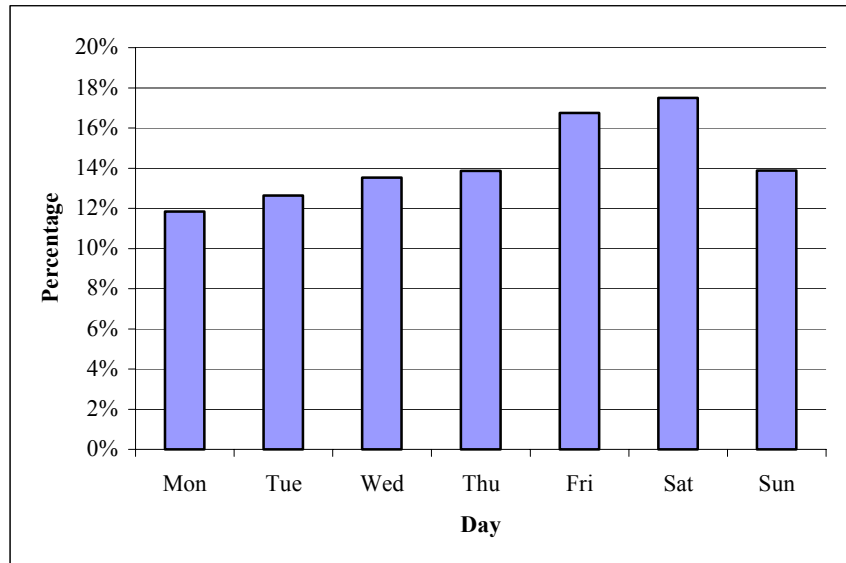
**Figure 3: Urgent Incidents by Location - Quartiles**

35
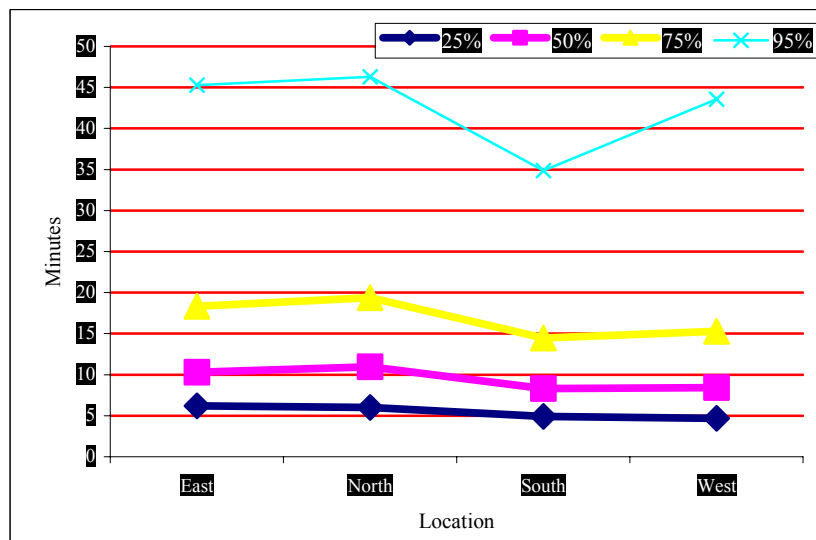
Day of the week

As can be seen below in Figure 4, analysis of incidents by the day of their occurrence reveals a cyclic pattern. Starting from a low-point on Monday, the volume of incidents gradually peaked on Friday and Saturday before declining on Sunday.

Figure 4: Daily Distribution of Urgent Incidents

Quartiles for day-of-the-week shown in Figure 5 indicated that there was a slight pattern in response times over the days of the week. However, this particular equity issue displayed the least amount of variation.

**Figure 5: Urgent Incidents by Day of the Week - Quartiles**
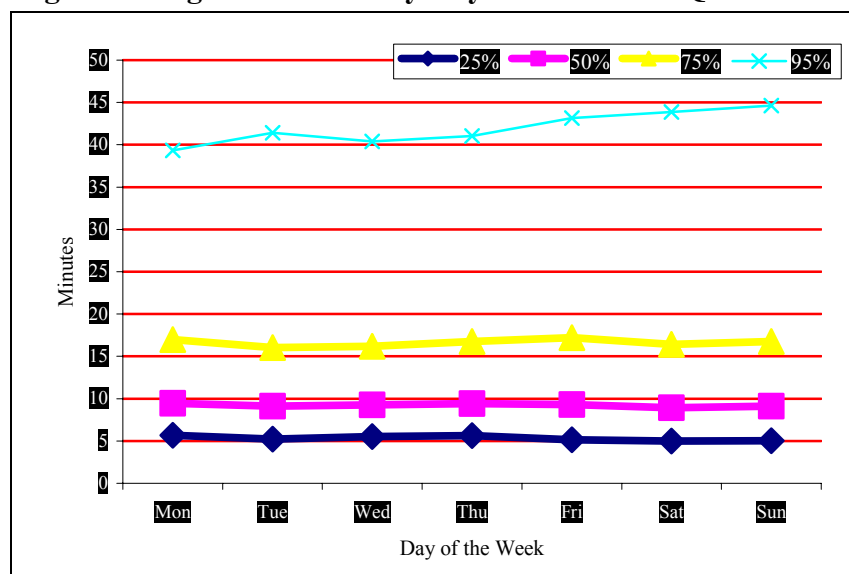
Time of Day

Similar to the day of the week, a pattern was noted in the reporting of incidents to police during the course of the day. From a low between 4:00 – 6:00 AM the volume of incidents gradually rose, reaching a maximum approximately 12 hours later, from which it then receded.

Figure 6: Hourly Distribution of Urgent Incidents
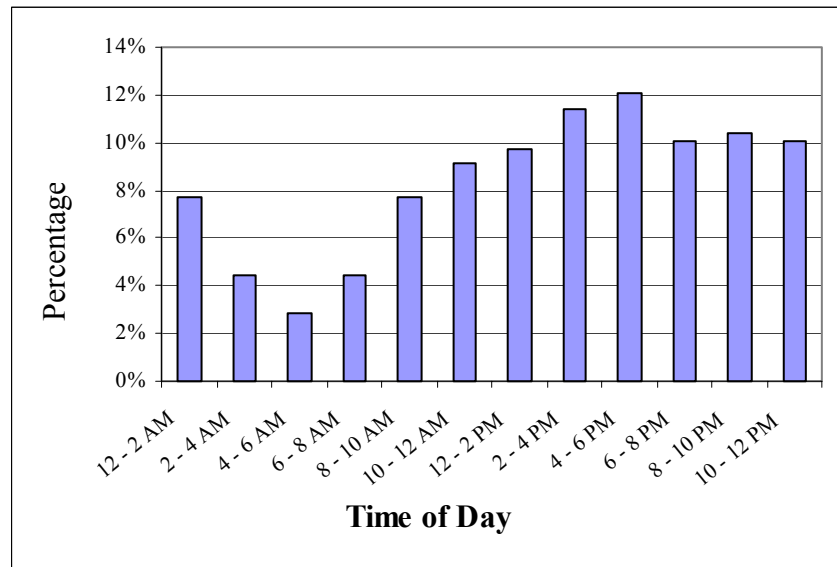
Although Figure 6 shows that the number of incidents was lowest around 4:00 AM, Figure 7 indicated that response times were starting to peak at about the same time. We analysed data from these times but were unable to determine the cause. We have speculated that the level of resources were insufficient to address the demand.

Figure 7: Hourly Distribution of Urgent Incidents - Quartiles
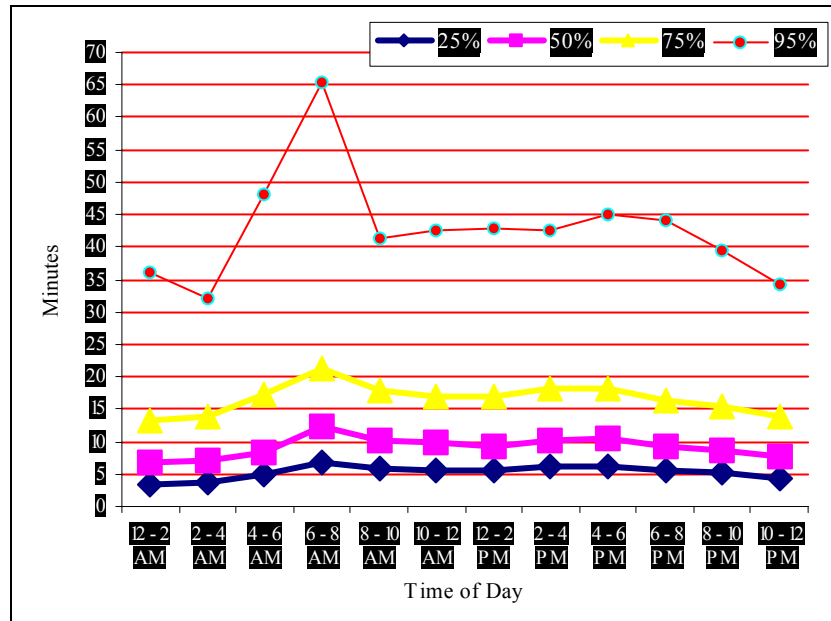
Response to calls for assistance was not unduly affected by the location or the day of the week. However, there was evidence that response was slower between 3:30 and 07:30 AM.

We raised this matter with Police and were advised that the Central Roster Group regularly reviews demand trends to optimise the deployment of resources. As part of that activity we suggest that the early morning peak revealed through our analysis should be investigated.

Recommendation 8
Tasmania Police should continue to monitor peaks in response times.

Tasmania Police response:

'The Central Rostering Group regularly uses CACS for the purpose of establishing the high-demand periods for police.'

4.5   CONCLUSION

We were not able to form a definitive opinion as to Tasmania Police's responsiveness to calls for assistance because benchmarks had not been set. Similarly, formal urgency gradings were not assigned and could not be assessed.

Despite the lack of reliable urgency gradings, reliable response time data and benchmarks, our impression was that response times for urgent incidents were reasonable.

Approximations used in this report are likely to disadvantage Tasmania Police because:

- o 'At scene time' data will be either correct or LATER than the actual time; or

- o Our urgency gradings as derived from incident types were much more likely to overstate rather than understate actual performance.

We concluded that response times were 'reasonable' with a fair degree of confidence.

Available data also indicated that, for the most part, police response was unaffected by geographical location, time of day or day of the week.

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