

# ***Emergency Service Response Times***

Tabled 19 March 2015

The Auditor-General provides assurance to Parliament on the accountability and performance of the Victorian Public Sector. The Auditor-General conducts financial audits and performance audits, and reports on the results of these audits to Parliament.

On the 19<sup>th</sup> of March 2015, the Auditor-General tabled his performance audit report *Emergency Service Response Times*.

## Overview

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Measures of response time are critical to understanding the performance of emergency services.

However:

- Targets are outdated or not based on evidence.
- Reports do not properly cover the range of emergencies.
- Reports should offer more information, including trends, actual times and regional variation.
- Statewide response times have been stable since 2012.

Improve measures and reporting to better demonstrate performance.

Timely responses to emergencies can directly affect outcomes. Measures of response times are therefore critical to understanding emergency service performance.

However, we found multiple problems with the design of response time measures and methods for calculating results. Response time targets are outdated or not based on evidence, and current measures and reports do not properly cover the range of emergency responses.

Reports on response times should offer more information, including trends, actual times and regional variation.

Our analysis of response times since 2012 also found that statewide emergency response times have been relatively stable.

To increase accountability and transparency, agencies need

to improve emergency response time measures and reporting to better demonstrate performance.

## Background

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- Ambulance Victoria (AV), Country Fire Authority (CFA), Metropolitan Fire and Emergency Services Board (MFESB), Victoria State Emergency Service (SES), Victoria Police respond to Triple Zero calls.
- Departments of Justice & Regulation (DJR) and Health & Human Services (DHHS) coordinate delivery and monitor performance.



Ambulance Victoria, or AV, the Country Fire Authority, or CFA, the Metropolitan Fire and Emergency Services Board, or MFESB, the Victoria State Emergency Service, or SES, and Victoria Police all respond to Triple Zero calls received and dispatched by the Emergency Services Telecommunications Authority, or ESTA.

The Department of Justice & Regulation, or DJR, and the Department of Health & Human Services, or DHHS, are responsible for coordinating and monitoring emergency responses.

## Background – *continued*

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Response time  
performance reports in  
Budget Papers for:

- ambulance responses
- structure fire responses
- emergency medical responses (MFESB)
- road accident rescues.



The departments report response time performance in State Budget Papers for ambulance responses, structure fire responses, emergency medical responses and road accident rescues.

## Focus of this audit

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The audit assessed whether:

- response time measures are relevant, appropriate and fairly represent performance
- response time performance meets or exceeds expectations
- agencies monitor and act on response time performance.

### Scope of audit

- AV, CFA, MFESB, SES and Victoria Police.
- DHHS and DJR.
- Code 1/Priority 1 responses 1 January 2012 to 30 June 2014.

The audit's objective was to determine the extent to which agencies are accountable for emergency response time performance.

To do this, we assessed:

- the relevance, appropriateness and fair representation of response time performance measures,
- what reported information actually tells us about performance
- and how agencies use this information.

We looked at Code or Priority 1 responses from 1 January 2012 to 30 June 2014.

## Meaningful and relevant measures and targets

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- Response times are relevant as part of a broader set of measures.
- Current targets outdated or not evidence-based.
- AV's measure not focused on most urgent cases.
- AV and SES measures include call-processing time outside their direct control.
- DHHS and DJR have not addressed these issues despite annual reviews of measures.

**Measures and targets do not allow proper understanding of emergency service response time performance.**

Response time measures and targets currently in place do not allow proper understanding of emergency service response time performance.

We found that none of the response time targets are based on up-to-date evidence or a clear rationale. For example, targets for structure fire responses are based on outdated scientific research and work MFESB undertook in 1987. For all other targets, agencies were unable to provide any explanation for their basis. Without valid response time targets, current measures fail to describe performance in any meaningful way.

Some response time performance measures also include activity not entirely within agency control. For example, AV and SES measures include substantial components of call-processing time that involve the work of ESTA.

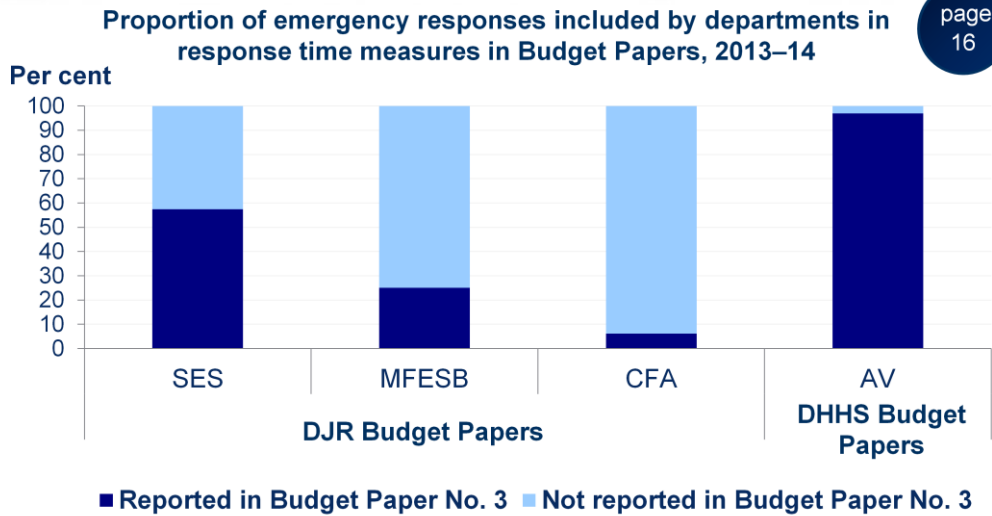
Neither DHHS or DJR has fulfilled its responsibility to annually review the ongoing relevance of these measures, meaning that these longstanding issues have not been addressed.

Overall, while we found that response times are relevant measures of emergency service delivery, they need to be considered as part of a broader set of measures that look at factors such as outcomes.



## Reports don't cover the range of emergencies

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DJR reporting excludes 83% of MFESB, CFA, SES response times.

A further example of problems with the design of response time measures is that they do not appropriately cover the range of emergency responses.

Due to narrow definitions, the measures reported by DJR in State Budget Papers exclude 83 per cent of Priority 1 emergency responses by CFA, MFESB and SES, as shown is this graph.

Conversely, the majority of AV's Code 1 responses are included in its emergency response time measures.

## Accurate and reliable response time information

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- Reports fairly represented performance despite minor errors due to weak controls.
- Agencies inconsistently calculate shared measures.
- DHHS/AV used less reliable rural data despite better data available.
- Victoria Police data not yet reliable for external reporting.
- DJR and DHHS do not ensure response time data used for their Budget Paper No.3 (BP3) measures is 'auditable and verified'.

**Reports were mostly accurate, however, agencies should tighten controls to prevent the risk of greater errors.**

Reported performance fairly represents actual performance in most cases. Minor errors and misreporting that we identified were the result of control weaknesses, particularly poor calculation methods and lack of data auditing. There are also inconsistencies in the way agencies calculate response times for the same kinds of emergencies.

Despite more reliable data being available since 2011, DHHS and AV had not been using the most accurate data for rural ambulance responses, leading to statewide performance being overstated by 1 to 2 per cent.

Victoria Police response time data is not yet reliable enough for external reporting, due to a lack of controls and incomplete data. However, our testing found that it was complete enough to be useful for internal monitoring.

Neither DHHS nor DJR have fulfilled their obligations to

ensure that the data and methodology underpinning reports on emergency response time measures is auditable and verified for accuracy. This is consistent with our

2014 *Public Sector Performance Measurement and Reporting* audit, which also found departments had not fulfilled this requirement.

In summary, we found response time reports were mostly accurate, however, agencies should tighten controls to prevent the risk of greater errors.

## Response time performance (Jan 2012–June 2014)

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- Emergency services except AV generally met or came close to target.
- AV has never met its target.
- Statewide response times have been mostly stable.
- 90% of statewide emergencies responded to within 7.8 minutes (urban area structure fires) to 27 minutes (road rescues).
- Response times varied significantly between regions, and based on agency, location and type of emergency.

**Response times were stable statewide but varied between regions.**

Noting the lack of evidence supporting all emergency response time performance targets, all services except AV are performing at or close to targets. AV has not met targets since the organisation was created in 2008.

We found that 90% of Code 1 or Priority 1 emergencies were responded to within the range of 7.8 minutes for urban area structure fires to 27 minutes for statewide road rescues.

Response times were stable statewide but they varied between regions, agency, location and type of emergency.

## Reporting response times transparently

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- Public response time reporting does not provide enough information for Parliament or the public to:
  - properly understand performance
  - know how long responses in their area are likely to take.
- Emergency service organisations—except Victoria Police—monitor, report and act on response time performance but can improve reporting to senior management by adding trends and greater analysis.
- Victoria Police should trial response time information in internal performance measurement.

**Reports should offer more information, including trends, actual times, definitions and regional variation.**

Public response time reporting does not provide enough information for Parliament or the public to properly understand performance or know how long responses in their area are likely to take.

External reports on response time performance lack times, trends, regional variation and analysis of the factors driving performance. Only MFESB has routinely reported the actual number of minutes it takes to respond to urgent calls from the public. Additionally, a focus on reporting high-level statewide data also means that there is little understanding of how performance varies across Victoria.

The agencies that measure response times use this information to drive improvement, although some do not report sufficient detail to senior management.

Given the relevance of response times to some of Victoria Police's internal goals and service delivery objectives, it could make better use of existing data for internal performance measurement.

In summary, in order to improve response time reporting, reports should offer more information, including trends, actual times and regional variation.

## Recommendations

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		Accept
1.	That DHHS and DJR determine relevant targets in consultation with portfolio agencies.	✓
2.	That DJR improve the comprehensiveness of Budget Paper No. 3 response time measures.	✓
3.	That DHHS and AV focus response time reporting on highest priority cases.	✓
4.	That DHHS and DJR attribute accountability for each phase of emergency responses in public reporting.	DHHS — in principle DJR ✓
5.	That DHHS uses ESTA Computer Aided Dispatch data for ambulance performance.	✓
6.	That DHHS and DJR verify the response time data used in their reports is accurate and auditable.	✓

- We made ten recommendations to seven agencies to improve:
- the response time measures in regards to targets and coverage
- the accuracy and usefulness of reports of response time performance
- agency oversight of response time measures and consistency of approach to shared measures
- Victoria Police's use of available response time data.

## Recommendations – *continued*

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		Accept
7.	That DJR applies a consistent approach to emergency response time measures.	✓
8.	That CFA, SES and MFESB improve controls over response time data collection and reporting.	✓
9.	That Victoria Police: <ul style="list-style-type: none"> <li>• assess and address limitations to available data</li> <li>• trial using response times for internal performance measurement.</li> </ul>	In principle
10.	That AV, CFA, MFESB and SES improve the transparency of public reporting on response times by including: <ul style="list-style-type: none"> <li>• regional performance</li> <li>• times</li> <li>• trends</li> <li>• analysis of the factors affecting performance.</li> </ul>	✓

The agencies have supported all recommendations, although some agencies accepted them in principle only. DHHS accepted Recommendation 4 in principle, pending outcome of a review of their measures and targets.

Victoria Police accepted Recommendation 9 in principle only, pending the results of their review of the quality of available data.

Agency responses are contained in Appendix B of the report. The Auditor-General will monitor agency progress against the recommendations over time.



## Key messages

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**Targets are outdated or not based on evidence.**

**Reports were mostly accurate, however, agencies should tighten controls to prevent the risk of greater errors.**

**Response times were stable statewide but varied between regions.**

**Reports should offer more information, including trends, actual times, definitions and regional variation.**

In summary, the four key issues raised in this performance audit are:

- Response time targets are outdated or not based on evidence.
- Response time reports are mostly accurate and reliable, however, agencies should tighten controls to prevent the risk of greater errors.
- Response times have been stable statewide but vary significantly between regions.
- Reports should offer more information, including trends, actual times, definitions and regional variation.

## Conclusion

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**Parliament and the public cannot effectively use current response time reporting to hold agencies to account for performance.**

In conclusion, our audit found that Parliament and the public cannot effectively use current response time reporting to hold agencies to account for performance.

## Relevant reports

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- *Emergency Response ICT Systems (2014–15)*
- *Public Sector Performance Measurement and Reporting (2014–15)*
- *Access to Ambulance Services (2010–11)*

Other relevant reports are listed on this slide.

## Contact details

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