



Tasmanian
Audit Office

Ambulance emergency services

REPORT OF THE AUDITOR-GENERAL
No. 1 of 2016–17



Tasmanian
Audit Office



Report of the Auditor-General
No. 1 of 2016-17

Ambulance emergency services

September 2016

Strive • Lead • Excel | To Make a Difference

Why this audit?

- From our *2015-16 Annual Plan of Work*
- No previous performance audit of Ambulance Tasmania
- Tasmanians expect timely, high-quality care
- Risk that demand may outstrip supply or responsiveness decline



Audit objective

To form an opinion on the effectiveness and efficiency of AT's emergency and urgent responses

Audit scope

- Limited to AT (part of DHHS)
- Concentrated on the five-year period 1 July 2010 to 30 June 2015

Criterion 1: Effective clinical outcomes?

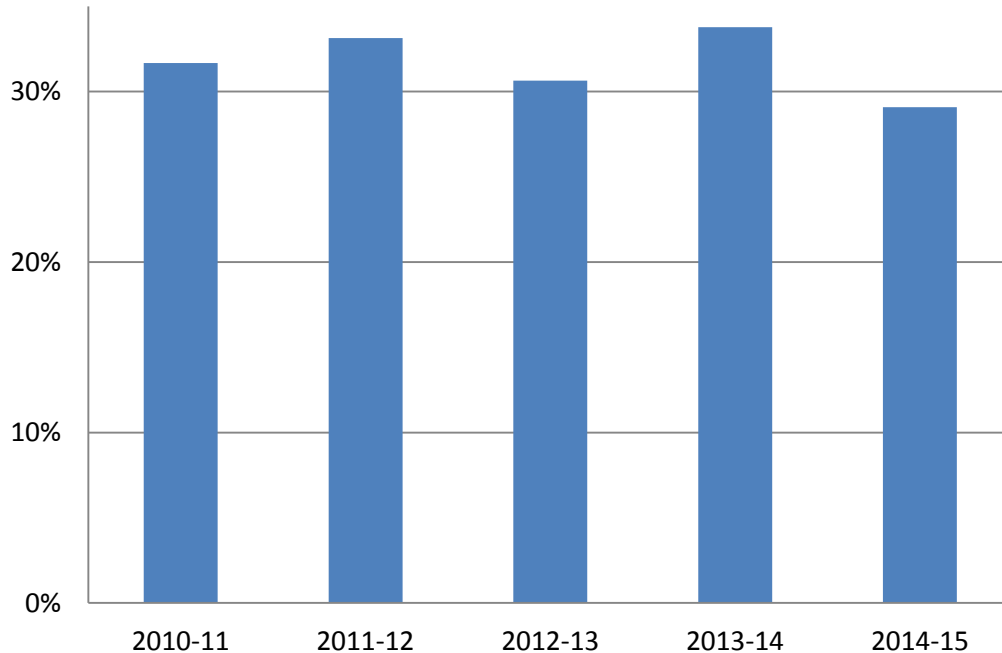
We looked at:

- Comparison with previous periods
- Comparison with other jurisdictions
- Regional comparisons
- Compliance with clinical guidelines

Measures used for clinical outcomes

- We used standard ROGS indicators:
 - cardiac survival rates (only small % of emergencies)
 - pain reduction (subjective)
 - patient satisfaction (subjective)
- But advantage: available and comparable for all jurisdictions

Previous periods – cardiac survival rate



Small fall: 32% → 29%

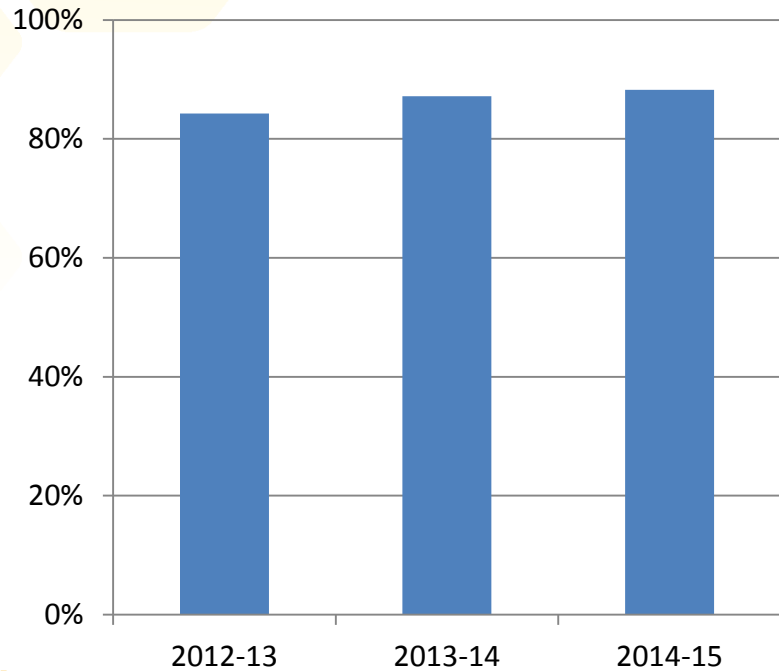
Numbers small: < 500

Cannot conclude there is trend

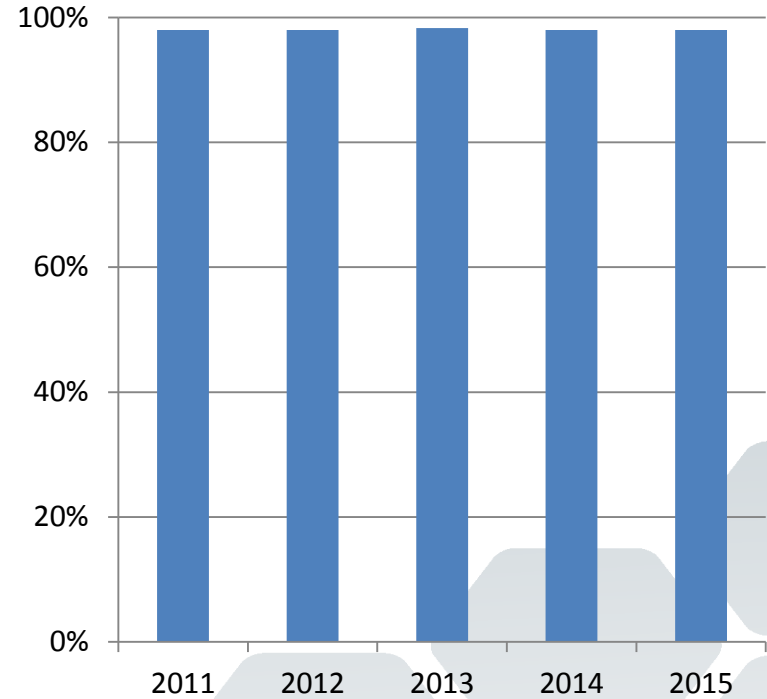
But AT should be alert



Pain reduction



Patient satisfaction

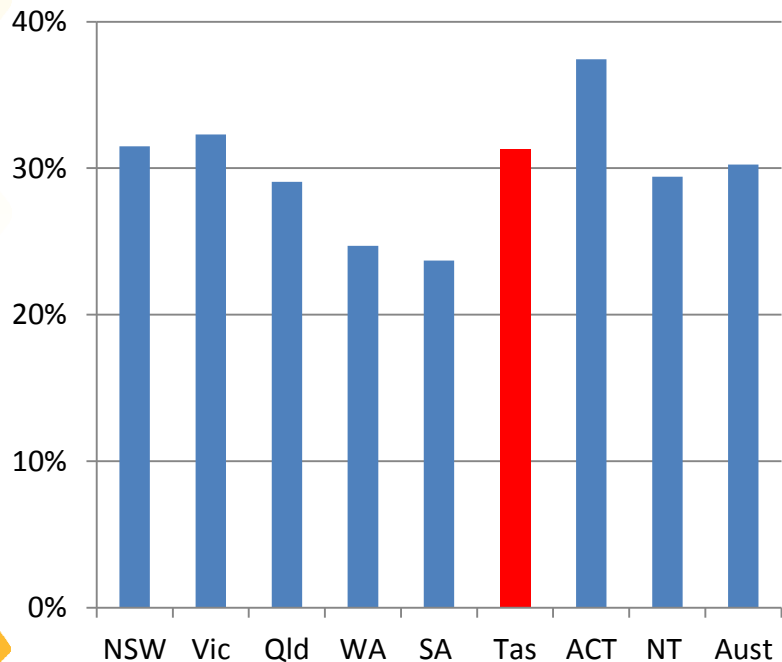


Clinical outcomes - previous periods

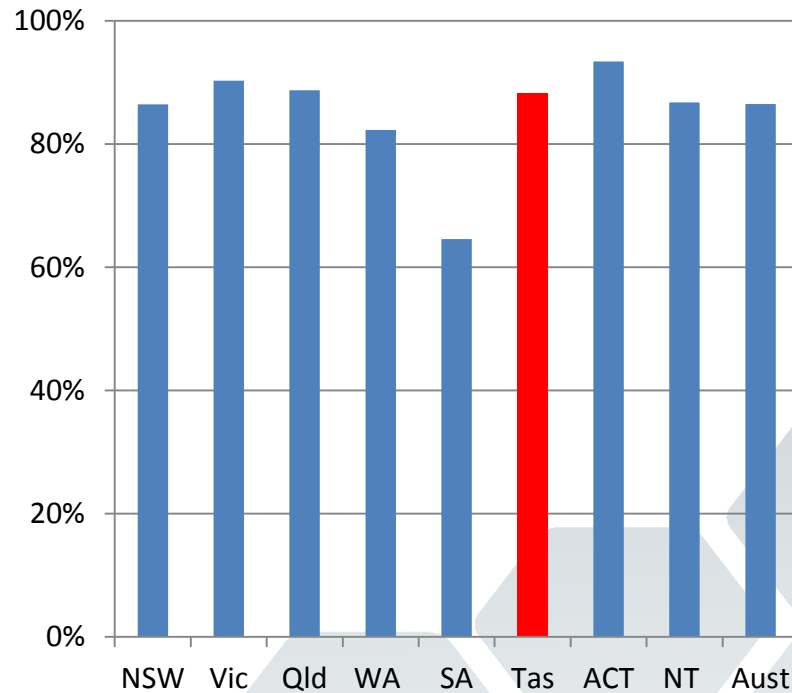
Conclusion: the level of AT's clinical outcomes was at least maintained over time

Other jurisdictions

Cardiac survival



Pain reduction



Clinical outcomes – other jurisdictions

Conclusion: clinical outcomes similar and in some areas better than those of other jurisdictions

Clinical outcomes by region

- Pain reduction rates for 2014–15 were similar across the three regions
- Patient satisfaction data not available, but statewide rate is 98 per cent → regions OK
- Regional cardiac survival rates not available
- **Conclusion: clinical outcomes reasonably consistent**

Compliance with clinical guidelines

- A manual outlined specific procedures
- We found 15 per cent of incidents reviewed monthly
- Internal reporting happens (but could improve with consistent format)
- **Conclusion: comprehensive clinical review process**

Criterion 1: Conclusion

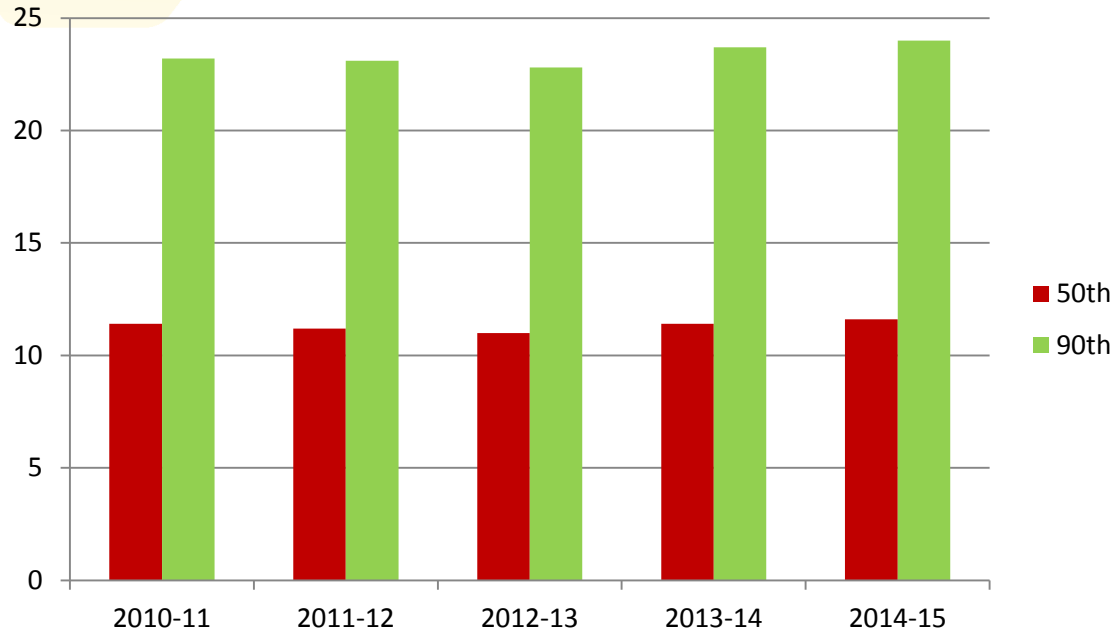
- AT was effective regarding clinical outcomes
- In particular, clinical outcomes were:
 - maintained over time
 - similar and in some areas better than other Australian jurisdictions.
 - reasonably consistent for all regions
 - compliant with clinical procedures

Criterion 2: Effective response times?

We looked at:

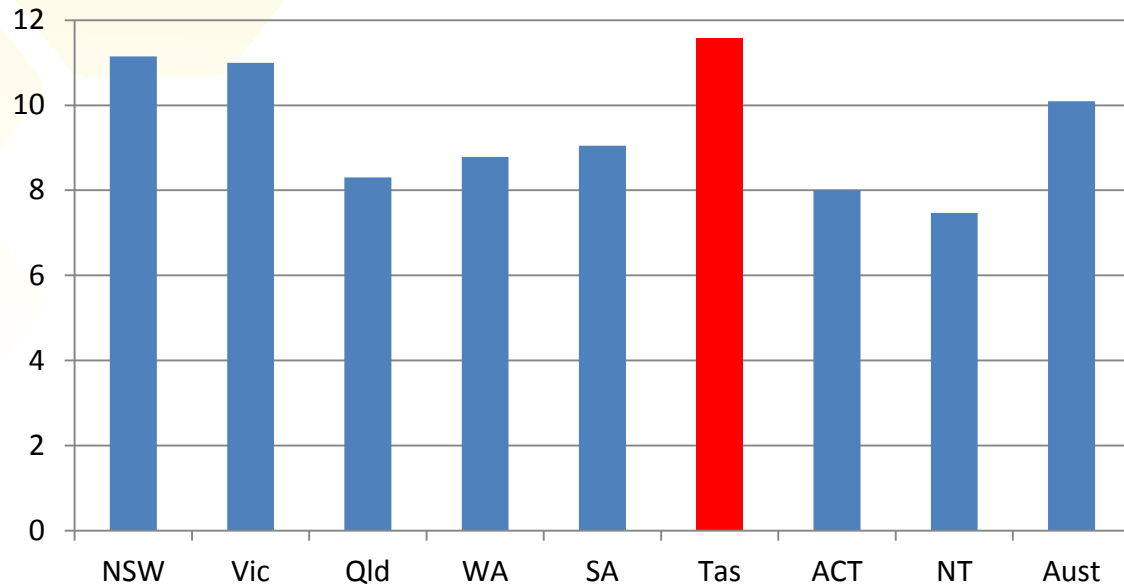
- Comparison with previous periods
- Comparison with other jurisdictions
- Regional comparisons
- Ambulance locations

Response times: previous periods



Conclusion: virtually unchanged despite 16% more responses

Response times: other jurisdictions (median)



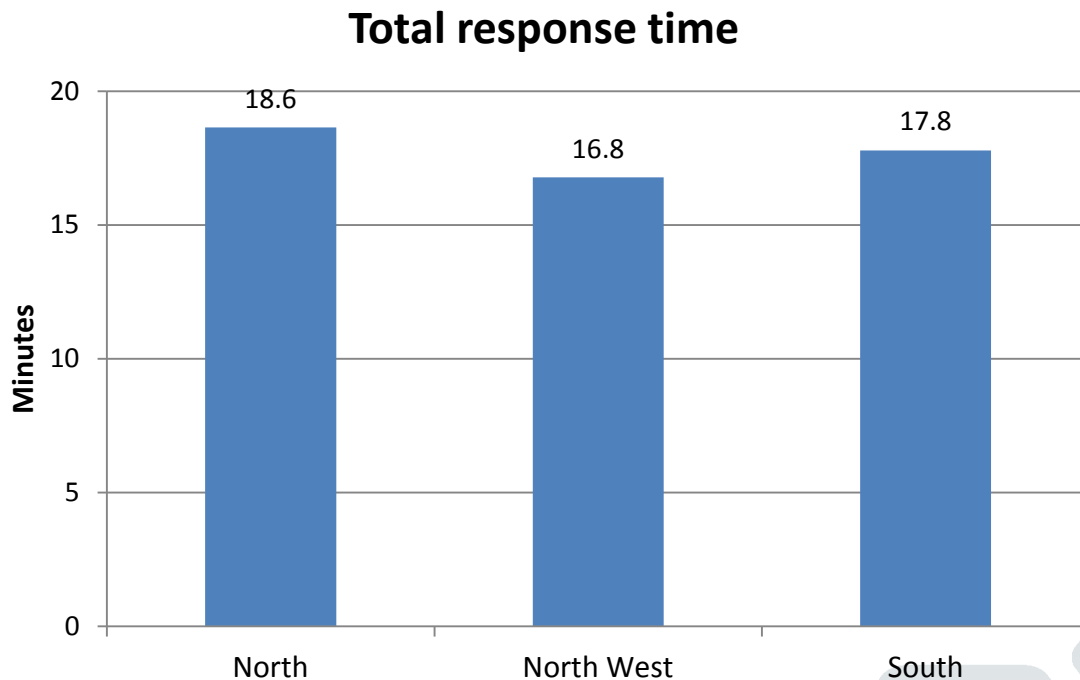
Tasmania:

- 13% more emergency responses
- 23% less urbanised
- better clinical outcomes than most

Conclusion: higher response times but mitigating factors

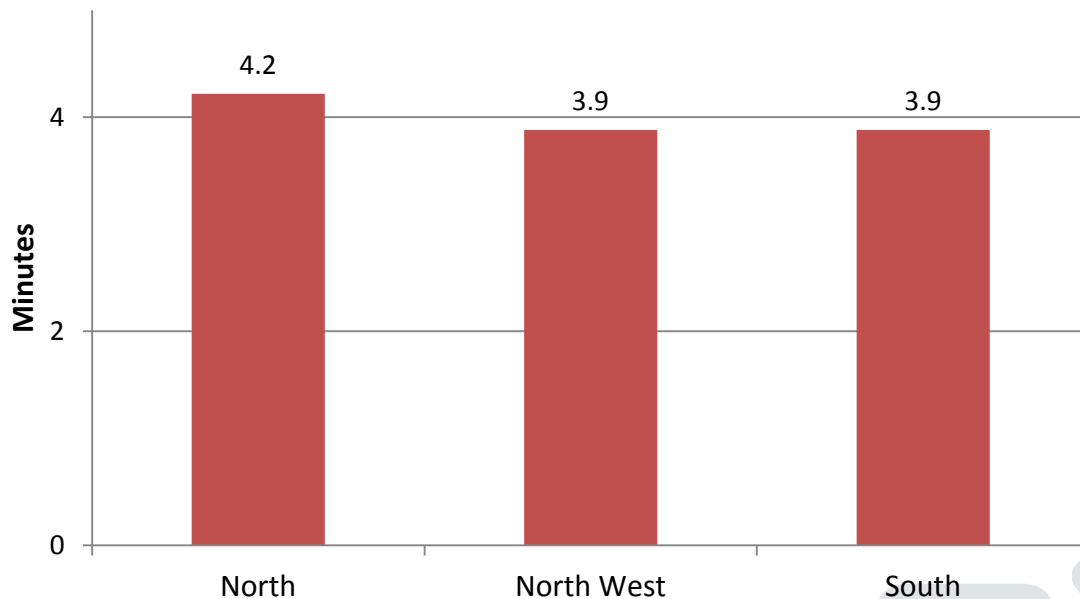


Average response times by region



Average response times by region

Mobilisation time



Response times by region

- Significantly more ambulances and officers in North
 - to compensate for being less urban?
 - an inefficiency?
- Greater use of volunteers in North
 - contributing to slower mobilisation time?

Conclusion: disparity in response times, variations in deployment of resources may have contributed

Response times – station locations

- Consultant review in 2010 recommended:
 - new stations at Hobart, Launceston and Longford
 - relocations and upgrades
- Bids submitted by DHHS in 2012-13
- To be resubmitted following review of emergency services

Conclusion: location of stations not entirely optimal

Criterion 2: Conclusion

- Response times consistent over time (despite rise in responses)
- Response times slower than other jurisdictions, because:
 - more emergency responses and Tasmania less urbanised
- At regional level:
 - disparity in overall response times
 - variations in deployment of resources
- Location of stations and branches not optimal

Criterion 3: Cost effective services?

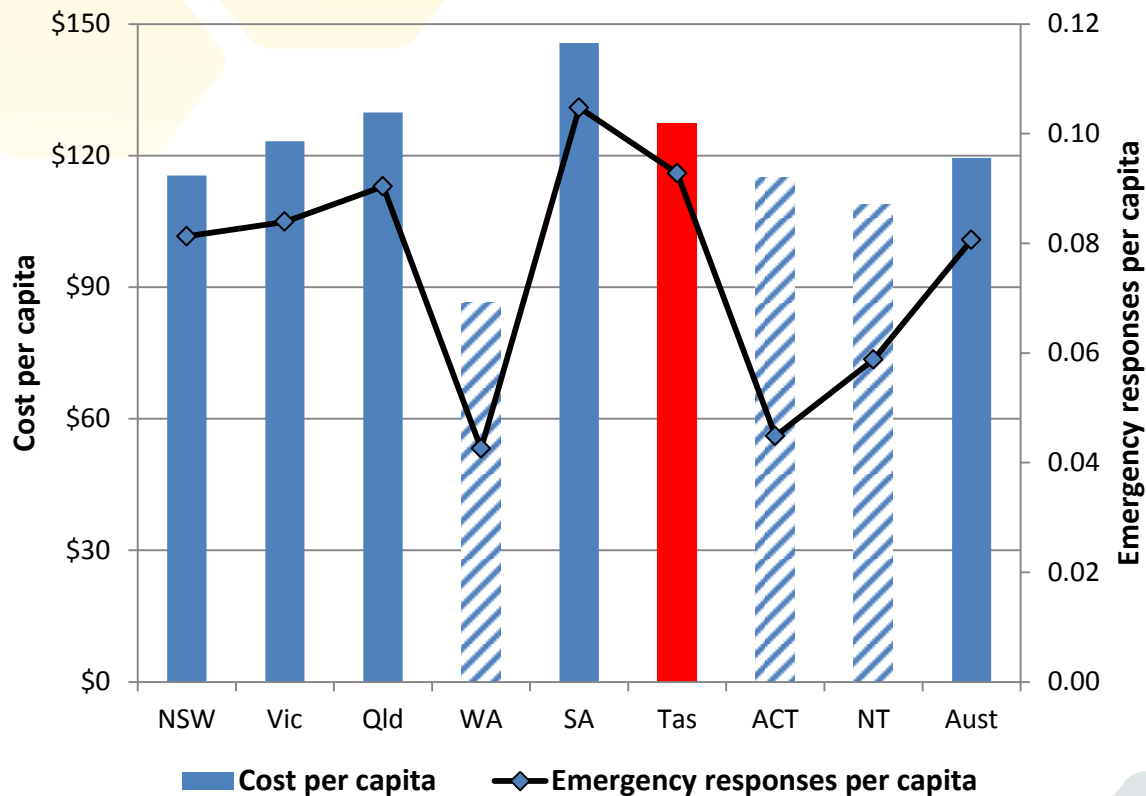
We looked at:

- Comparison with previous periods
- Comparison with other jurisdictions

Comparison with previous periods

- Over nine years:
 - real cost per capita increased by 26%
 - real cost per emergency response reduced by 12%
- Contrasting results explained by:
 - 4% more incidents deemed ‘emergency’ (**controllable**)
 - 12% more responses per incident (**controllable**)
 - 36% more reported incidents (**uncontrollable**)

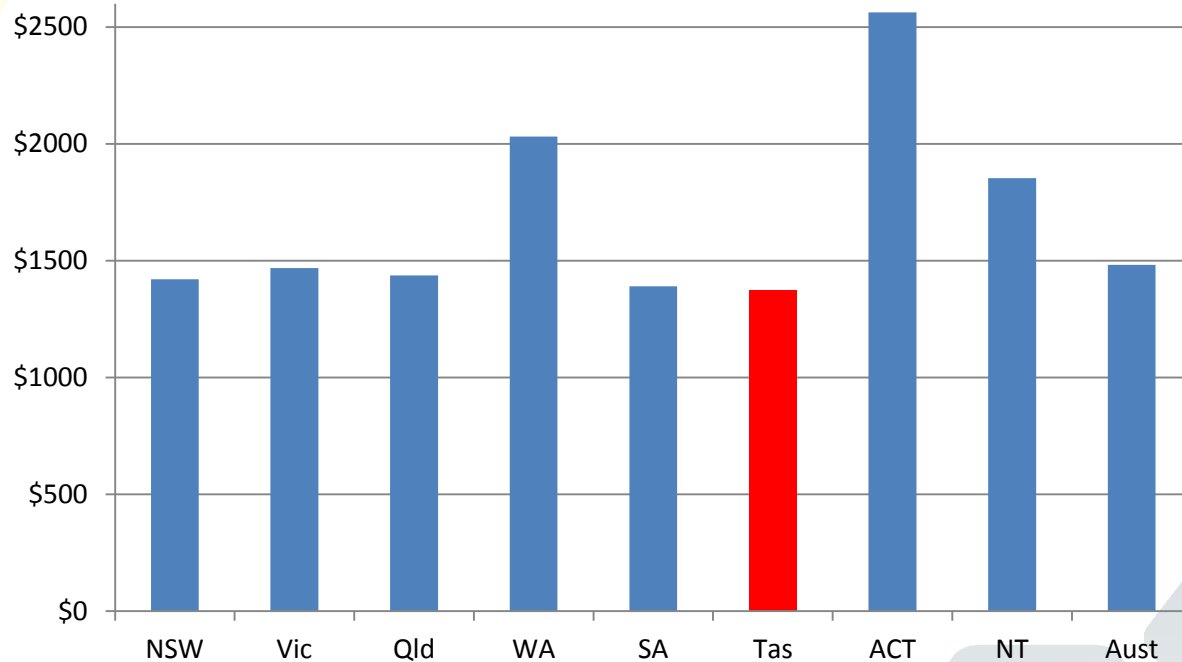
Other jurisdictions – cost per capita



- 3% higher than Aust average
- Close relationship: responses and costs
- Tas less urbanised
- **Conclusion: satisfactory**



Other jurisdictions – cost per emergency response



Criterion 3: Conclusion

- Significant reduction in real cost per response over the past nine years
- Services were reasonably cost effective compared with other jurisdictions

Criterion 4: Effective strategic management?

We looked at whether AT had:

- clear strategic goals
- strategies to maintain and improve services
- key performance indicators

Clear strategic goals?

- Strategic goals outlined in business plan
- Clearly outlined AT's priorities

Strategies to improve services?

Numerous strategies to achieve improvements to improve services, including:

- First Intervention Vehicle trial
- Extending Care Paramedic trial
- Defibrillation program

Key performance indicators?

- KPIs defined in business plan
- KPIs relevant
- But:
 - Measure not specified (e.g. what is measure for the KPI to ‘improve patient outcomes’?)
 - No benchmarks



Criterion 4: Conclusion

- AT's strategic management processes had been generally effective
- In particular, AT was trying to improve its performance through trialling a raft of innovative strategies

Recommendations

9 recommendations, including:

- collect data for better regional comparison of clinical outcomes
- develop strategies to improve response times to those of other jurisdictions
- investigate impact of additional resources in the north on response times
- investigate why the level of multiple responses had increased
- Improve KPIs

Responses

Minister for Health

- Report confirms:
 - AT's performance consistent with other jurisdictions
 - Cost per response significantly reduced

DHHS

- Department reviewing AT operations
- Report will assist that review

Current audits

- Tasmanian Forests Intergovernmental Agreement
- Management of national parks
- Government support for sporting and other events
- Follow-up audit



Any questions?