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Making public transport services more accessible - Lessons learned in Victoria, Australia

Fei Wang
Ray Winn

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Wang, Fei  
The Victorian Auditor General's Office, Melbourne, Australia  
fei.wang@audit.vic.gov.au

Winn, Ray  
The Victorian Auditor General’s Office, Melbourne Australia.  
ray.winn@audit.vic.gov.au

SUMMARY

This paper describes challenges Victoria faced with in making public transport more accessible for people with a disability. It reports the findings from examining the Department of Transport’s accessibility programs.

The department has for the most part complied with the legislative requirements, but it has not adequately measured how these changes have affected people with a disability. Whilst it is important to comply with legislative requirements, the four case studies presented in the paper demonstrate how critical it is to evaluate whether the program implemented has delivered the legislation’s intent. Evaluating the practical outcomes for people with a disability will provide the information needed to improve the accessibility planning and program in the future.

Key Words:  
Accessible public transport; compliance; accessibility outcomes; trams; program evaluation.

PURPOSE OF STUDY

This paper describes the audit findings of a program to make public transport more accessible for people who face mobility challenges in Victoria, Australia and discusses some of the lessons learned.

About 20 per cent of Victorians have some type of disability and about one third of these people, or six per cent, report that this affects their access to public transport [ABS, 2003]. Other people, for example, parents with young children, also need public transport that is easy to use. The demand for accessible public transport will rise as the population ages: one in four people will be over the age of 60 by 2021, compared with one in six in 2001 [Office of Senior Victorians, 2003].

In 1992 the Australian government passed the Disability Discrimination Act 1992 (the DDA) requiring states to upgrade their public transport systems to eliminate discrimination. In 2002 the Australian government adopted the Disability Standards for Accessible Public Transport (the disability standards). The disability standards set minimum design requirements for:
- information on public transport services
- train stations and public transport interchanges
- tram and bus stops
- trains, trams and buses.

Full compliance with the standards was mandated for public transport by 2032. Intermediate compliance milestones were established for 2007, 2012, 2017 and 2022.

Victoria has one of the largest public transport networks in Australia and much of the system was not built so that people with mobility challenges can easily use it. It is therefore challenging to make such a large-scale public transport system compliant with the disability standards and to progressively meet the milestone targets.

In September 2006 the Victorian Government released the "Accessible Public Transport in Victoria—Action Plan 2006–2012" (the Action Plan) [DOT, 2006]. The Action Plan’s objectives were to apply the disability standards and to enable people with a disability to use public transport safely, effectively and with dignity. In the same year, the Victorian government allocated $1.3 billion for new trams and trains which were to be DDA compliant and $250 million over 10 years to improve access to existing infrastructure.

The Department of Transport (the department) is the main agency responsible for carrying out the Action Plan.

The Victorian Auditor-General's Office, under the Audit Act 1994, evaluates whether a public agency is meeting its objectives effectively and using the resources economically and efficiently. In 2009, it audited whether the department has been effective in making existing public transport services more accessible for people with a disability. The audit report was released in December 2009 [VAGO, 2009]. This paper presents some key findings and discusses lessons learned in Victoria from applying the disability standards.

**METHODS**

The audit examined whether the department has been effective in making public transport more accessible for people with a disability and others who face mobility challenges. It looked specifically at how accessible the department has made fixed route train, tram and bus services.

The audit examined how well actions had been:
- planned and prioritised
- implemented and monitored
- evaluated and plans amended to improve performance.

The audit examined the evidence on the department’s programs under the Action Plan. Where possible, the audit also obtained views from key stakeholders to understand their assessment of the programs’ effectiveness.
RESULTS

1. Achieving compliance

1.1 Summary

The national disability standards require states to progressively upgrade public transport to fully comply with the standards by 2032 and meet intermediate milestones in 2007, 2012, 2017 and 2022, as shown in Table 1. The standards cover 30 areas with each applying to some or all of the infrastructure and vehicles used for tram, train, bus and coach services in Melbourne and regional Victoria.

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Coverage</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>25 per cent</td>
<td>Some standards require 100 per cent coverage</td>
</tr>
<tr>
<td>2012</td>
<td>55 per cent</td>
<td>Some standards require 100 per cent coverage</td>
</tr>
<tr>
<td>2017</td>
<td>90 per cent</td>
<td>Some standards require 100 per cent coverage</td>
</tr>
<tr>
<td>2022</td>
<td>100 per cent</td>
<td>Applies to all standards except for trains and trams</td>
</tr>
<tr>
<td>2032</td>
<td>100 per cent</td>
<td>Applies to all standards</td>
</tr>
</tbody>
</table>

Source: Disability Standards for Accessible Public Transport 2002.

In order to meet the disability standards, the department’s Action Plan established a range of individual programs covering train station, tram and bus stop upgrades. In addition, new infrastructure projects must also include works to achieve DDA compliance. Furthermore, operators include some DDA works in their regular maintenance and asset renewal programs, such as installing tactile indicators on station platforms for vision impaired people when the station platform is re-surfaced.

The department annually publishes information showing how the vehicles and infrastructure for each public transport mode complied with the relevant standards areas. Although the audit discovered that there were a small number of categories where the accuracy and clarity of the information reported could be improved, overall the information was sufficient to understand how well it is complying with the disability standards.

Table 2 summarises the status of compliance based on the information reported by the department as at June 2008. The 30 standards areas for infrastructure or vehicles were grouped into 195 categories.
Table 2  Measures of compliance at June 2008

<table>
<thead>
<tr>
<th>Level of compliance</th>
<th>Categories</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 per cent</td>
<td></td>
<td>94</td>
<td>48</td>
</tr>
<tr>
<td>At least 55 per cent (2012 milestone)</td>
<td></td>
<td>33</td>
<td>17</td>
</tr>
<tr>
<td>Between 25 and 55 per cent (met 2007 but not 2012 milestone)</td>
<td></td>
<td>51</td>
<td>26</td>
</tr>
<tr>
<td>Below 25 per cent (not met 2007 milestone)</td>
<td></td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>195</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: VAGO adapted from Department of Transport material.

Table 2 shows the department had reached or exceeded the 2007 targets for 91 per cent of the compliance categories. For 17 categories (9 per cent) compliance fell short of that required in 2007. Trams and tram infrastructure accounted for about three quarters of this non-compliance. In particular, the number of platform tram stops and DDA compliant low-floor trams was too low to meet the standards for helping people board trams.

While the department set out a plan to progress towards the compliance targets, it was constrained by the amount of government funding and by the difficulties in implementing the program in a complex urban environment, as will be illustrated in the first two case studies. In addition, the department needed to better coordinate its program to consistently achieve compliance across the network, as demonstrated by the third case study.

The department has for the most part successfully complied with the standards within the target dates.

1.2  Case study 1: trams

Melbourne has the third largest tram and light rail network in the world. It has 250km of track, 28 main routes and nearly 1,800 individual tram stops. Two thirds of the Melbourne tram network operates in mixed road traffic, requiring passengers to cross traffic lanes to board.

To provide access for people who use a wheelchair, low floor trams must run on routes with upgraded platform stops, which provide a level entry for them.

Recognising the complexity and costs involved in making the public transport system compliant with the standards, the Victorian government decided to use existing trams for their 30 to 35 year design lives before replacing them with new low-floor vehicles that fully comply with the standards. This saves money by delaying the replacement of existing trams. However, it also means that the tram fleet did not comply with the 2007 target or will not comply with the 2012 milestone that requires 55 per cent of the tram fleet to be accessible.

As of 2009, 100 of 426 trams (23 per cent) were compliant, which included five low-floor trams that were on lease and will be returned in 2011. To achieve the 2012 milestone, the department estimated it needed 120 new trams that are compliant. However the government has funded the purchase of 50 new trams between 2012
by 2012, only 23 per cent of the tram fleet will be expected to be compliant.

The compliance levels for trams fell well short of the standards in 2002 and 2007 and will continue to do so at the next compliance milestone of 55 per cent in 2012, principally because of the government’s decision.

1.3 Case study 2: tram stops

When the Action Plan was released in 2006, only 5 per cent of the tram stops were fully compliant with wheelchair-accessible platforms. The Action Plan aimed to upgrade 560 stops, or about 32 per cent of all stops, by 2012 within the committed funding. This target falls short of the 2012 requirement for compliance of 55 per cent of tram stops.

In piloting the proposed tram stop upgrading program, the department had problems getting public acceptance for building accessible tram stops in most settings. Some sections of the community perceived that level access tram stop construction would have a significant and negative effect on traffic congestion, parking, business and resident access. This was a barrier to achieving the planned program of stop upgrades.

As a result, the department adopted a practical approach. Apart from a number of locations where the department upgraded high-volume tram stops and stops for major destinations such as hospitals and universities, it mainly upgraded stops where it was easy to construct or where there was space to do so.

By September 2009, the department had built 294 platform stops, or 16 per cent of all stops, that allowed level boarding onto low-floor trams. There will be further challenges to provide level access at tram stops, now that the relatively easy locations have been upgraded. The department is investigating other alternatives such as lifts on trams.

3 Case study 3 – accessible bus stops

There were 23,800 bus stops in metropolitan Melbourne, and a further 6,600 in regional areas [DOT, 2006]. The department planned to upgrade 10,200 bus stops over the 4 years to 2012.

To deliver such a large scale program, the department entered into agreements with local councils and funded the upgrade of local bus stops. The department contracted out bus stops located on arterial roads to commercial contractors.

The success of such a large scale program depends on consistent implementation and quality assurance. The department audits the upgrades, but there has been a significant lag between the works’ completion and the audit. This study found that in four councils about 13 per cent of upgraded bus stops did not fully comply with the standards.
2. Achieving effectiveness

2.1 Summary

Transforming an ageing public transport system into an accessible one is a large and complex task, something recognised by the legislation when it allowed three decades for full compliance.

Recognising that full compliance will take several decades to achieve, it is important that the department:

- prioritises works to best achieve the legislation's goal of improved access
- evaluates the impact of its actions on this goal to help it refine its plans and programs to be more effective.

The audit found that the department had:

- formed plans that included reasonable prioritisation principles but did not explain how these principles had been applied to determine priorities
- not adequately measured how its actions had affected people with a disability.

2.2 Measuring effectiveness

Many of the works completed to date are likely to improve access to public transport for people with a disability and for other passengers. For example, platform tram stops make it easier to board and alight from trams and tactile indicators on stops provide the vision impaired with help in locating a stop and boarding a vehicle.

So, has the Action Plan been effective in making the public transport more accessible? To answer this question, the audit examined if the department evaluated its progress towards the outcomes.

In the business case submitted for government funding, the department intended to evaluate its effectiveness by measuring:

- level of satisfaction of disabled community with the outcome
- use of public transport by people with a disability compared with other members of the community

However, the audit found the department has not collected this type of information that can provide a measure whether travel has become easier for people with a disability.

In 2007 three disability groups surveyed 130 people with various disabilities over three months and reported their experience using public transport [VCOSS, 2007]. It revealed the difficulties these people still faced even in the parts of the system that were deemed to comply with the disability standards. For example, many participants reported difficulty accessing accurate travel information, even though the reported compliance is 100 per cent. This type of research is valuable in helping the department to understand its program’s effectiveness.

Another important aspect of evaluating effectiveness is through consultation with disability groups.
The department set up the Public Transport Access Committee (PTAC), which included representatives from peak disability organisations, as a forum to advise the Minister for Transport.

The involvement of PTAC has been valuable in providing the department with feedback on how the application of the standards actually worked in reality. For example, PTAC members have been able to comment on public transport projects, take part in trials, raise issues when upgrades have not improved accessibility, and ask the department about its plans and priorities.

PTAC has also been valuable in raising concerns where applying the disability standards did not adequately remove the barriers to access for people with a disability. Case study 4 illustrates such an example.

2.2 Case study 4: The gap between platforms and trains

Since June 2005 PTAC members have been raising as an access concern the size of the gap between platforms and stationary trains at some stations in Melbourne.

The department’s response between June 2005 and September 2008 was that the current practice of train drivers deploying ramps at these locations would remain as the means of providing compliant access.

At the front of the train, a ramp is used to allow people using wheelchairs and motorised scooters to board the train. However, most of those experiencing difficulties were actually able to walk but still struggled to board trains where there was a large gap.

The 2007 peak body survey [VCOSS, 2007] confirmed that the gap was a problem for some people with a disability.

In September 2008, PTAC was told that the train operator was measuring the horizontal gap between trains and platforms and increasing the signage about being aware of these gaps, as a way of responding to this on-going concern.

The case study illustrates the importance of going beyond compliance measures to evaluate the program’s effectiveness and its impact on people with a disability.

DISCUSSION

This paper illustrates the great challenges Victoria faced in making public transport more accessible through implementing infrastructure upgrade programs to meet the required compliance standards.

The first and second case studies show that it is complex and costly to meet the standards and targets. This is particularly the case for providing level access between tram stops and trams. This means Victoria has not achieved the 2007 compliance targets, will not achieve the 2012 targets and has not yet finalised a plan for moving to full compliance in 2032.

The third and fourth case studies illustrate the importance of understanding how changes have affected the travel outcomes of people with a disability. It highlights that compliance does not necessarily equate to better access, where the compliant infrastructure still prevents people with a disability from using it. Works also need to
be programmed taking account of the journeys people with a disability most want to make.

It is essential therefore to understand current and desired travel patterns and to collect information that shows how well changes have met the needs of people with a disability.

CONCLUSION

This audit examined the Victorian Department of Transport’s implementation of its accessibility program and assessed if the department has complied with the legislative requirements and been effective in making the public transport system more accessible.

Overall, the department has succeeded in complying with the disability standards for most parts of the public transport system, but it has not adequately measured how these changes have affected people with a disability.

Whilst it is important to comply with legislative requirements, the case studies presented demonstrate how critical it is to evaluate whether the program implemented has delivered the legislation’s intent. Evaluating the practical outcomes for people with a disability will provide the information needed to improve the accessibility planning and program in the future.

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